

Communicable Diseases

Tarrant County 2017



TARRANT COUNTY
PUBLIC HEALTH

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Communicable Diseases Tarrant County, 2017



Tarrant County Public Health

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Reportable Diseases in Tarrant County

Several Texas laws (Health & Safety Code, chapter 81, 84, and 87) require specific information regarding notifiable conditions to be provided to the local health department. Tarrant County Public Health is the designated health department for reporting notifiable conditions in the county. ***Health care providers, hospitals, laboratories, schools, and others are required to report patients who are suspected of having a notifiable condition*** (chapter 97, Title 25, Texas Administrative Code).

All notifiable conditions in Tarrant County, as well as Texas, for 2017 are listed in Table 1. In addition to these, any outbreak, exotic diseases, and unusual group expressions of disease must be reported. All diseases must be reported by ***name, age, gender, race/ethnicity, date of birth, address, telephone number, disease, date of onset, method of diagnosis, and name, address, and telephone number of physician.***

Background Information for Statistical Summaries

The frequency and incidence rate of communicable diseases are presented overall, by gender, by race/ethnicity, by age group, and by ZIP code. Incidence rates are calculated as follows:

- Numerator – 2017 incidence of disease in Tarrant County
- Denominator – 2017 Tarrant County population at risk (2012-2016 five-year population estimates used for rates by ZIP code)
- Rate – per 100,000 population

Incidence rate is an essential and valuable public health measure. However, rates based on numbers less than 20 cases are not recommended for reliable comparison because such rates fluctuate dramatically and differ considerably, even when differences are not meaningful. Therefore rates for less than 20 cases are not provided in this report. Also, conditions with less than five cases are not presented to protect confidentiality. Even when a specific demographic category has more than five cases, the number may be suppressed in order to prevent inadvertent disclosure through subtraction.

In this report cases are reported based on the disease event date, which is likely closest to the disease onset date. This date differs from the date used, report date, in Tarrant County Public Health's Monthly Morbidity Report.

Notifiable Conditions

Table 1. Notifiable conditions, Tarrant County, 2017

A – H	Cases	I – Y	Cases
Acquired immune deficiency syndrome (AIDS)	42	Influenza, Novel	0
Amebiasis	6	Legionellosis	39
Amebic meningitis and encephalitis	0	Leishmaniasis	0
Anaplasmosis	<5	Listeriosis	<5
Anthrax	0	Lyme disease	7
Arbovirus infection		Malaria	20
Chikungunya virus	<5	Measles (rubeola)	0
West Nile Virus (fever/neuroinvasive)	9/11	Meningococcal infections, invasive (Neisseria meningitidis)	0
Zika virus*	<5	Multidrug-resistant Acinetobacter (MDR-A)†	95
Other arbovirus*	<5	Mumps	40
Ascariasis	0	Paragonimiasis	0
Babesiosis	0	Pertussis	496
Botulism (adult and infant)	0	Plague (Yersinia pestis)	0
Brucellosis	<5	Poliomyelitis, acute paralytic	0
Campylobacteriosis	336	Poliovirus infection, non-paralytic	0
Carbapenem resistant Enterobacteriaceae (CRE)†	30	Prion disease such as Creutzfeldt-Jakob disease (CJD)	<5
Chagas disease	0	Q fever	0
Chancroid	0	Rabies, human	0
Chickenpox (varicella)	118	Rubella (including congenital)	0
<i>Chlamydia trachomatis</i> infection	8,025	Salmonellosis, including typhoid fever	410
Coronavirus, novel	0	Shiga toxin-producing <i>Escherichia coli</i>	86
Cryptosporidiosis	83	Shigellosis	89
Cyclosporiasis	19	Smallpox	0
Cysticercosis	0	Spotted fever group rickettsioses	6
Diphtheria	0	Staphylococcus aureus, VISA and VRSA†	0
Echinococcosis	0	Streptococcal disease	
Ehrlichiosis	<5	Group A Streptococcus	68
Fascioliasis	0	Group B Streptococcus	147
Gonorrhea	2,718	Streptococcus Pneumoniae	156
<i>Haemophilus influenzae</i> , invasive	38	Syphilis – primary and secondary stages	197
Hansen's disease (leprosy)	0	Syphilis – all other stages	310
Hantavirus infection	0	<i>Taenia solium</i> and undifferentiated <i>Taenia</i> infection	0
Hemolytic uremic syndrome (HUS)	<5	Tetanus	0
Hepatitis A	8	Trichinosis	0
Hepatitis B (acute)	12	Trichuriasis	0
Hepatitis B, perinatal	0	Tuberculosis	83
Hepatitis B, prenatal or at delivery	0	Tularemia	0
Hepatitis C (acute)	<5	Typhoid fever (salmonella typhi)	0
Hepatitis E (acute)	0	Typhus	26
Hookworm (ancylostomiasis)	0	Vibrio infection, including cholera	11
Human immunodeficiency virus (HIV), acute infection	10	Viral hemorrhagic fever, including Ebola	0
Human immunodeficiency virus (HIV)	265	Yellow fever	0
Influenza-associated pediatric mortality	0	Yersiniosis	<5
RED indicates immediately reportable conditions; BLUE indicates reportable within one working day; all others are reportable within one week			
<p><i>Note: This table represents communicable conditions that were reportable in 2017; Less than five cases not shown to protect confidentiality</i></p> <p><i>*All Zika cases were travel-related; **Other arboviral infections include neuroinvasive and non-neuroinvasive California serogroup including Cache Valley, Eastern Equine (EEE), Dengue, Powassan, St. Louis Encephalitis, and Western Equine (WEE)</i></p> <p><i>† 2017 MDRO data is provisional at the time of this report. Cases are considered provisional until reviewed by Texas DSHS</i></p> <p><i>Data source: Tarrant County Public Health: Texas National Electronic Disease Surveillance System (NEDSS)</i></p>			

Communicable Diseases in Tarrant County

Table 2. Leading communicable diseases overall and by gender, Tarrant County, 2017

Rank	Overall n (rate)	Female n (rate)	Male n (rate)
1	Chlamydia 8,025 (396.5)	Chlamydia 5,671 (551.3)	Chlamydia 2,354 (236.5)
2	Gonorrhea 2,718 (134.3)	Gonorrhea 1,339 (130.2)	Gonorrhea 1,379 (138.6)
3	Syphilis 503 (24.9)	Pertussis 275 (26.7)	Syphilis 441 (44.3)
4	Pertussis 496 (24.5)	Salmonellosis 196 (19.1)	Pertussis 221 (22.2)
5	Salmonella 410 (20.3)	Campylobacteriosis 155 (15.1)	HIV 220 (22.1)
6	Campylobacteriosis 336 (16.6)	<i>S. pneumoniae</i> , inv 83 (8.1)	Salmonella 212 (21.3)
7	HIV 275 (13.6)	Group B Strep 65 (6.3)	Campylobacteriosis 181 (18.2)
8	<i>S. pneumoniae</i> , inv 156 (7.7)	Syphilis 59 (5.7)	Group B Strep 82 (8.2)
9	Group B Strep 147 (7.3)	HIV 55 (5.3)	<i>S. pneumoniae</i> , inv 73 (7.3)
10	Varicella (Chickenpox) 118 (5.8)	Varicella (Chickenpox) 54 (5.2)	Varicella (Chickenpox) 64 (6.4)

n = number of cases; rate per 100,000 population

Data source: Tarrant County Public Health

Table 3. Leading communicable diseases by race/ethnicity, Tarrant County, 2017[†]

Rank	Hispanic n (rate)	Non-Hispanic Black n (rate)	Non-Hispanic White n (rate)	Other/Multiracial n (rate)
1	Chlamydia 952 (151.3)	Chlamydia 1,920 (614.6)	Chlamydia 1,178 (128.6)	Chlamydia 285 (171.0)
2	Gonorrhea 267 (42.4)	Gonorrhea 1,042 (333.6)	Gonorrhea 449 (49.0)	Gonorrhea 80 (48.0)
3	Pertussis 183 (29.1)	Syphilis 223 (71.4)	Pertussis 219 (23.9)	Tuberculosis 23 (13.8)
4	Campylobacteriosis 144 (22.9)	HIV 144 (46.1)	Salmonellosis 192 (21.0)	Pertussis 19 (@)
5	Salmonellosis 140 (22.3)	Pertussis 57 (18.2)	Syphilis 130 (14.2)	Syphilis 15 (@)
6	Syphilis 132 (21.0)	Salmonellosis 38 (12.2)	Campylobacteriosis 125 (13.6)	Salmonella/Varicella 12 (@)
7	HIV 51 (8.1)	<i>S. pneumoniae</i> , inv 37 (11.8)	Group B Strep 97 (10.6)	Campylobacteriosis 10 (@)
8	<i>E. coli</i> , STEC 46 (7.3)	Campylobacteriosis 33 (10.6)	<i>S. pneumoniae</i> , inv 88 (9.6)	Mumps 6 (@)
9	Tuberculosis 29 (4.6)	Shigellosis 27 (8.6)	HIV 71 (7.8)	Shigella 5 (@)
10	Shigellosis 25 (4.0)	Tuberculosis 21 (6.7)	Cryptosporidiosis 54 (5.9)	---

n = number of cases; rate per 100,000 population; @ = rate unstable for less than 20 cases

[†]Rankings for race/ethnicity should be interpreted with caution due to missing data: Race/ethnicity data are missing for 46% of chlamydia cases, 32% of gonorrhea cases, 30% of varicella cases, and 17% of MDRA cases

Selected case counts not reported to protect confidentiality and prevent inadvertent disclosure

