



CITY OF SAN ANTONIO
METROPOLITAN HEALTH DISTRICT

Bexar County 2017 Communicable Disease Report



Epidemiology Program

2509 Kennedy Circle, Bldg. 125

San Antonio, TX 78235

Phone: 210.207.8876 | Fax: 210.207.8807

Report Information and Definitions

The data contained in this report were extracted from the National Electronic Disease Surveillance System (NEDSS Base System) and analyzed by the Epidemiology Program of the City of San Antonio Metropolitan Health District. Incidence rates (cases per 100,000 population) were calculated using United States Census Bureau 2017 Population Estimates for Bexar County or 2013-2017 American Community Survey 5-Year Estimates for Zip Code Tabulation Areas. Rates for conditions with case counts <20 are considered unstable.

Information pertaining to causative agent, signs and symptoms, modes of transmission, incubation period, and period of communicability was obtained from the Centers for Disease Control and Prevention. The Emerging and Acute Infectious Disease Guidelines (Texas Department of State Health Services, January 2016) was used as a secondary source. Definitions are as follows:

- Causative Agent: bacteria, virus, parasite, fungus or prion which can cause disease state
- Signs/Symptoms: physical manifestations which may result from infection with a causative agent
- Mode(s) of Transmission: mechanisms by which the causative agent spreads among human populations
- Incubation Period: time interval from infection with a causative agent until the demonstration of signs or symptoms
- Period of Communicability: time period during which a causative agent may be transmitted directly or indirectly from a person to another person

Table 1. Selected Reported Notifiable Conditions, Bexar County, 2017

Condition	Case Count	Incidence Rate (Cases/100,000 Population)
Amebiasis	6	0.3
Campylobacteriosis	579	29.6
Carbapenem-resistant <i>Enterobacteriaceae</i> (CRE)	67	3.4
Chagas disease	1	0.1
Chikungunya virus disease	1	0.1
Cryptosporidiosis	101	5.2
Cyclosporiasis	41	2.1
<i>Heamophilus influenzae</i> , invasive	39	2.0
Hepatitis A, acute	17	0.9
Hepatitis B, acute	11	0.6
Hepatitis C, acute	4	0.2
Legionellosis	24	1.2
Listeriosis	4	0.2
Lyme disease	4	0.2
Malaria	5	0.3
Multidrug-resistant <i>Acinetobacter</i> (MDR-A)	94	4.8
Mumps	26	1.3
Pertussis	66	3.4
Rickettsiosis, unspecified	1	0.1
Salmonellosis	300	15.3
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	81	4.1
Shigellosis	159	8.1
Spotted fever group rickettsioses	12	0.6
<i>Streptococcus pneumoniae</i> , invasive disease (IPD)	85	4.3
<i>Streptococcus</i> , invasive Group A (GAS) disease	104	5.3
<i>Streptococcus</i> , invasive Group B (GBS) disease	172	8.8
Typhoid fever (<i>Salmonella Typhi</i>)	2	0.1
Typhus, flea-borne (endemic, murine)	59	3.0
Varicella (chickenpox)	87	4.4
<i>Vibrio parahaemolyticus</i>	2	0.1
<i>Vibrio vulnificus</i>	3	0.2
Vibriosis, other or unspecified	14	0.7
West Nile fever	1	0.1
Yersiniosis	9	0.5
Zika virus disease	4	0.2

Rates for diseases with case counts <20 are considered unstable

1. Campylobacteriosis

Causative Agent: *Campylobacter* species bacteria

Signs/Symptoms: Diarrhea (often bloody), fever, abdominal cramps, nausea, and vomiting. Some infected people do not have any symptoms.

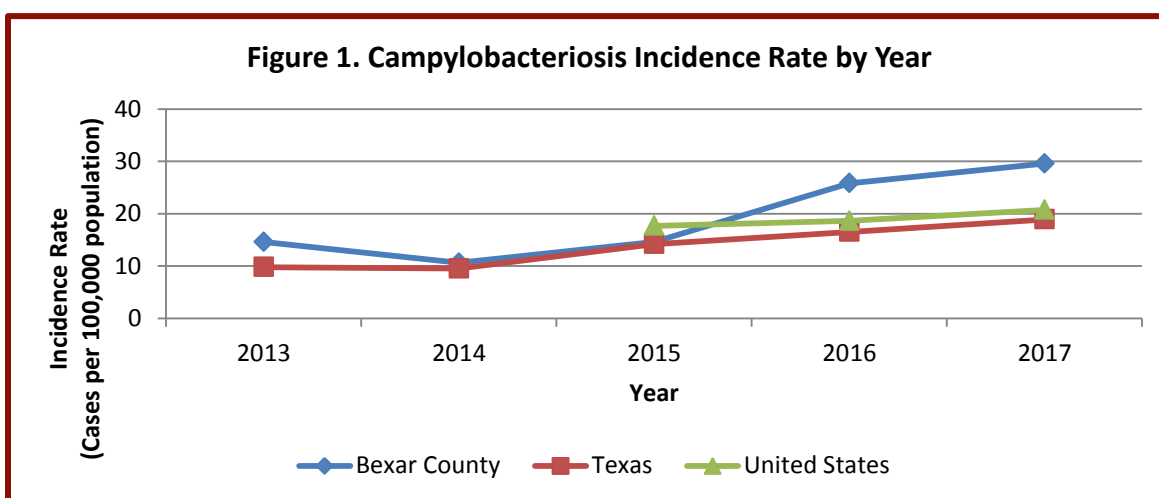
Mode(s) of Transmission: Ingestion of raw/undercooked poultry or food contaminated by raw/undercooked poultry; contact with the feces of a dog or cat.

