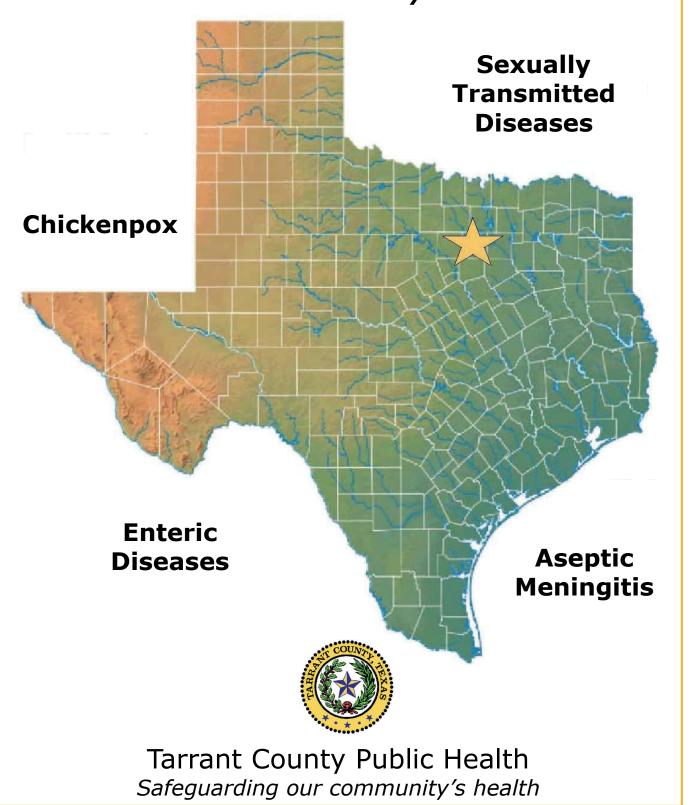
# Communicable Diseases Tarrant County 2011



# **Communicable Diseases 2011 Report Team**

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# **Notifiable Conditions in Tarrant County**

	Table 1. Communicable Conditions, 2011					
Conditions Immediately Reportable		Conditions Reportable Within One Week				
	Cases		Cases			
Anthrax	0	Acquired Immune Deficiency	41			
Botulism, foodborne	0	Syndrome (AIDS)	41			
Diphtheria	0	Amebiasis	<5			
Haemophilus influenzae	0	Arbovirus infection	0			
type b infections, invasive	0	Asbestosis	0			
Measles (rubeola)	<5	Botulism, infant, wound, and other	0			
Meningococcal infections, invasive	<5	Campylobacteriosis	163			
Plague ( <i>Yersinia pestis</i> )	0	Chancroid	0			
Poliomyelitis, acute paralytic	0	Chickenpox (varicella)	175			
Rabies, human	0	Chlamydia trachomatis infection	7,678			
Severe Acute Respiratory	0	Creutzfeldt-Jakob disease	0			
Syndrome (SARS)	0	Cryptosporidiosis	62			
Smallpox	0	Cyclosporiasis	<5			
Staphylococcus aureus,	•	Cysticercosis	<5			
Vancomycin-resistant (VISA & VRSA)	0	Dengue	<5			
Tularemia	0	Ehrlichiosis	<5			
Viral hemorrhagic fever, including Ebola	0	Encephalitis	<5			
Yellow fever	0	Escherichia coli, enterohemorrhagic	36			
		Gonorrhea	2,074			
Conditions Reportable Within One Working Da	У	Hansen's disease (leprosy)	0			
	Cases	Hantavirus infection	0			
Brucellosis	<5	Hemolytic Uremic Syndrome (HUS)	<5			
Hepatitis A (acute)	10	Hepatitis B (acute)	13			
Hepatitis B, perinatal	0	Hepatitis C (acute)	<5			
Influenza-associated pediatric mortality	<5	Hepatitis E (acute)	<5			
Pertussis	95	Human Immunodeficiency Virus				
Q fever	<5	(HIV) infection	212			
Rubella (including congenital)	0	Legionellosis	11			
Syphilis-primary, secondary & early latent stages	226	Leishmaniasis	0			
Tuberculosis	220	Listeriosis	<5			
(including all <i>M. tuberculosis</i> complex)	75	Lyme disease	5			
Vibrio infection, including cholera	<5	Malaria	11			
vierie illicotion, ilioidaling oneiera		Aseptic (viral) Meningitis	126			
		Bacterial and other Meningitis	6			
		Mumps	<5			
		Relapsing fever	0			
		Salmonellosis, including typhoid fever	367			
		Shigellosis	152			
		Silicosis	0			
		Spotted fever group rickettsioses	<5			
		Streptococcal disease	10			
		(group A, B, S. pneumoniae), invasive	279			
		Syphilis - all other stages	102			
		Taenia solium and	102			
		undifferentiated <i>Taenia</i> infection	<5			
		Tetanus	0			
		Trichinosis	0			
			0			
		Typhus West Nile Fover	0			
		West Nile Fever Yersiniosis	<5 <5			

Note: This table represents communicable conditions that were reportable in 2011. Additions/changes made for 2012 are not presented in Table 1. Conditions with less than five cases not presented to protect confidentiality.

# **Ten Leading Communicable Diseases in Tarrant County**

Table 2. Ten Leading Communicable Diseases in 2011, Cases and Rate, 2011-2006

Cases and Rate, 2011-2000													
2011	20		2011 2010		2009		200	2008		2007		2006	
Rank	Disease	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
1	Chlamydia	7,678	410.1	7,945	435.2	7,795	437.7	7,798	448.6	5,577	331.6	5,345	326.7
2	Gonorrhea	2,074	110.8	2,526	138.4	2,435	136.7	2,901	166.9	2,564	152.4	2,685	164.1
3	Salmonellosis	367	19.6	362	19.8	304	17.1	389	22.4	249	14.8	298	18.2
4	Early Syphilis	226	12.1	259	14.2	280	15.7	166	9.5	271	16.1	151	9.2
5	HIV	212	11.3	206	11.3	233	13.1	179	10.3	167	9.9	160	9.8
6	Varicella	175	9.3	202	11.1	298	16.7	507	29.2	796	47.3	1,564	95.6
7	Campylobacteriosis	163	8.7	110	6.0	97	5.4	85	4.9	107	6.4	66	4.0
8	Shigellosis	152	8.1	250	13.7	60	3.4	78	4.5	50	3.0	161	9.8
9	Streptoccocus pneumoniae, invasive	145	7.7	189	10.4	56	3.1	160	9.2	135	8.0	57	3.5
10	Aseptic Meningitis	126	6.7	218	11.9	228	12.8	191	11.0	282	16.8	257	15.7

Rate per 100,000 population

HIV data are preliminary. The number of cases may change.