Data source: Tarrant County Public Health

Table 4. Leading communicable diseases by age group, Tarrant County, 2017

Rank	0 to 14 n (rate)	15 to 24 n (rate)	25 to 44 n (rate)	45 to 64 n (rate)	65+ n (rate)
1	Pertussis 341 (77.1)	Chlamydia 5,152 (1,715.4)	Chlamydia 2,640 (459.5)	Chlamydia 183 (36.9)	Group B Strep 65 (30.7)
2	Salmonellosis 199 (45.0)	Gonorrhea 1,468 (488.8)	Gonorrhea 1,099 (191.3)	Gonorrhea 135 (27.2)	<i>S. pneumoniae</i> , inv 57 (26.9)
3	Campylobacteriosis 111 (25.1)	Syphilis 121 (40.3)	Syphilis 286 (49.8)	Syphilis 92 (18.6)	Campylobacteriosis 53 (25.0)
4	Varicella (Chickenpox) 90 (20.4)	Pertussis 92 (30.6)	HIV 148 (25.8)	Salmonellosis 84 (17.0)	Salmonellosis 46 (21.7)
5	<i>E. coli</i> , STEC 57 (12.9)	HIV 64 (21.3)	Campylobacteriosis 68 (11.8)	Campylobacteriosis 67 (13.5)	MDR-Acinetobacter [†] 44 (20.8)
6	Shigella/Chlamydia -- (--)	Campylobacteriosis 37 (12.3)	Salmonellosis 51 (8.9)	HIV 60 (12.1)	H. Influenza 25 (11.8)
7	Cryptosporidiosis 30 (6.8)	Salmonellosis 30 (10.0)	Pertussis 36 (6.3)	<i>S. pneumoniae</i> , inv 54 (10.9)	Group A Strep 22 (10.4)
8	<i>S. pneumoniae</i> , inv 21 (4.7)	Mumps 22 (7.3)	Tuberculosis 26 (4.5)	Group B Strep 48 (9.7)	Tuberculosis 16 (@)
9	Group B Strep -- (--)	Shigellosis 11 (@)	AIDS 23 (4.0)	MDR-Acinetobacter [†] 35 (7.1)	Legionellosis 13 (@)
10	Gonorrhea 11 (@)	Varicella (Chickenpox) 9 (@)	<i>S. pneumoniae</i> , inv -- (3.5)	Group A Strep/TB 30 (6.1)	CR-Enterobacteriaceae 11 (@)

n = number of cases; rate per 100,000 population; @ = rate unstable for less than 20 cases

Selected case counts not reported to protect confidentiality and prevent inadvertent disclosure

E. coli STEC - Shiga toxin-producing *Escherichia coli*; MDR = Multidrug-Resistant; CR = Carbapenem-Resistant;

Data source: Tarrant County Public Health

Disease Specific Information and Definitions

Following are disease specific information, statistical summary tables, and ZIP code maps for the 10 leading communicable diseases overall for Tarrant County in 2017. 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 (www.cdc.gov). 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

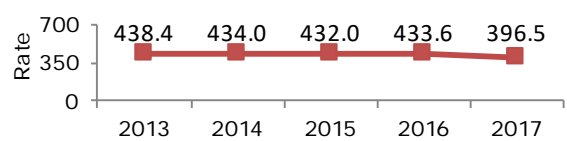
1. Chlamydia

- **Causative Agent:** (bacterial) *Chlamydia trachomatis*
- **Signs/Symptoms:** Men - discharge, urethral itching, burning urination; 1-25% of infected men do not exhibit symptoms. Women - discharge with swelling; up to 70% of infected women do not exhibit symptoms. Infants born to infected women may develop eye or pneumonic infections. Complications for both men and women include infertility and for women, increased risk of HIV infection.
- **Mode(s) of Transmission:** Perinatally or sexually transmitted infection
- **Incubation Period:** 7-14 days or longer
- **Period of Communicability:** Infected individuals are assumed to be infectious

SUMMARY: CHLAMYDIA

Number of cases	8,025
Incidence rate (per 100,000 population)	396.5
Change from 5-year average incidence	- 7.1%

5-Year Trend (2013-2017)



Gender	Number	(Percent)	Rate	Age (in years)
Female	5,671	(70.7)	551.3	Mean 24
Male	2,354	(29.3)	236.5	Median 22
Unknown	0			Min-Max 0-69

Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	952	(22.0)	151.3	0-14	-	(-)	10.4
Non-Hispanic Black	1,920	(44.3)	614.6	15-24	5,152	(64.2)	1,715.4
Non-Hispanic White	1,178	(27.2)	128.6	25-44	2,640	(32.9)	459.5
Other/Multiracial	285	(6.6)	171.0	45-64	183	(2.3)	36.9
Unknown	3,690			65+	-	(-)	@

Select cases not reported to protect confidentiality and prevent inadvertent disclosure;
 @ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 1. Chlamydia cases by month, Tarrant County, 2017

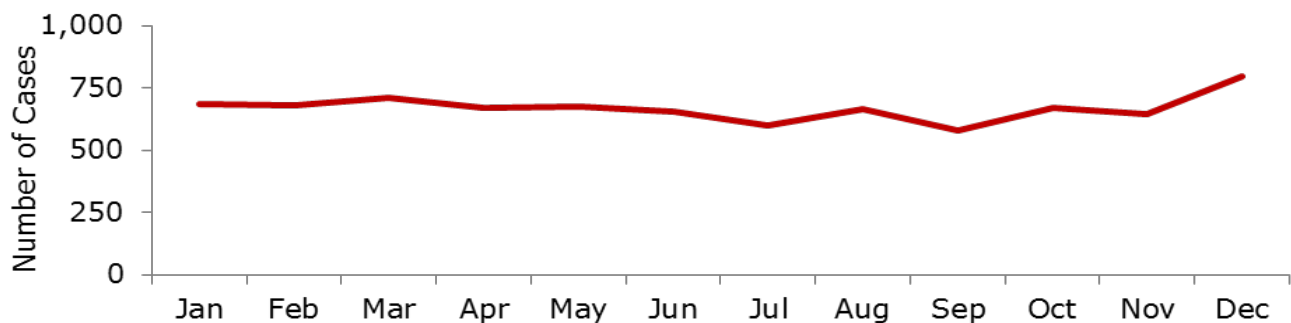
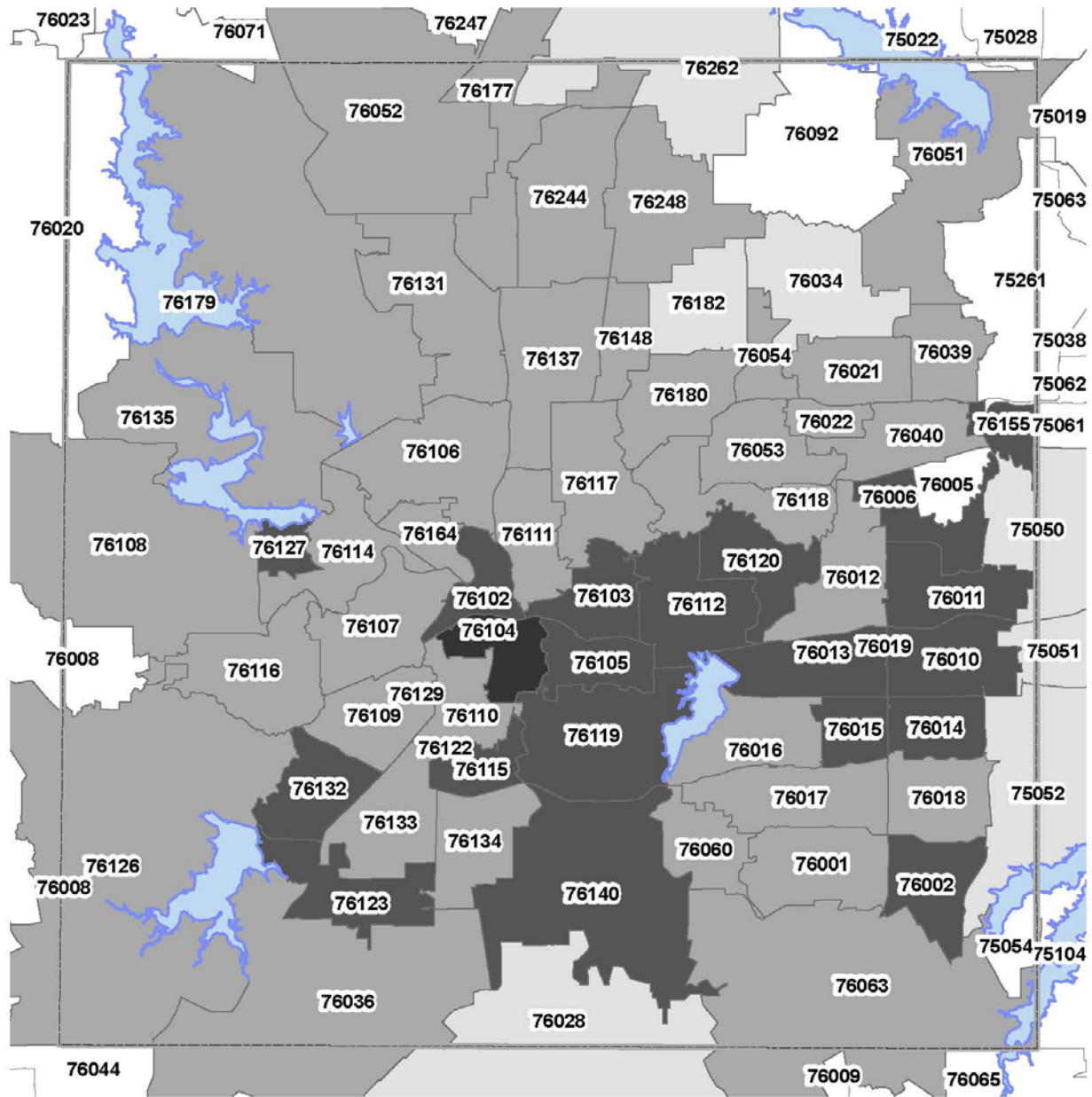
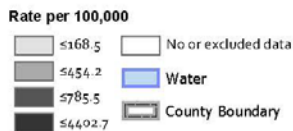


Figure 2. Geographic distribution of Chlamydia by ZIP code, Tarrant County, 2017



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2. Gonorrhea

- **Causative Agent:** (bacterial) *Neisseria gonorrhoeae*
- **Signs/Symptoms:** Men - discharge, urethral itching, burning urination; very few of infected men do not exhibit symptoms. Women - discharge and vaginal bleeding after intercourse; most women do not exhibit symptoms. Infants born to infected women may develop eye infections.
- **Mode(s) of Transmission:** Perinatally or sexually transmitted infection
- **Incubation Period:** 1-14 days or longer
- **Period of Communicability:** Infected individuals are assumed to be infectious

SUMMARY: GONORRHEA				5-Year Trend (2013-2017)			
Number of cases	2,718						
Incidence rate (per 100,000 population)	134.3						
Change from 5-year average incidence	+ 0.7%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	1,339	(49.3)	130.2	Mean	26		
Male	1,379	(50.7)	138.6	Median	24		
Unknown	0			Min-Max	0-73		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	267	(14.5)	42.4	0-14	11	(0.4)	@
Non-Hispanic Black	1,042	(56.7)	333.6	15-24	1,468	(54.0)	488.8
Non-Hispanic White	449	(24.4)	49.0	25-44	1,099	(40.4)	191.3
Other/Multiracial	80	(4.4)	48.0	45-64	135	(5.0)	27.2
Unknown	880			65+	5	(0.2)	@

