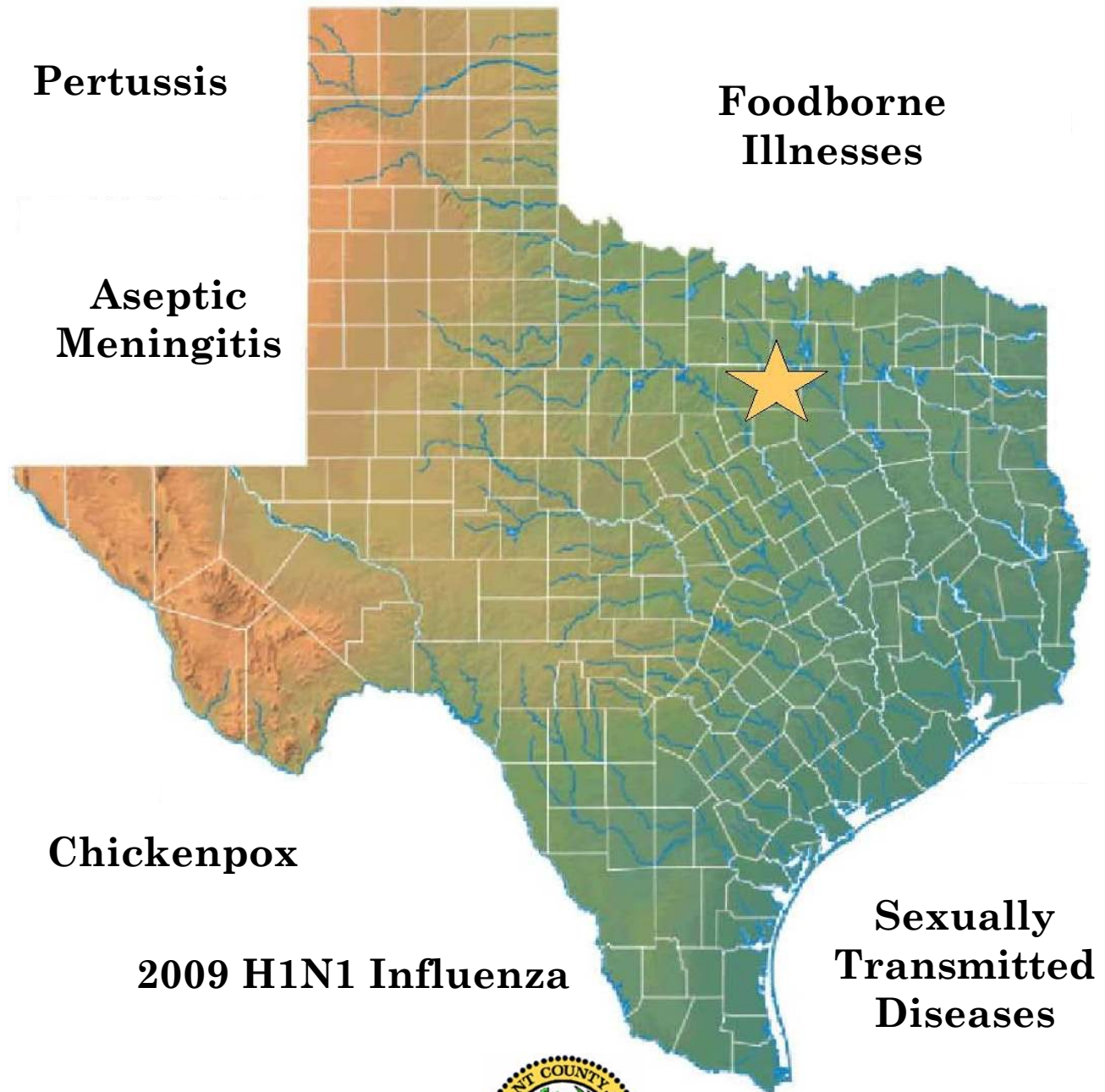


Communicable Diseases

Tarrant County 2009



Pertussis

**Foodborne
Illnesses**

**Aseptic
Meningitis**

Chickenpox

2009 H1N1 Influenza

**Sexually
Transmitted
Diseases**



Tarrant County Public Health

Safeguarding our community's health

Communicable Diseases Tarrant County, 2009



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 2009 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, by city, and by ZIP code. Incidence rates are calculated as follows:

- Numerator – 2009 incidence of disease in Tarrant County
- Denominator – 2009 Tarrant County population at risk (2000 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 2009 Tarrant County population estimates used to calculate incidence rates overall, by gender, by race/ethnicity, and by age group are listed in Table 2 – Table 4. Population estimates were obtained from the Texas Department of State Health Services. The 2009 population estimates by city were obtained from the North Central Texas Council of Governments. Population estimates by ZIP code were obtained from the US Census Bureau, 2000 Census.

Notifiable Conditions in Tarrant County

Table 1. Notifiable Conditions, 2009

Conditions Immediately Reportable	Cases	Conditions Reportable Within One Week	Cases
Anthrax	0	Acquired Immune Deficiency Syndrome (AIDS)	25
Botulism, foodborne	0	Amebiasis	< 5
Diphtheria	0	Arbovirus infection	0
<i>Haemophilus influenzae</i> type b infections, invasive	< 5	Botulism, infant, wound, and other	0
Measles (rubeola)	0	Campylobacteriosis	97
Meningococcal infections, invasive	6	Chancroid	0
Plague	0	Chickenpox (varicella)	298
Poliomyelitis, acute paralytic	0	<i>Chlamydia trachomatis</i> infection	7,795
Rabies, human	0	Creutzfeldt-Jakob disease	< 5
Severe Acute Respiratory Syndrome (SARS)	0	Cryptosporidiosis	55
Smallpox	0	Cyclosporiasis	< 5
Staphylococcus aureus, Vancomycin-resistant (VISA & VRSA)	0	Cysticercosis	0
Tularemia	0	Dengue	0
Viral hemorrhagic fever	0	Ehrlichiosis	0
Yellow fever	0	Encephalitis	0
		<i>Escherichia coli</i> , enterohemorrhagic	20
		Gonorrhea	2,435
		Hansen's disease (leprosy)	0
		Hantavirus infection	0
		Hemolytic Uremic Syndrome (HUS)	< 5
		Hepatitis B, C, D, E and unspecified (acute)	60
		Hepatitis B, acute or chronic identified prenatally or at delivery	0
		Human Immunodeficiency Virus (HIV) infection	233
		Legionellosis	11
		Leishmaniasis	0
		Listeriosis	< 5
		Lyme disease	6
		Malaria	5
		Meningitis (Aseptic and non-Neisseria Bacterial)	231
		Mumps	< 5
		Relapsing fever	0
		Salmonellosis, including typhoid fever	306
		Shigellosis	60
		Spotted fever group rickettsioses	0
		Streptococcal disease (group A, B, S. pneumo), invasive	243
		Syphilis (early stages)	280
		<i>Taenia solium</i> and undifferentiated <i>Taenia</i> infection	0
		Tetanus	0
		Trichinosis	0
		Typhus	0
		West Nile Fever	< 5
		Yersiniosis	< 5
Conditions Reportable Within One Working Day			
	Cases		
Brucellosis	< 5		
Hepatitis A (acute)	21		
Hepatitis B, perinatal	0		
Influenza-associated pediatric mortality*	< 5		
2009 H1N1 Influenza, Hospitalizations	173		
2009 H1N1 Influenza, Intensive Care Unit	33		
2009 H1N1 Influenza, non-pediatric mortality	9		
Pertussis	202		
Q fever	0		
Rubella (including congenital)	0		
Tuberculosis (including all <i>M. tuberculosis</i> complex)	109		
<i>Vibrio</i> infection, including cholera	< 5		

Note: This table represents communicable conditions that were reportable in 2009. Additions/changes made for 2010 are not presented in Table 1. Conditions with less than five cases not presented to protect confidentiality.

** All influenza-associated pediatric mortalities were attributed to the 2009 H1N1 subtype*

Tarrant County Population Distributions by Gender, Race/Ethnicity, and Age Group

**Table 2. Population Estimates by Gender,
Tarrant County, 2009**

	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

**Table 3. Population Estimates by Race/Ethnicity,
Tarrant County, 2009**

	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

**Table 4. Population Estimates by Age Group (in Years),
Tarrant County, 2009**

	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

Ten Leading Communicable Diseases in Tarrant County

Table 5. Ten Leading Communicable Diseases by Gender, Tarrant County, 2009

	Overall n (Rate)	Male n (Rate)	Female n (Rate)
1	Chlamydia 7,795 (437.7)	Chlamydia 1,847 (206.3)	Chlamydia 5,948 (671.5)
2	Hep. C, chronic 2,738 (153.7)	Hep. C, chronic 1,604 (179.2)	Gonorrhea 1,319 (148.9)
3	Gonorrhea 2,435 (136.7)	Gonorrhea 1,115 (124.6)	Hep. C, chronic 1,127 (127.2)
4	Hep. B, chronic 719 (40.4)	Hep B, chronic 365 (40.8)	Hep. B, chronic 354 (40.0)
5	Salmonellosis 304 (17.1)	HIV 183 (20.4)	Salmonellosis 163 (18.4)
6	Varicella 298 (16.7)	Early Syphilis 179 (20.0)	Varicella 154 (17.4)
7	Early Syphilis 280 (15.7)	Varicella 144 (16.1)	Aseptic Meningitis 104 (11.7)
8	HIV 233 (13.1)	Salmonellosis 141 (15.8)	Early Syphilis 101 (11.4)
9	Aseptic Meningitis 228 (12.8)	Aseptic Meningitis 124 (13.9)	Pertussis 100 (11.3)
10	Pertussis 202 (11.3)	Pertussis 102 (11.4)	Strep. pneumoniae 79 (8.9)

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

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

2009 population estimates obtained from Texas Department of State Health Services

Data source: Tarrant County Public Health

Table 6. Ten Leading Communicable Diseases by Race/Ethnicity[†], Tarrant County, 2009

	White n (Rate)	Black n (Rate)	Hispanic n (Rate)	Other n (Rate)
1	Chlamydia 1,965 (218.5)	Chlamydia 3,349 (1,399.3)	Chlamydia 2,272 (436.3)	Hep. B, chronic 191 (157.2)
2	Hep. C, chronic 746 (82.9)	Gonorrhea 1,711 (714.9)	Gonorrhea 311 (59.7)	Chlamydia 145 (119.4)
3	Gonorrhea 378 (42.0)	Hep. C, chronic 305 (127.4)	Hep. C, chronic 200 (38.4)	Hep. C, chronic 38 (31.3)
4	Salmonellosis 135 (15.0)	Early Syphilis 170 (71.0)	Varicella 88 (16.9)	Tuberculosis 30 (24.7)
5	Varicella 130 (14.5)	HIV 126 (52.6)	Pertussis 82 (15.7)	Gonorrhea 19 (15.6)
6	Aseptic Meningitis 129 (14.3)	Hep. B, chronic 95 (39.7)	Salmonellosis 59 (11.3)	Varicella 10 (8.2)
7	Pertussis/ Strep. pneumoniae 84 (9.3)	Strep. pneumoniae 44 (18.4)	Early Syphilis 52 (10.0)	Aseptic Meningitis 9 (7.4)
8		TB 33 (13.8)	Aseptic Meningitis 46 (8.8)	HIV 7 (5.8)
9	Hep. B, chronic 59 (6.6)	Aseptic Meningitis/ Varicella 31 (13.0)	HIV 39 (7.5)	Salmonellosis 5 (4.1)
10	HIV 58 (6.4)		Hep. B, chronic 30 (5.8)	AIDS/ Campylobacteriosis/ Group B Strep./ Hep. < 5*

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

[†]Rankings for race/ethnicity should be interpreted with caution due to missing data. Race/ethnicity data are missing for 53% of chronic Hepatitis C cases, 48% of chronic Hepatitis B cases, and 27% of salmonellosis cases.

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

2009 population estimates obtained from Texas Department of State Health Services

Data source: Tarrant County Public Health

**Table 7a. Ten Leading Communicable Diseases by Age Group (in Years),
Tarrant County, 2009**

	0 - 4 Yrs n (Rate)	5 - 9 Yrs n (Rate)	10 - 14 Yrs n (Rate)	15 - 19 Yrs n (Rate)	20 - 24 Yrs n (Rate)
1	Salmonellosis 108 (75.8)	Varicella 136 (103.9)	Chlamydia 119 (96.6)	Chlamydia 2,826 (2,188.8)	Chlamydia 2,776 (2,188.4)
2	Pertussis 97 (68.0)	Salmonellosis 45 (34.4)	Varicella 83 (67.4)	Gonorrhea 837 (648.3)	Gonorrhea 819 (645.6)
3	Varicella 65 (45.6)	Pertussis 40 (30.6)	Pertussis 40 (32.5)	Early Syphilis 30 (23.2)	Hep. C, chronic 72 (56.8)
4	Aseptic Meningitis 51 (35.8)	Aseptic Meningitis 22 (16.8)	Gonorrhea 36 (29.2)	Hep. C, chronic 21 (16.3)	Early Syphilis 71 (56.0)
5	Shigellosis 22 (15.4)	Shigellosis 16 (12.2)	Salmonellosis 17 (13.8)	Aseptic Meningitis/ Hep. B, chronic	HIV 49 (38.6)
6	Campylobacteriosis 21 (14.7)	Campylobacteriosis 11 (8.4)	Aseptic Meningitis 15 (12.2)	17 (13.2)	Hep. B, chronic 43 (33.9)
7	Strep. pneumoniae 20 (14.0)	Strep. pneumoniae 8 (6.1)	Campylobacteriosis 9 (7.3)	HIV 14 (10.8)	Aseptic Meningitis 19 (15.0)
8	Hep. C, chronic 9 (6.3)	Cryptosporidiosis/ Hep. B, chronic/ Hep. C, chronic	Hep. B, chronic 6 (4.9)	Salmonellosis 9 (7.0)	Salmonellosis 10 (7.9)
9	EHEC (E. coli)/ Group B Strep		EHEC (E. coli)/ Hep. C, chronic	Pertussis 7 (5.4)	Campylobacteriosis/ Tuberculosis
10	6 (4.2)	< 5*	< 5*	Varicella 5 (3.9)	6 (4.7)

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

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

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.

2009 population estimates obtained from Texas Department of State Health Services

Data source: Tarrant County Public Health

**Table 7b. Ten Leading Communicable Diseases by Age Group (in Years),
Tarrant County, 2009**

	25 - 34 Yrs n (Rate)	35 - 44 Yrs n (Rate)	45 - 54 Yrs n (Rate)	55 - 64 Yrs n (Rate)	65 + Yrs n (Rate)
1	Chlamydia 1,615 (556.5)	Hep. C, chronic 487 (172.8)	Hep. C, chronic 1,100 (448.5)	Hep. C, chronic 601 (355.6)	Hep. C, chronic 185 (130.4)
2	Gonorrhea 539 (185.7)	Chlamydia 346 (122.8)	Hep. B, chronic 147 (59.9)	Hep. B, chronic 127 (75.1)	Hep. B, chronic 58 (40.9)
3	Hep. C, chronic 254 (87.5)	Hep. B, chronic 178 (63.2)	Chlamydia 86 (35.1)	Strep. Pneumoniae 36 (21.3)	Salmonellosis 34 (24.0)
4	Hep. B, chronic 140 (48.2)	Gonorrhea 144 (51.1)	Gonorrhea 44 (17.9)	Chlamydia 22 (13.0)	Strep. pneumoniae 33 (23.3)
5	Early Syphilis 80 (27.6)	HIV 59 (20.9)	Early Syphilis 35 (14.3)	Salmonellosis 20 (11.8)	Group B strep./ Tuberculosis
6	HIV 68 (23.4)	Early Syphilis 46 (16.3)	HIV/ Strep. Pneumoniae	Tuberculosis 16 (9.5)	19 (13.4)
7	Aseptic Meningitis 38 (13.1)	Aseptic Meningitis 27 (9.6)	33 (13.5)	Early Syphilis 15 (8.9)	Cryptosporidiosis/ Group A Strep.
8	Salmonellosis 21 (7.2)	Tuberculosis 20 (7.1)	Salmonellosis 27 (11.0)	Aseptic Meningitis 14 (8.3)	12 (8.5)
9	Tuberculosis 16 (5.5)	Strep. pneumoniae 15 (5.3)	Tuberculosis 24 (9.8)	Campylobacteriosis/ Gonorrhea	Aseptic Meningitis 9 (6.3)
10	Crypto/ Strep. Pneumo 12 (4.1)	Salmonellosis 13 (4.6)	Hep. B, acute 19 (7.7)	13 (7.7)	Hep. B, acute 7 (4.9)

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.

2009 population estimates obtained from Texas Department of State Health Service

Data source: Tarrant County Public Health

Selected Communicable Diseases by City

Table 8a. Selected Communicable Diseases by City, Tarrant County, 2009

	Aseptic Meningitis			Chlamydia		Gonorrhea		2009 H1N1 Hospitalizations	
	Population	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Arlington	370,450	51	13.8	1,785	481.8	571	154.1	33	8.9
Azle	10,950	< 5	@	25	228.3	< 5	@	< 5	@
Bedford	49,700	7	14.1	127	255.5	24	48.3	6	12.1
Benbrook	23,900	< 5	@	37	154.8	8	33.5	< 5	@
Blue Mound	2,400	< 5	@	7	291.7	< 5	@	< 5	@
Burleson	7,713	0	0.0	48	622.3	9	116.7	0	0.0
Colleyville	22,550	6	26.6	23	102.0	< 5	@	0	0.0
Crowley	12,200	< 5	@	66	541.0	16	131.1	< 5	@
Eules	54,200	11	20.3	187	345.0	59	108.9	5	9.2
Everman	5,800	0	0.0	0	0.0	13	224.1	0	0.0
Forest Hill	11,950	0	0.0	71	594.1	14	117.2	< 5	@
Fort Worth	720,250	90	12.5	4,399	610.8	1,496	207.7	84	11.7
Grand Prairie	168,500	5	3.0	157	93.2	47	27.9	< 5	@
Grapevine	47,950	5	10.4	68	141.8	19	39.6	< 5	@
Haltom City	39,550	5	12.6	111	280.7	21	53.1	< 5	@
Haslet	1,450	0	0.0	25	1,724.1	< 5	@	0	0.0
Hurst	38,750	< 5	@	112	289.0	22	56.8	< 5	@
Keller	39,450	5	12.7	115	291.5	18	45.6	6	15.2
Kennedale	6,450	< 5	@	17	263.6	< 5	@	< 5	@
Lake Worth	4,850	< 5	@	9	185.6	< 5	@	0	0.0
Lakeside	1,300	< 5	@	< 5	@	0	0.0	0	0.0
Mansfield	55,950	9	16.1	135	241.3	24	42.9	6	10.7
North Richland Hills	66,100	7	10.6	113	171.0	37	56.0	< 5	@
Pantego	2,750	0	0.0	< 5	@	0	0.0	0	0.0
Richland Hills	8,350	< 5	@	16	191.6	5	59.9	0	0.0
River Oaks	7,350	0	0.0	13	176.9	< 5	@	< 5	@
Saginaw	19,350	5	25.8	46	237.7	< 5	@	< 5	@
Sansom Park	4,250	0	0.0	0	0.0	0	0.0	0	0.0
Southlake	26,650	< 5	@	19	71.3	< 5	@	< 5	@
Watauga	24,350	5	20.5	49	201.2	11	45.2	< 5	@
Westworth Village	3,100	0	0.0	< 5	@	< 5	@	0	0.0
White Settlement	16,150	0	0.0	10	61.9	0	0.0	0	0.0

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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.