Incubation Period: Typically 2-4 days

Period of Communicability: Person-to-person transmission is uncommon.

Table 2. Campylobacteriosis Disease Summary, Bexar County, 2017

Case Count	579	Incidence Rate	29.6
Gender	Number	Percent	Rate
Female	272	47.0	27.4
Male	307	53.0	31.8
Race/Ethnicity	Number	Percent	Rate
Hispanic	346	59.8	29.3
Black, Non-Hispanic	21	3.6	14.7
White, Non-Hispanic	81	14.0	14.9
Other, Non-Hispanic	6	1.0	6.6
Age Group	Number	Percent	Rate
0-14	212	36.6	50.3
15-24	54	9.3	18.8
25-44	130	22.5	22.6
45-64	116	20.0	26.1
65+	67	11.6	28.9



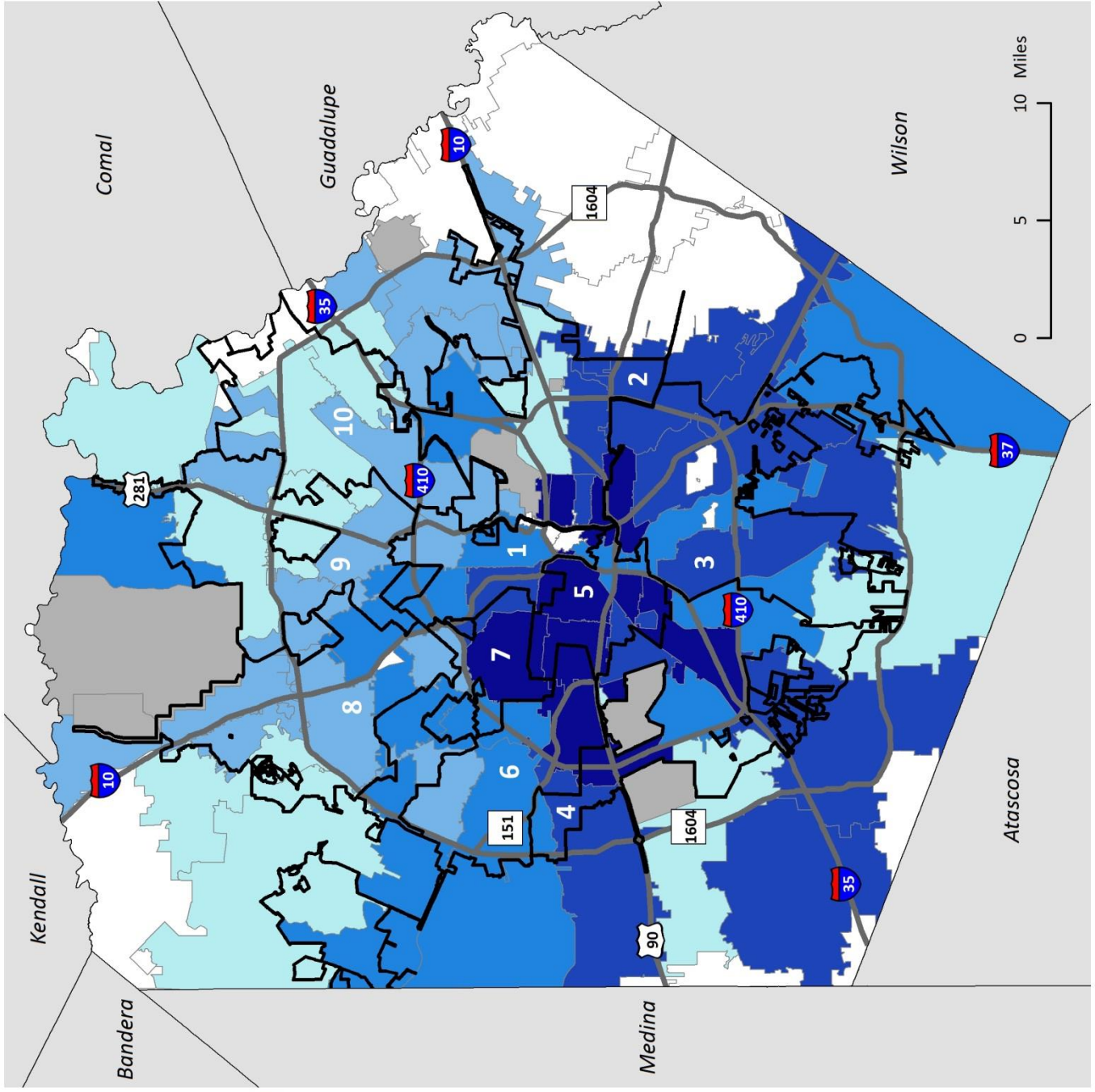
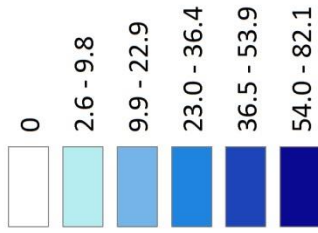
Texas (2013-2017) and Bexar County (2013-2016) rates from *Campylobacteriosis Data* (Infectious Disease Control Unit, Texas Department of State Health Services). US rates from *Summary of Notifiable Infectious Diseases and Conditions — United States, 2015* (CDC MMWR) and *National Notifiable Infectious Diseases and Conditions: United States, Annual data for 2016-2017* (CDC WONDER). US rates for 2013-2014 not reported as campylobacteriosis was not nationally notifiable before 2015.