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 3. Gonorrhea cases by month, Tarrant County, 2017

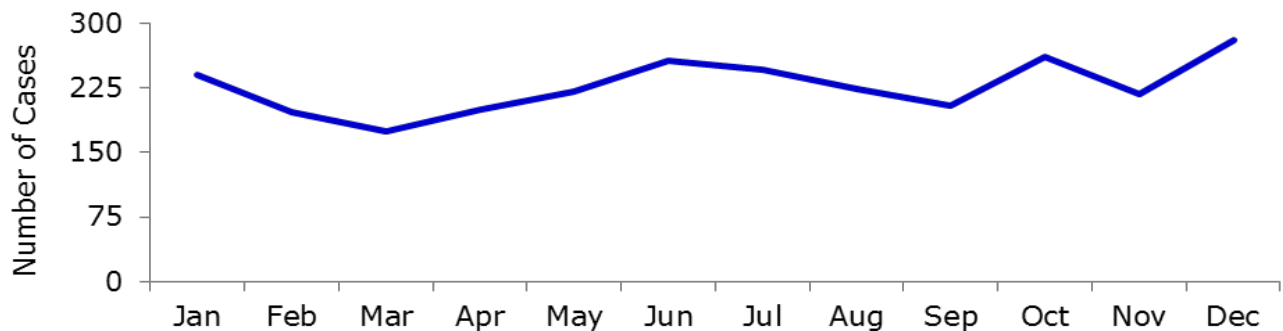
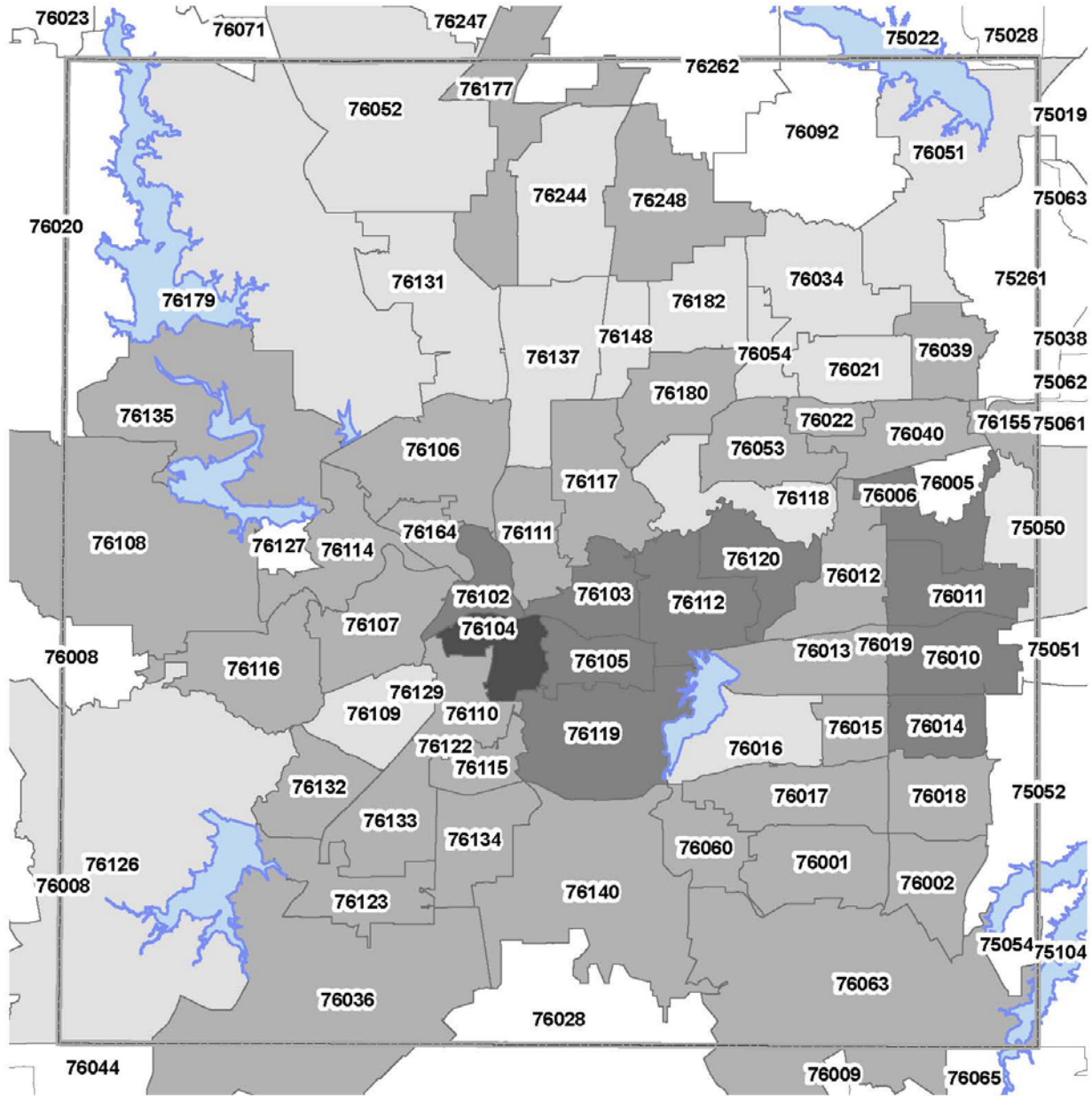
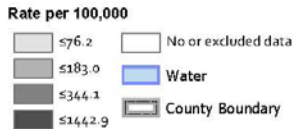


Figure 4. Geographic distribution of Gonorrhea by ZIP code, Tarrant County, 2017



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3. Syphilis

- **Causative Agent:** (bacterial) *Treponema pallidum*
- **Signs/Symptoms:** Primary lesion which may or may not be visible appearing approximately 3 weeks after infection (primary syphilis) followed by a secondary disease phase lasting 2 weeks to 12 months characterized by a rash on the palms of the hands and soles of the feet (secondary syphilis). Untreated individuals will proceed to a tertiary phase (late syphilis) which may involve reoccurring lesions, central nervous system disease, and meningitis. Infants born to infected women (congenital syphilis) may die due to preterm birth and/ or low birthweight.
- **Mode(s) of Transmission:** Perinatally, sexually, or blood transmitted infection
- **Incubation Period:** 10 days to 3 months, usually 3 weeks
- **Period of Communicability:** Period involving lesions, typically within the first year of infection

SUMMARY: SYPHILIS (ALL STAGES)				5-Year Trend (2013-2017)			
Number of cases	507						
Incidence rate (per 100,000 population)	25.0						
Change from 5-year average incidence	+ 9.4%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	59	(11.7)	5.7	Mean	33		
Male	441	(87.7)	44.3	Median	30		
Unknown	4			Min-Max	0-76		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	132	(26.4)	21.0	0-14	-	(-)	@
Non-Hispanic Black	223	(44.6)	71.4	15-24	121	(23.9)	40.3
Non-Hispanic White	130	(26.0)	14.2	25-44	286	(56.4)	49.8
Other/Multiracial	15	(3.0)	@	45-64	92	(18.1)	18.6
Unknown	7			65+	-	(-)	@

Select cases not reported to protect confidentiality and prevent inadvertent disclosure;
 @ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

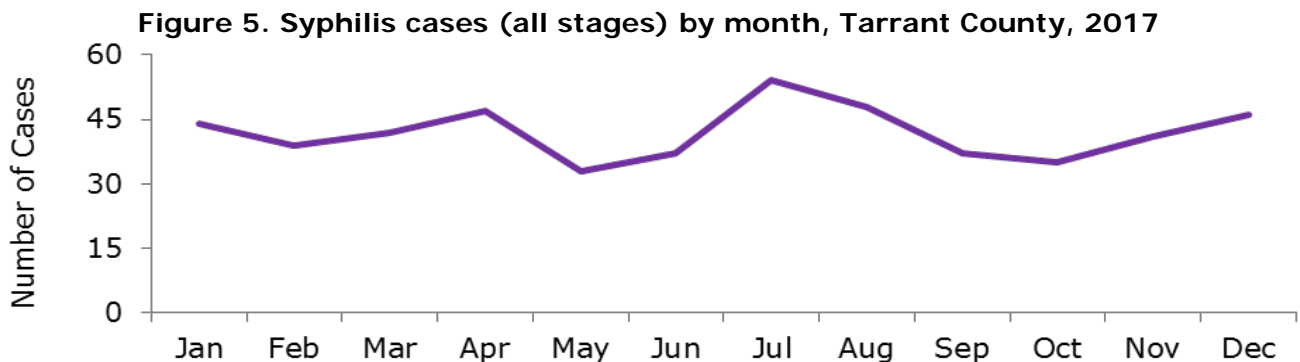
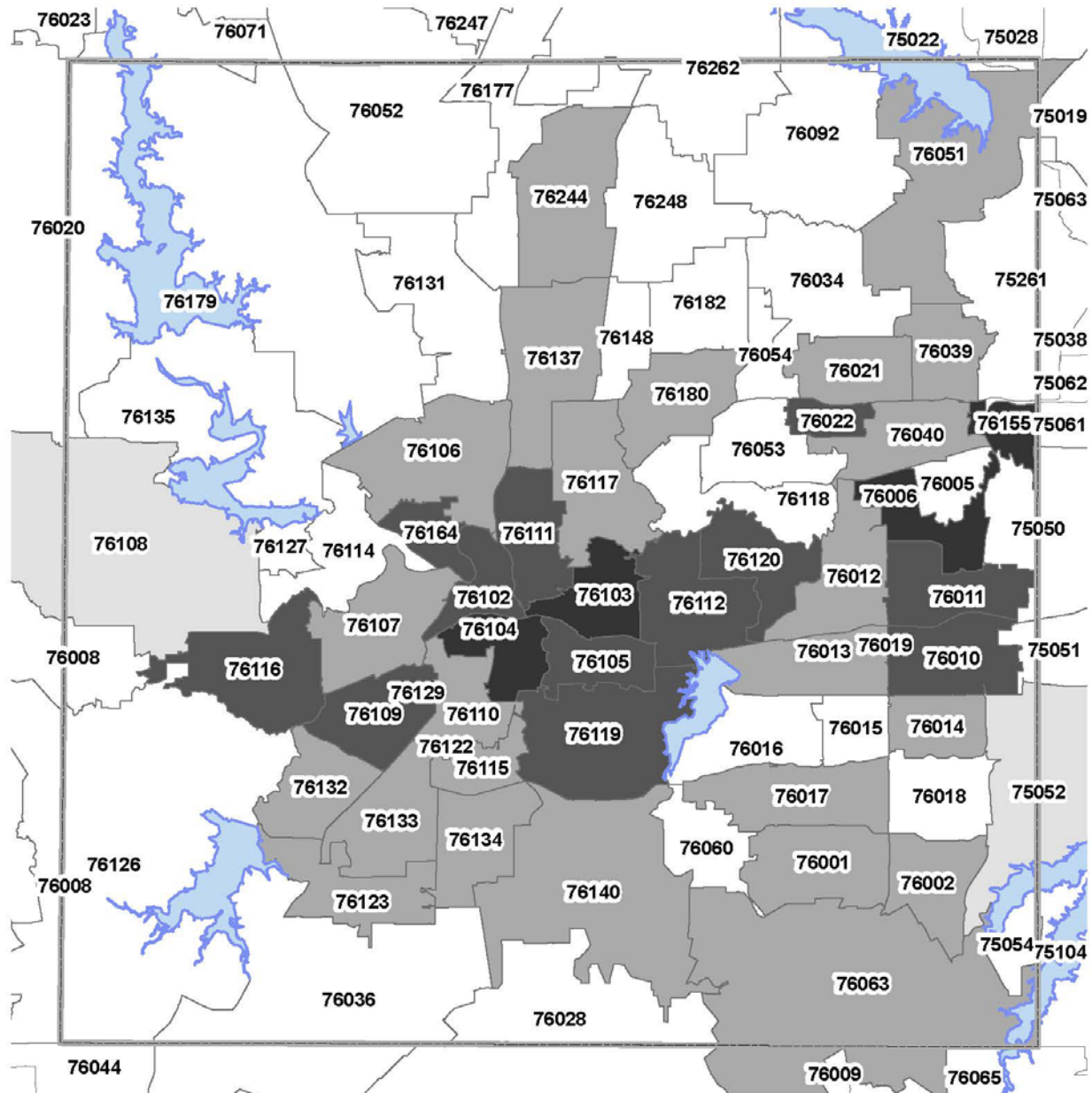