2009 city population estimates were obtained from the North Central Texas Council of Governments

Data source: Tarrant County Public Health

Table 8b. Selected Communicable Diseases by City, Tarrant County, 2009

	Hep. B, chronic			Hep. C, chronic		HIV		Pertussis	
	Population	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Arlington	370,450	197	53.2	411	110.9	67	18.1	34	9.2
Azle	10,950	< 5	@	44	401.8	0	0.0	< 5	@
Bedford	49,700	12	24.1	51	102.6	6	12.1	< 5	@
Benbrook	23,900	5	20.9	13	54.4	0	0.0	< 5	@
Blue Mound	2,400	< 5	@	5	208.3	< 5	@	0	0.0
Burleson	7,713	0	0.0	6	77.8	< 5	@	0	0.0
Colleyville	22,550	12	53.2	11	48.8	< 5	@	< 5	@
Crowley	12,200	6	49.2	23	188.5	< 5	@	< 5	@
Euless	54,200	34	62.7	84	155.0	13	24.0	5	9.2
Everman	5,800	< 5	@	< 5	@	0	0.0	0	0.0
Forest Hill	11,950	< 5	@	13	108.8	< 5	@	0	0.0
Fort Worth	720,250	305	42.3	1,543	214.2	122	16.9	108	15.0
Grand Prairie	168,500	31	18.4	10	5.9	6	3.6	5	3.0
Grapevine	47,950	13	27.1	29	60.5	< 5	@	< 5	@
Haltom City	39,550	17	43.0	63	159.3	< 5	@	7	17.7
Haslet	1,450	< 5	@	11	758.6	0	0.0	< 5	@
Hurst	38,750	8	20.6	53	136.8	< 5	@	< 5	@
Keller	39,450	15	38.0	62	157.2	< 5	@	12	30.4
Kennedale	6,450	< 5	@	10	155.0	0	0.0	< 5	@
Lake Worth	4,850	< 5	@	5	103.1	0	0.0	0	0.0
Lakeside	1,300	0	0.0	0	0.0	0	0.0	0	0.0
Mansfield	55,950	20	35.7	52	92.9	< 5	@	< 5	@
North Richland Hills	66,100	10	15.1	80	121.0	< 5	@	9	13.6
Pantego	2,750	0	0.0	< 5	@	0	0.0	< 5	@
Richland Hills	8,350	< 5	@	6	71.9	< 5	@	< 5	@
River Oaks	7,350	0	0.0	< 5	@	0	0.0	< 5	@
Saginaw	19,350	5	25.8	13	67.2	0	0.0	0	0.0
Sansom Park	4,250	0	0.0	0	0.0	0	0.0	0	0.0
Southlake	26,650	7	26.3	9	33.8	0	0.0	0	0.0
Watauga	24,350	7	28.7	16	65.7	< 5	@	0	0.0
Westworth Village	3,100	0	0.0	< 5	@	0	0.0	0	0.0
White Settlement	16,150	0	0.0	< 5	@	0	0.0	0	0.0

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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.

2009 city population estimates were obtained from the North Central Texas Council of Governments

Data source: Tarrant County Public Health

Table 8c. Selected Communicable Diseases by City, Tarrant County, 2009

	Salmonellosis			Early Syphilis		Tuberculosis		Varicella	
	Population	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
Arlington	370,450	54	14.6	51	13.8	24	6.5	39	10.5
Azle	10,950	5	45.7	0	0.0	0	0.0	9	82.2
Bedford	49,700	11	22.1	< 5	@	0	0.0	11	22.1
Benbrook	23,900	< 5	@	0	0.0	< 5	@	< 5	@
Blue Mound	2,400	0	0.0	< 5	@	< 5	@	< 5	@
Burleson	7,713	< 5	@	0	0.0	0	0.0	< 5	@
Colleyville	22,550	< 5	@	0	0.0	0	0.0	< 5	@
Crowley	12,200	< 5	@	< 5	@	0	0.0	0	0.0
Eules	54,200	9	16.6	10	18.5	< 5	@	27	49.8
Everman	5,800	0	0.0	0	0.0	0	0.0	0	0.0
Forest Hill	11,950	< 5	@	0	0.0	< 5	@	< 5	@
Fort Worth	720,250	125	17.4	181	25.1	59	8.2	98	13.6
Grand Prairie	168,500	< 5	@	6	3.6	5	3.0	7	4.2
Grapevine	47,950	8	16.7	< 5	@	< 5	@	5	10.4
Haltom City	39,550	10	25.3	< 5	@	< 5	@	5	12.6
Haslet	1,450	< 5	@	0	0.0	0	0.0	7	482.8
Hurst	38,750	7	18.1	6	15.5	< 5	@	10	25.8
Keller	39,450	22	55.8	< 5	@	< 5	@	24	60.8
Kennedale	6,450	< 5	@	0	0.0	0	0.0	0	0.0
Lake Worth	4,850	0	0.0	0	0.0	0	0.0	< 5	@
Lakeside	1,300	0	0.0	0	0.0	0	0.0	0	0.0
Mansfield	55,950	11	19.7	< 5	@	< 5	@	< 5	@
North Richland Hills	66,100	10	15.1	< 5	@	< 5	@	20	30.3
Pantego	2,750	0	0.0	0	0.0	0	0.0	0	0.0
Richland Hills	8,350	< 5	@	0	0.0	0	0.0	< 5	@
River Oaks	7,350	< 5	@	0	0.0	0	0.0	0	0.0
Saginaw	19,350	< 5	@	< 5	@	< 5	@	< 5	@
Sansom Park	4,250	0	0.0	0	0.0	0	0.0	0	0.0
Southlake	26,650	7	26.3	0	0.0	0	0.0	< 5	@
Watauga	24,350	< 5	@	< 5	@	0	0.0	6	24.6
Westworth Village	3,100	0	0.0	0	0.0	0	0.0	< 5	@
White Settlement	16,150	0	0.0	0	0.0	0	0.0	0	0.0

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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

2009 city population estimates were obtained from the North Central Texas Council of Governments

Data source: Tarrant County Public Health

Selected Communicable Diseases by ZIP Code

Table 9a. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Aseptic Meningitis		Chlamydia		Gonorrhea		2009 H1N1 Hospitalization	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
75050	37,860	< 5	@	31	81.9	5	13.2	0	0.0
75051	31,299	0	0.0	31	99.0	14	44.7	< 5	@
75052	56,252	< 5	@	92	163.5	27	48.0	< 5	@
75053	NA	0	-	0	-	0	-	< 5	-
75054	NA	0	-	< 5	-	< 5	-	0	-
75061	53,184	0	0.0	0	0.0	0	0.0	0	0.0
75102	1,036	0	0.0	0	0.0	0	0.0	0	0.0
75105	323	0	0.0	0	0.0	0	0.0	0	0.0
75110	31,292	0	0.0	0	0.0	0	0.0	0	0.0
75148	5,849	0	0.0	0	0.0	0	0.0	0	0.0
75180	19,335	0	0.0	0	0.0	0	0.0	0	0.0
75212	22,173	0	0.0	0	0.0	0	0.0	0	0.0
75662	22,017	0	0.0	0	0.0	0	0.0	0	0.0
76001	21,566	< 5	@	105	486.9	20	92.7	5	23.2
76002	7,355	< 5	@	106	1,441.2	33	448.7	< 5	@
76003	NA	0	-	6	-	< 5	-	0	-
76004	NA	0	-	< 5	-	< 5	-	0	-
76005	NA	0	-	< 5	-	0	-	0	-
76006	24,678	< 5	@	131	530.8	46	186.4	0	0.0
76007	NA	0	-	6	-	< 5	-	0	-
76008	8,260	0	0.0	0	0.0	0	0.0	0	0.0
76010	53,757	6	11.2	347	645.5	113	210.2	6	11.2
76011	29,898	< 5	@	172	575.3	54	180.6	< 5	@
76012	25,488	7	27.5	97	380.6	38	149.1	< 5	@
76013	32,134	< 5	@	119	370.3	28	87.1	< 5	@
76014	31,127	5	16.1	225	722.8	88	282.7	5	16.1
76015	16,063	< 5	@	68	423.3	26	161.9	< 5	@
76016	30,814	5	16.2	64	207.7	21	68.2	< 5	@
76017	42,060	8	19.0	166	394.7	47	111.7	< 5	@
76018	23,918	6	25.1	133	556.1	46	192.3	< 5	@
76019	NA	0	-	16	-	< 5	-	0	-
76020	23,303	< 5	@	25	107.3	< 5	@	< 5	@
76021	33,643	< 5	@	78	231.8	11	32.7	< 5	@
76022	14,038	< 5	@	45	320.6	13	92.6	< 5	@
76028	38,776	0	0.0	54	139.3	10	25.8	0	0.0
76031	38,561	0	0.0	0	0.0	0	0.0	0	0.0
76034	19,643	6	30.5	23	117.1	< 5	@	0	0.0
76036	12,731	< 5	@	66	518.4	16	125.7	< 5	@
76039	28,066	< 5	@	89	317.1	16	57.0	< 5	@
76040	23,072	7	30.3	98	424.8	43	186.4	< 5	@
76048	19,318	0	0.0	0	0.0	0	0.0	0	0.0
76050	5,180	0	0.0	0	0.0	0	0.0	0	0.0
76051	41,813	5	12.0	68	162.6	18	43.0	< 5	@
76052	2,912	0	0.0	25	858.5	< 5	@	0	0.0
76053	24,253	< 5	@	91	375.2	16	66.0	< 5	@
76054	11,686	0	0.0	21	179.7	6	51.3	0	0.0
76060	5,141	< 5	@	17	330.7	< 5	@	< 5	@
76061	465	0	0.0	0	0.0	0	0.0	0	0.0
76063	32,675	9	27.5	135	413.2	24	73.5	6	18.4
76071	2,966	0	0.0	0	0.0	0	0.0	0	0.0
76078	5,158	0	0.0	0	0.0	0	0.0	0	0.0
76084	7,237	0	0.0	0	0.0	0	0.0	0	0.0
76086	23,884	0	0.0	0	0.0	0	0.0	0	0.0
76092	21,068	< 5	@	19	90.2	< 5	@	< 5	@
76094	NA	0	-	0	-	0	-	0	-
76095	NA	0	-	< 5	-	0	-	0	-
76096	NA	0	-	< 5	-	0	-	0	-
76099	NA	0	-	0	-	0	-	0	-
76101	NA	0	-	9	-	5	-	0	-

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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.

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

Table 9b. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Aseptic Meningitis		Chlamydia		Gonorrhea		2009 H1N1 Hospitalization	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
76102	8,432	< 5	@	90	1,067.4	38	450.7	0	0.0
76103	14,302	< 5	@	101	706.2	32	223.7	< 5	@
76104	17,511	7	40.0	217	1,239.2	93	531.1	7	40.0
76105	22,047	< 5	@	276	1,251.9	136	616.9	6	27.2
76106	51,700	8	15.5	265	512.6	42	81.2	8	15.5
76107	26,665	< 5	@	115	431.3	34	127.5	< 5	@
76108	26,423	7	26.5	119	450.4	24	90.8	< 5	@
76109	24,007	< 5	@	63	262.4	12	50.0	0	0.0
76110	32,742	< 5	@	177	540.6	47	143.5	< 5	@
76111	20,503	< 5	@	117	570.6	17	82.9	< 5	@
76112	39,436	< 5	@	372	943.3	176	446.3	7	17.8
76113	NA	0	-	5	-	< 5	-	< 5	-
76114	24,438	< 5	@	104	425.6	16	65.5	< 5	@
76115	20,009	< 5	@	117	584.7	27	134.9	7	35.0
76116	45,343	6	13.2	250	551.4	67	147.8	< 5	@
76117	29,316	5	17.1	125	426.4	21	71.6	< 5	@
76118	12,602	< 5	@	36	285.7	9	71.4	< 5	@
76119	40,484	< 5	@	432	1,067.1	222	548.4	5	12.4
76120	9,928	< 5	@	110	1,108.0	44	443.2	< 5	@
76121	NA	0	-	< 5	-	0	-	0	-
76122	NA	0	-	< 5	-	< 5	-	0	-
76123	11,636	< 5	@	160	1,375.0	54	464.1	< 5	@
76124	NA	0	-	0	-	0	-	0	-
76126	15,454	< 5	@	41	265.3	8	51.8	< 5	@
76127	289	0	0.0	< 5	@	< 5	@	0	0.0
76129	NA	0	-	6	-	< 5	-	0	-
76130	NA	0	-	< 5	-	0	-	0	-
76131	7,207	5	69.4	85	1,179.4	13	180.4	8	111.0
76132	21,542	< 5	@	149	691.7	51	236.7	0	0.0
76133	43,073	< 5	@	268	622.2	108	250.7	< 5	@
76134	18,575	< 5	@	179	963.7	74	398.4	< 5	@
76135	14,989	5	33.4	73	487.0	15	100.1	< 5	@
76136	NA	0	-	0	-	0	-	0	-
76137	39,706	6	15.1	177	445.8	32	80.6	< 5	@
76140	18,632	< 5	@	200	1,073.4	91	488.4	< 5	@
76147	NA	0	-	0	-	0	-	0	-
76148	24,700	6	24.3	60	242.9	13	52.6	< 5	@
76150	NA	0	-	< 5	-	0	-	0	-
76155	2,626	0	0.0	14	533.1	< 5	@	0	0.0
76161	NA	0	-	< 5	-	0	-	0	-
76162	NA	0	-	< 5	-	0	-	< 5	-
76163	NA	0	-	0	-	< 5	-	0	-
76164	NA	< 5	-	67	-	13	-	< 5	-
76177	45	0	0.0	5	11,111.1	0	0.0	0	0.0
76179	20,644	8	38.8	119	576.4	18	87.2	5	24.2
76180	54,195	6	11.1	130	239.9	42	77.5	< 5	@
76182	NA	< 5	-	0	-	0	-	< 5	-
76191	NA	0	-	0	-	0	-	0	-
76195	NA	0	-	0	-	0	-	0	-
76244	NA	< 5	-	9	-	< 5	-	< 5	-
76247	5,503	0	0.0	0	0.0	0	0.0	< 5	@
76248	27,924	< 5	@	109	390.3	15	53.7	0	0.0
76262	15,475	< 5	@	0	0.0	0	0.0	< 5	@

Rate per 100,000 population

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

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

Table 9c. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Hep. B, chronic		Hep. C, chronic		HIV		Pertussis	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
75050	37,860	< 5	@	< 5	@	< 5	@	< 5	@
75051	31,299	< 5	@	0	0.0	0	0.0	0	0.0
75052	56,252	22	39.1	< 5	@	5	8.9	< 5	@
75053	NA	0	-	0	-	0	-	< 5	-
75054	NA	< 5	-	< 5	-	0	-	0	-
75061	53,184	< 5	@	0	0.0	0	0.0	0	0.0
75102	1,036	0	0.0	0	0.0	0	0.0	0	0.0
75105	323	0	0.0	0	0.0	0	0.0	0	0.0
75110	31,292	0	0.0	0	0.0	0	0.0	0	0.0
75148	5,849	0	0.0	0	0.0	0	0.0	0	0.0
75180	19,335	0	0.0	0	0.0	0	0.0	0	0.0
75212	22,173	0	0.0	0	0.0	0	0.0	0	0.0
75662	22,017	0	0.0	0	0.0	0	0.0	0	0.0
76001	21,566	14	64.9	20	92.7	< 5	@	< 5	@
76002	7,355	31	421.5	17	231.1	< 5	@	< 5	@
76003	NA	0	-	< 5	-	0	-	0	-
76004	NA	0	-	< 5	-	0	-	< 5	-
76005	NA	0	-	< 5	-	0	-	0	-
76006	24,678	6	24.3	26	105.4	10	40.5	0	0.0
76007	NA	0	-	< 5	-	0	-	0	-
76008	8,260	0	0.0	< 5	@	0	0.0	0	0.0
76010	53,757	36	67.0	56	104.2	7	13.0	12	22.3
76011	29,898	6	20.1	38	127.1	9	30.1	< 5	@
76012	25,488	8	31.4	20	78.5	7	27.5	< 5	@
76013	32,134	10	31.1	52	161.8	5	15.6	< 5	@
76014	31,127	29	93.2	48	154.2	10	32.1	5	16.1
76015	16,063	6	37.4	25	155.6	0	0.0	0	0.0
76016	30,814	8	26.0	18	58.4	5	16.2	< 5	@
76017	42,060	16	38.0	44	104.6	6	14.3	< 5	@
76018	23,918	29	121.2	36	150.5	< 5	@	< 5	@
76019	NA	0	-	0	-	0	-	0	-
76020	23,303	< 5	@	45	193.1	0	0.0	< 5	@
76021	33,643	7	20.8	34	101.1	5	14.9	< 5	@
76022	14,038	5	35.6	16	114.0	< 5	@	< 5	@
76028	38,776	0	0.0	6	15.5	< 5	@	0	0.0
76031	38,561	0	0.0	0	0.0	0	0.0	0	0.0
76034	19,643	12	61.1	9	45.8	< 5	@	< 5	@
76036	12,731	6	47.1	23	180.7	< 5	@	< 5	@
76039	28,066	16	57.0	41	146.1	5	17.8	< 5	@
76040	23,072	17	73.7	42	182.0	8	34.7	< 5	@
76048	19,318	0	0.0	< 5	@	0	0.0	0	0.0
76050	5,180	0	0.0	0	0.0	0	0.0	0	0.0
76051	41,813	12	28.7	28	67.0	< 5	@	< 5	@
76052	2,912	< 5	@	11	377.7	0	0.0	< 5	@
76053	24,253	7	28.9	48	197.9	< 5	@	< 5	@
76054	11,686	< 5	@	6	51.3	0	0.0	< 5	@
76060	5,141	< 5	@	10	194.5	0	0.0	< 5	@
76061	465	0	0.0	0	0.0	0	0.0	0	0.0
76063	32,675	20	61.2	51	156.1	< 5	@	< 5	@
76071	2,966	0	0.0	< 5	@	0	0.0	0	0.0
76078	5,158	0	0.0	0	0.0	0	0.0	0	0.0
76084	7,237	0	0.0	0	0.0	0	0.0	0	0.0
76086	23,884	0	0.0	0	0.0	0	0.0	0	0.0
76092	21,068	7	33.2	9	42.7	0	0.0	0	0.0
76094	NA	0	-	0	-	0	-	0	-
76095	NA	0	-	0	-	0	-	0	-
76096	NA	0	-	< 5	-	0	-	0	-
76099	NA	0	-	< 5	-	0	-	0	-
76101	NA	0	-	< 5	-	0	-	0	-

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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.

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

Table 9d. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Hep. B, chronic		Hep. C, chronic		HIV		Pertussis	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
76102	8,432	15	177.9	231	2,739.6	< 5	@	0	0.0
76103	14,302	6	42.0	54	377.6	< 5	@	0	0.0
76104	17,511	23	131.3	101	576.8	8	45.7	< 5	@
76105	22,047	7	31.8	53	240.4	5	22.7	11	49.9
76106	51,700	< 5	@	76	147.0	< 5	@	< 5	@
76107	26,665	8	30.0	57	213.8	5	18.8	< 5	@
76108	26,423	6	22.7	68	257.4	< 5	@	6	22.7
76109	24,007	6	25.0	20	83.3	< 5	@	0	0.0
76110	32,742	< 5	@	83	253.5	< 5	@	5	15.3
76111	20,503	< 5	@	51	248.7	< 5	@	< 5	@
76112	39,436	16	40.6	94	238.4	13	33.0	< 5	@
76113	NA	0	-	< 5	-	< 5	-	0	-
76114	24,438	7	28.6	48	196.4	< 5	@	8	32.7
76115	20,009	7	35.0	26	129.9	< 5	@	< 5	@
76116	45,343	15	33.1	78	172.0	7	15.4	0	0.0
76117	29,316	21	71.6	75	255.8	< 5	@	5	17.1
76118	12,602	7	55.5	23	182.5	< 5	@	5	39.7
76119	40,484	41	101.3	105	259.4	18	44.5	5	12.4
76120	9,928	8	80.6	16	161.2	< 5	@	< 5	@
76121	NA	0	-	0	-	0	-	0	-
76122	NA	0	-	0	-	0	-	0	-
76123	11,636	14	120.3	11	94.5	< 5	@	6	51.6
76124	NA	0	-	< 5	-	0	-	0	-
76126	15,454	< 5	@	21	135.9	0	0.0	< 5	@
76127	289	< 5	@	< 5	@	< 5	@	0	0.0
76129	NA	0	-	0	-	0	-	0	-
76130	NA	0	-	0	-	0	-	0	-
76131	7,207	18	249.8	24	333.0	< 5	@	5	69.4
76132	21,542	7	32.5	20	92.8	7	32.5	< 5	@
76133	43,073	27	62.7	61	141.6	< 5	@	9	20.9
76134	18,575	11	59.2	33	177.7	5	26.9	6	32.3
76135	14,989	< 5	@	41	273.5	< 5	@	< 5	@
76136	NA	0	-	< 5	-	0	-	0	-
76137	39,706	18	45.3	48	120.9	< 5	@	< 5	@
76140	18,632	6	32.2	34	182.5	< 5	@	< 5	@
76147	NA	0	-	< 5	-	0	-	0	-
76148	24,700	12	48.6	26	105.3	< 5	@	< 5	@
76150	NA	0	-	0	-	0	-	0	-
76155	2,626	5	190.4	< 5	@	< 5	@	0	0.0
76161	NA	0	-	< 5	-	0	-	0	-
76162	NA	0	-	0	-	0	-	0	-
76163	NA	0	-	< 5	-	0	-	0	-
76164	NA	0	-	16	-	< 5	-	9	-
76177	45	0	0.0	< 5	@	0	0.0	0	0.0
76179	20,644	9	43.6	45	218.0	< 5	@	7	33.9
76180	54,195	13	24.0	88	162.4	< 5	@	8	14.8
76182	NA	< 5	-	5	-	0	-	< 5	-
76191	NA	0	-	0	-	0	-	0	-
76195	NA	0	-	0	-	0	-	0	-
76244	NA	6	-	< 5	-	0	-	< 5	-
76247	5,503	0	0.0	57	1,035.8	0	0.0	0	0.0
76248	27,924	12	43.0	< 5	@	< 5	@	10	35.8
76262	15,475	0	0.0	0	0.0	0	0.0	0	0.0

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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.