Figure 2. Campylobacteriosis Incidence Rates by ZIP Code, Bexar County, 2017

Legend

-  San Antonio City Council Districts (1-10)
-  Major Highways
-  Military Bases

Campylobacteriosis Incidence Rate
(Cases by ZIP Code/100,000 ZCTA Population)



2. Salmonellosis

Causative Agent: *Salmonella* species bacteria

Signs/Symptoms: Diarrhea (may be bloody), abdominal cramps, fever, nausea, vomiting, and headache.

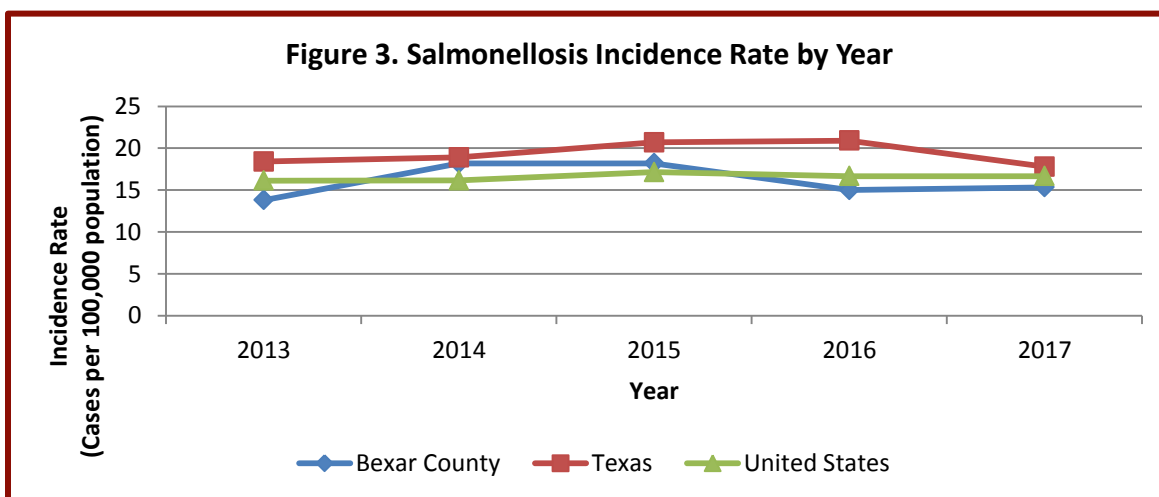
Mode(s) of Transmission: Ingestion of contaminated food or water; contact with infected animals or people.

Incubation Period: 12-72 hours

Period of Communicability: Infected persons may transmit the bacteria for days to weeks during infection, up to several months (rarely).