Figure 6. Geographic distribution of Early Syphilis by ZIP code, Tarrant County, 2017



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Rate per 100,000

- ☐ ≤12.1
- ☐ ≤35.9
- ☐ ≤64.7
- ☐ ≤120.8
- ☐ No or excluded data
- ☐ Water
- ☐ County Boundary



4. Pertussis (Whooping Cough)

- **Causative Agent:** (bacterial) *Bordetella pertussis*
- **Signs/Symptoms:** Early symptoms are cold-like and include runny nose, low-grade fever, with an occasional mild cough. After 1 to 2 weeks, severe coughing can begin and continue for weeks. Coughing can be violent and rapid until the air is gone from the lungs and the person is forced to inhale with a loud “whooping” sound.
- **Mode(s) of Transmission:** Direct contact with discharges from respiratory mucous membranes of infected persons by the airborne route, usually via droplets.
- **Incubation Period:** 6-20 days, average 9-10 days
- **Period of Communicability:** Highly communicable during the early phase of illness (first 2 weeks); Communicability decreases in about 3 weeks, despite persisting cough.

SUMMARY: PERTUSSIS (WHOOPING COUGH)				5-Year Trend (2013-2017)			
Number of cases	496						
Incidence rate (per 100,000 population)	24.5						
Change from 5-year average incidence	+ 3.6%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	275	(55.4)	26.7	Mean	13		
Male	221	(44.6)	22.2	Median	10		
Unknown	0			Min-Max	0-81		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	183	(38.3)	29.1	0-14	341	(68.8)	77.1
Non-Hispanic Black	57	(11.9)	18.2	15-24	92	(18.5)	30.6
Non-Hispanic White	219	(45.8)	23.9	25-44	36	(7.3)	6.3
Other/Multiracial	19	(4.0)	@	45-64	21	(4.2)	4.2
Unknown	18			65+	6	(1.2)	@

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 7. Pertussis cases by month, Tarrant County, 2017

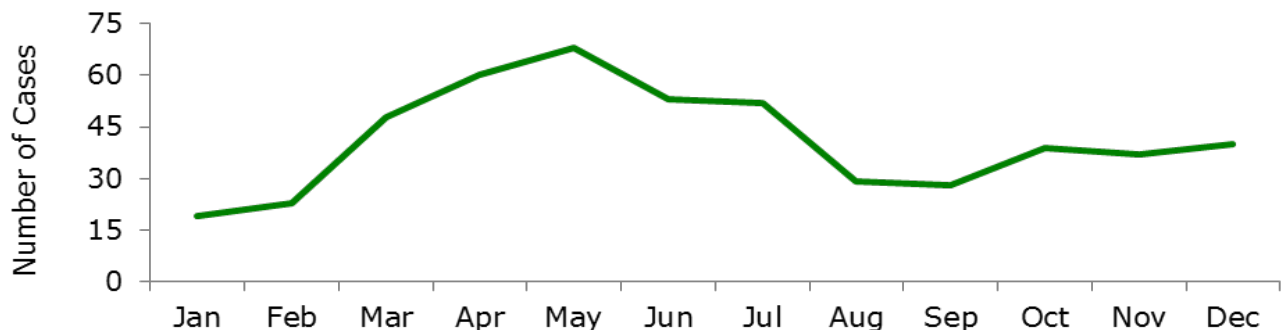
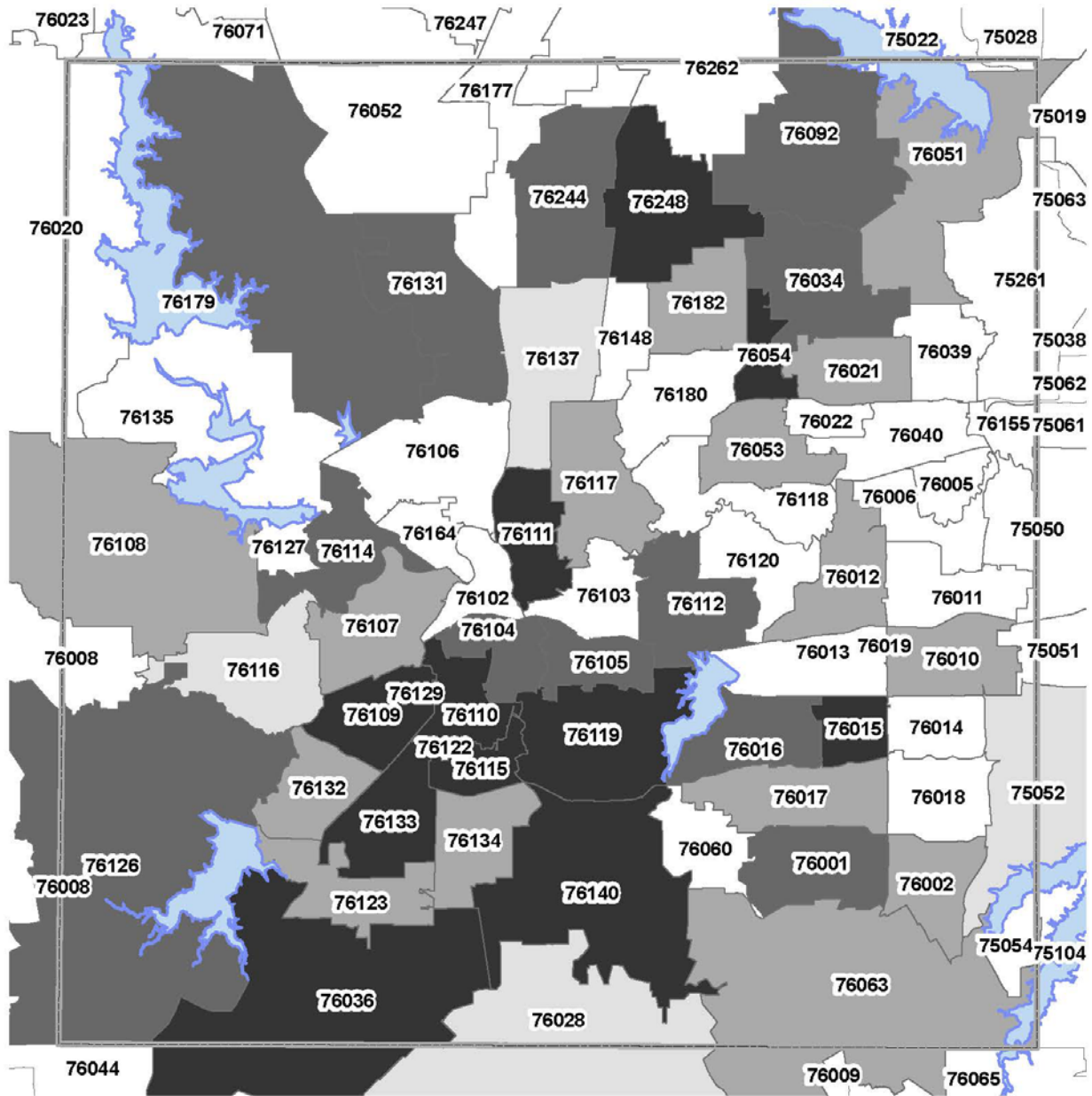
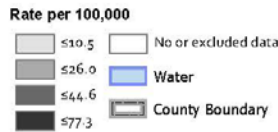


Figure 8. Geographic distribution of Pertussis by ZIP code, Tarrant County, 2017



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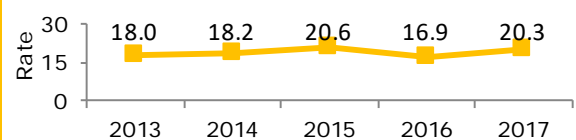
5. Salmonellosis

- **Causative Agent:** (bacterial) *Salmonella* species
- **Signs/Symptoms:** Fever, headache, abdominal pain, diarrhea, possibly vomiting. Some people do not present with any symptoms.
- **Mode(s) of Transmission:** Ingestion of the bacteria in food derived from infected animals or contaminated by feces of an infected animal or person.
- **Incubation Period:** 6 hours to 5 days, usually 1-2 days
- **Period of Communicability:** While signs/symptoms are present; those infected may carry and transmit the bacteria for weeks up to a year after becoming infected.