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

Table 9e. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Salmonellosis		Early Syphilis		TB		Varicella	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
75050	37,860	0	0.0	< 5	@	< 5	@	< 5	@
75051	31,299	0	0.0	0	0.0	< 5	@	0	0.0
75052	56,252	< 5	@	< 5	@	< 5	@	< 5	@
75053	NA	0	-	0	-	0	-	0	-
75054	NA	0	-	< 5	-	0	-	0	-
75061	53,184	0	0.0	0	0.0	0	0.0	0	0.0
75102	1,036	0	0.0	0	0.0	0	0.0	0	0.0
75105	323	0	0.0	0	0.0	0	0.0	0	0.0
75110	31,292	0	0.0	0	0.0	0	0.0	0	0.0
75148	5,849	0	0.0	0	0.0	0	0.0	0	0.0
75180	19,335	0	0.0	0	0.0	0	0.0	0	0.0
75212	22,173	0	0.0	0	0.0	0	0.0	0	0.0
75662	22,017	0	0.0	0	0.0	0	0.0	0	0.0
76001	21,566	7	32.5	< 5	@	< 5	@	0	0.0
76002	7,355	< 5	@	< 5	@	< 5	@	5	68.0
76003	NA	0	-	0	-	0	-	0	-
76004	NA	0	-	0	-	0	-	0	-
76005	NA	0	-	0	-	0	-	< 5	-
76006	24,678	< 5	@	< 5	@	0	0.0	0	0.0
76007	NA	0	-	0	-	0	-	0	-
76008	8,260	0	0.0	0	0.0	0	0.0	0	0.0
76010	53,757	12	22.3	7	13.0	7	13.0	10	18.6
76011	29,898	< 5	@	8	26.8	0	0.0	< 5	@
76012	25,488	< 5	@	< 5	@	< 5	@	< 5	@
76013	32,134	5	15.6	< 5	@	< 5	@	5	15.6
76014	31,127	< 5	@	6	19.3	< 5	@	< 5	@
76015	16,063	< 5	@	< 5	@	0	0.0	0	0.0
76016	30,814	5	16.2	< 5	@	< 5	@	5	16.2
76017	42,060	< 5	@	6	14.3	< 5	@	< 5	@
76018	23,918	< 5	@	< 5	@	< 5	@	< 5	@
76019	NA	0	-	0	-	0	-	0	-
76020	23,303	5	21.5	0	0.0	0	0.0	9	38.6
76021	33,643	0	0.0	< 5	@	< 5	@	< 5	@
76022	14,038	< 5	@	< 5	@	0	0.0	10	71.2
76028	38,776	< 5	@	0	0.0	< 5	@	< 5	@
76031	38,561	0	0.0	0	0.0	0	0.0	0	0.0
76034	19,643	< 5	@	0	0.0	0	0.0	< 5	@
76036	12,731	< 5	@	< 5	@	0	0.0	0	0.0
76039	28,066	< 5	@	< 5	@	< 5	@	< 5	@
76040	23,072	6	26.0	7	30.3	< 5	@	25	108.4
76048	19,318	0	0.0	0	0.0	0	0.0	0	0.0
76050	5,180	0	0.0	0	0.0	0	0.0	0	0.0
76051	41,813	8	19.1	< 5	@	< 5	@	5	12.0
76052	2,912	< 5	@	0	0.0	0	0.0	7	240.4
76053	24,253	< 5	@	5	20.6	< 5	@	7	28.9
76054	11,686	5	42.8	< 5	@	0	0.0	< 5	@
76060	5,141	< 5	@	0	0.0	0	0.0	0	0.0
76061	465	0	0.0	0	0.0	0	0.0	0	0.0
76063	32,675	11	33.7	< 5	@	< 5	@	13	39.8
76071	2,966	0	0.0	0	0.0	0	0.0	0	0.0
76078	5,158	0	0.0	0	0.0	0	0.0	0	0.0
76084	7,237	0	0.0	0	0.0	0	0.0	0	0.0
76086	23,884	0	0.0	0	0.0	0	0.0	0	0.0
76092	21,068	7	33.2	0	0.0	0	0.0	< 5	@
76094	NA	0	-	0	-	0	-	0	-
76095	NA	< 5	-	0	-	0	-	0	-
76096	NA	0	-	0	-	0	-	0	-
76099	NA	0	-	0	-	0	-	0	-
76101	NA	0	-	0	-	0	-	0	-

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

Table 9f. Selected Communicable Diseases by ZIP Code, Tarrant County, 2009

ZIP Code	Population	Salmonellosis		Early Syphilis		TB		Varicella	
		Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
76102	8,432	5	59.3	8	94.9	< 5	@	0	0.0
76103	14,302	< 5	@	7	48.9	< 5	@	< 5	@
76104	17,511	< 5	@	27	154.2	< 5	@	< 5	@
76105	22,047	< 5	@	13	59.0	< 5	@	5	22.7
76106	51,700	7	13.5	5	9.7	5	9.7	< 5	@
76107	26,665	5	18.8	< 5	@	< 5	@	< 5	@
76108	26,423	9	34.1	5	18.9	< 5	@	7	26.5
76109	24,007	5	20.8	0	0.0	< 5	@	< 5	@
76110	32,742	6	18.3	< 5	@	< 5	@	< 5	@
76111	20,503	< 5	@	5	24.4	5	24.4	5	24.4
76112	39,436	7	17.8	22	55.8	< 5	@	0	0.0
76113	NA	0	-	0	-	0	-	< 5	-
76114	24,438	8	32.7	< 5	@	< 5	@	5	20.5
76115	20,009	< 5	@	< 5	@	< 5	@	5	25.0
76116	45,343	7	15.4	15	33.1	< 5	@	< 5	@
76117	29,316	8	27.3	< 5	@	< 5	@	< 5	@
76118	12,602	< 5	@	< 5	@	0	0.0	< 5	@
76119	40,484	< 5	@	21	51.9	5	12.4	7	17.3
76120	9,928	< 5	@	6	60.4	< 5	@	0	0.0
76121	NA	0	-	0	-	0	-	0	-
76122	NA	0	-	< 5	-	0	-	0	-
76123	11,636	< 5	@	6	51.6	< 5	@	< 5	@
76124	NA	0	-	0	-	0	-	0	-
76126	15,454	< 5	@	0	0.0	< 5	@	< 5	@
76127	289	0	0.0	0	0.0	< 5	@	0	0.0
76129	NA	0	-	0	-	0	-	0	-
76130	NA	0	-	0	-	0	-	0	-
76131	7,207	6	83.3	< 5	@	< 5	@	7	97.1
76132	21,542	6	27.9	< 5	@	< 5	@	0	0.0
76133	43,073	< 5	@	9	20.9	5	11.6	5	11.6
76134	18,575	< 5	@	5	26.9	< 5	@	5	26.9
76135	14,989	5	33.4	0	0.0	0	0.0	< 5	@
76136	NA	0	-	0	-	0	-	0	-
76137	39,706	13	32.7	< 5	@	< 5	@	18	45.3
76140	18,632	< 5	@	6	32.2	< 5	@	0	0.0
76147	NA	0	-	0	-	0	-	0	-
76148	24,700	< 5	@	5	20.2	< 5	@	< 5	@
76150	NA	0	-	< 5	-	0	-	0	-
76155	2,626	0	0.0	0	0.0	0	0.0	0	0.0
76161	NA	0	-	0	-	0	-	0	-
76162	NA	0	-	0	-	0	-	0	-
76163	NA	0	-	0	-	0	-	0	-
76164	NA	< 5	-	< 5	-	0	-	2	-
76177	45	< 5	@	0	0.0	0	0.0	0	0.0
76179	20,644	7	33.9	< 5	@	< 5	@	7	33.9
76180	54,195	7	12.9	< 5	@	< 5	@	21	38.7
76182	NA	< 5	-	0	-	0	-	0	-
76191	NA	0	-	0	-	0	-	0	-
76195	NA	0	-	0	-	0	-	0	-
76244	NA	< 5	-	0	-	< 5	-	< 5	-
76247	5,503	0	0.0	0	0.0	0	0.0	0	0.0
76248	27,924	19	68.0	< 5	@	< 5	@	23	82.4
76262	15,475	< 5	@	0	0.0	0	0.0	5	32.3

Rate per 100,000 population

Less than five cases not reported to protect confidentiality; @ = rate not calculated for less than five cases

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

ZIP code population estimates from 2000 Census – NA = ZIP code population not available

Data source: Tarrant County Public Health

1. Chlamydia

Chlamydia is a bacterial infection caused by *Chlamydia trachomatis*. Chlamydia is not only the most reported sexually transmitted disease (STD) in Tarrant County, but also the most commonly reported STD in the United States with 1,210,523 cases (a rate of 401.3 cases per 100,000 population) reported nationally in 2008. Chlamydia infections are usually asymptomatic and can cause serious conditions in women such as pelvic inflammatory disease (PID), ectopic pregnancy, and chronic pelvic pain. Chlamydia can also be passed by pregnant women during delivery, potentially causing neonatal ophthalmia and pneumonia.¹

A total of 7,795 cases (a rate of 437.7 cases per 100,000 population) of Chlamydia were reported in Tarrant County in 2009. The incidence among females in 2009 (5,948 cases, 671.5 per 100,000 population) was more than three times that among males (1,847 cases, 206.3 per 100,000 population) (Figure 1).

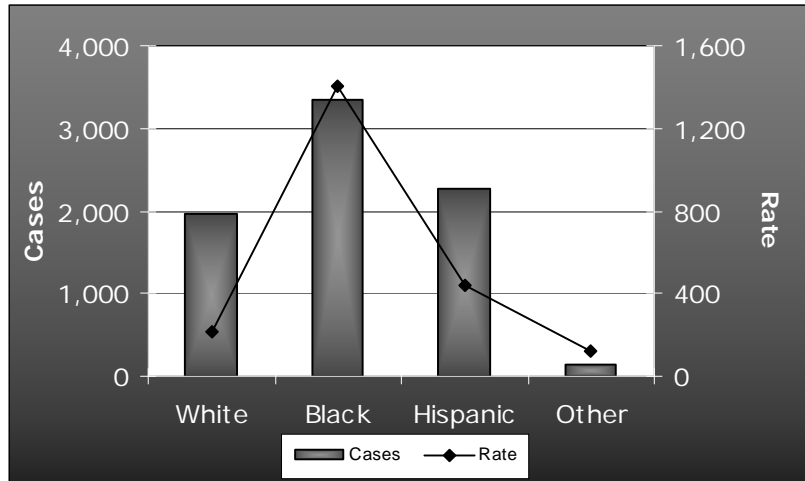
Figure 1. Chlamydia by Gender, Tarrant County, 2009



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

Among racial/ethnic groups, the highest incidence rate of Chlamydia was observed among Blacks (3,349 cases, 1,399.3 per 100,000 population). The rate among Blacks was more than three times that of Hispanics (2,272 cases, 436.3 per 100,000 population), more than six times that of Whites (1,965 cases, 218.5 per 100,000 population), and almost twelve times that of Others (145 cases, 119.4 per 100,000 population) (Figure 2).

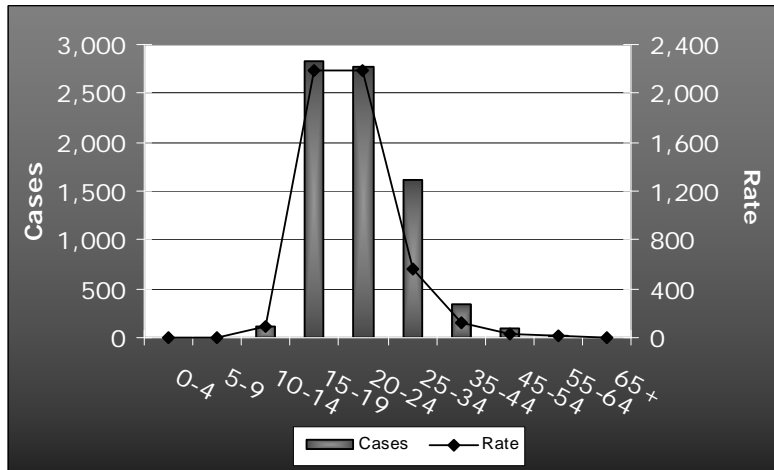
Figure 2. Chlamydia by Race/Ethnicity, Tarrant County, 2009



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

The highest incidence rates of Chlamydia were observed in the 15-19 year age group (2,826 cases, 2,188.8 per 100,000 population) and 20-24 year age group (2,776 cases, 2,188.4 per 100,000 population). New cases of Chlamydia observed in other age groups are ranked as follows: 25-34 year age group (1,615 cases, 556.5 per 100,000 population), 35-44 year age group (346 cases, 122.8 per 100,000 population), 10-14 year age group (119 cases, 96.6 per 100,000 population), 45-54 year age group (86 cases, 35.1 per 100,000 population), and 55-64 year age group (22 cases, 13.0 per 100,000 population). There were less than five cases in age group 0-4 years as well as those 5-9 years of age; no cases were reported in the 65+ age group (Figure 3).

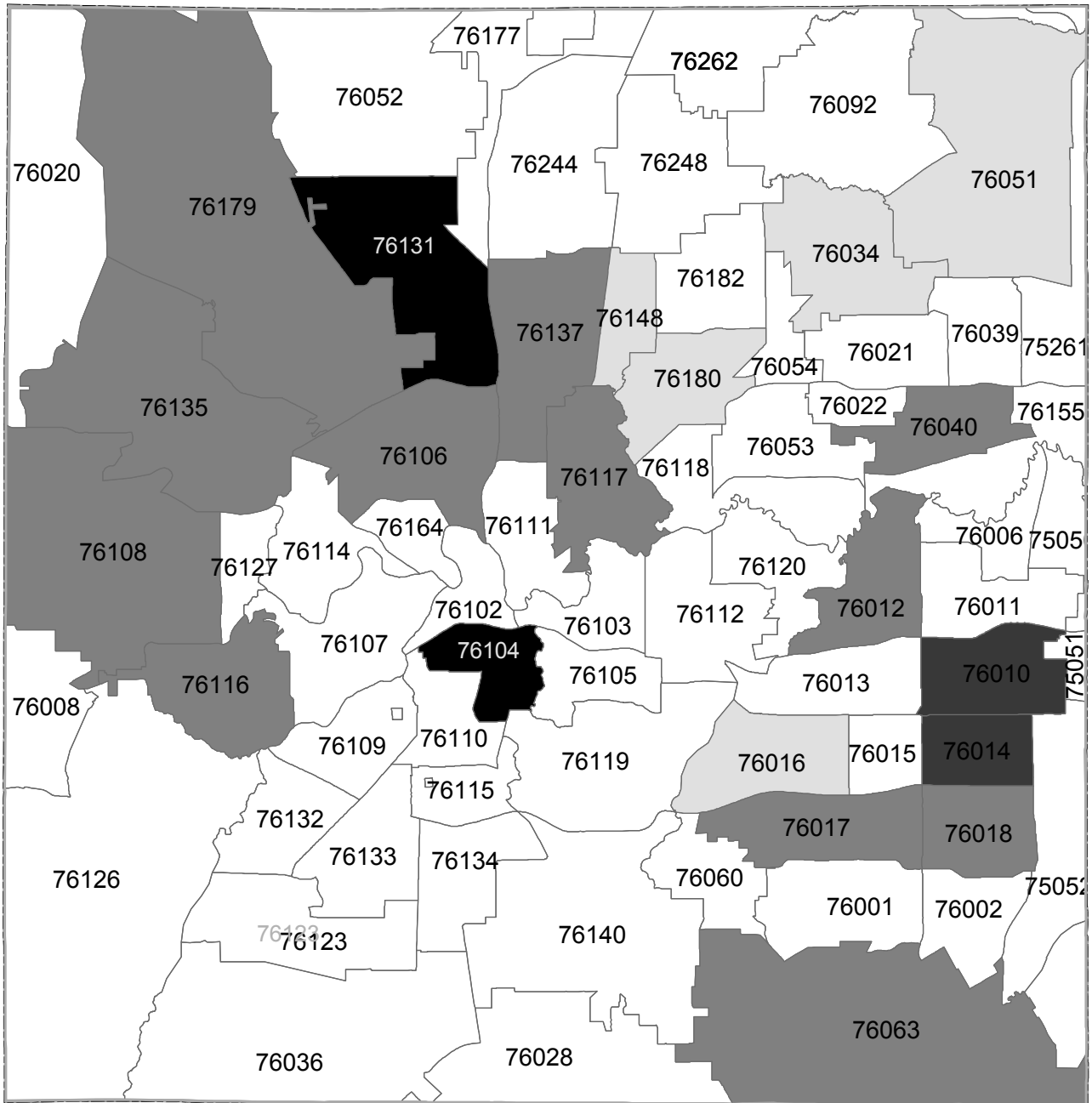
Figure 3. Chlamydia by Age Group (in Years), Tarrant County, 2009



Rate per 100,000 population
The numerator was too small for rate calculation for the 65+ year age group.
Data Source: Tarrant County Public Health

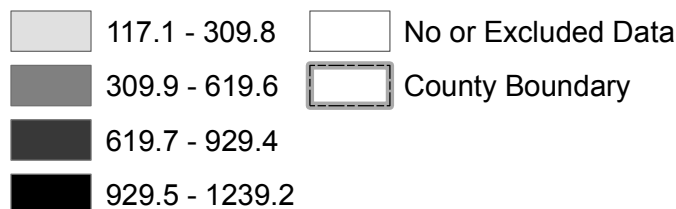
Since infection with Chlamydia is usually asymptomatic, screening is important. Data has shown that Chlamydia screenings can reduce the incidence of PID (a principal cause of infertility) by as much as 60 percent. The Centers for Disease Control and Prevention (CDC) recommends annual Chlamydia screening among sexually active women younger than 26 years of age.¹

Figure 4. Geographic Distribution of Chlamydia by ZIP Code, Tarrant County, 2009



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Rate per 100,000

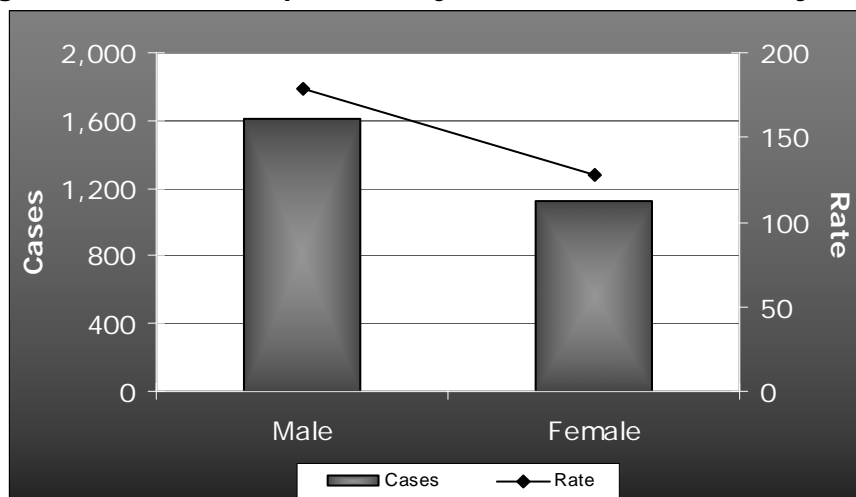


2. Chronic Hepatitis C

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV). Chronic Hepatitis C infection occurs in 75-85 percent of infected persons. Symptoms of Hepatitis C infection include jaundice, fatigue, dark urine, abdominal pain, loss of appetite, and nausea; although, 70-80 percent of infected persons are asymptomatic. Potential long-term effects include chronic liver disease, liver transplant, and death. Hepatitis C is most often spread through illegal injection drug use, but can be spread through sexual contact, accidental needle sticks, and transmission from mother to child.²

Overall, there were 2,738 cases (153.7 per 100,000 population) of chronic Hepatitis C reported in Tarrant County for 2009, with more cases observed among males (1,604 cases, 179.2 per 100,000 population) than females (1,127 cases, 127.2 per 100,000 population) (Figure 5).

Figure 5. Chronic Hepatitis C by Gender, Tarrant County, 2009

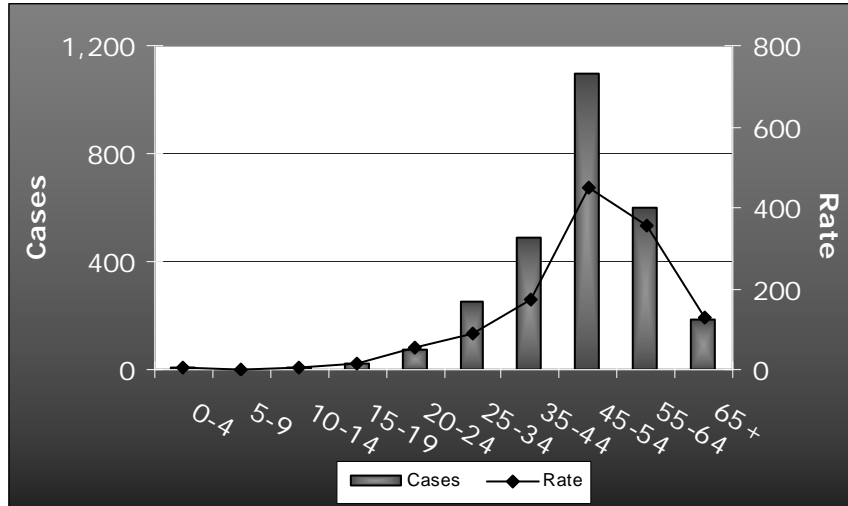


Rate per 100,000 population
Data source: Tarrant County Public Health

Race/ethnicity data for chronic Hepatitis C are not included due to missing data. Data are missing for approximately 53 percent of chronic hepatitis C cases.