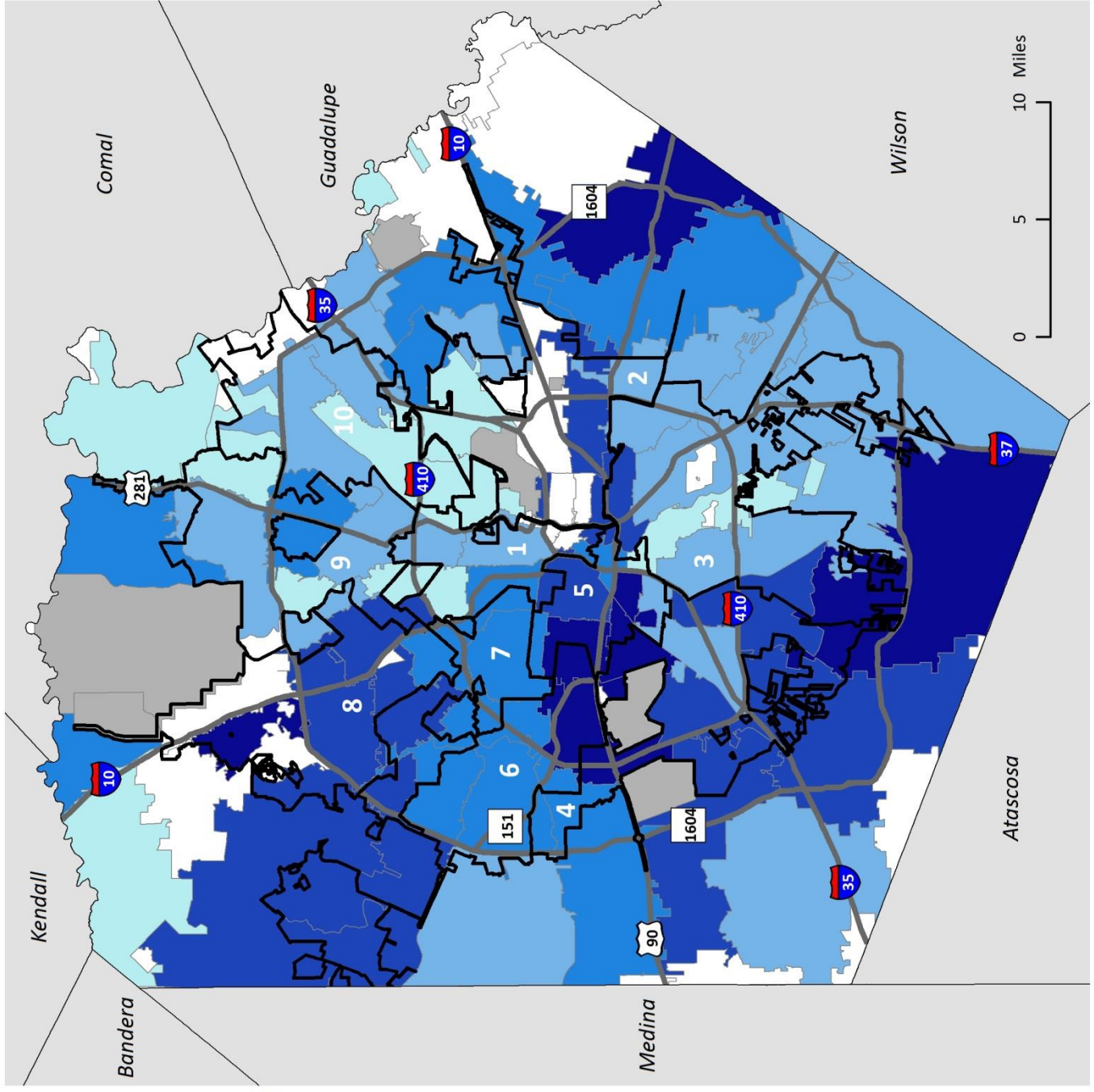
Table 3. Salmonellosis Disease Summary, Bexar County, 2017

Case Count	300	Incidence Rate	15.3
Gender	Number	Percent	Rate
Female	161	53.7	16.2
Male	137	45.7	14.2
Race/Ethnicity	Number	Percent	Rate
Hispanic	156	52.0	13.2
Black, Non-Hispanic	10	3.3	7.0
White, Non-Hispanic	64	21.3	11.8
Other, Non-Hispanic	2	0.7	2.2
Age Group	Number	Percent	Rate
0-14	150	50.0	35.6
15-24	26	8.7	9.1
25-44	47	15.7	8.2
45-64	45	15.0	10.1
65+	32	10.7	13.8



Texas (2013-2017) and Bexar County (2013-2016) rates from *Salmonellosis Data* (Infectious Disease Control Unit, Texas Department of State Health Services). US rates from *Summary of Notifiable Infectious Diseases and Conditions — United States, 2013-2015* (CDC MMWR) and *National Notifiable Infectious Diseases and Conditions: United States, Annual data for 2016-2017* (CDC WONDER).