SUMMARY: SALMONELLOSIS

5-Year Trend (2013-2017)

Number of cases	410
Incidence rate (per 100,000 population)	20.3
Change from 5-year average incidence	+ 8.0%



Gender	Number	(Percent)	Rate	Age (in years)		
Female	196	(48.0)	19.1	Mean	27	
Male	212	(52.0)	21.3	Median	18	
Unknown	2			Min-Max	0-88	

Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	140	(36.6)	22.3	0-14	199	(48.5)	45.0
Non-Hispanic Black	38	(9.9)	12.2	15-24	30	(7.3)	10.0
Non-Hispanic White	192	(50.3)	21.0	25-44	51	(12.4)	8.9
Other/Multiracial	12	(3.1)	@	45-64	84	(20.5)	17.0
Unknown	28			65+	46	(11.2)	21.7

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 9. Salmonellosis cases by month, Tarrant County, 2017

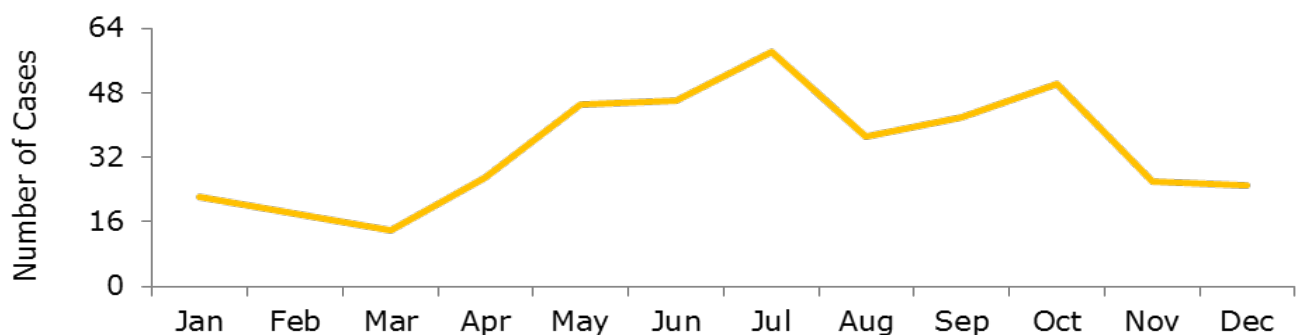
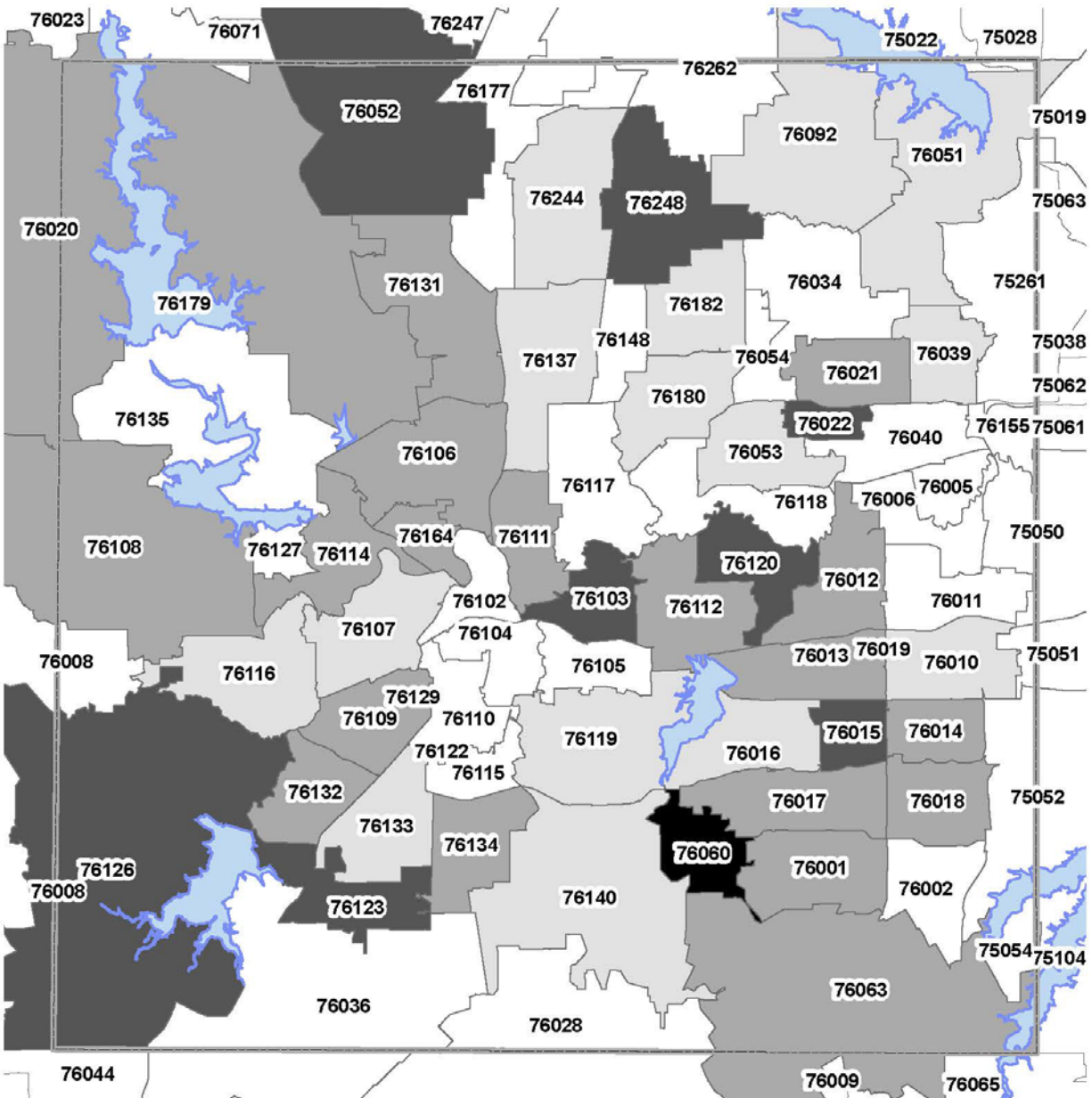
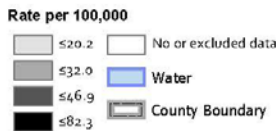


Figure 10. Geographic distribution of Salmonellosis by ZIP code, Tarrant County, 2017



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6. Campylobacteriosis

- **Causative Agent:** (bacterial) *Campylobacter* species
- **Signs/Symptoms:** Diarrhea (frequently bloody), fever, abdominal pain, vomiting. Many people do not present with any symptoms.
- **Mode(s) of Transmission:** Ingestion of the bacteria in food derived from infected animals (typically poultry) or food or water contaminated by feces of an infected animal. Contact with infected animals, especially puppies and kittens.
- **Incubation Period:** 1-10 days, usually 2-5 days
- **Period of Communicability:** While signs/symptoms are present; those infected may carry and transmit the bacteria for 2-7 weeks after becoming infected.

SUMMARY: CAMPYLOBACTERIOSIS				5-Year Trend (2013-2017)			
Number of cases	336						
Incidence rate (per 100,000 population)	16.6						
Change from 5-year average incidence	+ 37.4%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	155	(46.1)	15.1	Mean	34		
Male	181	(53.9)	18.2	Median	30		
Unknown	0			Min-Max	0-92		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	144	(46.2)	22.9	0-14	111	(33.0)	25.1
Non-Hispanic Black	33	(10.6)	10.6	15-24	37	(11.0)	12.3
Non-Hispanic White	125	(40.1)	13.6	25-44	68	(20.2)	11.8
Other/Multiracial	10	(3.2)	@	45-64	67	(19.9)	13.5
Unknown	24			65+	53	(15.8)	25.0

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 11. Campylobacteriosis cases by month, Tarrant County, 2017

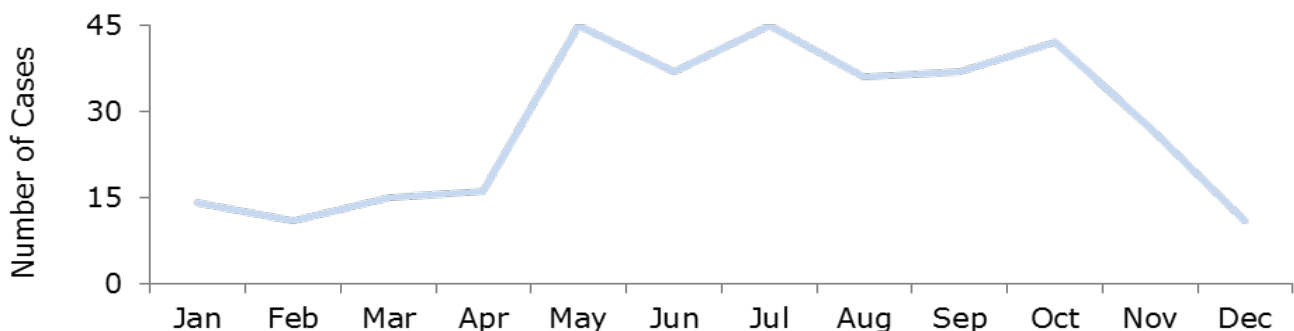
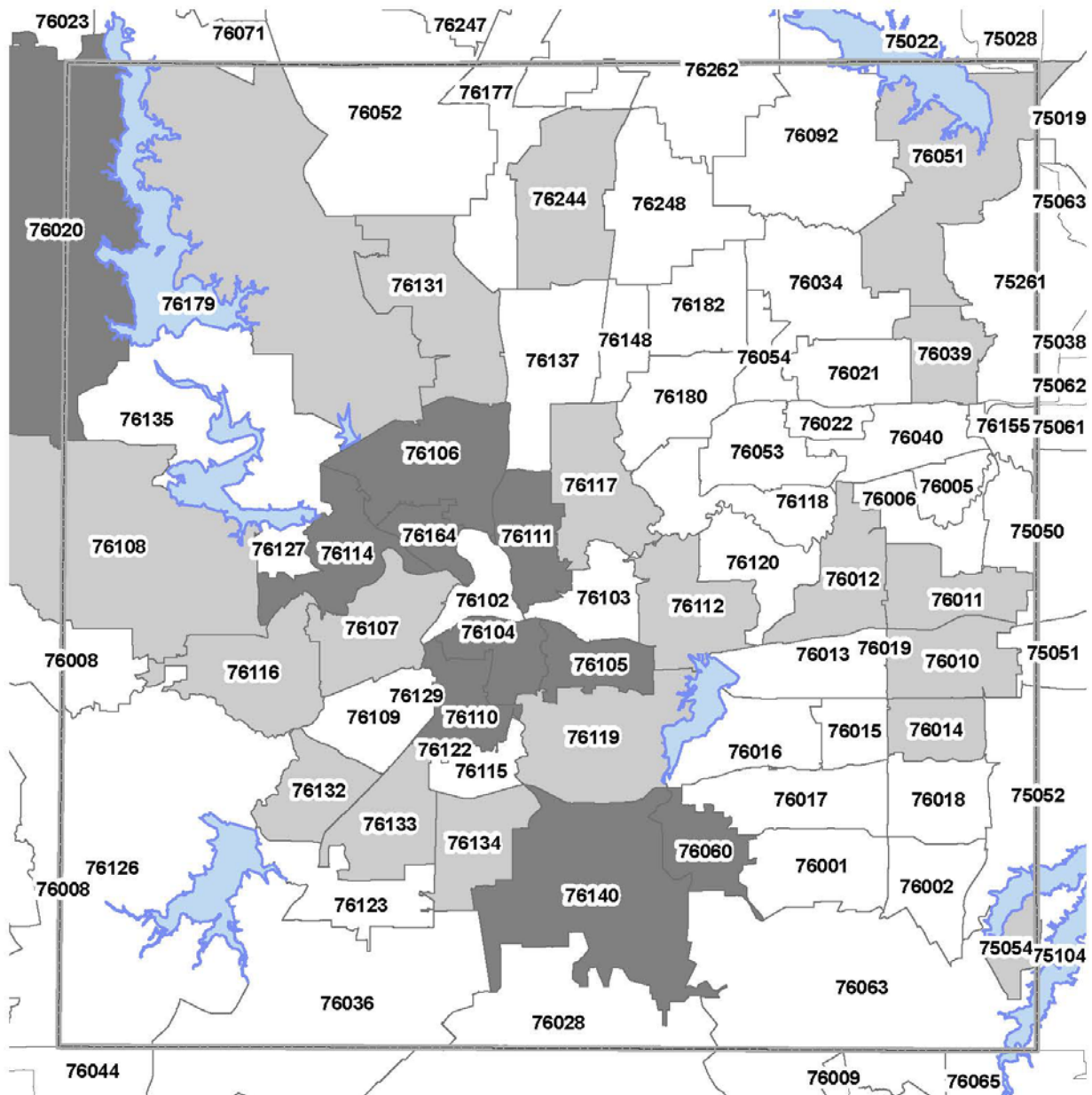