Cases of chronic Hepatitis C were reported among all age groups, with the highest incidence rates observed in the older age groups. The highest rate occurred on the 45-54 year age group with 1,100 cases (448.5 per 100,000 population) reported. The incidence rate then decreased as follows: 55-64 year age group (601 cases, 355.6 per 100,000 population), 35-44 year age group (487 cases, 172.8 per 100,000 population), 65 years and older age group (185 cases, 130.4 per 100,000 population), 25-34 year age group (254 cases, 87.5 per 100,000 population), 20-24 year age group (72 cases, 56.8 per 100,000 population), 15-19 year age group (21 cases, 16.3 per 100,000 population), and 0-4 year age group (9 cases, 6.3 per 100,000 population). Finally, there were less than five cases of chronic Hepatitis C among the 5-9 year age group as well as the 10-14 year age group (Figure 6).

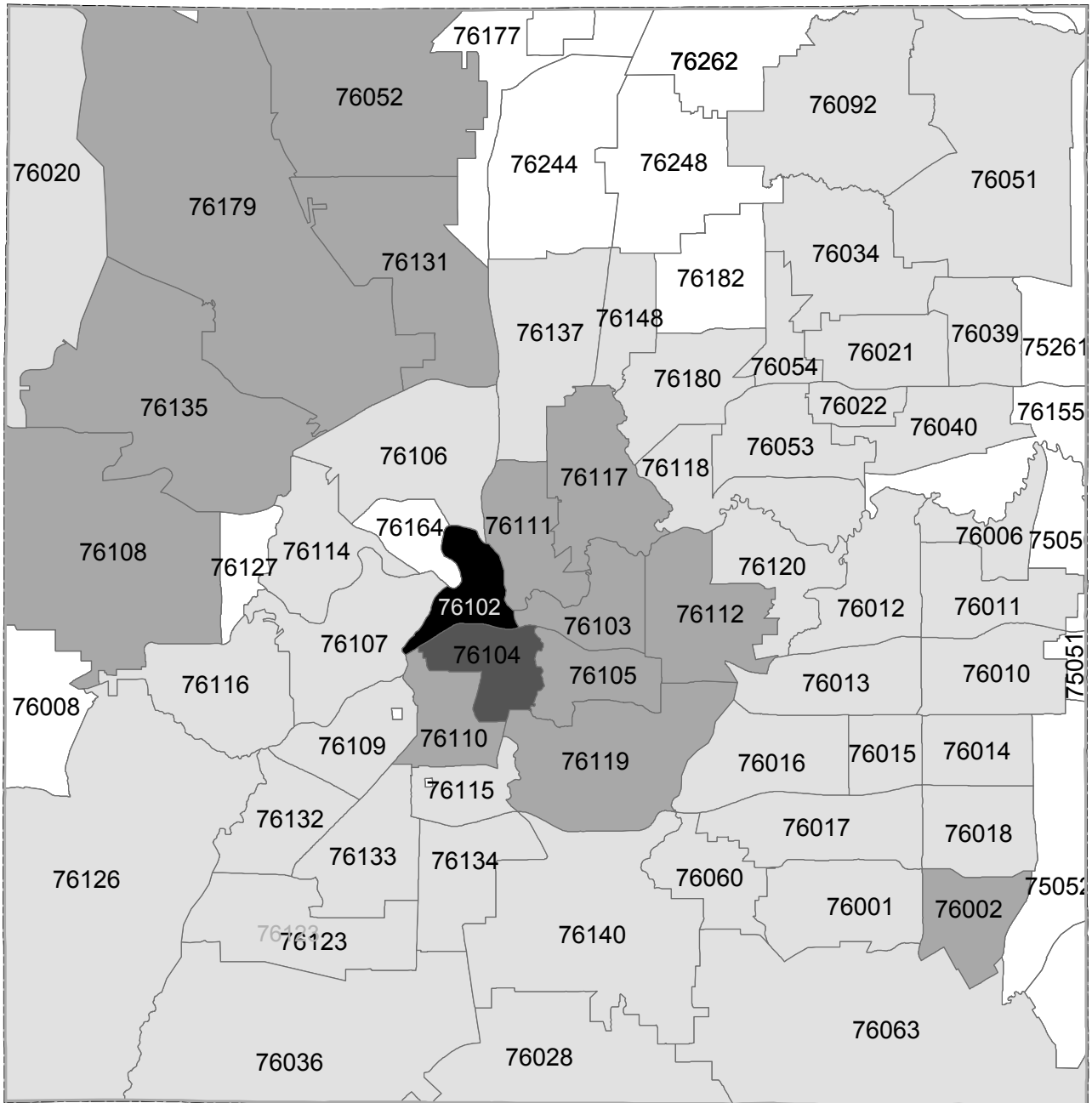
Figure 6. Chronic Hepatitis C by Age Group (in Years), Tarrant County, 2009



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

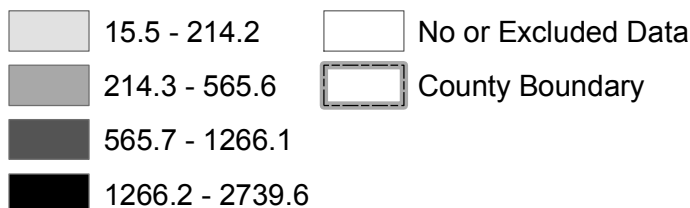
No vaccines are available to prevent Hepatitis C infection. Some preventive measures include not injecting illegal drugs, not sharing needles, and always practicing safe sex. Since a large number of persons with Hepatitis C may not show symptoms, the number of true cases is unknown. It is estimated that 3.2 million Americans have chronic Hepatitis C.² Appropriate testing and medical management are offered at Tarrant County Public Health.

Figure 7. Geographic Distribution of Chronic Hepatitis C by ZIP Code, Tarrant County, 2009



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Rate per 100,000

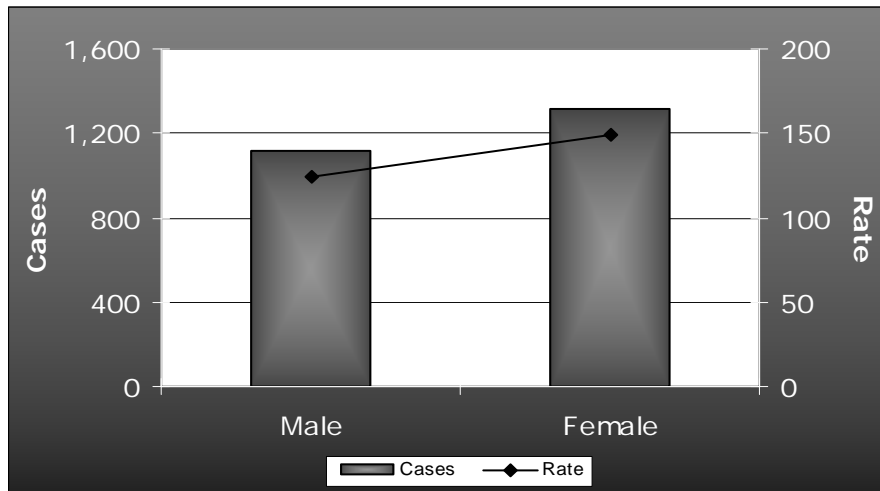


3. Gonorrhea

Gonorrhea is a sexually transmitted disease (STD) caused by the bacterium *Neisseria gonorrhoeae*. Gonorrhea is the third most commonly reported disease in Tarrant County and the second most common in the United States with 336,742 cases (a rate of 111.6 cases per 100,000 population) reported nationally in 2008. Persons infected with gonorrhea may be asymptomatic; however, gonorrhea infections in women can cause serious conditions such as pelvic inflammatory disease (PID), ectopic pregnancy, and chronic pelvic pain. In men, gonorrhea infections can lead to epididymitis – a painful condition of the testicles that can lead to infertility. In 2006, an increase in resistance among *Neisseria gonorrhoeae* bacteria to quinolones resulted in restrictions in national treatment guidelines to include only the cephalosporin class of drugs. Historically, the national rate of gonorrhea infection was higher among males, but the rate of new infections has been similar among both genders for the past eight years. Nationally, the incidence rate of gonorrhea was highest among 20-24 year olds in 2008.³ Screening and treatment services for gonorrhea are available at Tarrant County Public Health.

Overall, there were 2,435 cases (136.7 per 100,000 population) of gonorrhea reported in Tarrant County for 2009. Incidence was slightly higher among females (1,319 cases, 148.9 per 100,000 population) compared to males (1,115 cases, 124.6 per 100,000 population) (Figure 8).

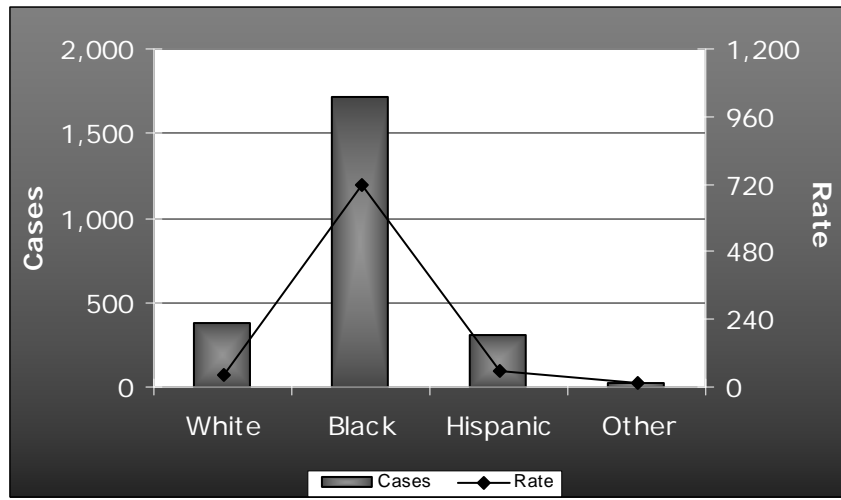
Figure 8. Gonorrhea by Gender, Tarrant County, 2009



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

Among racial/ethnic groups, the highest incidence of gonorrhea was observed among Blacks. The rate among Blacks (1,711 cases, 714.9 per 100,000 population) was approximately 46 times higher than Others (19 cases, 15.6 per 100,000 population), 17 times higher than Whites (378 cases, 42.0 per 100,000 population), and 12 times higher than Hispanics (311 cases, 59.7 per 100,000 population) (Figure 9).

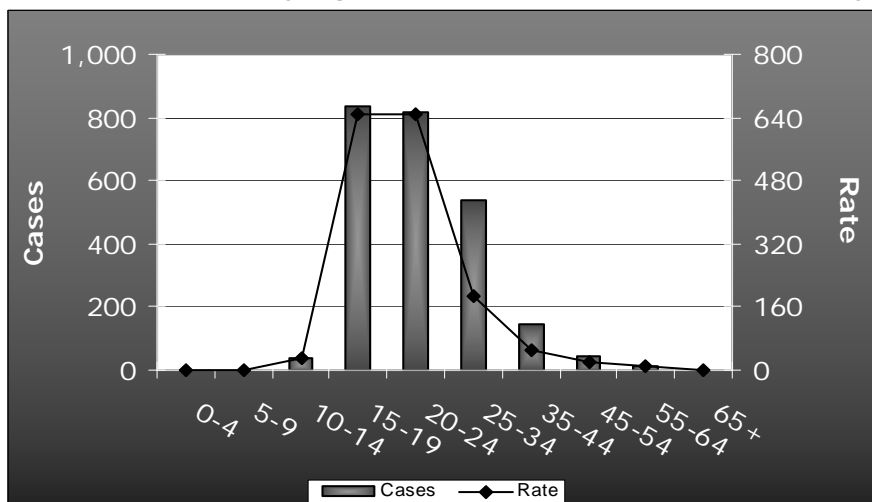
Figure 9. Gonorrhea by Race/Ethnicity, Tarrant County, 2009



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

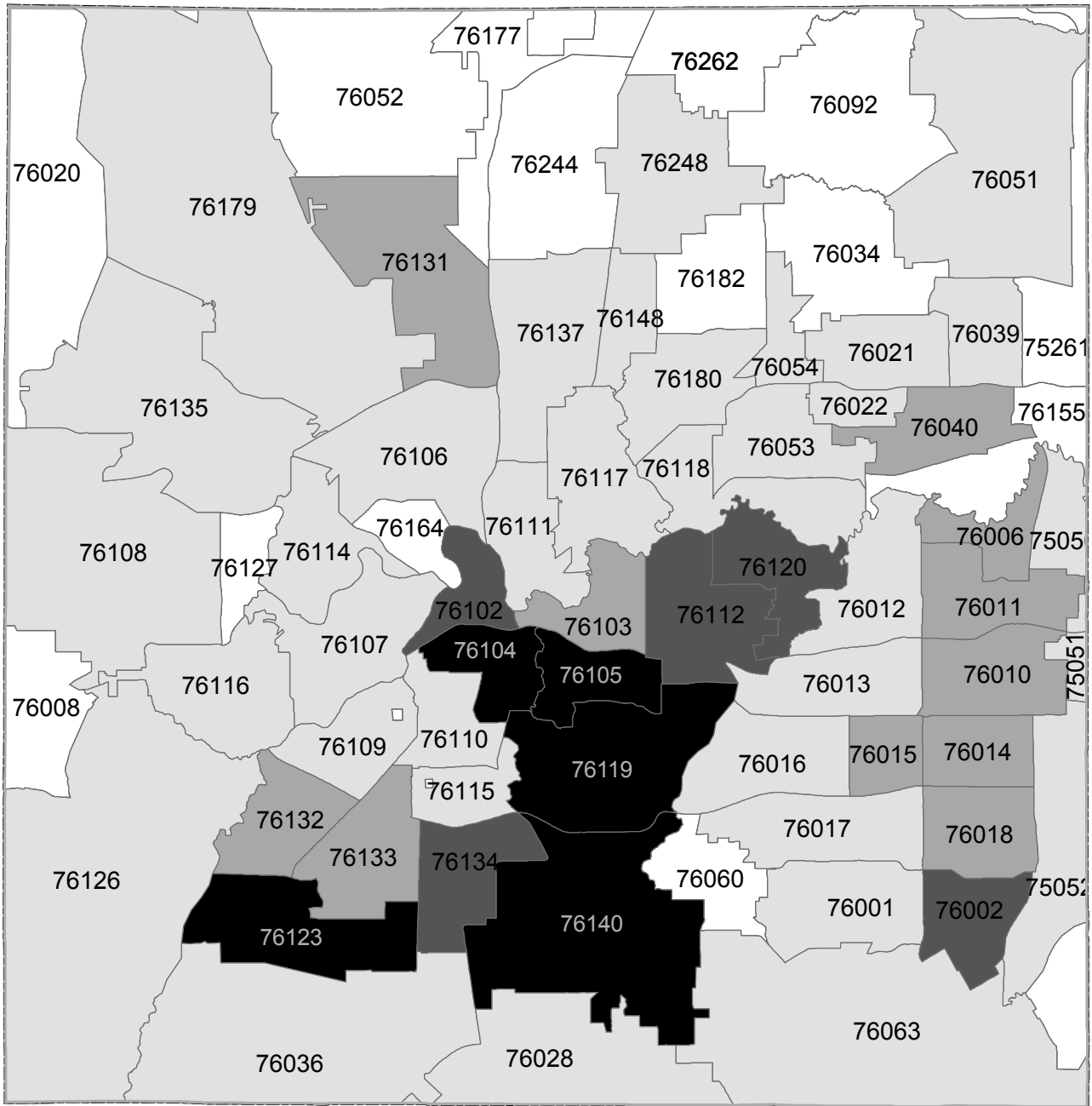
The highest incidence rate of gonorrhea was observed in the 15-19 year age group (837 cases, 648.3 per 100,000 population) followed by the 20-24 year age group (819 cases, 645.6 per 100,000 population), 25-34 year age group (539 cases, 185.7 per 100,000 population), 35-44 year age group (144 cases, 51.1 per 100,000 population), 10-14 year age group (36 cases, 29.2 per 100,000 population), 45-54 year age group (44 cases, 17.9 per 100,000 population), and 55-64 year age group (13 cases, 7.7 per 100,000 population). Less than five cases were reported for those 5-9 years of age and those 65+ years of age and older (9 cases, 6.6 per 100,000 population). No cases were reported in the 0-4 year group (Figure 10).

Figure 10. Gonorrhea by Age Group (in Years), Tarrant County, 2009









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

Figure 11. Geographic Distribution of Gonorrhea by ZIP Code, Tarrant County, 2009



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Rate per 100,000

	13.2 - 154.2		No or Excluded Data
	154.3 - 308.5		County Boundary
	308.6 - 462.7		
	462.8 - 616.9		

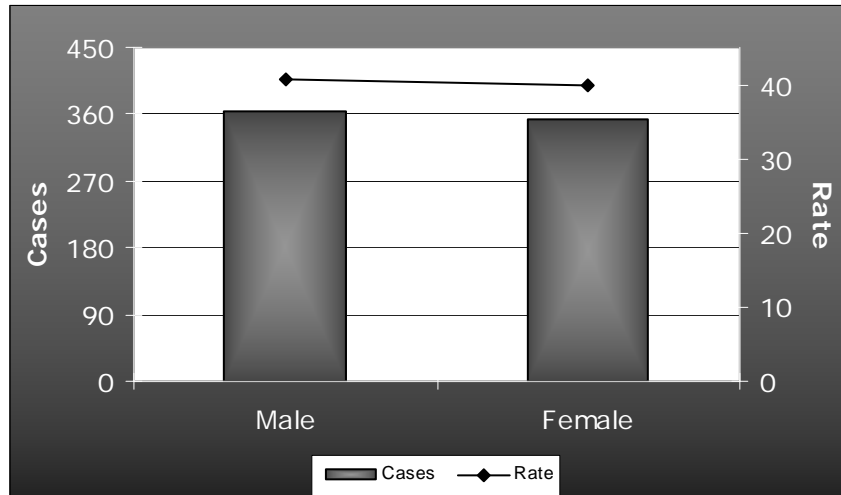


4. Chronic Hepatitis B

Hepatitis B is a liver disease caused by the Hepatitis B virus (HBV). The younger a person is when they first become infected with HBV, the greater the risk of becoming chronically infected. Ninety percent of infants who are infected with HBV at birth will become chronically infected, as will 25-50 percent of children infected between the ages of one to five years, and 6-10 percent of persons over five years of age. Symptoms of Hepatitis B infection include jaundice, fatigue, abdominal pain, loss of appetite, nausea, vomiting, and joint pain. An estimated 30-50 percent of infected persons are asymptomatic with symptoms less common in children than in adults. Potential long-term effects include chronic liver disease, liver transplant, and death. Hepatitis B is spread through sexual contact with an infected person, direct contact with blood or sores from an infected person, sharing needles, accidental needle sticks, and transmission from mother to child.⁴

Overall, there were 719 cases (a rate of 40.4 cases per 100,000 population) of chronic Hepatitis B reported in Tarrant County in 2009. The incidence rate was roughly the same among males (365 cases, 40.8 per 100,000 population) and females (354 cases, 40.0 per 100,000 population) (Figure 12).

Figure 12. Chronic Hepatitis B by Gender, Tarrant County, 2009

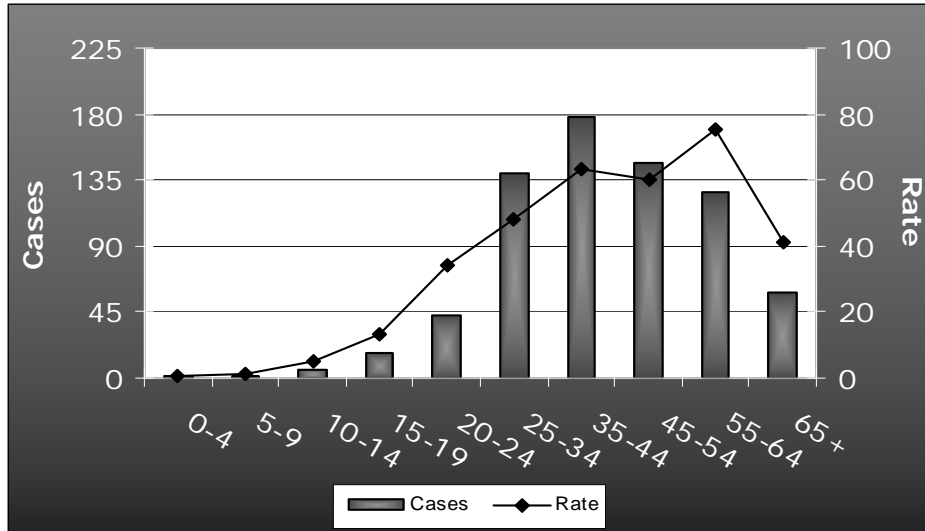


Rate per 100,000 population
Data source: Tarrant County Public Health

Race/ethnicity data for chronic Hepatitis B are not included due to missing data. Data are missing for approximately 47 percent of chronic Hepatitis B cases.