Figure 4. Salmonellosis Incidence Rates by ZIP Code, Bexar County, 2017









Legend

-  San Antonio City Council Districts (1-10)
-  Major Highways
-  Military Bases

Salmonellosis Incidence Rate

(Cases by ZIP Code/100,000 ZCTA Population)

-  0
-  2.8 - 7.0
-  7.1 - 13.2
-  13.3 - 19.7
-  19.8 - 28.3
-  28.4 - 43.4

3. *Streptococcus*, Invasive Group B (GBS)

Causative Agent: *Streptococcus agalactiae* (group B *Streptococcus*) bacteria

Signs/Symptoms: In newborns, GBS can cause bacteremia and sepsis, pneumonia, and meningitis; symptoms include fever, difficulty feeding, irritability or lethargy, difficulty breathing, and bluish skin color. In adults, GBS can cause bacteremia and sepsis, pneumonia, skin and soft-tissue infections, and bone and joint infections; symptoms depend on the part of the body that is infected.

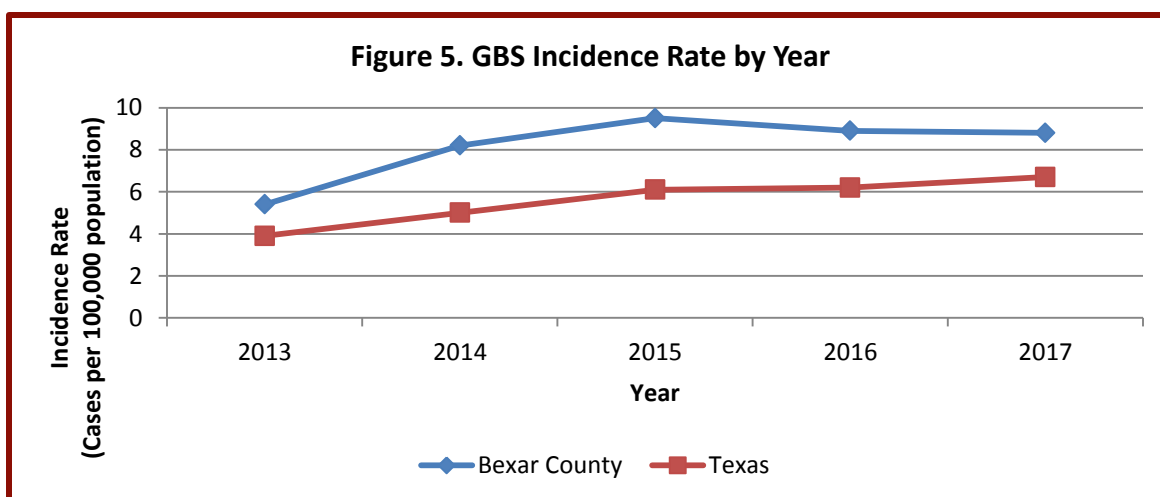
Mode(s) of Transmission: Pregnant women may pass GBS to babies during labor and delivery. Mode of transmission in non-pregnant adults is unknown.

Incubation Period: <7 days for babies less than 7 days old; unknown for infants, children, and adults.

Period of Communicability: If a pregnant woman has the bacteria in her body, she can transmit them to her baby during labor and delivery.

Table 4. GBS Disease Summary, Bexar County, 2017

Number of Cases	172	Incidence Rate	8.8
Gender	Number	Percent	Rate
Female	62	36.0	6.3
Male	110	64.0	11.4
Race/Ethnicity	Number	Percent	Rate
Hispanic	109	63.4	9.2
Black, Non-Hispanic	8	4.7	5.6
White, Non-Hispanic	24	14.0	4.4
Other, Non-Hispanic	0	0.0	-
Age Group	Number	Percent	Rate
0-14	16	9.3	3.8
15-24	2	1.2	0.7
25-44	33	19.2	5.7
45-64	80	46.5	18.0
65+	41	23.8	17.7