Figure 12. Geographic distribution of Campylobacteriosis by ZIP code, Tarrant County, 2017



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Rate per 100,000

 ≤26.1	 Water
 ≥70.5	 County Boundary
 No or excluded data	



7. Human Immunodeficiency Virus (HIV)

- **Causative Agent:** (viral) Human Immunodeficiency Virus (HIV)
- **Signs/Symptoms:** Several weeks after infection flu-like symptoms of chills, body aches, and fatigue and possibly fever lasting 1-2 weeks. Symptoms may not appear again for possibly years and may involve infections and cancers resulting from HIV induced immune deficiencies. HIV infection will result in AIDS in over 90% of individuals.
- **Mode(s) of Transmission:** Perinatally, sexually or blood transmitted infection; breastfeeding may also transmit the infection
- **Incubation Period:** Variable
- **Period of Communicability:** Begins early after infection; risk of transmission most likely highest within the first few months after infection

SUMMARY: HIV				5-Year Trend (2013-2017)			
Number of cases	275						
Incidence rate (per 100,000 population)	13.6						
Change from 5-year average incidence	+ 21.9%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	55	(20.0)	5.3	Mean	34		
Male	220	(80.0)	22.1	Median	30		
Unknown	0			Min-Max	15-69		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	51	(19.0)	8.1	0-14	-	(-)	-
Non-Hispanic Black	144	(53.5)	46.1	15-24	64	(23.3)	21.3
Non-Hispanic White	71	(26.4)	7.8	25-44	148	(53.8)	25.8
Other/Multiracial	-	(-)	@	45-64	60	(21.8)	12.1
Unknown	-			65+	-	(-)	-

Select case counts not reported to protect confidentiality and prevent inadvertent disclosure;
 @ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 13. HIV cases by month, Tarrant County, 2017

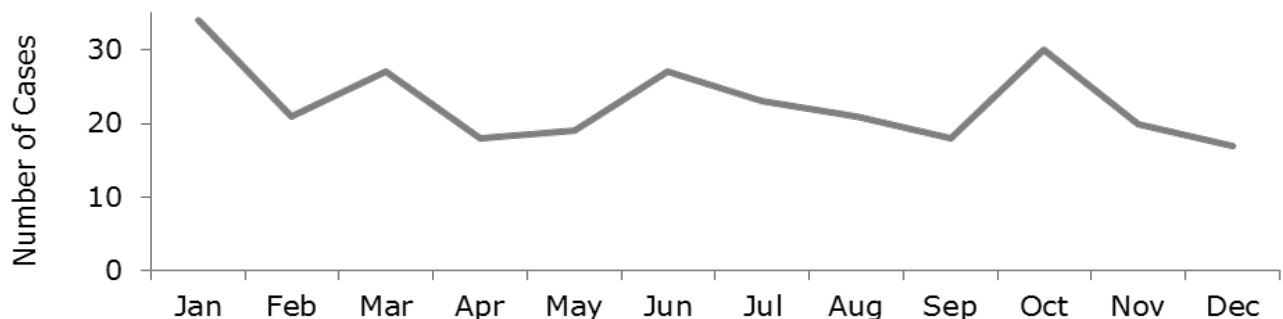
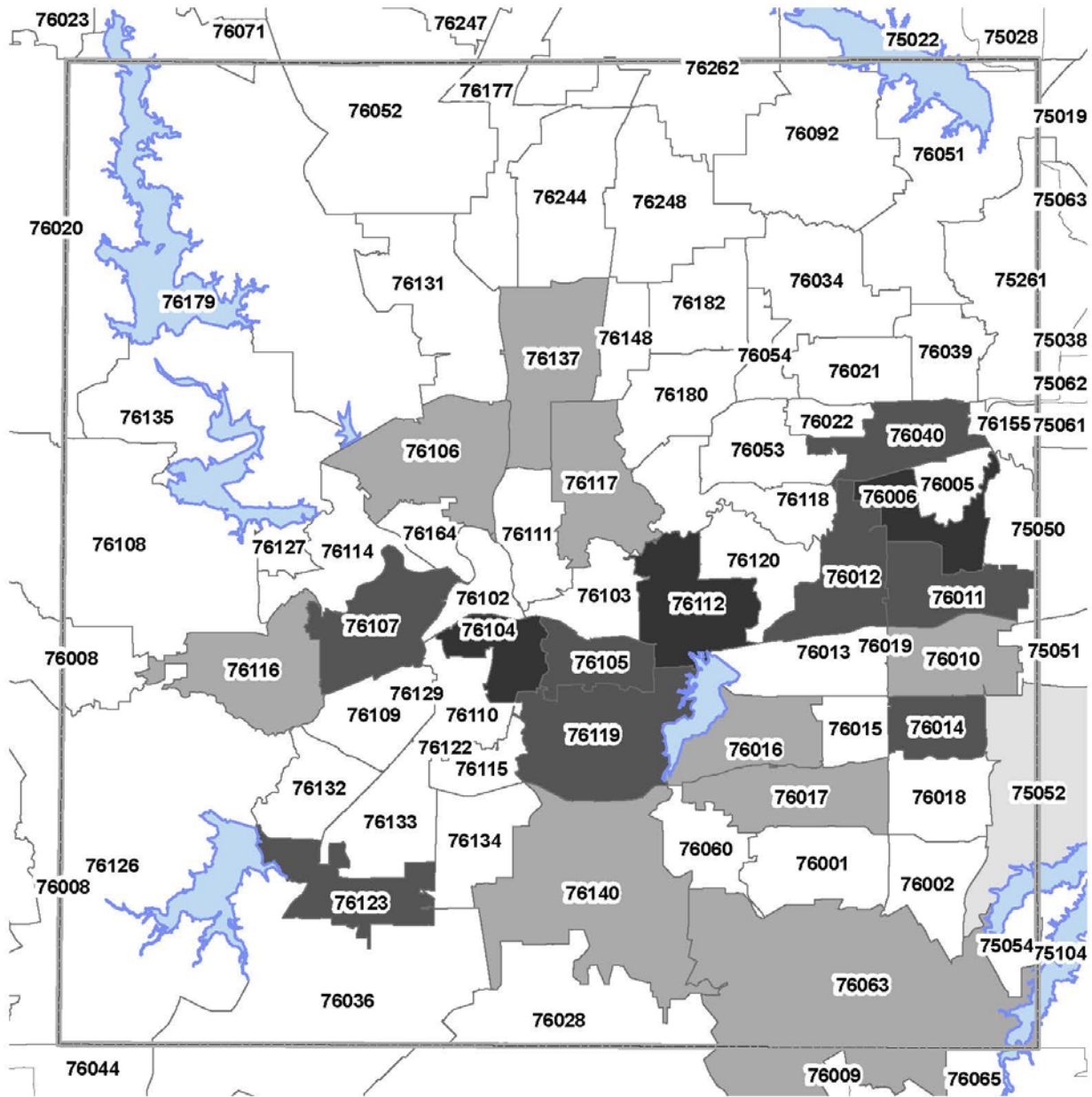
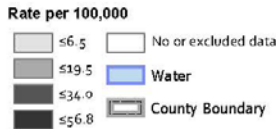


Figure 14. Geographic distribution of HIV by ZIP code, Tarrant County, 2017



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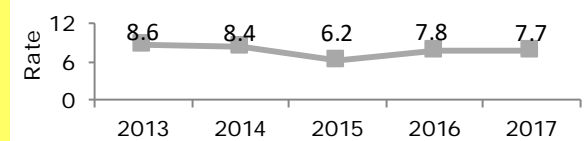
8. *Streptococcus pneumoniae* (invasive)

- **Causative Agent:** (bacterial) *Streptococcus pneumoniae*
- **Signs/Symptoms:** Bacterial infection of the blood, cerebral spinal fluid, or other normally sterile body fluid which may have originated from an infection ranging from a mild ear infection to severe pneumonia. Many people carry these bacteria in their nose and throat, not presenting with signs or symptoms.
- **Mode(s) of Transmission:** Contact with respiratory droplets of infected individuals
- **Incubation Period:** 1-3 days
- **Period of Communicability:** 10-21 days