2006-2011 population estimates obtained from Texas Department of State Health Services

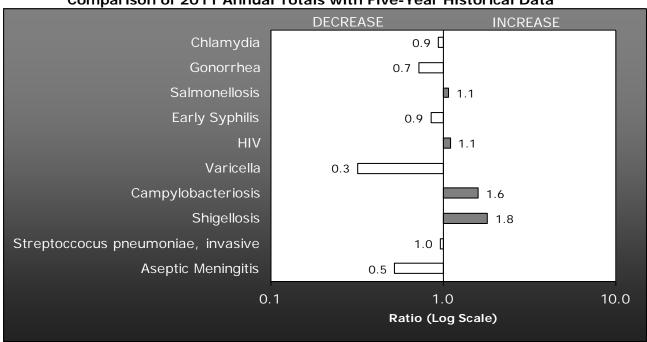
Table 3. Ten Leading Communicable Diseases in 2011, Five-Year Measures\*

2011		<b>5-year 5-year</b> MEDIAN MINUMUM		<b>5-year</b> MAXIMUM			
Rank	Disease	Cases	Rate	Cases	Rate	Cases	Rate
1	Chlamydia	7,795	435.2	5,345	326.7	7,945	448.6
2	Gonorrhea	2,564	152.4	2,435	136.7	2,901	166.9
3	Salmonellosis	304	18.2	249	14.8	389	22.4
4	Early Syphilis	259	14.2	151	9.2	280	16.1
5	HIV	179	10.3	160	9.8	233	13.1
6	Varicella	507	29.2	202	11.1	1,564	95.6
7	Campylobacteriosis	97	5.4	66	4.0	110	6.4
8	Shigellosis	78	4.5	50	3.0	250	13.7
9	Streptoccocus pneumoniae, invasive	135	8.0	56	3.1	189	10.4
10	Aseptic Meningitis	228	12.8	191	11.0	282	16.8

<sup>\*</sup> Five-year median, minimum and maximum based on 2006-2010 data

Data source: Tarrant County Public Health

Figure 1. Ten Leading Communicable Diseases in 2011, Comparison of 2011 Annual Totals with Five-Year Historical Data\*



<sup>\*</sup> Ratio of 2011 disease specific rate to median of five-year disease specific rate (2006-2010). Data source: Tarrant County Public Health

Table 4. Ten Leading Communicable Diseases by Gender, Tarrant County, 2011

	Male	Female
	n (Rate)	n (Rate)
1	Chlamydia 1,636 (173.4)	Chlamydia 6,042 (650.8)
2	Gonorrhea 896 (94.9)	Gonorrhea 1,178 ( 126.9)
3	Salmonellosis 189 (20.0)	Salmonellosis 178 (19.2)
4	HIV 167 (17.7)	Shigellosis/Varicella 85 (9.2)
5	Early Syphilis 165(17.5)	Campylobacteriosis 82 (8.8)
6	Varicella 90 (9.5)	S. pneumoniae, inv 81 (8.7)
7	Campylobacteriosis 81 (8.6)	Aseptic Meningitis 62 (6.7)
8	Shigellosis 67 (7.1)	Early Syphilis 61 (6.6)
9	Aseptic Meningitis/ S. pneumoniae, inv 64 (6.8)	HIV/Pertussis 45 (4.8)
10	Group B Strep 51 (5.4)	Cryptosporidiosis 39 (4.2)

n = number of cases; Rate per 100,000 population HIV/AIDS data are preliminary. The number of cases may change. 2011 population estimates obtained from Texas Department of State Health Services Data source: Tarrant County Public Health Table 5. Ten Leading Communicable Diseases by Race/Ethnicity<sup>†</sup>, Tarrant County, 2011

	White n (Rate)	Black n (Rate)	Hispanic n (Rate)	Other n (Rate)
1	Chlamydia 1,724 (193.4)	Chlamydia 2,655 (1,057.3)	Chlamydia 1,951 (330.1)	Chlamydia 115 (83.1)
2	Gonorrhea 368 (41.3)	Gonorrhea 1,136(452.4)	Gonorrhea 326 (55.2)	Gonorrhea 23 (16.6)
3	Salmonellosis 213 (23.9)	Early Syphilis 142 (56.5)	Salmonellosis 75 (12.7)	Tuberculosis 22 (15.9)
4	<i>S. pneumoniae,</i> inv 80 (9.0)	HIV 118 (47.0)	Campylobacteriosis 73 (12.4)	Salmonellosis 10 (7.2)
5	Aseptic Meningitis 72 (8.1)	S. pneumoniae, inv 39 (15.5)	Shigellosis 71 (12.0)	Varicella 7 (5.1)
6	Campylobacteriosis 66 (7.4)	Salmonellosis 36 (14.3)	Varicella 51 (8.6)	
7	Group B Strep 62 (7.0)	Aseptic Meningitis 22 (8.8)	Early Syphilis 47 (8.0)	
8	HIV/Varicella 59 (6.6)	Varicella 21(8.4)	HIV 33 (5.6)	
9	Pertussis/Shigellosis 53 (5.9)	Shigellosis 19 (7.6)	Pertussis 25 (4.2)	
10	Cryptosporidiosis 41 (4.6)	Tuberculosis 16 (6.4)	Tuberculosis/Aseptic Meningitis 24 (4.1)	

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

Rates based on less than 20 cases are considered unstable and should be interpreted with caution.

Less than five cases not reported; numerator too small for rate calculation

HIV/AIDS data are preliminary. The number of cases may change.
2011 population estimates obtained from Texas Department of State Health Services

<sup>†</sup>Rankings for race/ethnicity should be interpreted with caution due to unknown race/ethnicity status. Race/ethnicity data unknown for 16% of Chlamydia cases, 11% of gonorrhea cases, 15% of cryptosporidiosis cases, 11% of Group B strep cases and 21% of Varicella cases.

Table 6a. Ten Leading Communicable Diseases by Age Group (in Years),
Tarrant County, 2011

	0 - 4 Yrs	5 - 9 Yrs	10 - 14 Yrs	15 - 19 Yrs	20 - 24 Yrs
	n (Rate)	n (Rate)	n (Rate)	n (Rate)	n (Rate)
1	Salmonellosis 116 (78.4)	Shigellosis 50 (36.2)	Chlamydia 96 (75.5)	Chlamydia 2,605 (1,992.3)	Chlamydia 2,906 (2,142.5)
2	Shigellosis 65 (43.9)	Varicella 47 (34.1)	Varicella 30 (23.6)	Gonorrhea 652 (498.6)	Gonorrhea 734 (541.2)
3	Pertussis 54 (36.5)	Salmonellosis 38 (27.5)	Gonorrhea 25 (19.7)	Early Syphilis 33 (25.2)	Early Syphilis 81 (59.7)
4	Campylobacteriosis 48 (32.4)	Pertussis 24 (17.4)	Salmonellosis 24 (18.9)	HIV 25 (19.1)	HIV 61 (45.0)
5	Varicella 45 (30.4)	Campylobacteriosis 21 (15.2)	Campylobacteriosis/ Shigellosis 13 (10.2)	Salmonellosis 17 (13.0)	Salmonellosis 31 (22.9)
6	Aseptic Meningitis 30 (20.3)	Aseptic Meningitis 9 (6.5)	Pertussis 10 (7.9)	Varicella 13 (9.9)	Aseptic Meningitis 8 (539)
7	<i>E. coli</i> STEC 15 (10.1)	S. pneumoniae, inv 8 (5.8)	S. pneumoniae, inv 5 (3.9)	Campylobacteriosis 7 (5.4)	Campylobacteriosis 7 (5.2)
8	S. pneumoniae, inv 11 (7.4)	Cryptosporidiosis 6 (4.3)			Tuberculosis 6 (4.4)
9	Group B Strep 10 (6.8)				
10	Cryptosporidiosis 7 (4.7)				

n = number of cases; Rate per 100,000 population.
Rates based on less than 20 cases are considered unstable and should be interpreted with caution.
HIV/AIDS data are preliminary. The number of cases may change.
2011 population estimates obtained from Texas Department of State Health Services