The incidence of chronic Hepatitis B was highest among the 55-64 year (127 cases, 75.1 per 100,000 population), 35-44 year (178 cases, 63.2 per 100,000 population), 45-54 year (147 cases, 59.9 per 100,000 population) and the 25-34 year age groups (140 cases, 48.2 per 100,000 population). The incidence then declined as follows: 58 cases (40.9 per 100,000 population) in the 65+ year age group, 43 cases (33.9 per 100,000 population) in the 20-24 age group, 17 cases (13.2 per 100,000 population) in the 15-19 year age group, and 6 cases (4.9 per 100,000 population) in the 10-14 age group. Less than five cases were reported in the 0-4 year and 5-9 year age groups (Figure 13).

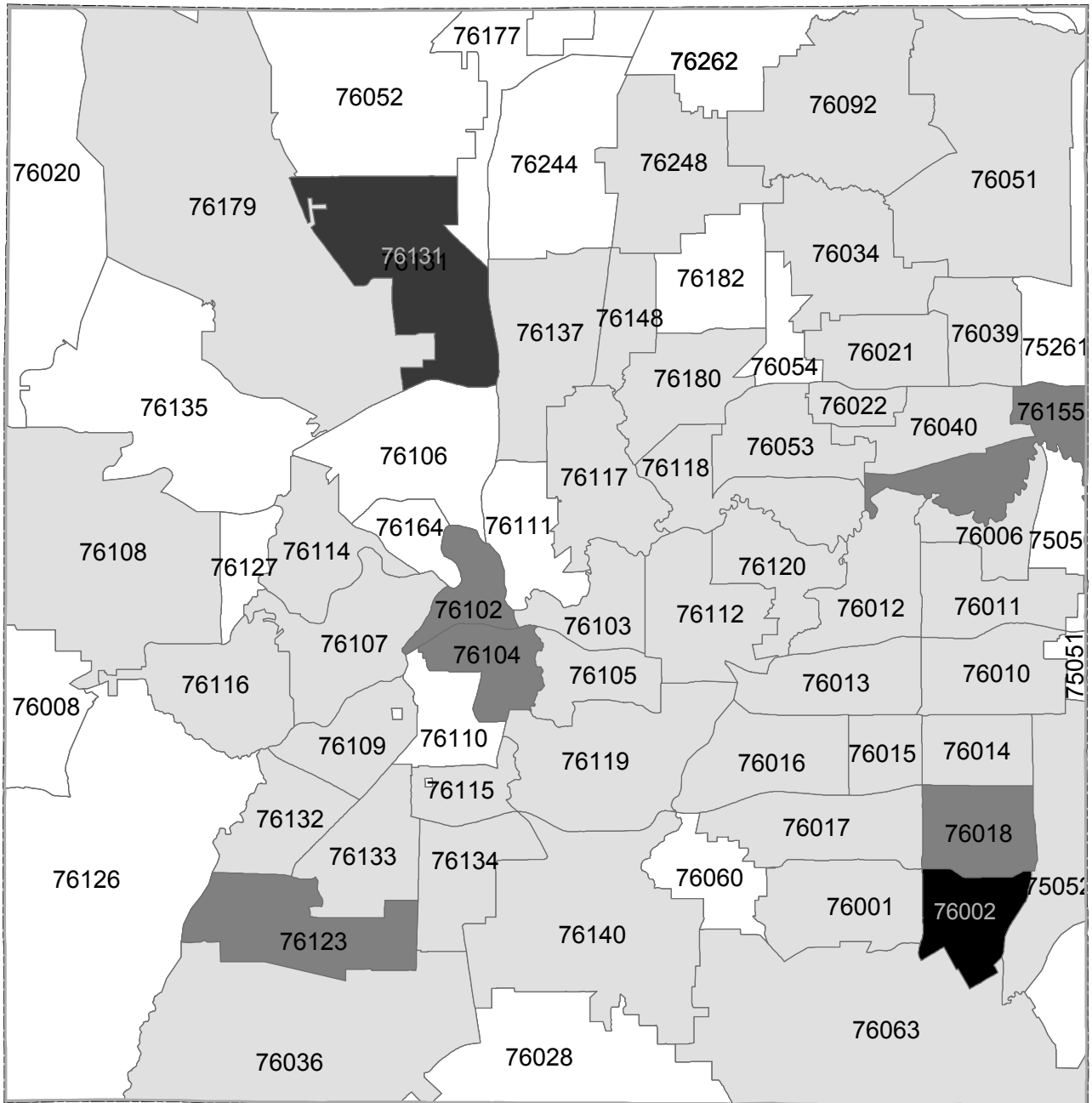
Figure 13. Chronic Hepatitis B by Age Group (in Years), Tarrant County, 2009



*Rate per 100,000 population
 The numerator was too small for rate calculation of the 0-4 year and 5-9 year age groups.
 Data source: Tarrant County Public Health*

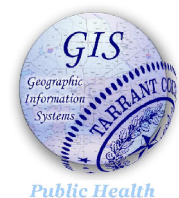
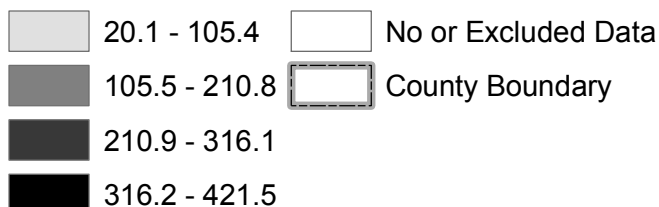
Vaccination for Hepatitis B has been available since 1982. Routine vaccination is recommended for persons 0-18 years of age and persons over 18 years of age who are at high risk. Some prevention measures include always practicing safe sex, not injecting illegal drugs, not sharing needles, and getting vaccinated. Since a large number of persons with Hepatitis B are asymptomatic, the number of true cases is unknown. It is estimated that 800,000 - 1.4 million Americans have chronic Hepatitis B.⁴ Appropriate testing and medical management are offered through Tarrant County Public Health.

Figure 14. Geographic Distribution of Chronic Hepatitis B by ZIP Code, Tarrant County, 2009



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Rate per 100,000

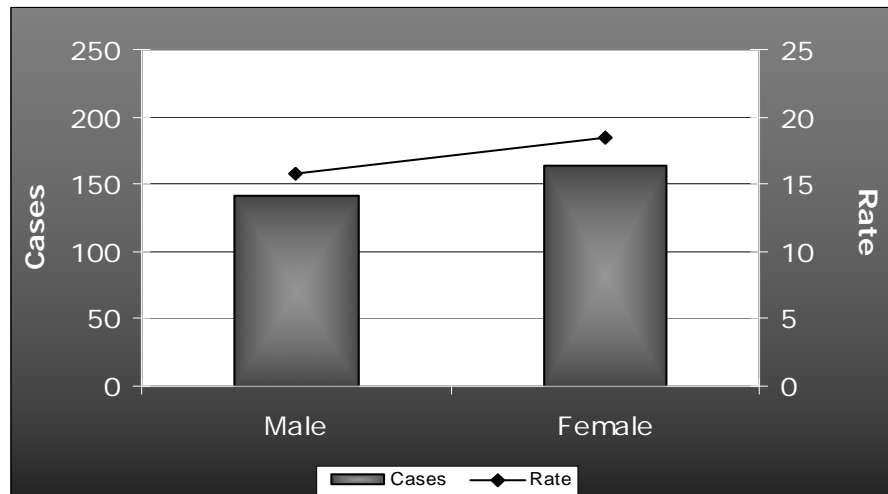


5. Salmonellosis

Salmonellosis is a bacterial disease caused by the bacterium *Salmonella*. Symptoms start 12 to 72 hours after infection and typically include diarrhea, fever, and stomach pain. Symptoms usually last four to seven days, and treatment is not necessary for most people. In some cases, however, severe complications may occur. For instance, the diarrhea may be severe enough for hospitalization. The infection may spread into the blood stream which could result in death if not medically treated. Salmonellosis may be contracted through eating foods contaminated with animal feces such as undercooked beef and poultry, milk, and raw eggs. Thorough cooking kills *Salmonella*. Infection may also be spread by handling baby chicks and reptiles such as turtles, lizards, and snakes. Children, the elderly, and immune-compromised persons are at a higher risk of infection.⁵

There were 304 cases (a rate of 17.1 cases per 100,000 population) of salmonellosis reported in Tarrant County in 2009. The incidence was lower among males (141 cases, 15.8 per 100,000 population) than females (163 cases, 18.4 per 100,000 population) (Figure 15).

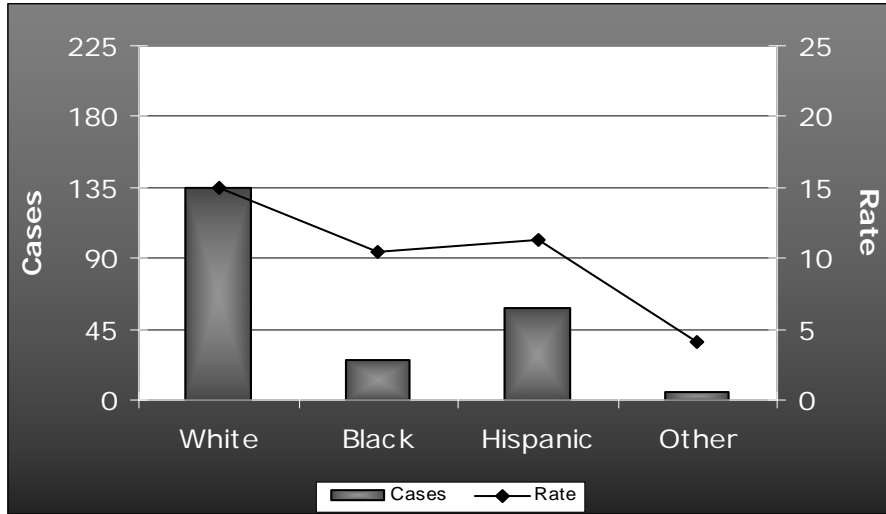
Figure 15. Salmonellosis by Gender, Tarrant County, 2009



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

Data for the racial/ethnic distribution of reported salmonellosis cases should be interpreted with caution due to the high percentage (26%) of missing data for race/ethnicity. Of collected data, the highest rate of salmonellosis cases were observed among Whites (135 cases, 15.0 per 100,000 population), followed by Hispanics (59 cases, 11.3 per 100,000 population), Blacks (25 cases, 10.4 per 100,000 population), and then Others (5 cases, 4.1 per 100,000 population) (Figure 16).

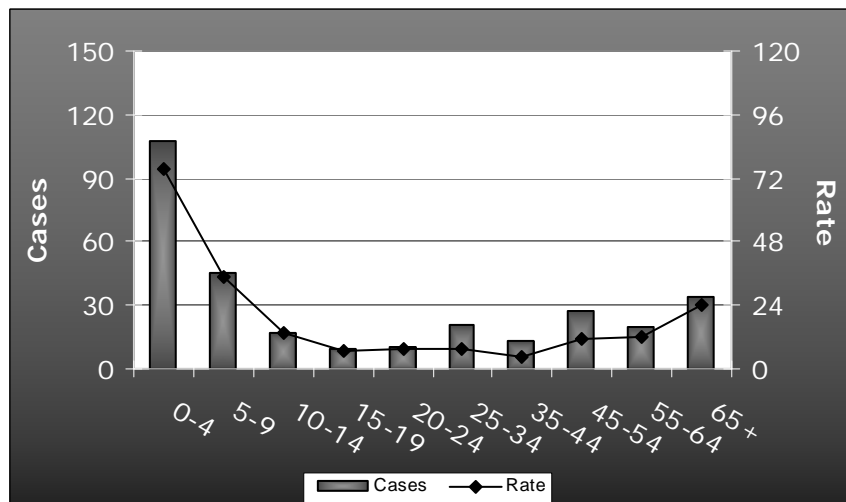
Figure 16. Salmonellosis by Race/Ethnicity, Tarrant County, 2009



Rate per 100,000 population
 Rankings for race/ethnicity should be interpreted with caution due to missing data.
 Race/ethnicity data are missing for 26% of salmonellosis cases.
 Data Source: Tarrant County Public Health

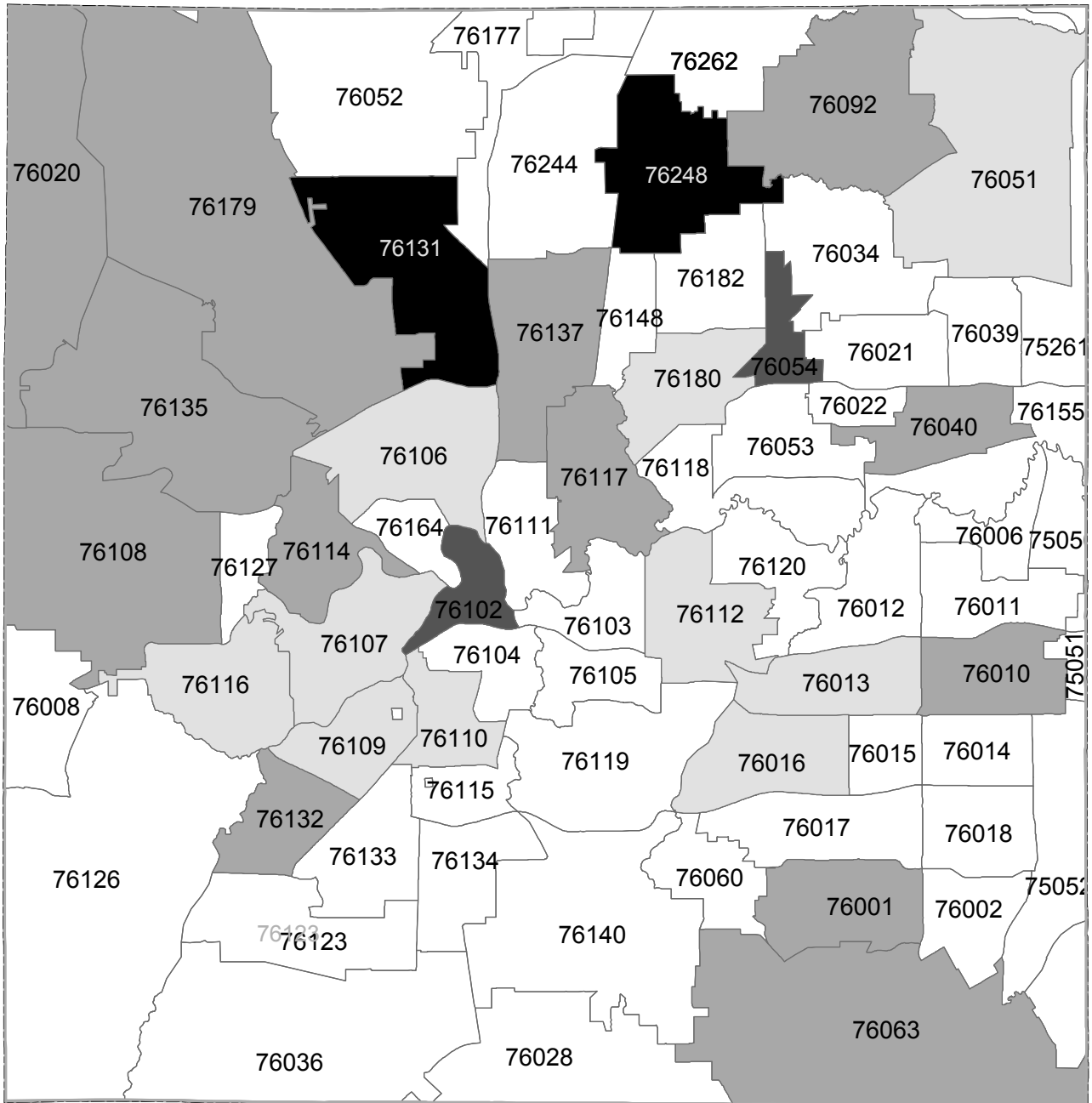
The highest incidence rate of reported salmonellosis cases was observed in the 0-4 year age group (108 cases, 75.8 per 100,000 population) followed by the 5-9 year age group (45 cases, 34.4 per 100,000 population). Incidence in the other age groups (by decreasing incidence rate) were: 24.0 per 100,000 population (34 cases) in the 65 years and older age group, 13.8 per 100,000 population (17 cases) in the 10-14 year age group, 11.8 per 100,000 population (20 cases) in the 55-64 year age group, 11.0 per 100,000 population (27 cases) in the 45-54 year age group, 7.9 per 100,000 population (10 cases) in the 20-24 year age group, 7.2 per 100,000 population (21 cases) in the 25-34 year age group, 7.0 per 100,000 population (9 cases) in the 15-19 year age group, and 4.6 per 100,000 population (13 cases) in the 35-44 year age group (Figure 17).

Figure 17. Salmonellosis by Age Group (in Years), Tarrant County, 2009



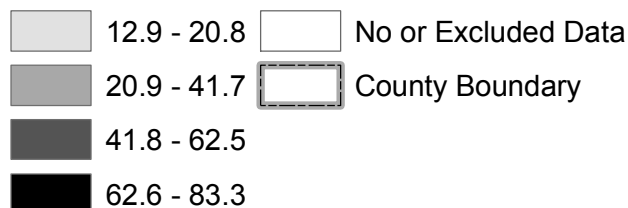
Rate per 100,000 population
 Data source: Tarrant County Public Health

Figure 18. Geographic Distribution of Salmonella by ZIP Code, Tarrant County, 2009



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Rate per 100,000

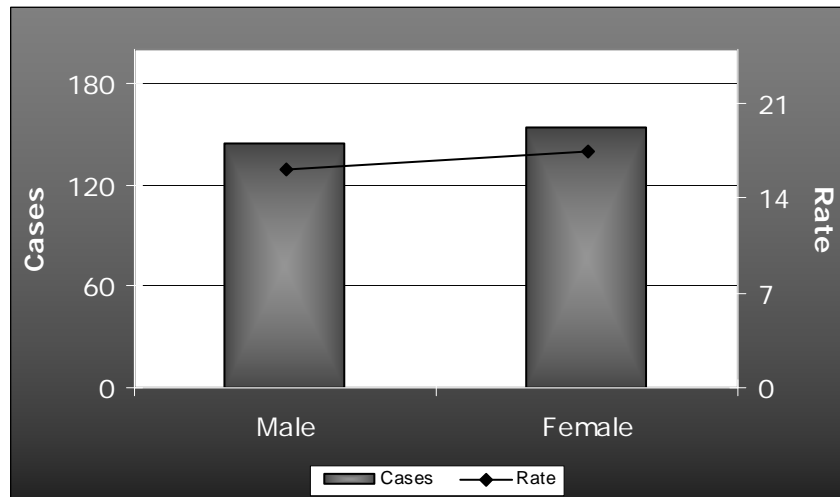


6. Varicella

Varicella, more commonly known as chickenpox, is caused by the varicella-zoster virus. Varicella infection causes a skin rash of blister-like lesions that may occur anywhere on the body but are usually concentrated on the face, scalp, or trunk of the body. It is highly contagious and spreads from person to person through direct contact, coughing, and sneezing. Mild effects of infection include an itchy rash, tiredness, dehydration, headache, and fever. Serious complications of infection can include bacterial skin infection, swelling of the brain, pneumonia, and even death. A person is contagious from one to two days before the appearance of the rash until all of the blisters have formed scabs. Symptoms generally appear 10-21 days after contact with someone who is infected.⁵

There were 298 cases (16.7 per 100,000 population) of varicella reported in Tarrant County during 2009. The incidence was slightly higher among females (154 cases, 17.4 per 100,000 population) than males (144 cases, 16.1 per 100,000 population) (Figure 19).