SUMMARY: STREP PNEUMO (INVASIVE)

Number of cases	156
Incidence rate (per 100,000 population)	7.7
Change from 5-year average incidence	- 0.5%

5-Year Trend (2013-2017)



Gender	Number	(Percent)	Rate	Age (in years)			
Female	83	(53.2)	8.1	Mean	54		
Male	73	(46.8)	7.3	Median	59		
Unknown	0			Min-Max	0-100		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	16	(11.2)	@	0-14	21	(13.5)	4.7
Non-Hispanic Black	37	(25.9)	11.8	15-24	-	(-)	-
Non-Hispanic White	88	(61.5)	9.6	25-44	-	(-)	3.5
Other/Multiracial	-	(-)	-	45-64	54	(34.6)	10.9
Unknown	-			65+	57	(36.5)	26.9

Select case counts not reported to protect confidentiality and prevent inadvertent disclosure

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 15. *Streptococcus pneumoniae* (invasive) cases by month, Tarrant County, 2017

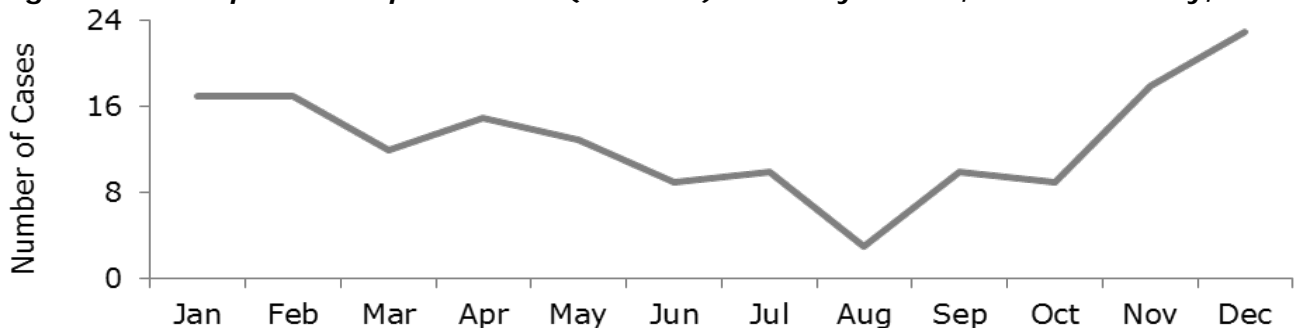
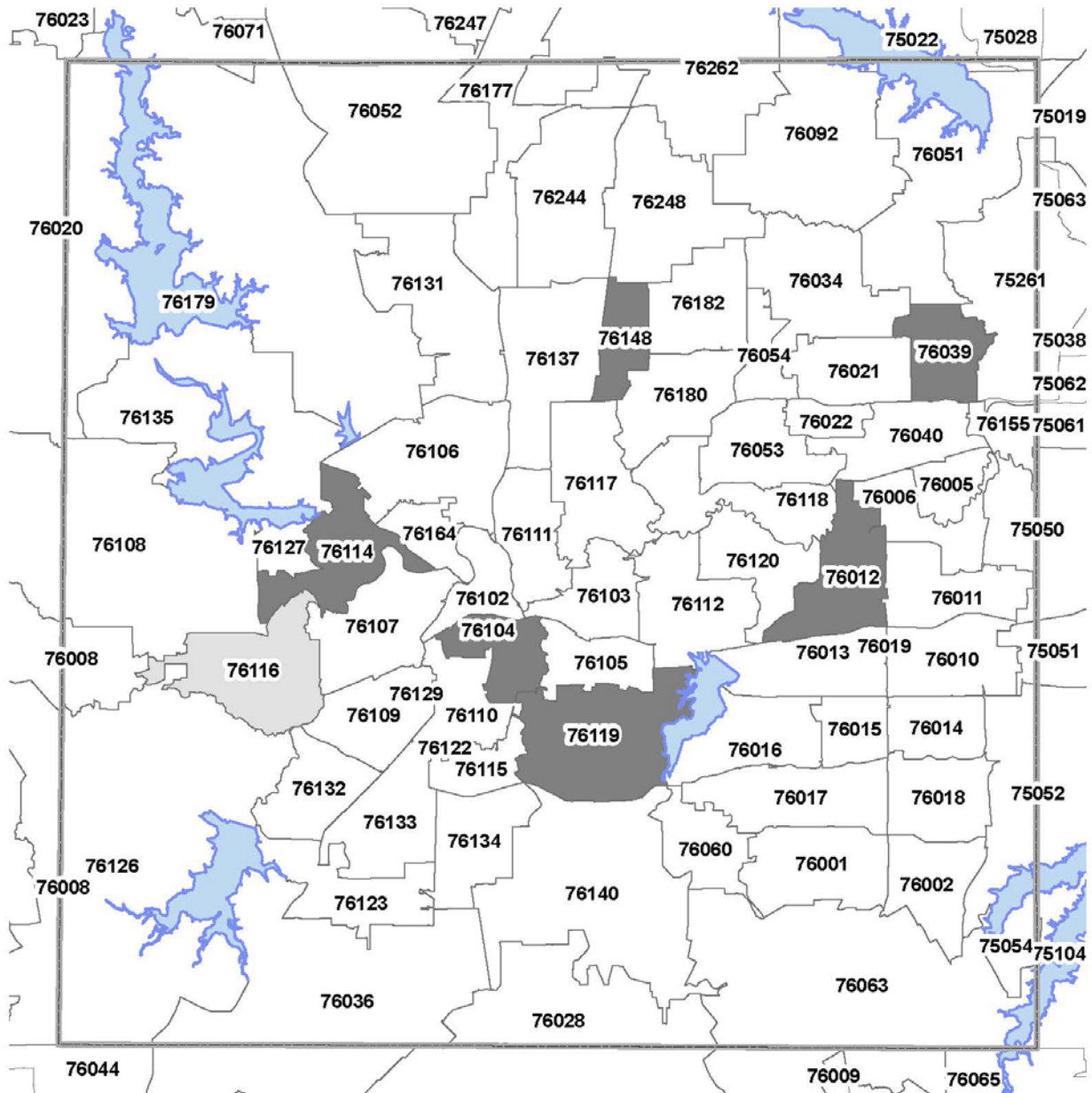


Figure 16. Geographic distribution of *Streptococcus pneumoniae* (invasive) by ZIP code, Tarrant County, 2017



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Rate per 100,000	 Water
 ≤10.2	 County Boundary
 ≤39.8	 No or excluded data



9. Group B Streptococcus (invasive)

- **Causative Agent:** (bacterial) *Streptococcus agalactiae* or group B *Streptococcus*
- **Signs/Symptoms:** Among newborns symptoms include fever, difficulty feeding, irritability, lethargy, difficulty breathing, blueish color to skin; Among adults, symptoms vary depending on the part of the body infected (blood, lung, skin/soft tissue, bone/joint).
- **Mode(s) of Transmission:** From mother to baby during labor and birth; Mode of transmission between adults is unknown (group B strep bacteria are common in the gastrointestinal tract)
- **Incubation Period:** Less than 7 days for neonates; Unknown for infants, children, and adults
- **Period of Communicability:** Unknown; An estimated 10-30% of women are carriers

SUMMARY: GROUP B STREP (INVASIVE)				5-Year Trend (2013-2017)			
Number of cases	147						
Incidence rate (per 100,000 population)	7.3						
Change from 5-year average incidence	+ 16.6%						
Gender	Number	(Percent)	Rate	Age (in years)			
Female	65	(44.2)	6.3	Mean	57		
Male	82	(55.8)	8.2	Median	62		
Unknown	0			Min-Max	0-93		
Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	24	(17.9)	3.8	0-14	-	(-)	-
Non-Hispanic Black	12	(9.0)	@	15-24	-	(-)	-
Non-Hispanic White	97	(72.4)	10.6	25-44	18	(12.2)	@
Other/Multiracial	-	(-)	-	45-64	48	(32.7)	9.7
Unknown	-			65+	65	(44.2)	30.7

Select cases not reported to protect confidentiality and prevent inadvertent disclosure