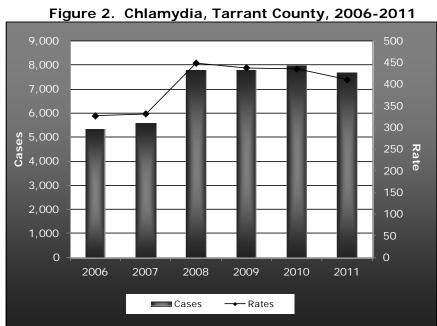
Table 6b. Ten Leading Communicable Diseases by Age Group (in Years), Tarrant County, 2011

	25 - 34 Yrs	35 - 44 Yrs	45 - 54 Yrs	55 - 64 Yrs	65 + Yrs
	n (Rate)	n (Rate)	n (Rate)	n (Rate)	n (Rate)
1	Chlamydia	Chlamydia	Chlamydia	Salmonellosis	S. pneumoniae, inv
	1,658 (544.3)	319 (106.8)	76 (30.1)	27 (14.5)	56 (37.1)
2	Gonorrhea	Gonorrhea	Gonorrhea	Group B Strep	Salmonellosis
	491 (161.2)	110 (36.8)	46 (18.2)	22 (11.9)	37 (24.5)
3	Early Syphilis	HIV	Salmonellosis	S. pneumoniae, inv	Group B Strep
	68 (22.3)	36 (12.1)	37 (14.6)	16 (8.6)	26 (17.2)
4	HIV 59 (19.4)	Aseptic Meningitis 23 (7.7)	S. pneumoniae, inv 27 (10.7)	Campylobacteriosis/ Gonorrhea 15 (8.1)	Group A Strep 20 (13.3)
5	Salmonellosis	Early Syphilis	HIV	Chlamydia	Campylobacteriosis
	23 (7.6)	21 (7.0)	22 (8.7)	12 (6.5)	16 (10.6)
6	Aseptic Meningitis	Salmonellosis	Early Syphilis	Tuberculosis	Tuberculosis
	22 (7.2)	17 (5.7)	18 (7.1)	10 (5.4)	13 (8.6)
7	Tuberculosis	AIDS	Group B Strep	HIV/AIDS	Aseptic Meningitis
	16 (5.3)	13 (4.4)	17 (6.7)	8 (4.3)	10 (6.6)
8	Campylobacteriosis 13 (4.3)	Tuberculosis 12 (4.0)	Campylobacteriosis 15 (5.9)	Aseptic Meningitis/ Cryptosporidiosis 7 (3.8)	Cryptosporodiosis/ Varicella 9 (6.0)
9	Varicella	Cryptosporidiosis	Tuberculosis	Group A Strep	Legionellosis
	12 (3.9)	10 (3.3)	13 (5.1)	6 (3.2)	5 (3.3)
10	S. pneumoniae, inv 11 (3.6)	S. pneumoniae, inv. 9 (3.0)	Aseptic Meningitis 11 (4.4)	Varicella 5 (2.7)	

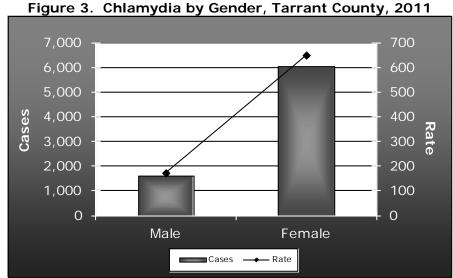
n = number of cases; Rate per 100,000 population; Less than five cases not reported Rates based on less than 20 cases are considered unstable and should be interpreted with caution. HIV/AIDS data are preliminary. The number of cases may change. 2011 population estimates obtained from Texas Department of State Health Service

## 1. Chlamydia

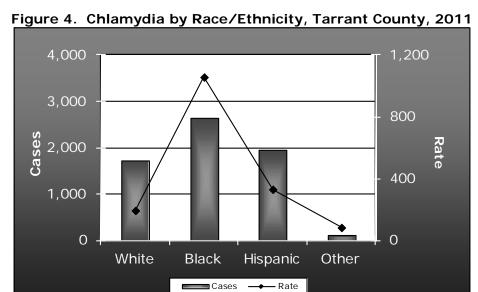
- Causative Agent: (bacterial) Chlamydia trachomatis
- Signs/Symptoms: Men- discharge, urethral itching, burning urination; 1-25% of infected men do not exhibit symptoms. Women- discharge with swelling; up to 70% of infected women do not exhibit symptoms. Infants born to infected women may develop eye 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.



Rate per 100,000 population Data source: Tarrant County Public Health



Rate per 100,000 population



Race/ethnicity data unknown for 16% of Chlamydia cases. Data source: Tarrant County Public Health

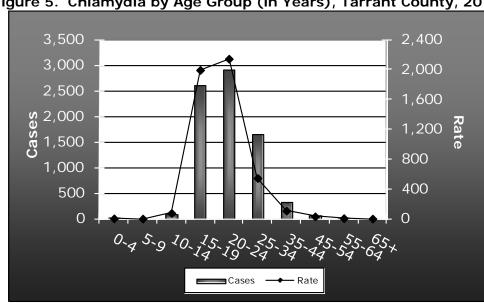


Figure 5. Chlamydia by Age Group (in Years), Tarrant County, 2011

Rate per 100,000 population

The numerator was too small for rate calculation for the 65+ age group (< 5 cases).

No cases were reported in the 5-9 year age group.

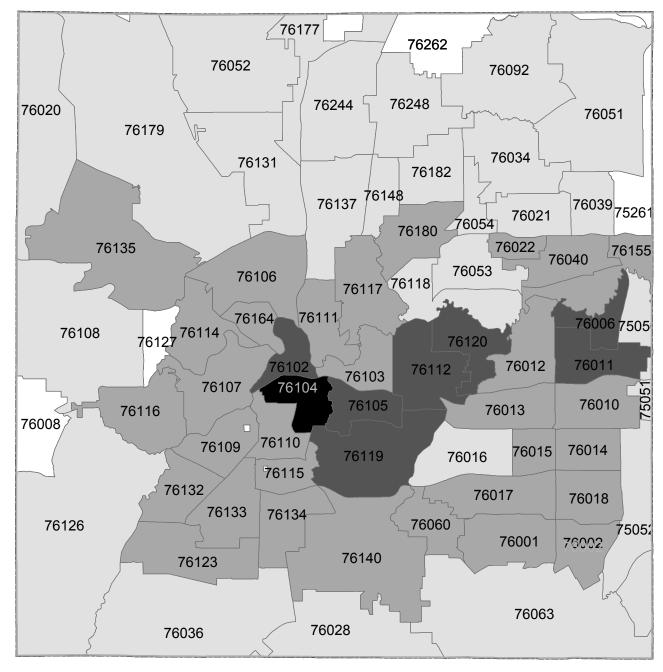
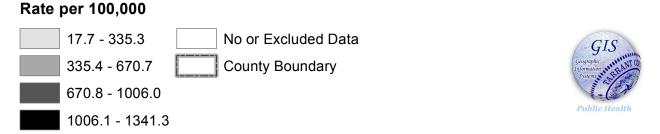
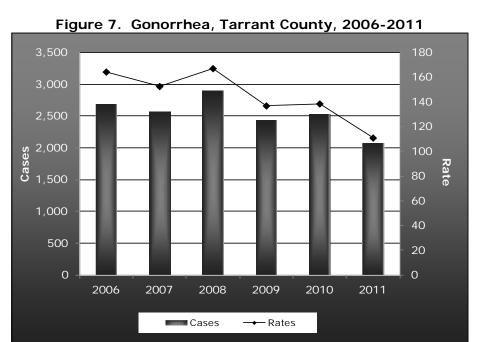


Figure 6. Geographic Distribution of Chlamydia by ZIP Code, Tarrant County, 2011



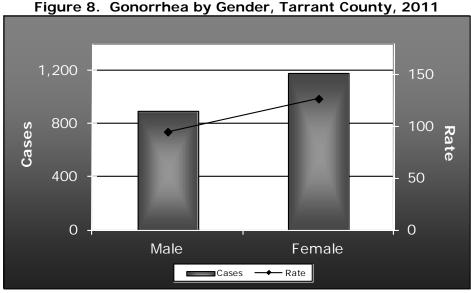
#### 2. Gonorrhea

- 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.