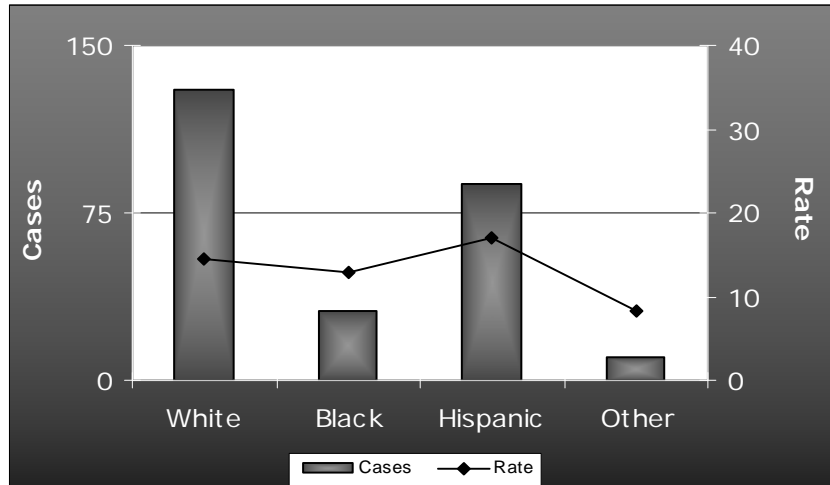
Figure 19. Varicella by Gender, Tarrant County, 2009



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

The incidence rate of varicella cases was highest among Hispanics (88 cases, 16.9 per 100,000 population) followed by Whites (130 cases, 14.5 per 100,000 population). The rate was lowest among Others (10 cases, 8.2 per 100,000 population) followed by Blacks (31 cases, 13.0 per 100,000 population) (Figure 20).

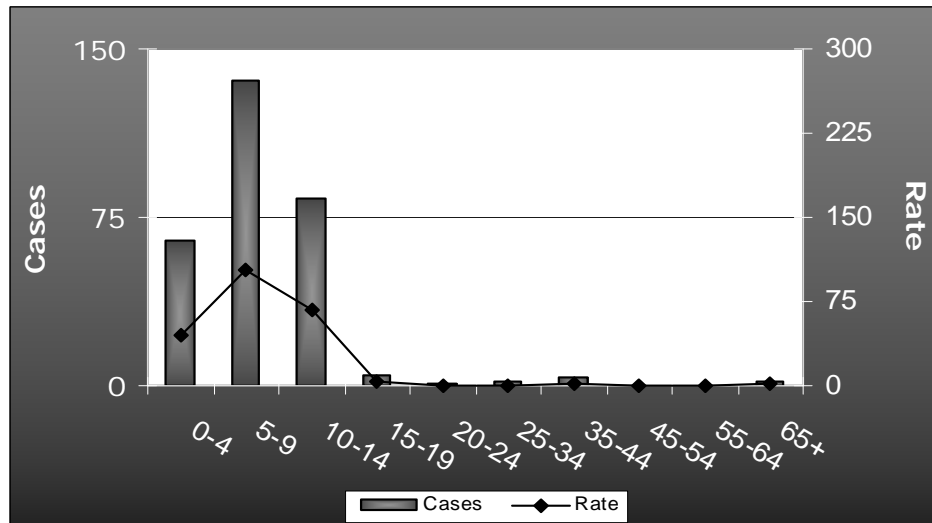
Figure 20. Varicella by Race / Ethnicity, Tarrant County, 2009



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

Higher incidence rates of varicella were observed among the younger age groups. The highest rate occurred in the 5-9 year age group (136 cases, 103.9 per 100,000 population) followed by the 10-14 year age group (83 cases, 67.4 per 100,000 population), 0-4 year age group (65 cases, 45.6 per 100,000 population), and 15-19 year age group (5 cases, 3.9 per 100,000 population). Less than five cases were reported for the 25-34 year age group, the 35-44 year age group, and the 65 and older age group. No cases were observed among those 45-54 years of age as well as those 55-64 years of age (Figure 21).

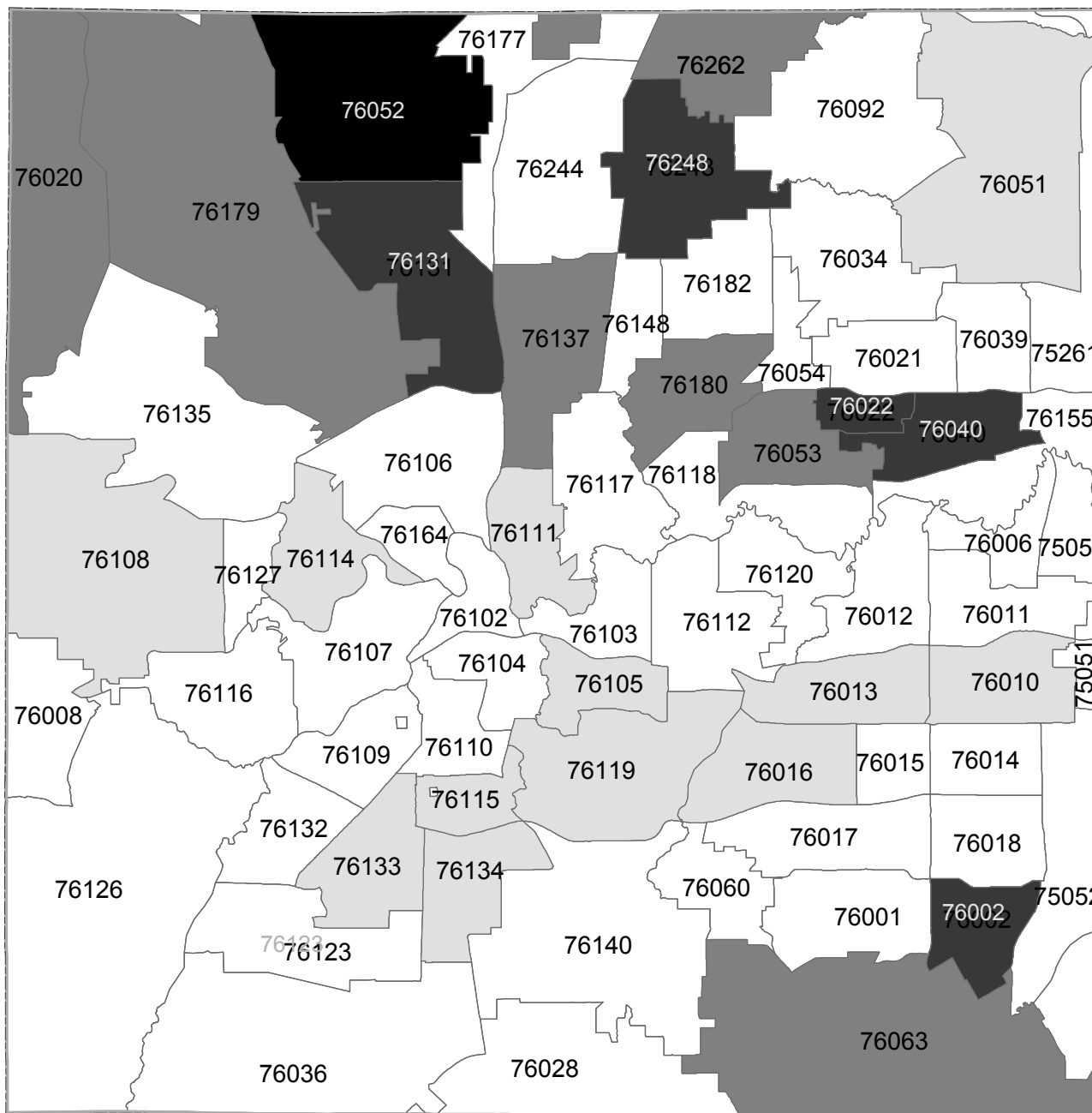
Figure 21. Varicella by Age Group (in Years), Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation of the 25-34 year, 35-44 year and 65 years and older age groups.
 Data source: Tarrant County Public Health

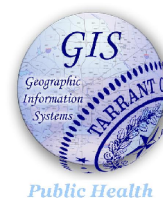
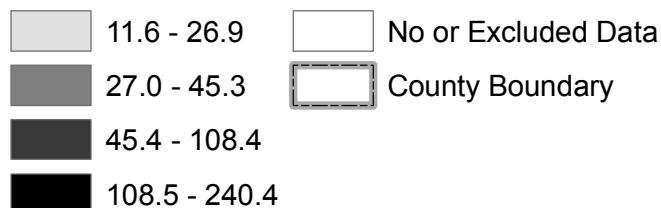
Varicella is preventable through vaccination. The vaccine is recommended for children and adults who have not previously had varicella. It is possible to be infected twice, but it is rare.⁵ Vaccination is available at Tarrant County Public Health.

Figure 22. Geographic Distribution of Varicella by ZIP Code, Tarrant County, 2009



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Rate per 100,000

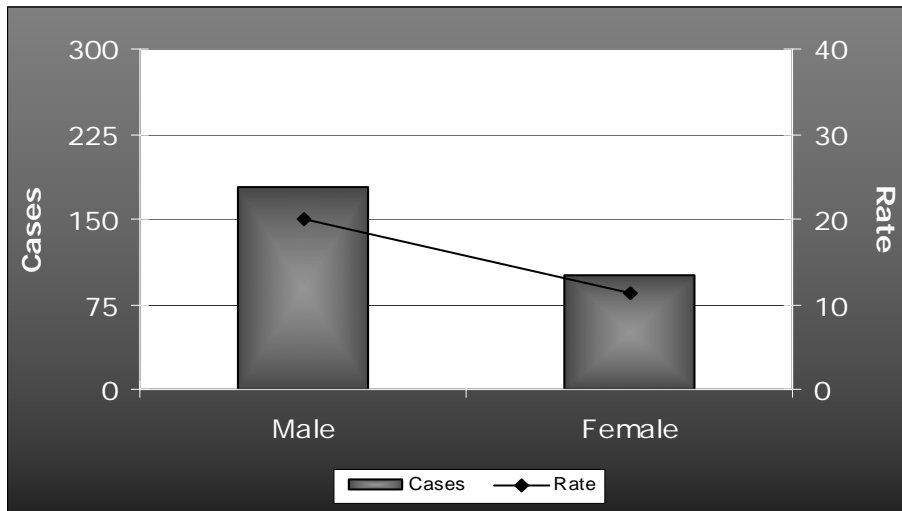


7. Early Syphilis

Syphilis is a sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum* whose symptoms are often difficult to distinguish from those of other diseases or conditions. Since 2001, syphilis incidence in the United States has been gradually increasing with 13,500 primary and secondary cases (4.5 cases per 100,000 population) reported nationally during 2008, an 18.4 percent increase since 2007.⁷ Persons infected with syphilis may be asymptomatic; however, if untreated, syphilis infections can facilitate the transmission of disease and among pregnant women, result in perinatal death or transmission of the bacteria to the fetus. Recent increases in the national rate of syphilis have occurred primarily among men. Nationally and in Tarrant County, the incidence rate of primary and secondary syphilis was highest among 20-24 year olds in 2008.⁷

There were 280 cases (a rate of 15.7 cases per 100,000 population) of early syphilis (includes primary, secondary, and early latent syphilis infections) reported in Tarrant County in 2009. The incidence was higher among males (179 cases, 20.0 per 100,000 population) than females (101 cases, 11.4 per 100,000 population) (Figure 23).

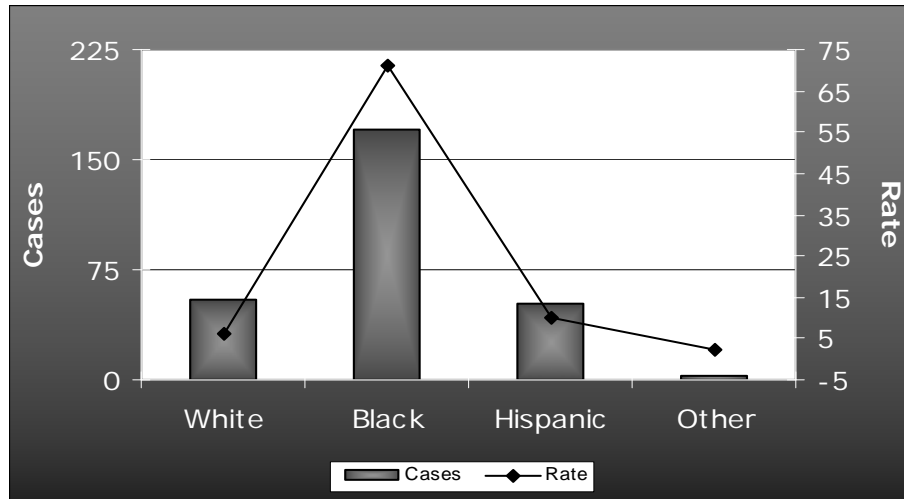
Figure 23. Early Syphilis by Gender, Tarrant County, 2009



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

Among racial/ethnic groups, the highest incidence rate of early syphilis was observed among Blacks (170 cases, 71.0 per 100,000 population). The rate among Blacks was more than seven times that of Hispanics (52 cases, 10.0 per 100,000 population) and almost twelve times that of Whites (55 cases, 6.1 per 100,000 population) (Figure 24).

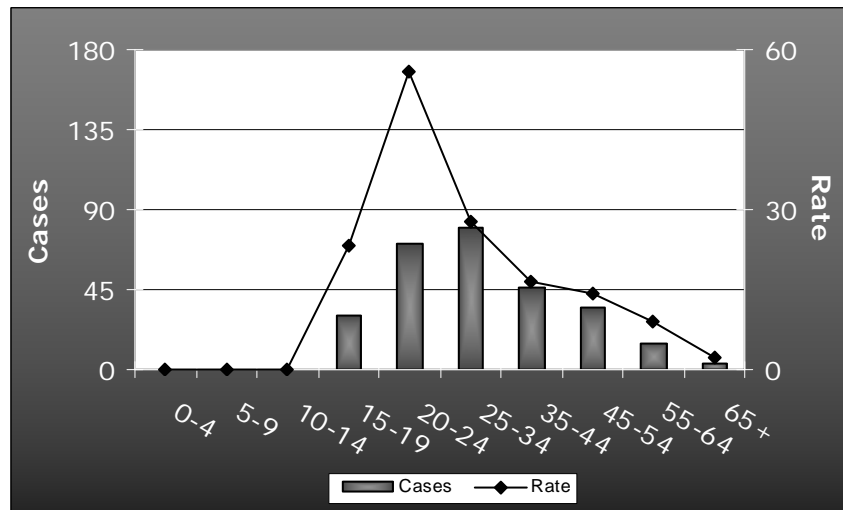
Figure 24. Early Syphilis by Race/Ethnicity, Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation for Other race/ethnicity group.
 Data source: Tarrant County Public Health

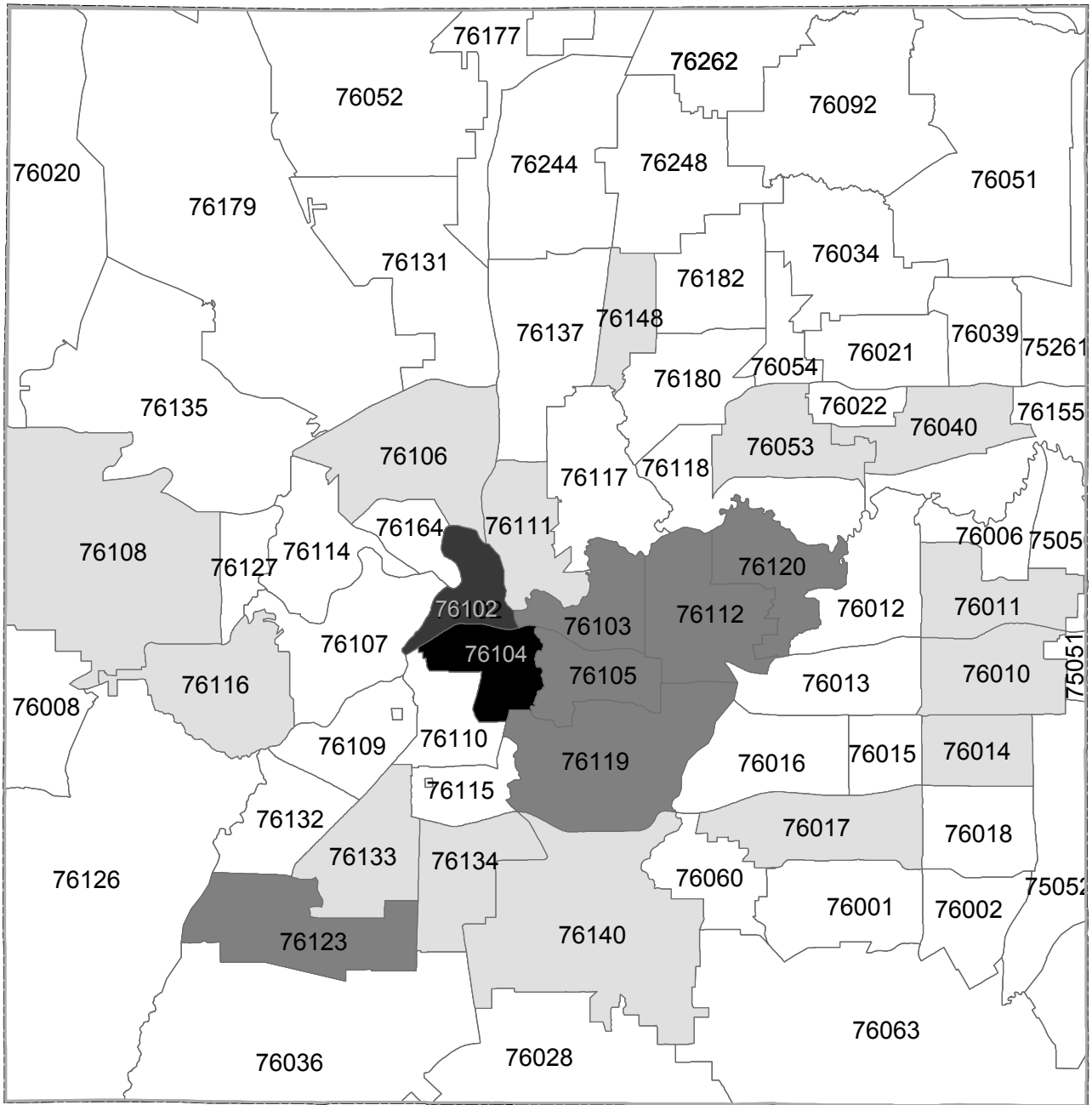
The incidence rate of early syphilis was highest among individuals aged 20-24 years (71 cases, 56.0 per 100,000 population). The remaining age groups' incident rates ranked from highest to lowest as follows: 25-34 year age group (80 cases, 27.6 per 100,000 population), 15-19 year age group (30 cases, 23.2 per 100,000 population), 35-44 year age group (46 cases, 16.3 per 100,000 population), 45-54 year age group (35 cases, 14.3 per 100,000 population), and 55-64 year age group (15 cases, 8.9 per 100,000 population). Less than five cases were reported among the 65 years and older age group, and no cases were reported for the 0-4 year, 5-9 year and 10-14 age groups (Figure 25).

Figure 25. Early Syphilis by Age Group (in Years), Tarrant County, 2009









Rate per 100,000 population
 The numerator was too small for rate calculation for the 0-4 year, 5-9 year and 10-14 year age groups.
 Data source: Tarrant County Public Health

Figure 26. Geographic Distribution of Early Syphilis by ZIP Code, Tarrant County, 2009



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Rate per 100,000

<ul style="list-style-type: none">  9.7 - 38.6  38.7 - 77.1  77.2 - 115.7  115.8 - 154.2 	<ul style="list-style-type: none">  No or Excluded Data  County Boundary
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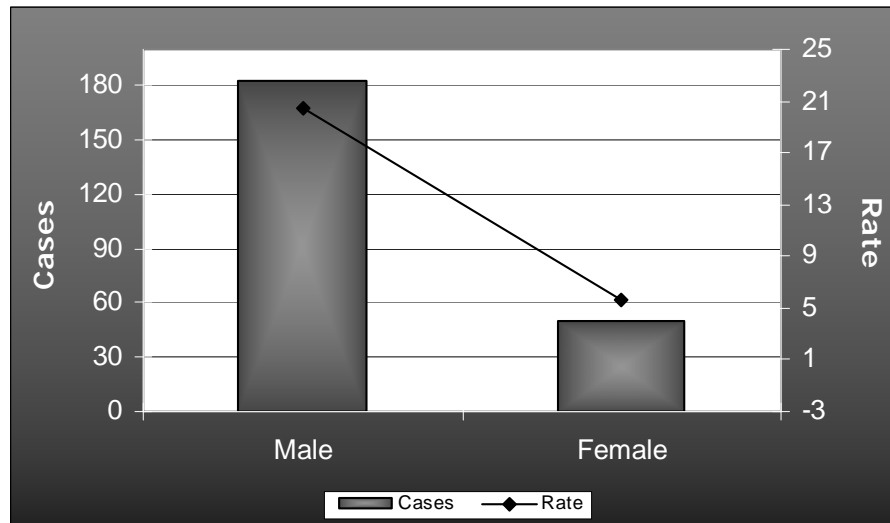


8. HIV

HIV (human immunodeficiency virus) is the virus that causes AIDS. HIV attacks a person's immune system and reduces a person's ability to fight off infections. Approximately 21 percent of persons infected with HIV do not know they are infected with the virus. HIV is transmitted through having sex with someone who is infected, sharing needles with someone who is infected, or being exposed during birth or breastfeeding. It is not transmitted by casual touching, mosquitoes, or drinking after someone. No vaccine is available for HIV at this time. Some preventive measures include abstaining from sexual contact or always practicing safe sex, not injecting illegal drugs, and not sharing needles. In 2008, the CDC approximated that around 56,300 individuals were newly infected with HIV during 2006. (Since a large number of persons with HIV are asymptomatic, the number of true cases can only be estimated.)⁸

A total of 233 new cases (13.1 per 100,000 population) of HIV were reported in Tarrant County in 2009. The incidence rate among males (183 cases, 20.4 per 100,000 population) was almost four times the rate among females (50 cases, 5.6 per 100,000 population) (Figure 27).