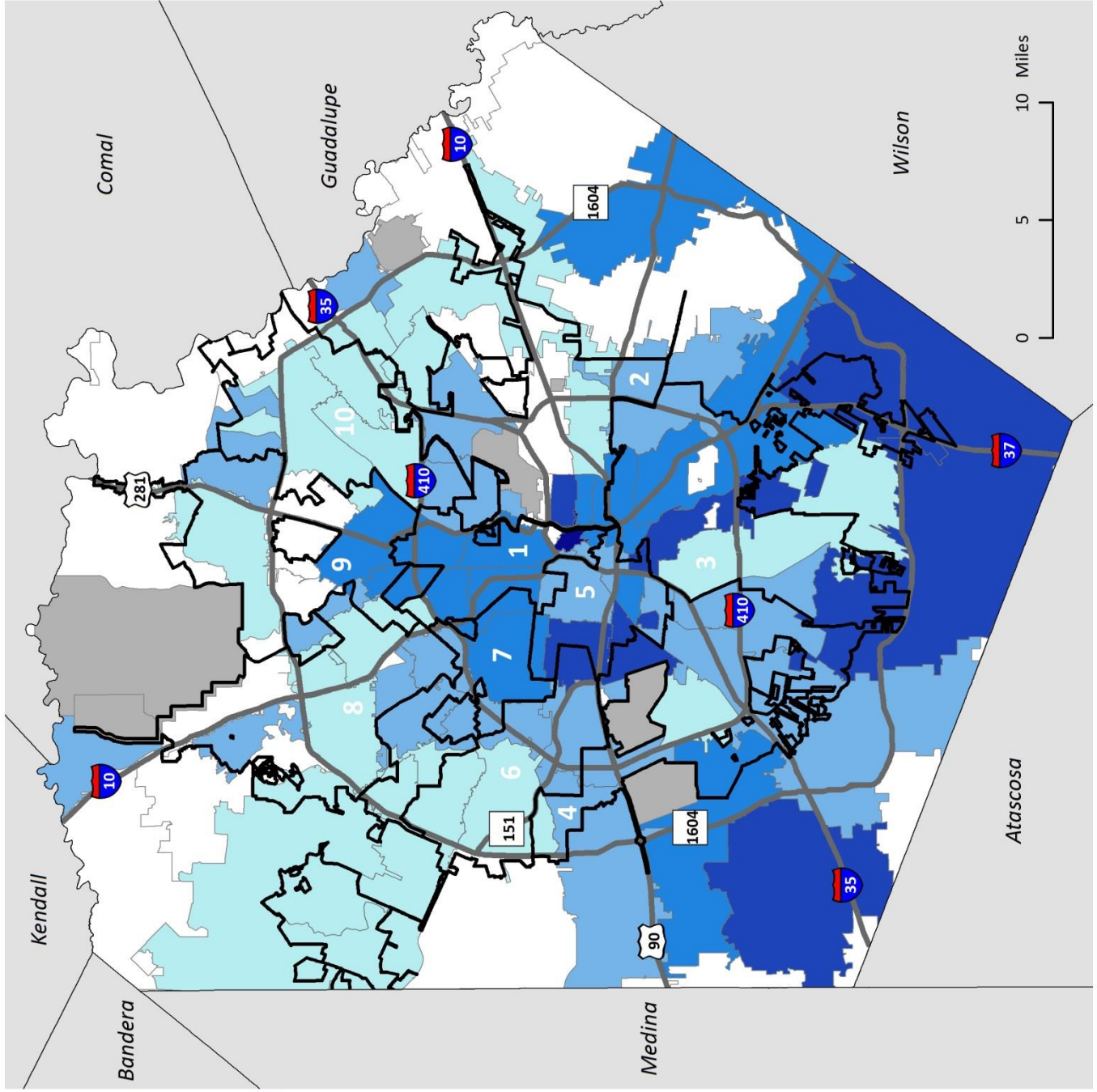
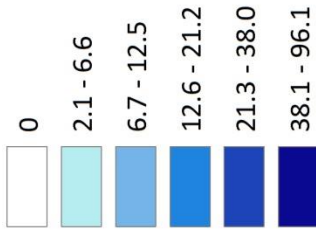
Texas (2013-2017) and Bexar County (2013-2016) rates from *Group B Streptococci Data* (Infectious Disease Control Unit, Texas Department of State Health Services). US rates are not reported as GBS is not a nationally notifiable condition.

**Figure 6. GBS
Incidence Rates by ZIP Code,
Bexar County, 2017**

Legend

-  San Antonio City Council Districts (1-10)
-  Major Highways
-  Military Bases

GBS Incidence Rate
(Cases by ZIP Code/100,000 ZCTA Population)



4. Shigellosis

Causative Agent: *Shigella* species bacteria

Signs/Symptoms: Diarrhea (sometimes bloody), fever, stomach pain, and feeling the need to pass stool even when the bowels are empty. Some people do not have any symptoms.

Mode(s) of Transmission: Contaminated hands touching someone's food or mouth; ingestion of contaminated food or water; exposure to feces through sexual contact.

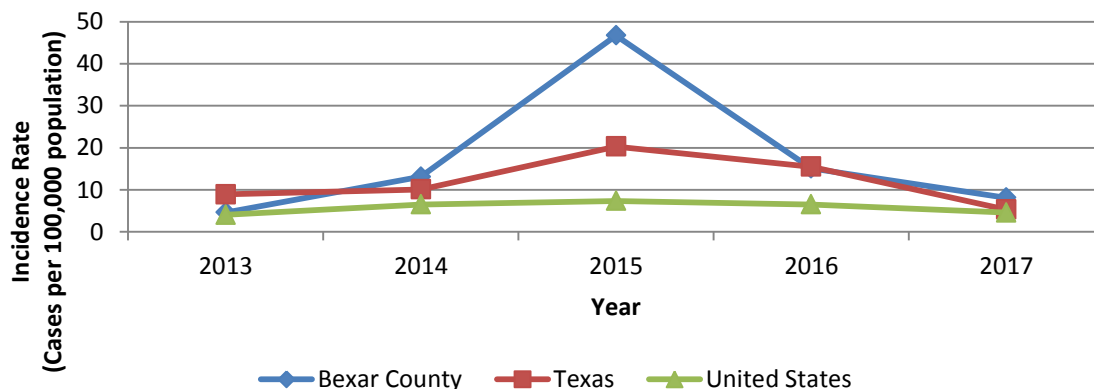
Incubation Period: Usually 1-2 days

Period of Communicability: Infected persons may transmit the bacteria for 1-4 weeks after onset of illness, up to several months (rarely).