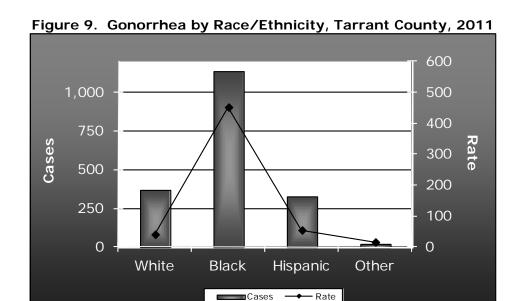


Rate per 100,000 population

Data source: Tarrant County Public Health



Rate per 100,000 population



Race/ethnicity unknown for 11% of gonorrhea cases.

Data source: Tarrant County Public Health

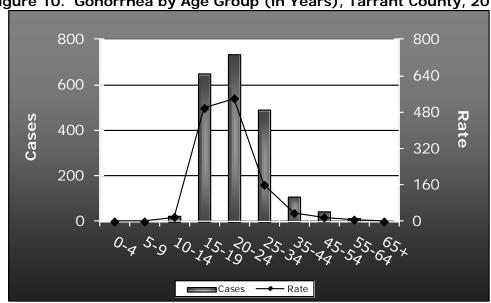


Figure 10. Gonorrhea by Age Group (in Years), Tarrant County, 2011

Rate per 100,000 population

The numerator was too small for rate calculation for the 5-9 year age group (< 5 cases).

No cases were reported in the 0-4 and 65+ year age groups.

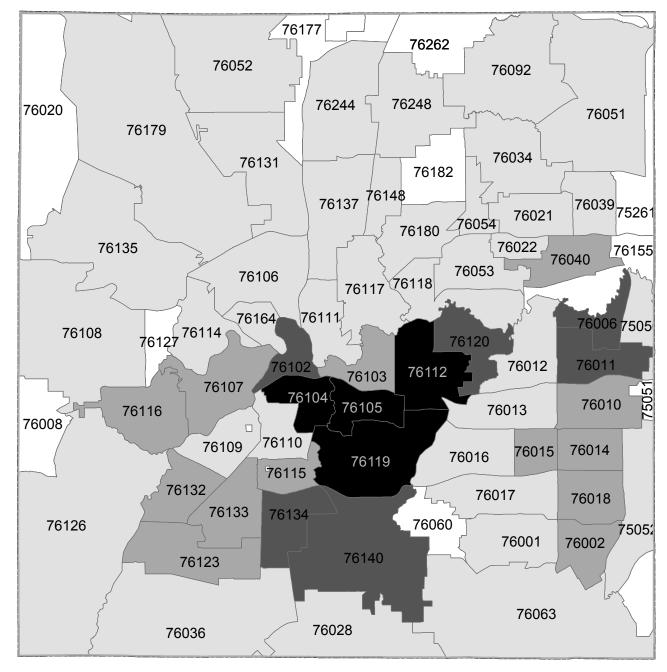
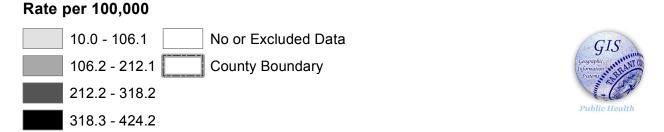
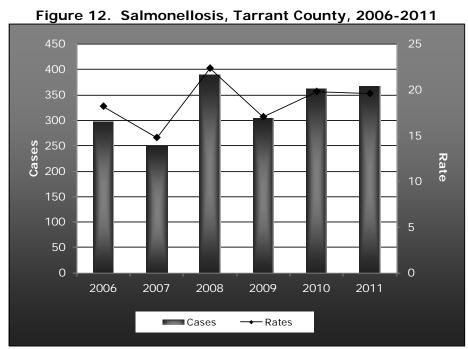


Figure 11. Geographic Distribution of Gonorrhea by ZIP Code, Tarrant County, 2011



