2008 Georgia Data Summary

SALMONELLOSIS



Quick Fact: Salmonella is the most common bacterial cause of gastroenteritis in Georgia and is often foodborne.

OVERVIEW

Salmonellosis is a zoonotic bacterial infection that generally affects the intestinal tract and occasionally the bloodstream. It is one of the more common causes of gastroenteritis with approximately 2000 cases occurring in Georgia each year. Most cases occur in the summer and early fall months and are seen as single cases, clusters, or outbreaks.

Mode of Transmission: Ingestion of *Salmonella* spp. in food derived from infected animals or food contaminated by feces of an infected animal or person.

- Common vehicles include undercooked eggs, raw milk, contaminated water, meat and poultry.
- Pet turtles, iguanas and chicks are common sources for infants and children exposures.
- Fecal-oral transmission from person to person <u>may</u> <u>also occur</u>, especially when diarrhea is present.

SURVEILLANCE

- All Georgia physicians, laboratories and other health care providers are required by law to report both labconfirmed and clinical diagnoses of cases of Salmonellosis.
- There are currently over 2,000 serotypes of Salmonella. Cultures may be sent to the Georgia Public Health Laboratory for DNA fingerprinting and serotype determination.

Table 1

TOP 5 SEROTYPES IN GEORGIA, 2008			
Serotype		#	%
1	Newport	354	13.8
2	Javiana	306	11.9
3	Enteritidis	282	11.0
4	Typhimurium	195	7.6
5	Munchen	140	5.5
	Unknown	306	11.9

- Active Surveillance for Salmonellosis is conducted through FoodNet. For more information, please visit:
 - ➤ http://health.state.ga.us/eip/
 - http://www.cdc.gov/foodnet

INCIDENCE

In 2008, 2,562 cases of *Salmonella* were reported, for a rate of 26.5 **per** 100,000 population (Figure 1). This was the highest rate among any FoodNet site. The incidence of *Salmonella* in Georgia has remained stable over time, with certain areas, especially in the southern parts of the state, having higher incidence (Figure 2).

Figure 1. Salmonella Cases and Rate

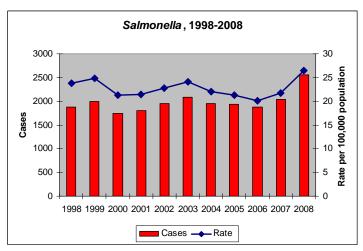
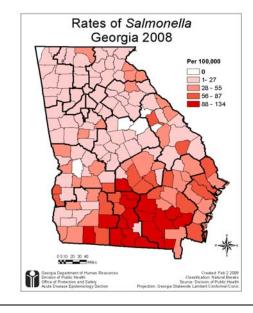


Figure 2.



DEMOGRAPHICS

- In 2008, of the reported cases with known race and ethnicity variables, 68% of cases were White, 22% of cases were Black, 7% of cases were Hispanic, and 3% of cases were other race/ethnicities (Figure 3).
- Consistent with the described epidemiology of Salmonella, in Georgia, higher rates of disease appear in infants and young children, followed by elderly individuals (Figure 4).

Figure 3.

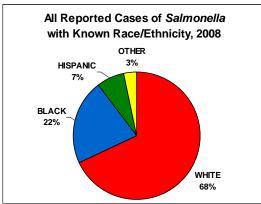
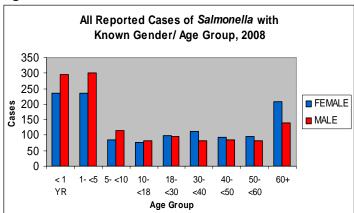


Figure 4.



IMPACT OF SALMONELLA

Hospitalizations & Deaths

- Of the total 2,562 cases of Salmonella in 2008, 698 (27%) individuals were hospitalized, while an additional 340 (13%) individuals were seen in the Emergency Room.
- In 2008, there were 12 deaths reported among Salmonella cases in Georgia. Of those 12 deaths, 25% were individuals less than 1 year old, 16.7% were individuals 40 to 49 years, 16.7% were individuals 50-59 years, and 41.7% were individuals over 60 years.

IMPACT OF SALMONELLA

Outbreaks

In 2008, we investigated 8 confirmed outbreaks of *Salmonella*. Reference the outbreak data summary for more information.

PREVENTION & RESEARCH

Food Preparation Tips

- 1. Always treat raw poultry, beef and pork as if they are contaminated and handle accordingly:
 - Wrap fresh meats in plastic bags at the market to prevent blood from dripping on other foods.
 - Refrigerate foods promptly; minimize holding time at room temperature.
 - Cutting boards and counters used for meat preparation should be washed immediately after use to prevent cross contamination with other foods.
 - Avoid eating raw or undercooked meats.
 - Ensure that the correct internal cooking temperature is reached, particularly when using a microwave. Make sure that the meat is no longer pink and that any juices run clear.
- 2. Avoid eating raw eggs or undercooking foods containing raw eggs.
- 3. Avoid using raw (unpasteurized) milk.

For more information, visit: www.foodsafety.gov

Hand Washing

- 1. Encourage careful hand washing before and after food preparation.
- 2. Make sure children wash hands thoroughly, particularly if the children handle pets (especially reptiles and birds).
- 3. Do not allow pet reptiles or birds to come in contact with infants, food, or food preparation surfaces.

FoodNet Projects

- Exploring additional sources of Salmonella through case-control studies
- Monitoring trends in Salmonella Epidemiology over time
- Monitoring the development of antibiotics resistance

For more information:

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