Table 5. Shigellosis Disease Summary, Bexar County, 2017

Number of Cases	159	Incidence Rate	8.1
Gender	Number	Percent	Rate
Female	65	40.9	6.6
Male	94	59.1	9.7
Race/Ethnicity	Number	Percent	Rate
Hispanic	95	59.7	8.0
Black, Non-Hispanic	5	3.1	3.5
White, Non-Hispanic	28	17.6	5.2
Other, Non-Hispanic	1	0.6	1.1
Age Group	Number	Percent	Rate
0-14	86	54.1	20.4
15-24	11	6.9	3.8
25-44	34	21.4	5.9
45-64	21	13.2	4.7
65+	7	4.4	3.0

Figure 7. Shigellosis Incidence Rate by Year



Texas (2013-2017) and Bexar County (2013-2016) rates from *Shigellosis Data* (Infectious Disease Control Unit, Texas Department of State Health Services). US rates from *Summary of Notifiable Infectious Diseases and Conditions — United States, 2013-2015* (CDC MMWR) and *National Notifiable Infectious Diseases and Conditions: United States, Annual data for 2016-2017* (CDC WONDER).

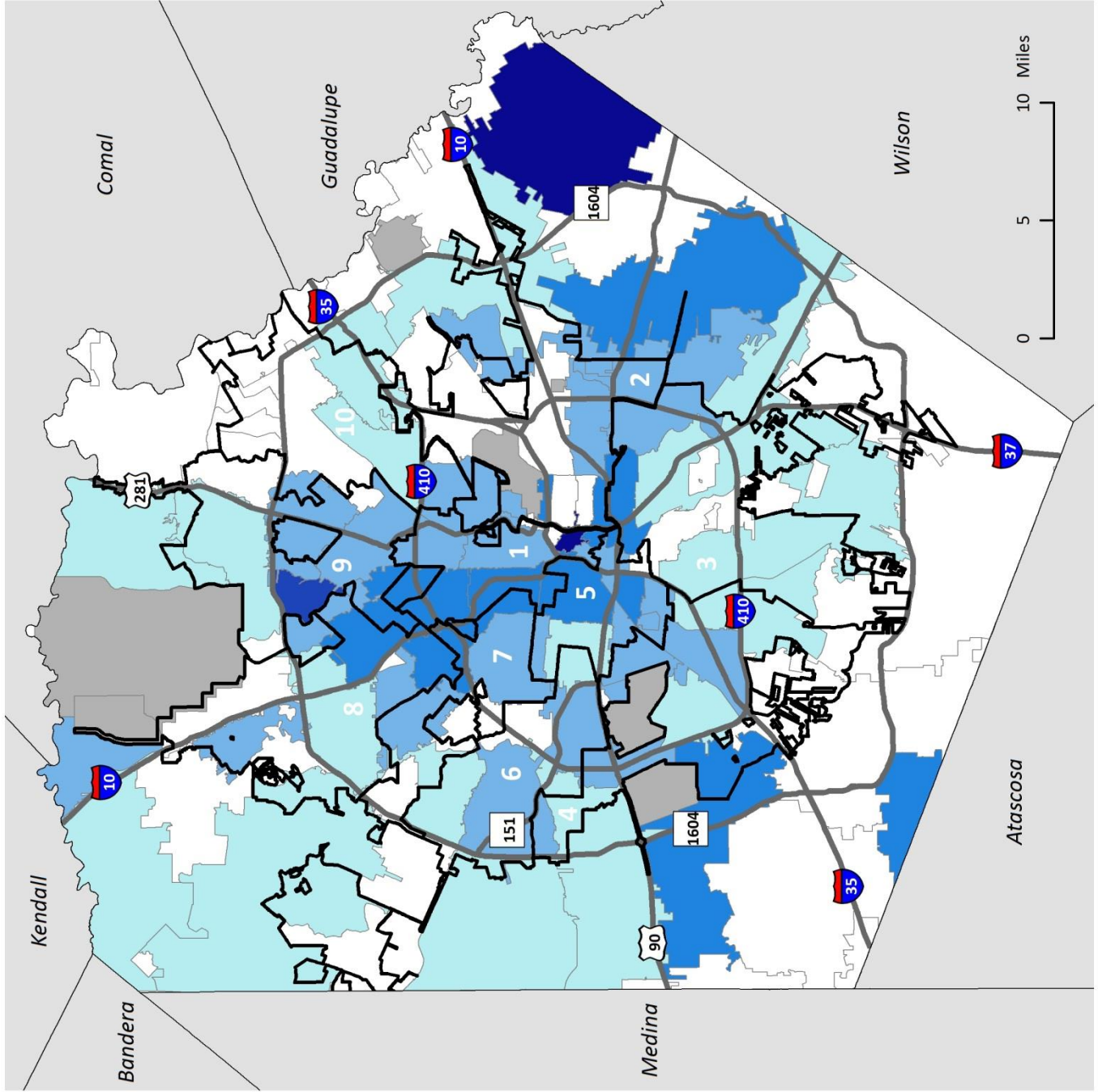
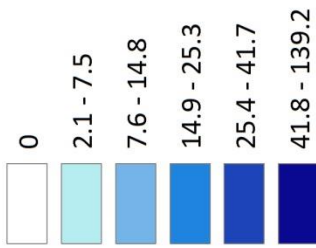
Figure 8. Shigellosis Incidence Rates by ZIP Code, Bexar County, 2017