#### 3. 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.



Rate per 100,000 population Data source: Tarrant County Public Health

Figure 13. Salmonellosis by Gender, Tarrant County, 2011

250
200
150
100
50
Male
Female

Cases — Rate

Rate per 100,000 population

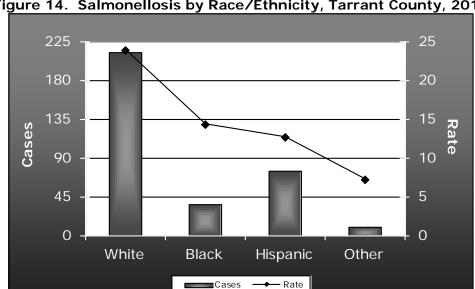


Figure 14. Salmonellosis by Race/Ethnicity, Tarrant County, 2011

Rate per 100,000 population Data Source: Tarrant County Public Health

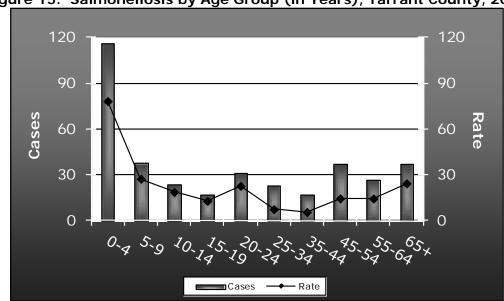


Figure 15. Salmonellosis by Age Group (in Years), Tarrant County, 2011

Rate per 100,000 population Data source: Tarrant County Public Health

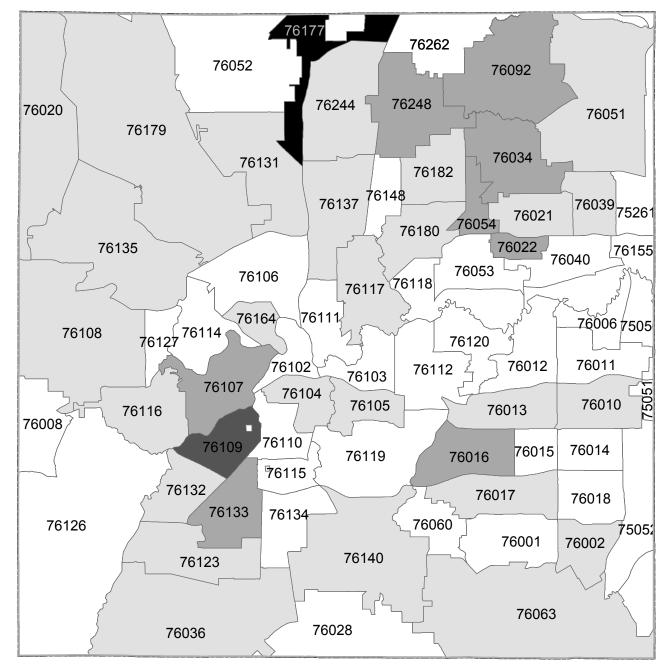
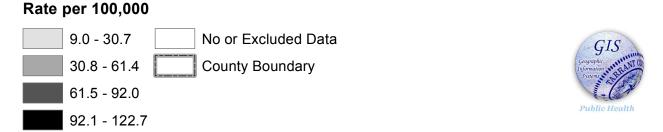
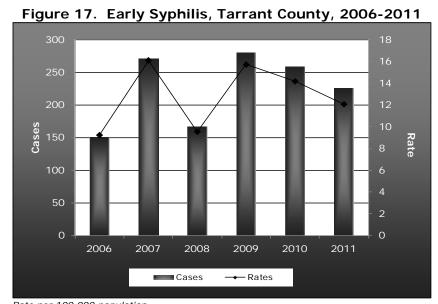


Figure 16. Geographic Distribution of Salmonellosis by ZIP Code, Tarrant County, 2011

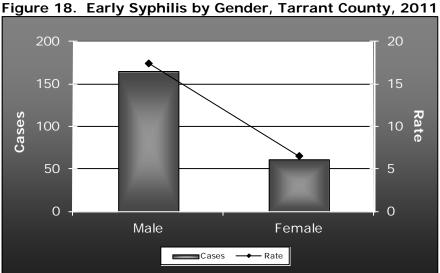


### 4. Early Syphilis

- Causative Agent: (bacterial) Treponema pallidum
- Signs/Symptoms: Primary lesion which may or may not be visible appearing approximately 3 weeks after infection 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. Untreated individuals will proceed to a tertiary phase considered late syphilis which may involve reoccurring lesions, central nervous system disease and meningitis. Infants born to infected women may die due to pre-term birth and/ or low birth weight.
- 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.

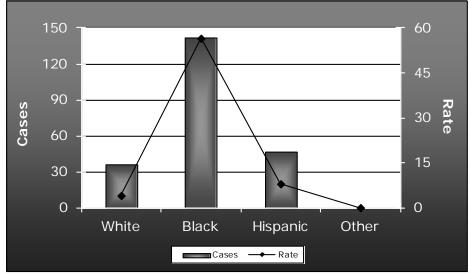


Rate per 100,000 population Data source: Tarrant County Public Health



Rate per 100,000 population

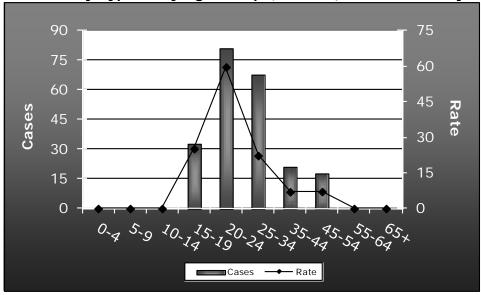




The numerator was too small for rate calculation for the Other race/ethnicity group (< 5 cases).

Data source: Tarrant County Public Health

Figure 20. Early Syphilis by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population

The numerator was too small for rate calculation for 55-64 and 65+ age groups (< 5 cases). No cases were reported in the 0-4 year, 5-9 year and 10-14 year age groups.

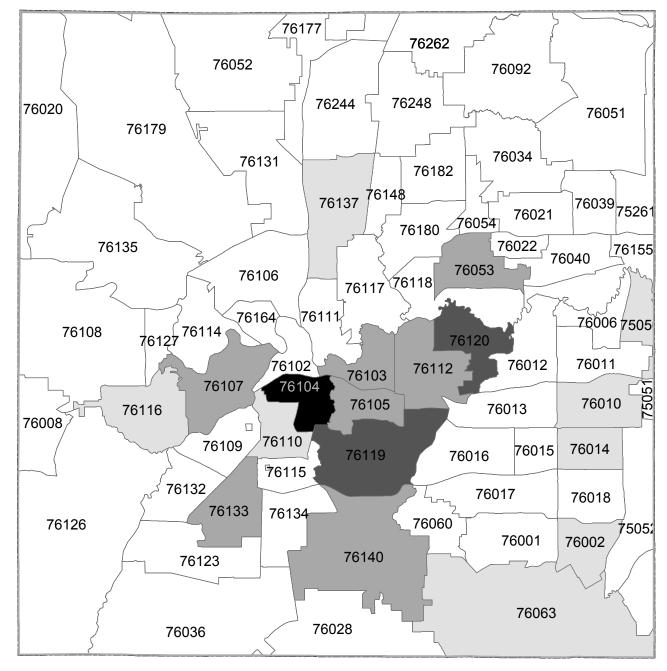
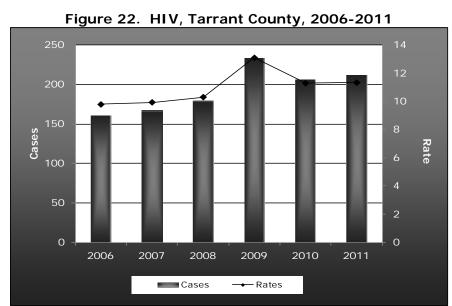


Figure 21. Geographic Distribution of Early Syphilis by ZIP Code, Tarrant County, 2011

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#### 5. **HIV**

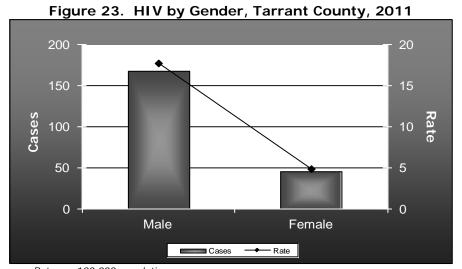
- Causative Agent: (viral) Human Immunodeficiency Virus
- Signs/Symptoms: Several weeks after infection flu-like symptoms of chills, body aches, fatigue and possibly fever lasting 1-2 weeks. Symptoms may not appear again for possibly years and may involve infections and cancers resulting from HIV induced immune deficiencies. HIV infection will result in AIDS in over 90% of individuals.
- **Mode(s) of Transmission:** Perinatally, sexually or blood transmitted infection; breast feeding 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.



Rate per 100,000 population

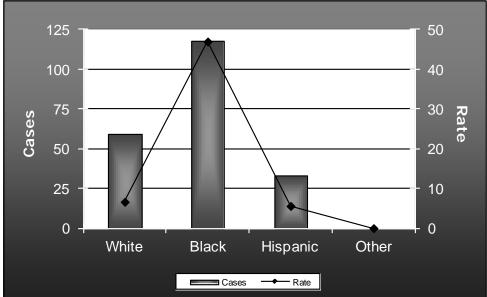
HIV data are preliminary. The number of cases may change.