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

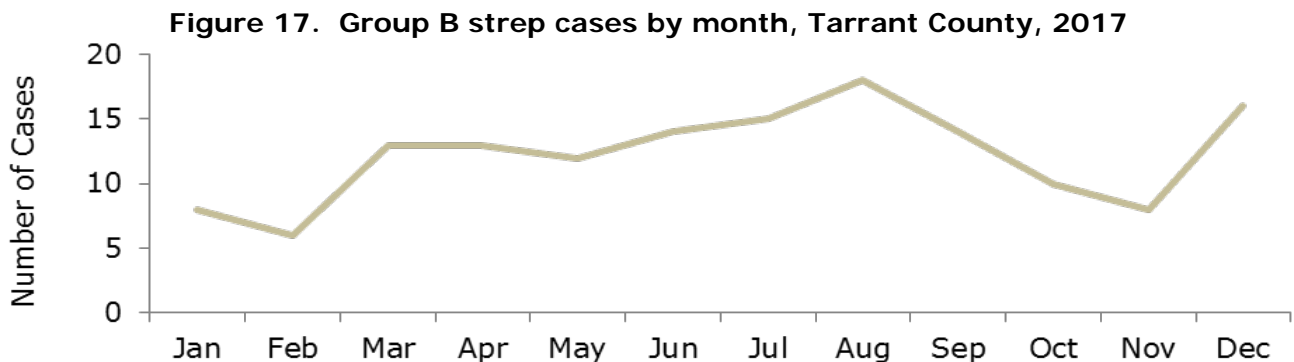
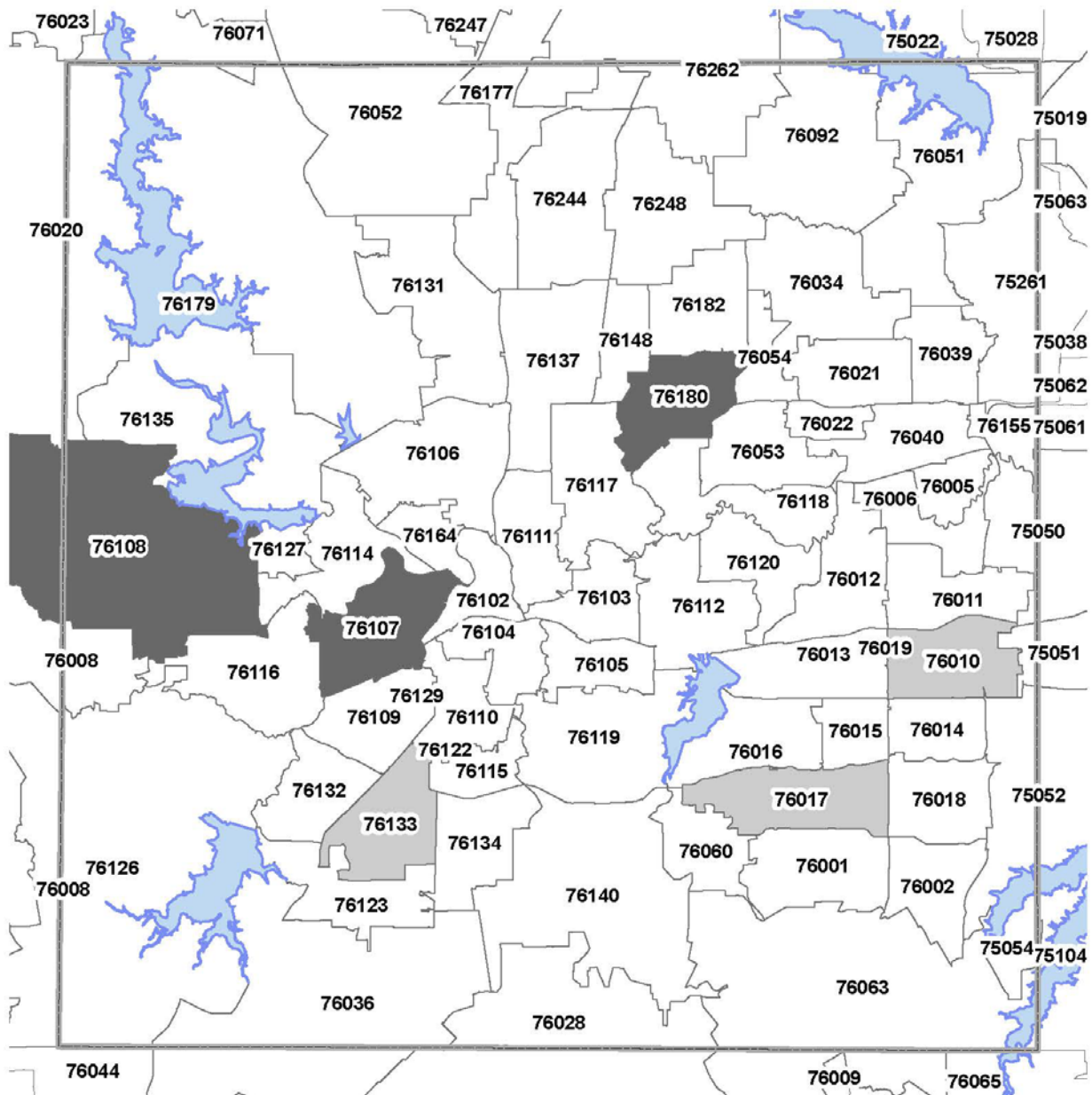


Figure 18. Geographic distribution of Group B Strep (invasive) by ZIP code, Tarrant County, 2017



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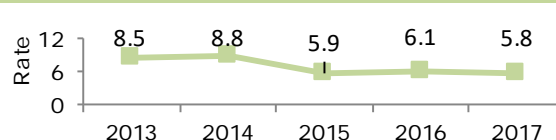
10. Chickenpox (Varicella)

- **Causative Agent:** (viral) Varicella-zoster virus
- **Signs/Symptoms:** In unvaccinated individuals, fever and rash initially presenting as red bumps progressing to blister-type lesions which may last 3-4 days before drying. Rash and lesions are typically found in differing stages of development and usually in covered areas of the body; over 200 lesions may be present. In vaccinated individuals exhibiting breakthrough infections, less than 50 non-blister like bumps may appear typically without fever.
- **Mode(s) of Transmission:** Direct contact, droplet, or air borne contact of lesion fluid or respiratory secretions of infected individuals.
- **Incubation Period:** 10-21 days; commonly 14-16 days
- **Period of Communicability:** Up to 5 days, typically 1-2 days before rash onset and continuing until lesions are dry which is typically 5 days.

SUMMARY: Chickepox (Varicella)

Number of cases	118
Incidence rate (per 100,000 population)	5.8
Change from 5-year average incidence	-17.4%

5-Year Trend (2013-2017)



Gender	Number	(Percent)	Rate	Age (in years)
Female	54	(45.8)	5.2	Mean 12
Male	64	(54.2)	6.4	Median 7.0
Unknown	0			Min-Max 0-78

Race/Ethnicity	Number	(Percent)	Rate	Age Group	Number	(Percent)	Rate
Hispanic	23	(27.7)	3.7	0-14	90	(76.3)	20.4
Non-Hispanic Black	10	(12.0)	@	15-24	9	(7.6)	@
Non-Hispanic White	38	(45.8)	4.1	25-44	15	(12.7)	@
Other/Multiracial	12	(14.5)	@	45-64	-	(-)	-
Unknown	35			65+	-	(-)	-

Select cases not reported to protect confidentiality and prevent inadvertent disclosure

@ = rate unstable for less than 20 cases

Bold = highest incidence rate in each demographic category

Data source: Tarrant County Public Health

Figure 19. Chickenpox cases by month, Tarrant County, 2017

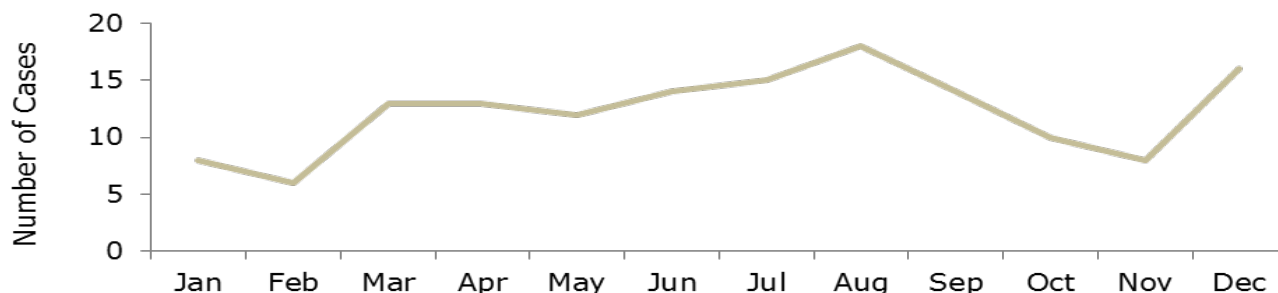
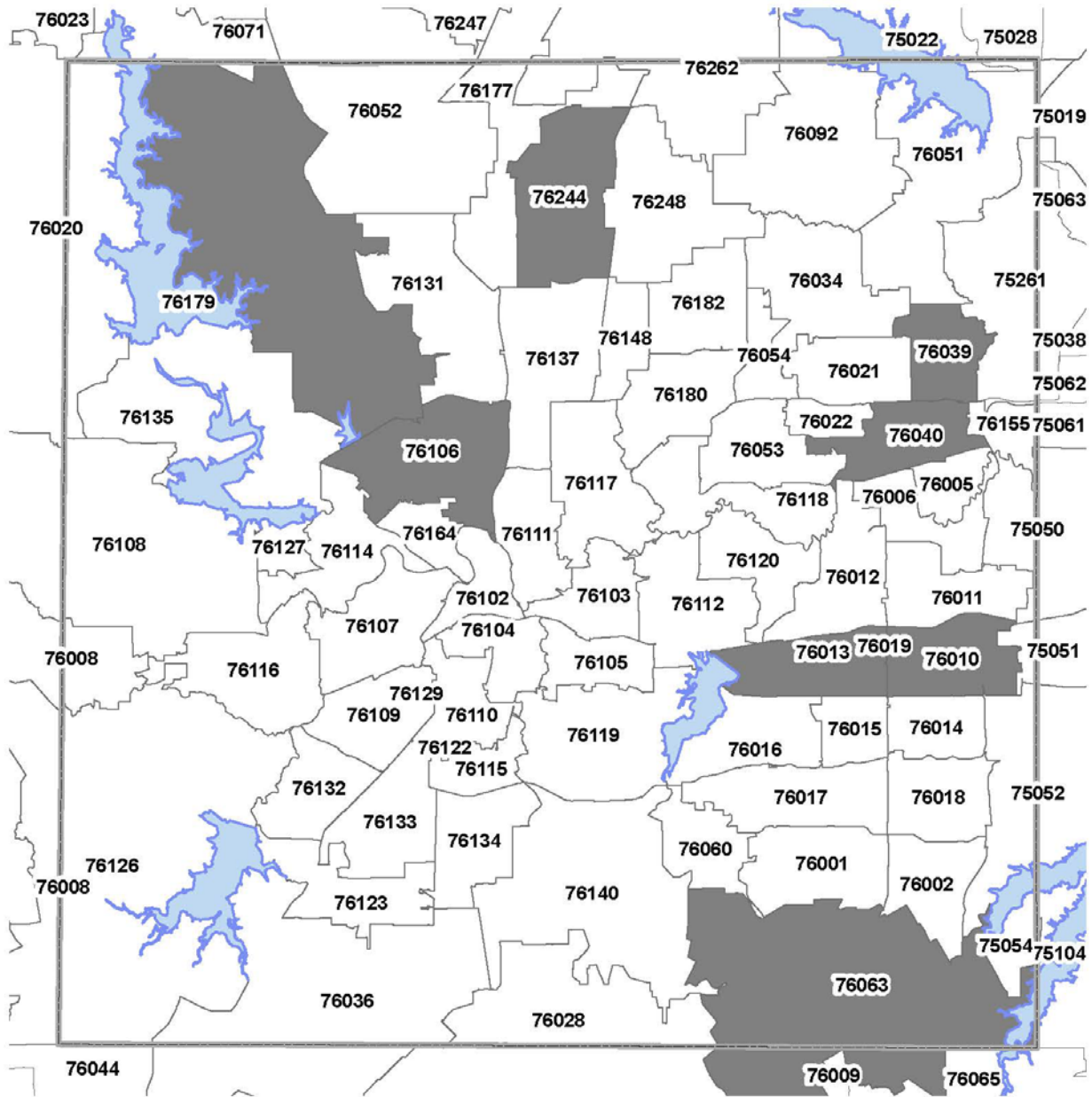


Figure 20. Geographic distribution of Varicella by ZIP code, Tarrant County, 2017



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Rate per 100,000

- ≤0.0
- ≤18.9
- No or excluded data
- Water
- County Boundary



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