Legend

-  San Antonio City Council Districts (1-10)
-  Major Highways
-  Military Bases

Shigellosis Incidence Rate

(Cases by ZIP Code/100,000 ZCTA Population)



5. *Streptococcus*, Invasive Group A (GAS)

Causative Agent: *Streptococcus pyogenes* (group A *Streptococcus*) bacteria

Signs/Symptoms: GAS disease has multiple invasive and non-invasive presentations. Non-invasive presentations include strep throat, scarlet fever, impetigo, cellulitis, otitis media and wound infections. Invasive presentations include meningitis, septicemia, septic arthritis, necrotizing fasciitis, peritonitis, osteomyelitis, and toxic-shock syndrome.

Mode(s) of Transmission: Most commonly through direct person-to-person transmission, typically through saliva or nasal secretions from an infected person. May be spread via food (rarely).

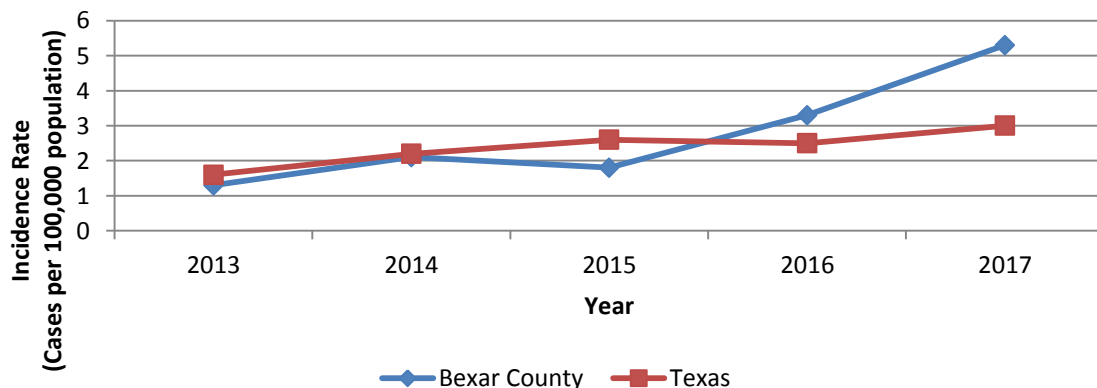
Incubation Period: 1-5 days

Period of Communicability: Untreated persons may transmit the bacteria for 10-21 days or longer. The infectious period ends 24 hours after the start of appropriate treatment.

Table 6. GAS Disease Summary, Bexar County, 2017

Number of Cases	104	Incidence Rate	5.3
Gender	Number	Percent	Rate
Female	42	40.4	4.2
Male	62	59.6	6.4
Race/Ethnicity	Number	Percent	Rate
Hispanic	46	44.2	3.9
Black, Non-Hispanic	4	3.8	2.8
White, Non-Hispanic	29	27.9	5.3
Other, Non-Hispanic	1	1.0	1.1
Age Group	Number	Percent	Rate
0-14	5	4.8	1.2
15-24	7	6.7	2.4
25-44	21	20.2	3.7
45-64	42	40.4	9.5
65+	29	27.9	12.5

Figure 9. GAS Incidence Rate by Year



Texas rates (2013-2017) and Bexar County rates (2013-2016) from *Group A Streptococcus Data* (Infectious Disease Control Unit, Texas Department of State Health Services). US rates are not reported as GAS is not a nationally notifiable condition.

**Figure 10. GAS
Incidence Rates by ZIP Code,
Bexar County, 2017**

Legend

-  San Antonio City Council Districts (1-10)
-  Major Highways
-  Military Bases

GAS Incidence Rate
(Cases by ZIP Code/100,000 ZCTA Population)