Data source: Tarrant County Public Health



Rate per 100,000 population HIV data are preliminary. The number of cases may change. Data source: Tarrant County Public Health

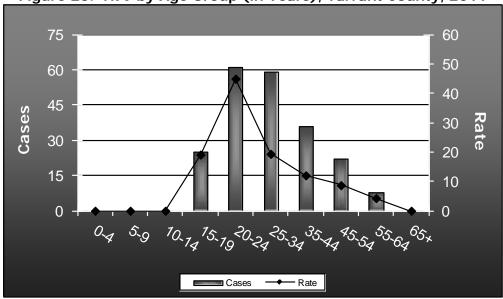




The numerator was too small for rate calculation for Other race/ethnicity group (< 5 cases).

HIV data are preliminary. The number of cases may change. Data source: Tarrant County Public Health

Figure 25. HIV by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population

The numerator was too small for rate calculation for 0-4 year age group (< 5 cases). No cases reported in the 0-4 year, 5-9 year, 10-14 year, and 65+ year age groups. HIV data are preliminary. The number of cases may change.

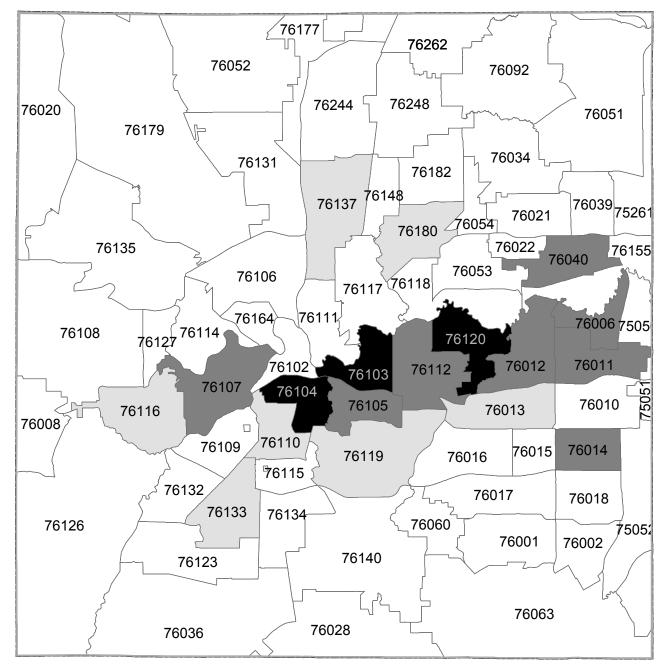
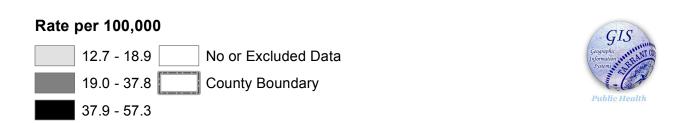
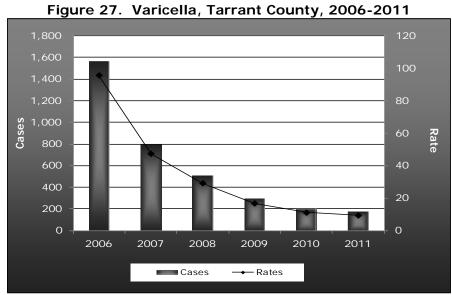


Figure 26. Geographic Distribution of HIV by ZIP Code, Tarrant County, 2011



#### 6. 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.



Rate per 100,000 population Data source: Tarrant County Public Health

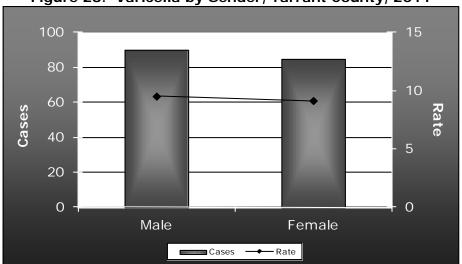
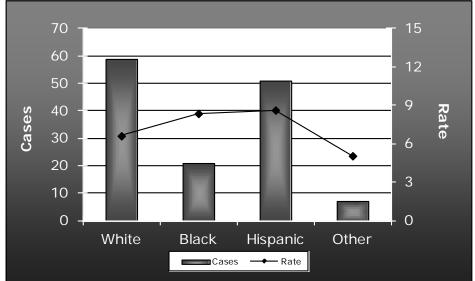


Figure 28. Varicella by Gender, Tarrant County, 2011

Rate per 100,000 population Data source: Tarrant County Public Health

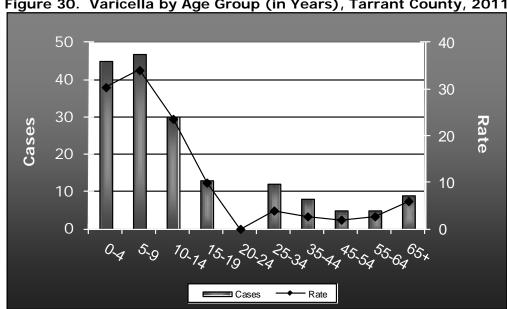




Race/ethnicity unknown for 21% of Varicella cases.

Data source: Tarrant County Public Health

Figure 30. Varicella by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population

The numerator was too small for rate calculation of the 20-24 year age group (< 5 cases).

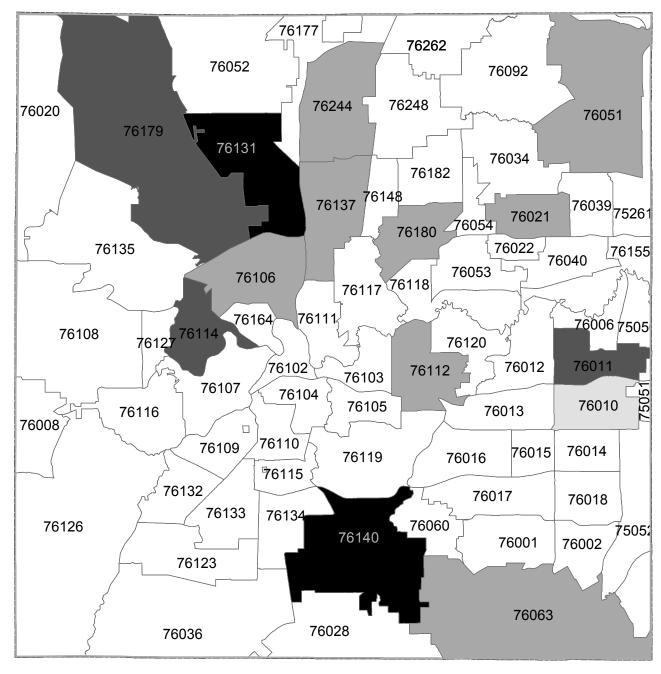
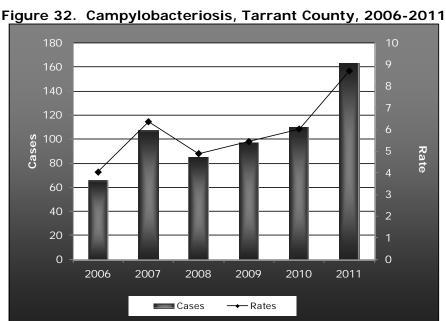


Figure 31. Geographic Distribution of Varicella by ZIP Code, Tarrant County, 2011

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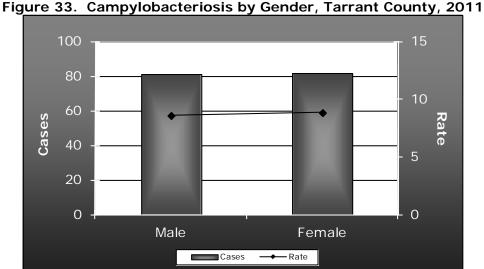
## 7. Campylobacteriosis

- 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.