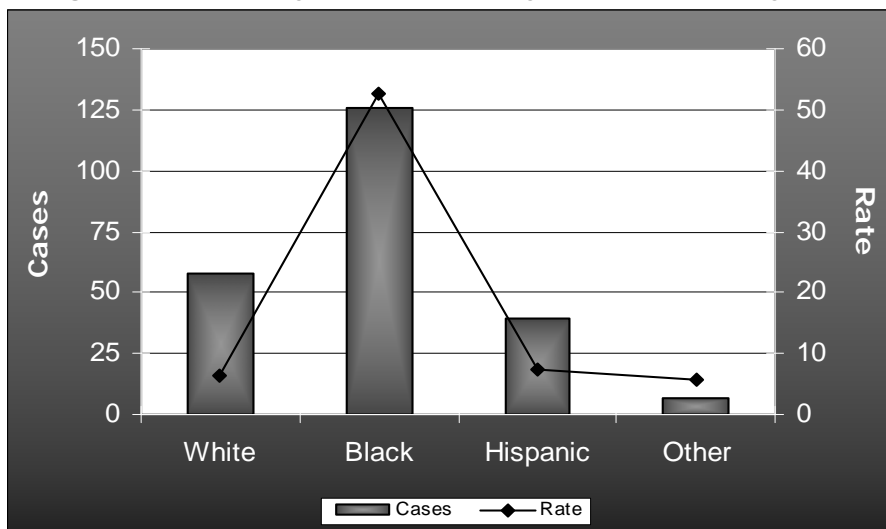
Figure 27. HIV by Gender, Tarrant County, 2009



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

The incidence rate of reported HIV cases among Blacks (126 cases, 52.6 per 100,000 population) was more than eight times higher than among Whites (58 cases, 6.4 per 100,000 population), seven times higher than among Hispanics (39 cases, 7.5 per 100,000 population) and roughly nine times higher than the incidence of HIV reported among Others in Tarrant County during 2009 (Figure 28).

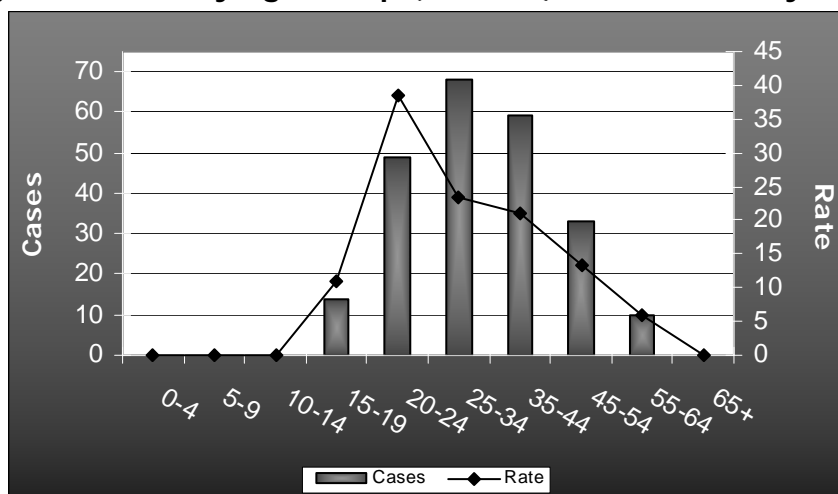
Figure 28. HIV by Race/Ethnicity, Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation for Other race/ethnicity group.
 HIV/AIDS data are preliminary. The number of cases may change.
 Data source: Tarrant County Public Health

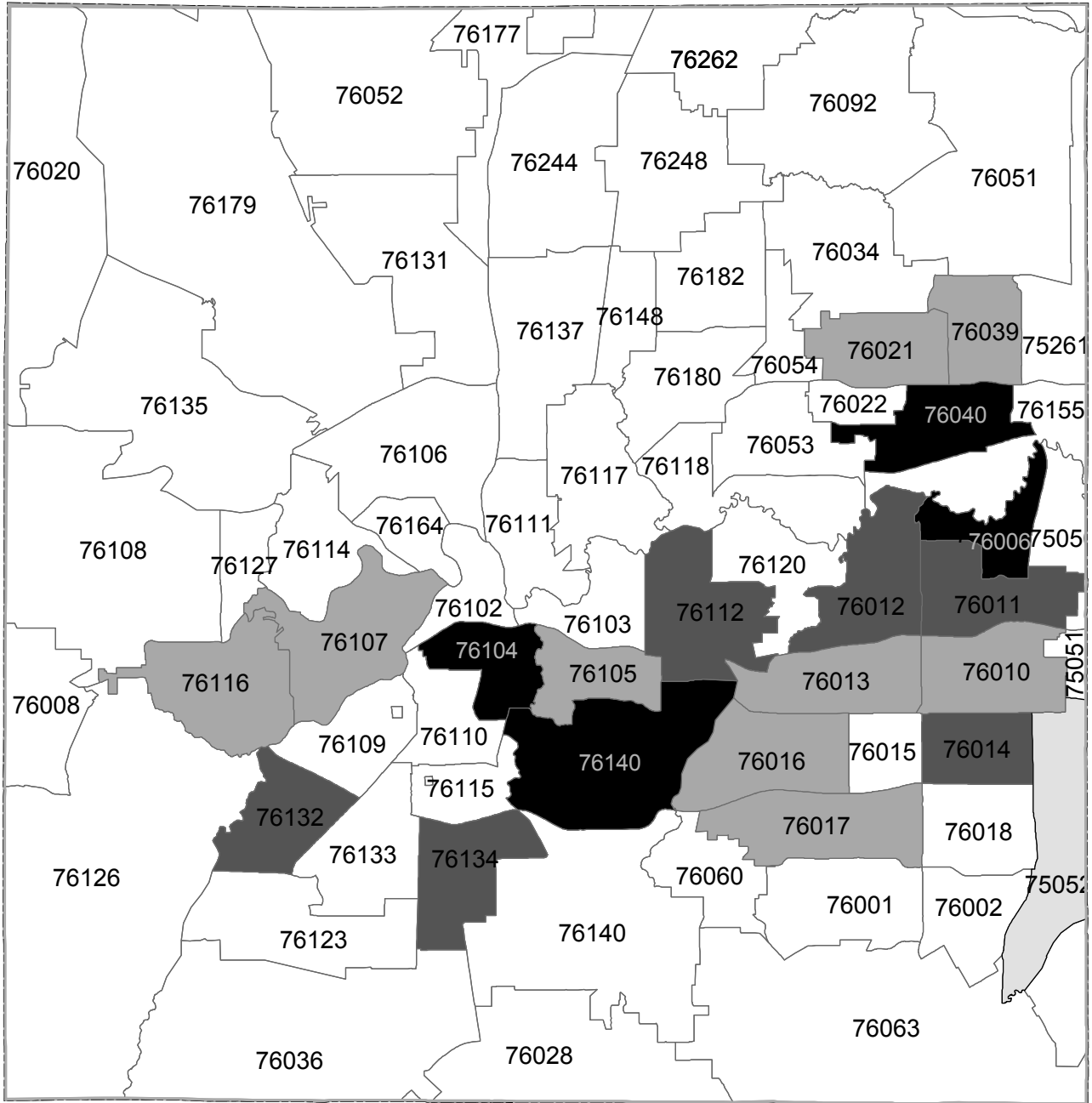
Across age groups, the highest rate of newly reported HIV cases was observed among young adults age 20-24 years (49 cases, 38.6 per 100,000 population). This was followed by the 25-34 year age group (68 cases, 23.4 per 100,000 population), the 35-44 year age group (59 cases, 20.9 per 100,000 population), the 45-54 year age group (33 cases, 13.5 per 100,000 population), the 15-19 year age group (14 cases, 10.8 per 100,000 population), and the 55-64 year age group (10 cases, 5.9 per 100,000). No cases were reported in the 0-4 year, 5-9 year, 10-14 year age and 65 years and older age groups (Figure 29). Appropriate HIV testing and medical management are offered at Tarrant County Public Health.

Figure 29. HIV by Age Group (in Years), Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation for the 0-4 year and 65+ year age groups.
 HIV/AIDS data are preliminary. The number of cases may change.
 Data source: Tarrant County Public Health

Figure 30. Geographic Distribution of HIV by ZIP Code, Tarrant County, 2009



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Rate per 100,000

	8.9 - 11.4		No or Excluded Data
	11.5 - 22.9		County Boundary
	23.0 - 34.3		
	34.4 - 45.7		

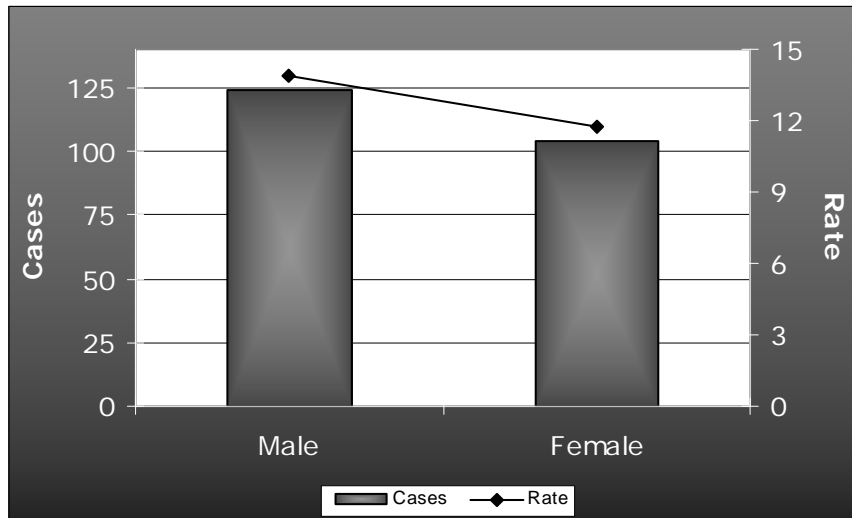


9. Aseptic Meningitis

Meningitis is an infection of the fluid around the brain and spinal cord which results in the inflammation of the tissues that cover these organs. Meningitis can be caused by a virus, bacteria, or fungi. Aseptic meningitis, or viral meningitis, is the most common form of meningitis; 90 percent of cases are caused by enteroviruses which spread through the respiratory secretions of infected persons. Symptoms of aseptic meningitis may include fever, severe headache, stiff neck, drowsiness or confusion, nausea, and vomiting. Additional symptoms to watch for with infants include fretfulness or irritability, difficulty in awakening, and refusal to eat. Although aseptic meningitis is not as serious as bacterial meningitis, it can be serious in persons with weak immune systems. Most people, however, recover in 7 to 10 days with no long-term effects. Hand washing and disinfecting surfaces are the best ways to prevent infection.⁹

Overall, 228 cases (a rate of 12.8 cases per 100,000 population) of aseptic meningitis were reported in Tarrant County in 2009. The incidence was slightly higher among males (124 cases, 13.9 per 100,000 population) than females (104 cases, 11.7 per 100,000 population) (Figure 31).

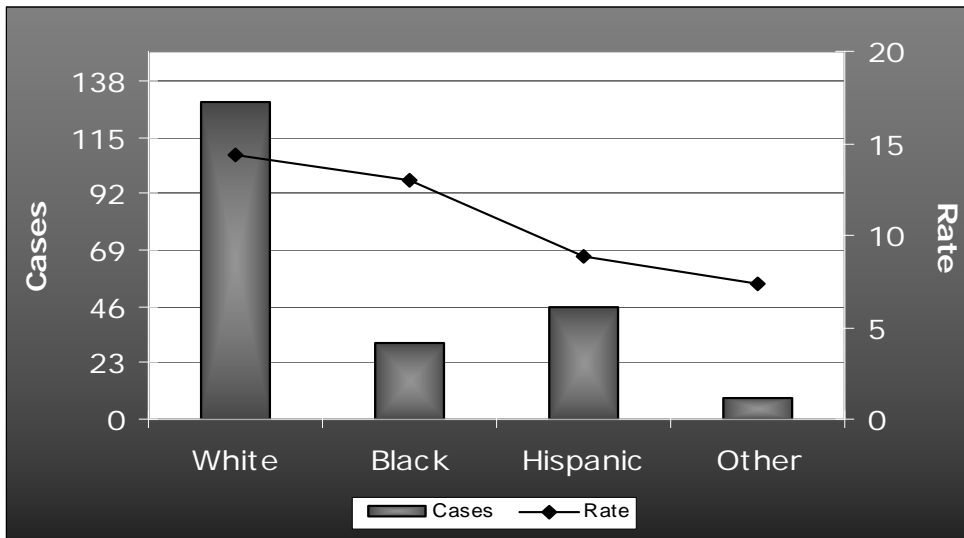
Figure 31. Aseptic Meningitis by Gender, Tarrant County, 2009



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

The incidence rate was highest among Whites (129 cases, 14.3 per 100,000 population), followed by Blacks (31 cases, 13.0 per 100,000 population), Hispanics (46 cases, 8.8 per 100,000 population), and lastly, among Others (9 cases, 7.4 per 100,000 population) (Figure 32).

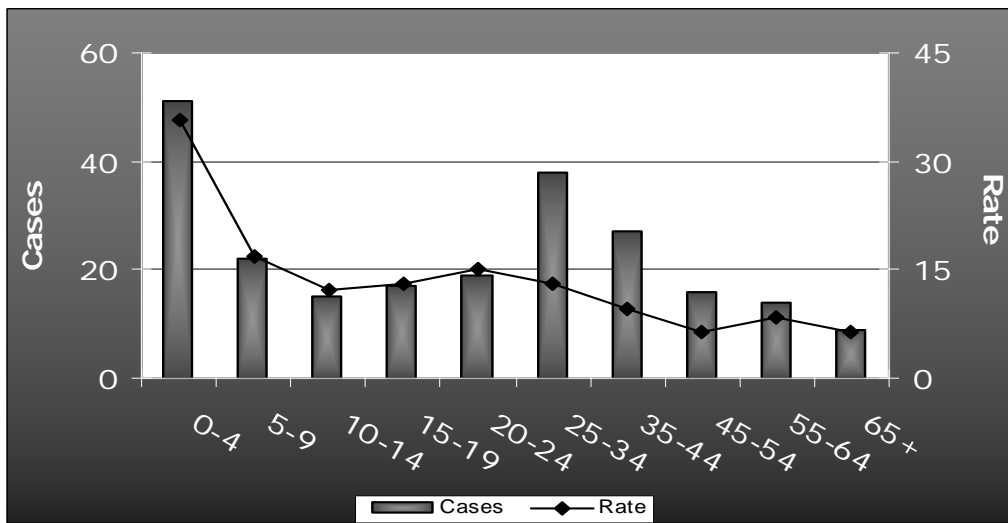
Figure 32. Aseptic Meningitis by Race/Ethnicity, Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation for Other race/ethnicity group.
 Data source: Tarrant County Public Health

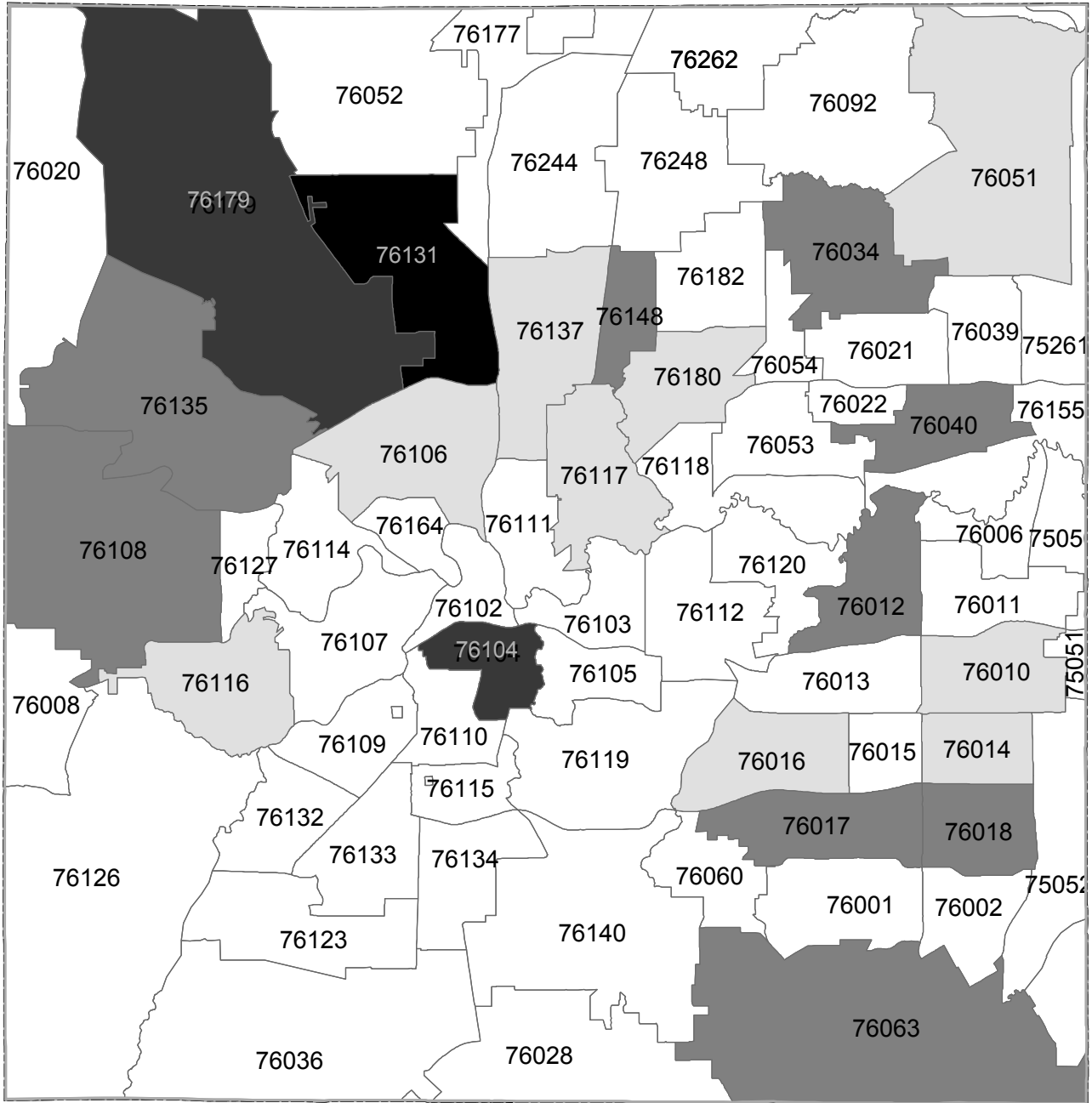
The incidence rate of aseptic meningitis for the 0-4 year age group (51 cases, 35.8 per 100,000 population) was more than five times higher than the incidence rate in the 45-54 year (16 cases, 6.5 per 100,000 population), and the 65 years and over (9 cases, 6.3 per 100,000 population) age groups. The incidence rate of aseptic meningitis was two to three times higher than the incidence rate for the 0-4 year age group in the 5-9 year (22 cases, 16.8 per 100,000 population), 10-14 year (15 cases, 12.2 per 100,000 population), 15-19 year (17 cases, 13.2 per 100,000 population), 20-24 year (19 cases, 15.0 per 100,000 population), and the 25-34 year (38 cases, 13.1 per 100,000 population) age groups. The other age groups in decreasing order of incidence rate are the 35-44 year age group (27 cases, 9.6 per 100,000 population), and 55-64 year age group (14 cases, 8.3 per 100,000 population) (Figure 33).