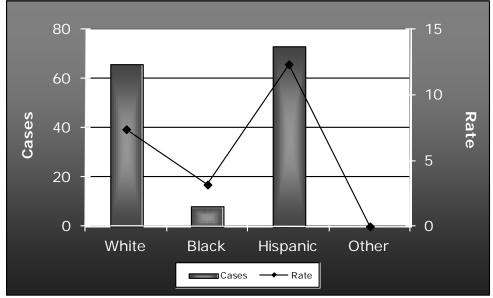
Rate per 100,000 population

Data source: Tarrant County Public Health



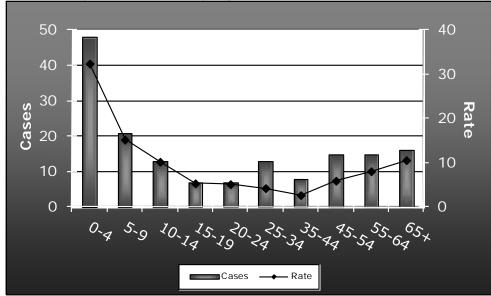
Rate per 100,000 population





The numerator was too small for rate calculation for Other race/ethnicity group (< 5 cases). Data source: Tarrant County Public Health

Figure 35. Campylobacteriosis by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population

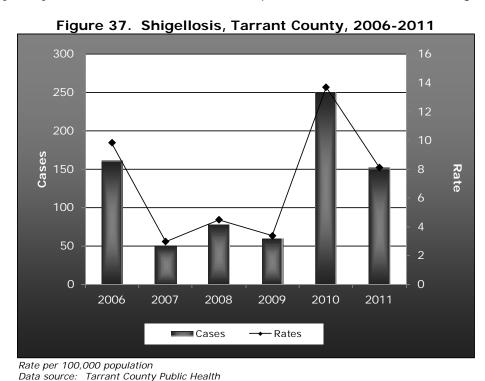
<sup>^</sup>76177 76137 76148 76039 75261 *(*76118 76006 7505 76102<sup>°</sup> ₱6115 

Figure 36. Geographic Distribution of Campylobacteriosis by ZIP Code, Tarrant County, 2011



# 8. Shigellosis

- Causative Agent: (bacterial) Shigella species
- **Signs/Symptoms:** Diarrhea (typically bloody), fever, abdominal pain, vomiting. Some people do not present with any symptoms.
- Mode(s) of Transmission: Direct fecal-oral contact or ingestion of food or water contaminated with feces of an infected individual.
- Incubation Period: 12-96 hours, usually 1-3 days
- **Period of Communicability:** While signs/symptoms are present; those infected may carry and transmit the bacteria for up to four weeks after becoming infected.



100 - 15 80 - 10 Rate - 5

Cases

0

Female

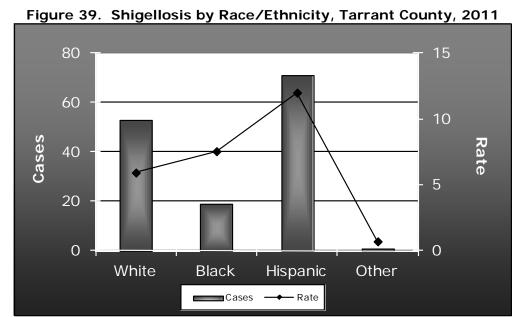
- Rate

Figure 38. Shigellosis by Gender, Tarrant County, 2011

Rate per 100,000 population Data source: Tarrant County Public Health

Male

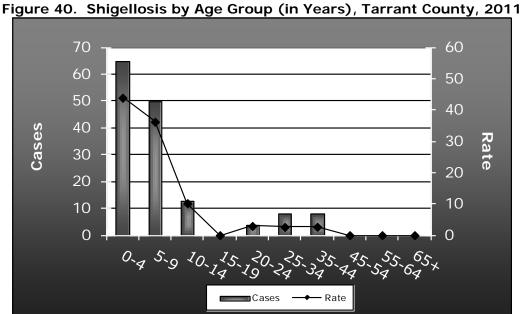
0



Rate per 100,000 population

The numerator was too small for rate calculation for Other race/ethnicity group (< 5 cases).

Data source: Tarrant County Public Health



Rate per 100,000 population

The numerator was too small for rate calculation for 15-19, 45-54, 55-64 and 65+ year age group (< 5 cases). Data source: Tarrant County Public Health

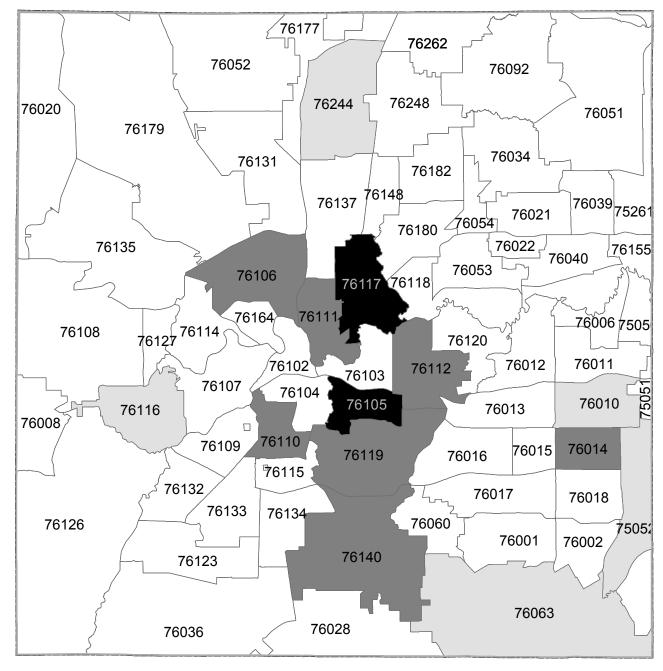
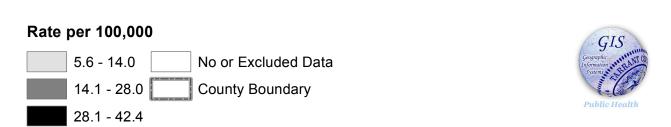


Figure 41. Geographic Distribution of Shigellosis by ZIP Code, Tarrant County, 2011

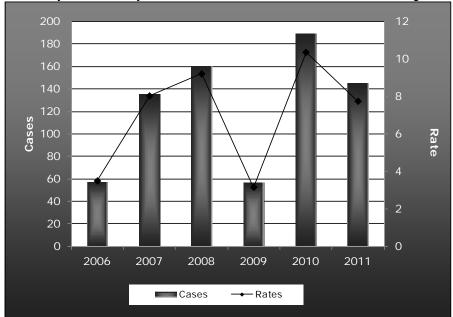
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#### 9. Streptococcus pneumoniae, invasive

- 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

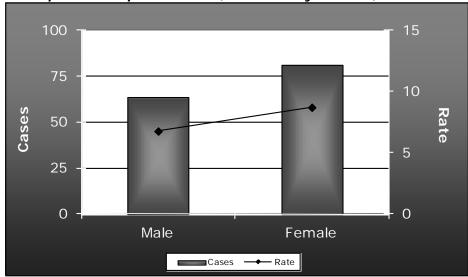
Figure 42. Streptococcus pneumoniae, invasive, Tarrant County, 2006-2011



Rate per 100,000 population

Data source: Tarrant County Public Health

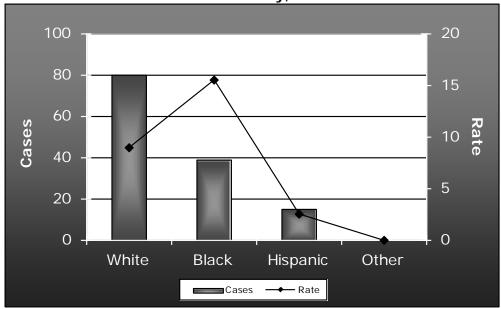
Figure 43. Streptococcus pneumoniae, invasive by Gender, Tarrant County, 2011



Rate per 100,000 population

Data source: Tarrant County Public Health

Figure 44. Streptococcus pneumoniae, invasive by Race/Ethnicity, Tarrant County, 2011

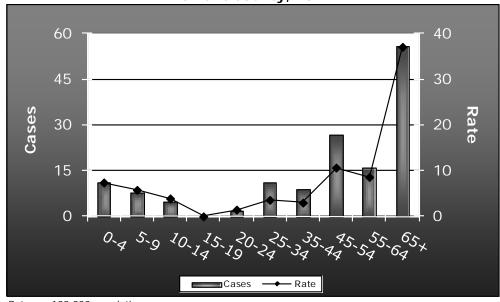


Rate per 100,000 population

No cases were reported in the Other race/ethnicity group.

Data source: Tarrant County Public Health

Figure 45. Streptococcus pneumoniae, invasive by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population No cases were reported in the15-19 year age group.

Data source: Tarrant County Public Health

<sup>^</sup>76177 76039 75261 76180 4 **76117 (**76118 76006 7505 76102° ₱6115 

Figure 46. Geographic Distribution of *Streptococcus pneumoniae*, invasive by ZIP Code, Tarrant County, 2011

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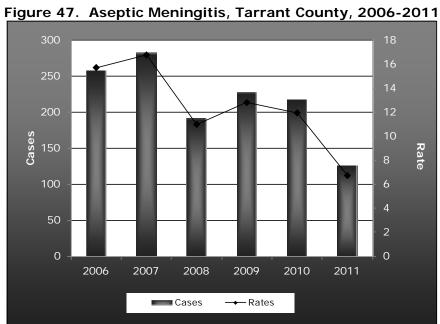
### Rate per 100,000





#### 10. Aseptic Meningitis

- Causative Agent: (multiple, non-bacterial agents) Most common in the United States, Enteroviruses
- **Signs/Symptoms:** Sudden onset of fever, headache, stiff neck, confusion and possibly a rash.
- Mode(s) of Transmission: Dependent on causative agent; for Enteroviruses most commonly contact of respiratory secretions or feces of infected person
- Incubation Period: Variable
- Period of Communicability: Infected individuals are assumed to be infectious.



Rate per 100,000 population Data source: Tarrant County Public Health

Figure 48. Aseptic Meningitis by Gender, Tarrant County, 2011

75

50

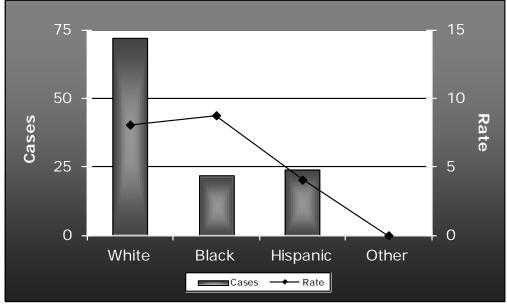
Male

Female

Cases Rate

Rate per 100,000 population Data source: Tarrant County Public Health



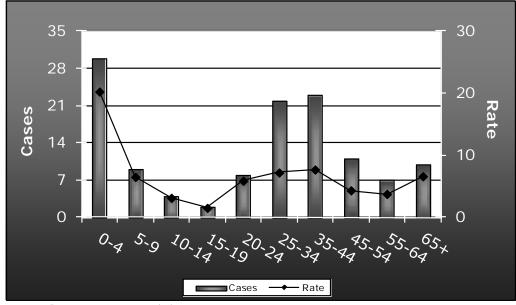


Rate per 100,000 population

The numerator was too small for rate calculation for Other race/ethnicity group (< 5 cases).

Data source: Tarrant County Public Health

Figure 50. Aseptic Meningitis by Age Group (in Years), Tarrant County, 2011



Rate per 100,000 population

Data source: Tarrant County Public Health

<sup>^</sup>76177 76039<sub>75261</sub> 76022. 76117 76118 76006 7505 76102<sup>°</sup> ₱6115 

Figure 51. Geographic Distribution of Aseptic Meningitis by ZIP Code, Tarrant County, 2011

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# Appendix A. 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, communicable conditions in Tarrant County as well as Texas for 2011 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*.

#### Appendix B. Disease Specific Information and Definitions

Disease specific information pertaining to causative agent, signs and symptoms, modes of transmission, incubation period and period of communicability was obtained from *Control of Communicable Diseases Manual*, 19<sup>th</sup> Edition (2008). Definitions and use for the formerly stated terms 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

#### Appendix C. 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 2011 incidence of disease in Tarrant County
- Denominator 2011 Tarrant County population at risk (2010 population for rates by ZIP code)
- Rate per 100,000 population

Incidence rate is an essential and valuable public health measure; however, the interpretation of the rate should be made with caution. Rates based on numbers less than 20 are not recommended for reliable comparison because such rates can fluctuate widely each year. The tables in this report include rates for diseases with five or more cases. Conditions with less than five cases are not presented to protect confidentiality.

The 2011 Tarrant County population estimates used to calculate incidence rates overall, by gender, by race/ethnicity, and by age group are listed in Appendix D. Population estimates were obtained from the Texas Department of State Health Services. Population estimates by ZIP code were obtained from the US Census Bureau, 2010 Census.

# Appendix D. Tarrant County Population Distributions by Gender, Race/Ethnicity, and Age Group

#### Population Estimates by Gender, Tarrant County, 2011

	Total	Percent
Male	895,092	50.3
Female	885,799	49.7
Total	1,780,891	100.0

Data source: Texas Department of State Health Services

#### Population Estimates by Race/Ethnicity, Tarrant County, 2011

	Total	Percent
White	899,365	50.5
Black	239,327	13.4
Hispanic	520,733	29.2
Other	121,466	6.8
Total	1,780,891	100.0

Data source: Texas Department of State Health Services

#### Population Estimates by Age Group (in Years), Tarrant County, 2011

Tarrant County, 2011			
	Total	Percent	
0-4 Yrs	142,545	8.0	
5-9 Yrs	130,910	7.4	
10-14 Yrs	123,232	6.9	
15-19 Yrs	129,114	7.2	
20-24 Yrs	126,851	7.1	
25-34 Yrs	290,226	16.3	
35-44 Yrs	281,820	15.8	
45-54 Yrs	245,284	13.8	
55-64 Yrs	168,998	9.5	
65+ Yrs	141,911	8.0	
Total	1,780,891	100.0	

Data source: Texas Department of State Health Services



# Tarrant County Public Health 1101 S. Main Street Fort Worth, TX 76104 (817) 321-5350 www.tarrantcounty.com/ehealth