Figure 33. Aseptic Meningitis by Age Group (in Years), Tarrant County, 2009



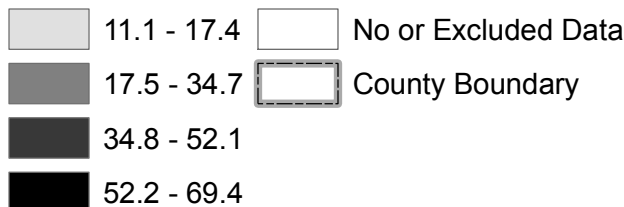
Rate per 100,000 population
 Data source: Tarrant County Public Health

Figure 34. Geographic Distribution of Aseptic Meningitis by ZIP Code, Tarrant County, 2009



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Rate per 100,000



10. Pertussis

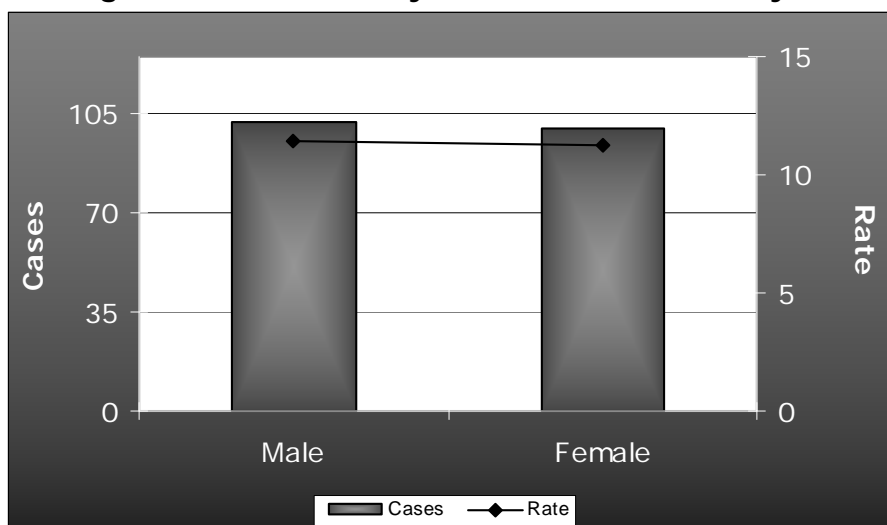
Pertussis (also known as “whooping cough”) is a highly contagious respiratory disease caused by a type of bacteria called *Bordetella pertussis*. Pertussis is the most commonly occurring vaccine-preventable disease in the United States. There has been an increase in the number of pertussis cases nationally since the 1980’s with the greatest increase occurring among children and teens (10-19 years old) and infants less than six months of age.¹⁰

Early pertussis symptoms are often mistaken for the common cold: runny nose or congestion, sneezing, fever, and perhaps a mild cough. After a week or so however, severe and painful coughing begins. The coughing episodes become so violent and occur so rapidly that all the air is forced out of the lungs, resulting in the need to inhale forcibly – creating a loud “whooping” sound characteristic of the disease.¹⁰

The key to pertussis prevention is vaccination. Children are protected with a series of five DTaP shots occurring between the ages of two months and approximately five years. DTaP protects against three different diseases: diphtheria, tetanus, and pertussis. Protection has been shown to wane over time and a booster shot (called Tdap) is recommended for pre-teens (ages 11-12 years). Tdap is also recommended for adults who have never received a pertussis booster, especially among pregnant women and families with infants.¹⁰

Overall, 202 cases (11.3 per 100,000 population) of pertussis were reported in Tarrant County in 2009. The incidence among males (102 cases, 11.4 per 100,000 population) and females (100 cases, 11.3 per 100,000 population) was similar (Figure 35).

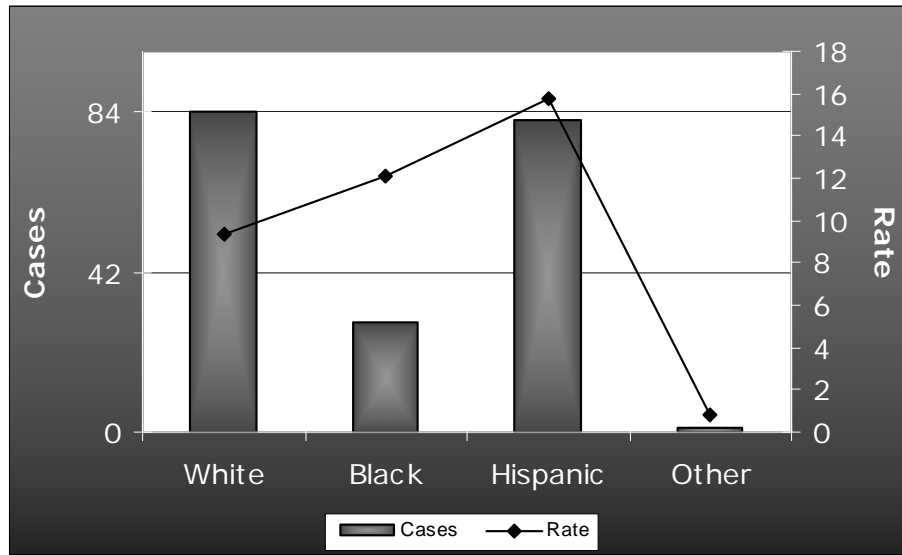
Figure 35. Pertussis by Gender, Tarrant County, 2009



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

The incidence rate of pertussis cases was highest among Hispanics (82 cases, 15.7 per 100,000 population) followed by Blacks (29 cases, 12.1 per 100,000 population) and Whites (84 cases, 9.3 per 100,000 population). There were less than five cases among Others (Figure 36).

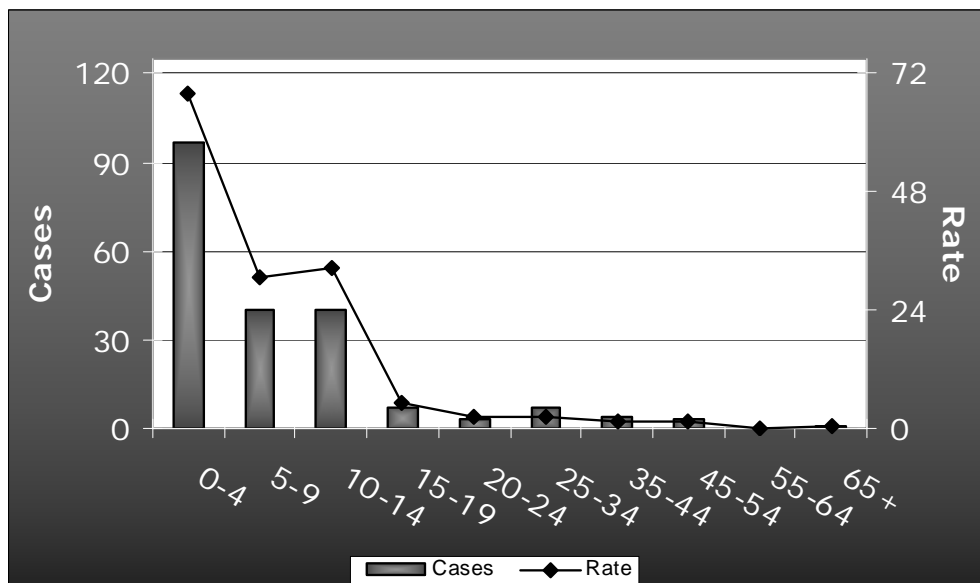
Figure 36. Pertussis by Race/Ethnicity, Tarrant County, 2009



Rate per 100,000 population
 The numerator was too small for rate calculation for Other race/ethnicity group.
 Data source: Tarrant County Public Health

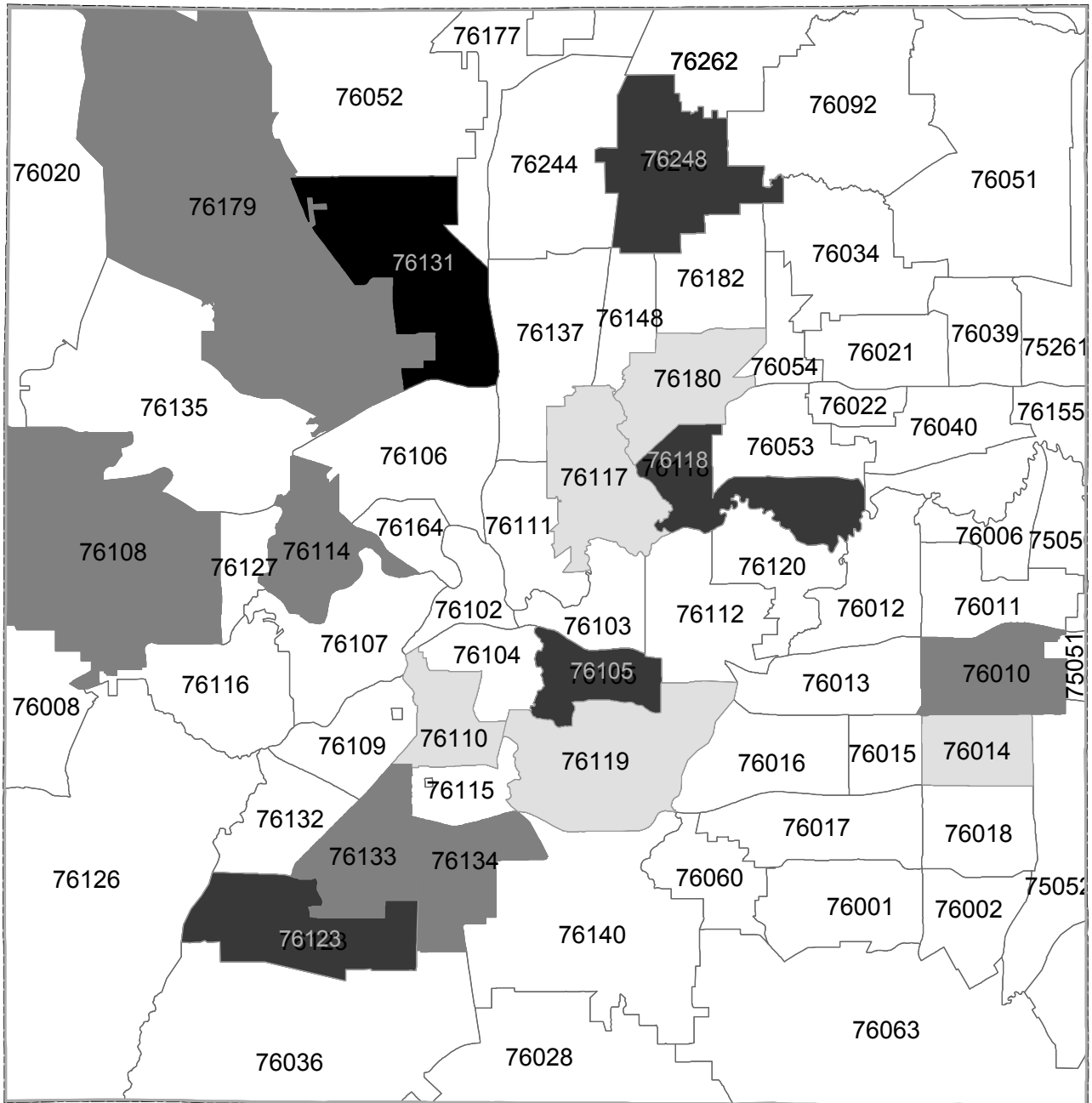
The incidence rate of pertussis was highest among children. The highest rate was observed in the 0-4 year age group (97 cases, 68.0 per 100,000 population) followed by the 10-14 year age group (40 cases, 32.5 per 100,000 population) and the 5-9 year age group (40 cases, 30.6 per 100,000 population). Rates then dropped considerably among the 15-19 year age group (7 cases, 5.4 per 100,000 population) and the 25-34 year age group (7 cases, 2.4 per 100,000 population). Fewer than five cases were reported among each of the following age groups: 20-24 years, 35-44 years, 45-54 years, and 65 years and older. No cases were reported for the 55-64 year age group (Figure 37).

Figure 37. Pertussis by Age Group (in Years), Tarrant County, 2009



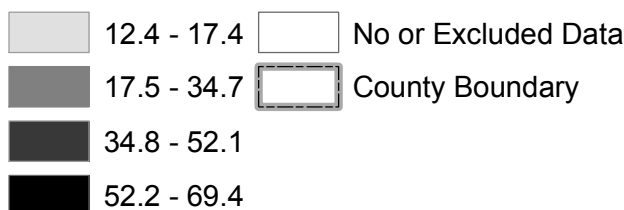
Rate per 100,000 population
 The numerator was too small for rate calculation for the following age groups: 35-44 years, 20-24 years, 45-54 years, 55-64 years, and 65+ years.
 Data source: Tarrant County Public Health

Figure 38. Geographic Distribution of Pertussis by ZIP Code, Tarrant County, 2009



These data were prepared by Tarrant County Public Health for its use, and may be revised any time, without notification. Tarrant County Public Health does not guarantee the correctness or accuracy of any features on this map. Tarrant County assumes no responsibility in connection therewith. Said data should not be edited by anyone other than designated personnel, or through written approval by GIS Manager. These data are for informational purposes only and should not create liability on the part of Tarrant County Government, any officer and/or employees thereof.

Rate per 100,000



2009 H1N1 Influenza: Pandemic of the 21st Century

In mid-March 2009, surveillance systems in Mexico detected increases of influenza-like illness (ILI) and pneumonia, an atypical pattern for that time of the year.¹¹ Soon afterwards in late March, specimens collected in California from two children and tested under routine influenza surveillance were diagnosed with an influenza A virus which could not be further characterized into seasonal influenza subtypes by local public health laboratories. On April 15, 2009 the first case of a novel influenza A virus, later known as the 2009 H1N1 influenza virus, was detected in the United States and reported to the World Health Organization (WHO).¹² Worldwide spread and identification of the 2009 H1N1 influenza virus prompted WHO to declare the start of an influenza pandemic on June 11, 2009.¹²

Prompted by the detection of this novel influenza virus in the United States, enhanced surveillance of patients presenting with febrile respiratory illness was instituted during the week of April 19th. On April 23rd, the first two cases of 2009 H1N1 influenza (two 16 year old males) were detected in Texas near San Antonio and on April 25th, the first case of influenza 2009 H1N1 influenza in Tarrant County was detected in a 12 year old female. Subsequently, national reporting of 2009 H1N1 influenza-associated hospitalizations and deaths was instituted by the Council of State and Territorial Epidemiologists.

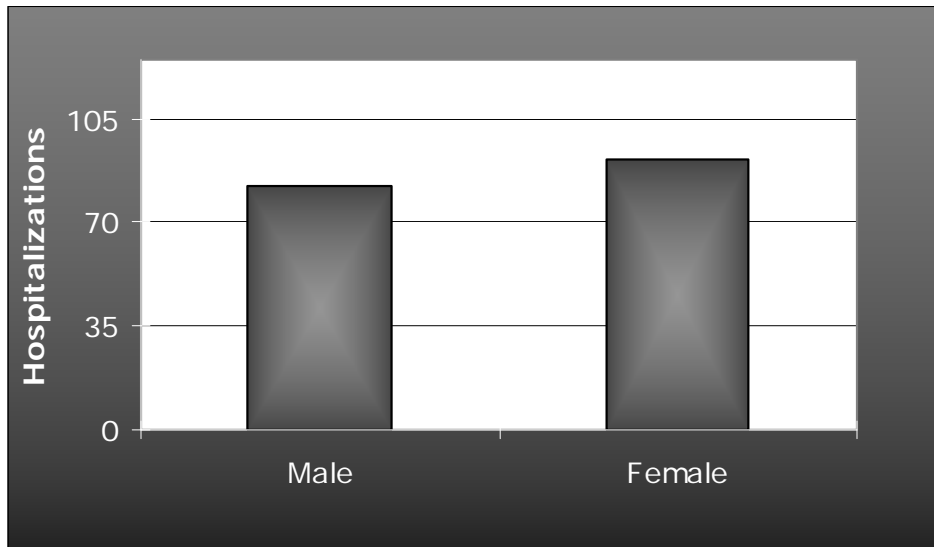
The 2009 H1N1 influenza virus appeared to have similar transmission patterns as observed with traditional seasonal influenza.¹¹ Those infected with the novel virus may transmit the virus from one day prior and until seven days after onset of symptoms.¹¹ The majority of those infected with the 2009 H1N1 influenza virus exhibited symptoms similar to those seen with infection due to seasonal influenza including fever, cough, sore throat, malaise and headache.¹¹ But compared to previous influenza seasons predominated by the influenza A H3N2 virus, the 2009 H1N1 influenza season was associated with higher pediatric mortality (children 18 years of age and younger) and higher rates of hospitalizations in children and young adults.¹² In the United States, from April 2009 until June 12, 2010, 344 laboratory confirmed 2009 H1N1 influenza-associated pediatric deaths were reported.¹² In Tarrant County during the same time period, thirteen total laboratory confirmed 2009 H1N1 influenza-associated deaths were reported, including less than five pediatric deaths.

In Tarrant County, 173 hospitalizations due to laboratory confirmed 2009 H1N1 influenza were reported. Hospitalizations were roughly similar among males (82 cases) and females (91 cases) (Figure 39). Of those hospitalized, 33 (19%) required care in the intensive care unit.

Total counts of laboratory confirmed 2009 H1N1 hospitalizations were highest in the 0-4 year age group followed by the 45-54 year age group (Figure 40). Note that as the numbers of total 2009 H1N1 influenza infections in Tarrant County are not available, rates could not be calculated. Total counts are therefore provided and should be interpreted with caution.

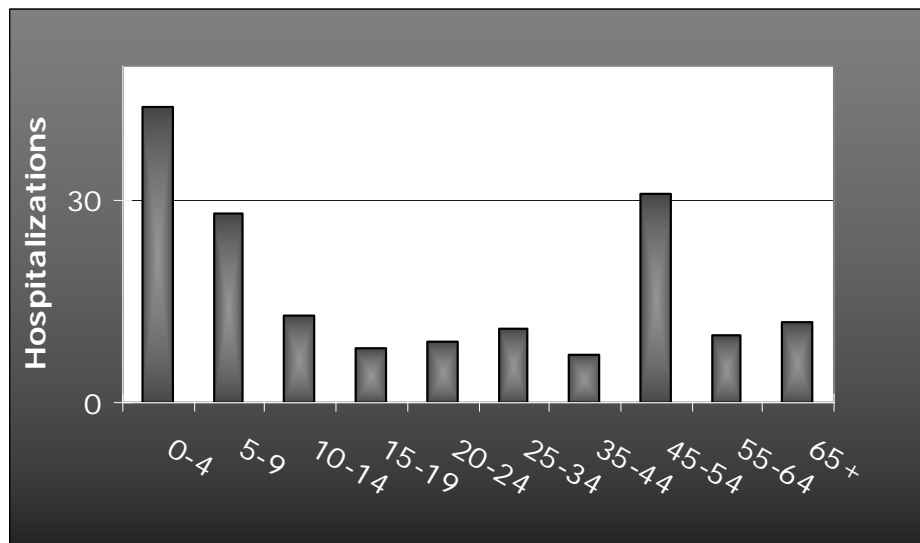
On August 10, 2010 WHO declared the end of the pandemic phase and entrance into the post-pandemic phase, with disease levels returning to those normally seen during a typical influenza season.¹²

Figure 39. 2009 H1N1 Influenza Hospitalizations by Gender, Tarrant County, 2009



Data source: Tarrant County Public Health

Figure 40. 2009 H1N1 Influenza Hospitalizations by Age Group (in Years), Tarrant County, 2009



Data source: Tarrant County Public Health

References

1. Centers for Disease Control and Prevention, Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. STD Surveillance 2009. National Profile: Chlamydia. Available at: <http://www.cdc.gov/STD/stats08/chlamydia.htm>.
2. Centers for Disease Control and Prevention, Division of Viral Hepatitis, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Hepatitis C FAQs for the Public. Available at: <http://www.cdc.gov/hepatitis/C/cFAQ.htm>
3. Centers for Disease Control and Prevention, Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. STD Surveillance 2009. National Profile: Gonorrhea. Available at: <http://www.cdc.gov/std/stats08/gonorrhea.htm>
4. Centers for Disease Control and Prevention, Division of Viral Hepatitis, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Hepatitis B FAQs for the Public. Available at: <http://www.cdc.gov/hepatitis/B/bFAQ.htm>
5. Centers for Disease Control and Prevention, National Center for Immunizations and Respiratory Diseases. Varicella (Chickenpox) Vaccination at a glance. Available at: <http://www.cdc.gov/vaccines/vpd-vac/varicella/default.htm>
6. Centers for Disease Control and Prevention, Division of Parasitic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases. Cryptosporidiosis: General Information. Available at: http://www.cdc.gov/crypto/gen_info/infect.html
7. Centers for Disease Control and Prevention, Division of Foodborne, Bacterial, and Mycotic Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases. Salmonellosis: FAQ Available at: <http://www.cdc.gov/nczved/divisions/dfbmd/diseases/salmonellosis/>
8. Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases, Division of Bacterial Diseases, Meningitis and Vaccine Preventable Diseases Branch. Pertussis: What you need to know. Available at: <http://www.cdc.gov/Features/Pertussis/>
9. Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases. Viral Meningitis Questions. Available at: <http://www.cdc.gov/meningitis/about/faq.html>
10. Centers for Disease Control and Prevention, Divisions of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Basic Statistics. Available: <http://www.cdc.gov/hiv/topics/surveillance/basic.htm>
11. Novel H1N1 influenza (Swine flu) update. Center for Infectious Disease Research and Policy (CIDRAP). Available at: <http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>.

12. Update: Influenza Activity- United States, 2009-10 Season. Morbidity and Mortality Weekly Report, The Centers for Disease Control and Prevention. July 30, 2010. 59(29); 901-908.



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