Cities in Northeast Tarrant County, Texas



Tarrant County

Community Health Profile





Northeast Tarrant County Community Health Profile



TARRANT COUNTY PUBLIC HEALTH

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Introduction

This Northeast Tarrant County (NETC) Community Health Profile, prepared by Tarrant County Public Health (TCPH), presents a selective overview of the community's health status. The NETC include the cities of Bedford, Colleyville, Euless, Grapevine, Haltom City, Hurst, Keller, North Richland Hills, Richland Hills, Southlake, Watauga and Westlake. The information contained in this report is derived from ongoing disease surveillance and from the analysis, reporting and dissemination of health-related data conducted by the TCPH Epidemiology and Health Information Division. The report provides information about not only the health status of NETC residents, but also the services they receive through the Public Health Centers in NETC and other TCPH programs available to them.

The profile is composed of six sections, which comprises a summary of reportable diseases, the leading causes of death in NETC, maternal and child health issues, a demographic profile of NETC cities, services provided to NETC residents by TCPH, and highlights of key public health activities directly impacting NETC in 2003. The most recently available data for each health issue and indicator are used. Within most sections data for NETC, Tarrant County and Texas are shown in order to provide useful comparisons. Some indicators will also be compared to Health People (HP) 2010 objectives as a benchmark in the conclusion section. HP 2010 is a comprehensive nationwide health promotion and disease prevention agenda established by the U.S Department of Health and Human Services containing 467 health objectives. However, this report is not intended as a complete profile but rather as a snapshot derived from currently available data sources and is presented in an illustrative format suitable for wide dissemination among city and community leaders, planners and policymakers. Overall, this profile confirms that the health of NETC residents is comparable to or better in some instances than that of Tarrant County and Texas.

TCPH is continuously exploring more and better ways of serving the NETC communities and all Tarrant County residents. To this end in 2003, TCPH completed the Monitoring and Assessment Project which is a comprehensive community health status report for all of Tarrant County and the NETC Community Health Profile is building on the baseline data for the cities in than area.

This report may be used:

- To formulate the basis for discussions and collaboration to improve the health of NETC residents
- Serve as a tool for expansion of pre-existing programs and services
- Serve as a tool for the planning, implementation and evaluation of new programs and services as needed in NETC.

For more epidemiological reports, check the TCPH web site:

http://health.tarrantcounty.com. Additional information about this report or the health status of

NETC may be obtained by contacting:

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To obtain additional copies, contact the Epidemiology & Health Information Office at 817.321.5350.

Summary of Reportable Diseases in Northeast Tarrant County

Background Information for Statistical Summaries

This section contains reports of communicable diseases occurring in NETC in 2003. Comparison and rating of communicable diseases are based on the frequency and incidence rate of each disease. The incidence rate represents the number of new cases per 100,000 population. Incidence rates are essential public health measures; however, the rates stated in this report should be interpreted with caution because of small numbers. **Rates based on numbers of 20 or less are not recommended for reliable comparison because such rates can fluctuate widely each year**. To protect confidentiality of patients, the frequency of diseases is not stated in tables if the total number of cases is less than three.

1. Vaccine preventable diseases, 2003

	Male	Female	Total [#]	Incidence rate* NETC	Incidence rate* Tarrant County
Chickenpox	37	30	69	18.0	24.0
Mumps	0	0	0	0.0	0.1
Pertussis	11	7	18	4.7	5.1

@ Less than three cases

#Total may not equal to the sum of male and female because of cases reported without gender *Rate: cases per 100,000 population (2002 population estimates)

2. Sexually transmitted diseases, 2003

	Male	Female	Total	Incidence rate* NETC	Incidence rate* Tarrant County
AIDS & HIV	63	14	77	20.0	39.0
Chlamydia	64	331	395	102.8	306.6
Gonorrhea	59	64	123	32.0	139.5
Early syphilis**	6	4	10	2.6	10.4

* Rate: cases per 100,000 population (2002 population estimates)
** Early syphilis includes primary, secondary and early latent syphilis only

3. Food-borne diseases & environmental health, 2003

	Male	Female	Total [#]	Incidence rate* NETC	Incidence rate* Tarrant County
Campylobacteriosis	11	8	19	4.9	7.5
Salmonellosis	38	41	80	20.8	24.0
Shigellosis	15	22	40	10.4	22.4
Lead, child	-	-	< 3	@	4.6

#Total may not equal to the sum of male and female because of cases reported without gender
*Rate: cases per 100,000 population (2002 population estimates)

4. Other viral diseases, 2003

	Male	Female	Total [#]	Incidence rate* NETC	Incidence rate* Tarrant County
Aseptic meningitis	44	56	100	26.0	29.6
Hepatitis A, acute	9	3	12	3.1	6.4
Hepatitis B, acute	2	7	9	2.3	4.2
Hepatitis C, acute	13	8	21	5.5	13.5
West Nile Fever	4	2	6	1.6	1.6

^{*} Rate: cases per 100,000 population (2002 population estimates) # Total is not equal to the sum of male and female because of cases reported without gender

5. Other bacterial diseases, 2003

	Male	Female	Total	Incidence rate* NETC	Incidence rate* Tarrant County
Streptococcal diseases Group A	3	8	11	2.9	2.8
Streptococcal diseases Group Non-A	2	5	7	1.8	4.8
Tuberculosis	NA	NA	26	6.8	7.8

^{*} Rate: cases per 100,000 population (2002 population estimates)

Seven Leading	Infectious	Diseases in	Northeast	Tarrant	County

	NE Tarrant C	ounty		Tarrant Cour	nty
By Rank	Disease	Incidence rate (per 100,000)	By Rank	Disease	Incidence rate (per 100,000)
1	Hepatitis C, chronic	129.6	1	Chlamydia	306.6
2	Chlamydia	102.8	2	Hepatitis C, chronic	226.8
3	Gonorrhea	32.0	3	Gonorrhea	139.5
4	Aseptic meningitis	26.0	4	HIV & AIDS	39.0
5	Salmonellos is	20.8	5	Hepatitis B, chronic	31.7
6	HIV & AIDS	20.0	6	Aseptic meningitis	29.6
7	Chickenpox	18.0	7	Salmonellosis	24.0

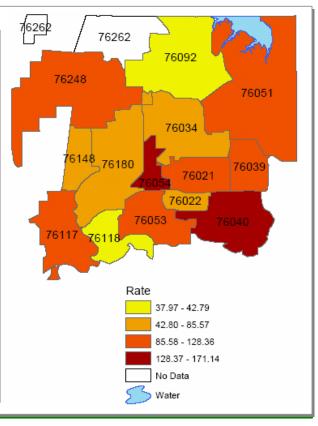
1. Hepatitis C

Hepatitis C is a liver disease caused by the Hepatitis C virus (HCV), found in the blood of people who have the disease. HCV is spread by contact with the blood of an infected person.

Since September 2000, Tarrant County Adult Health Services has been offering Hepatitis C testing to high-risk clients (STD clinic clients who are also IV drug users or those with heavy tattoos and body piercing). The test results revealed that almost half of the people who had been tested were infected with HCV.

The incidence rate of HCV in NETC (129.6 per 100,000) is lower than that of Tarrant County (226.8 per 100,000) (p.5). Hepatitis C is slightly higher in males than females (p.9). Although the majority of cases with reported racial/ethnicity are Whites, the incidence rate is higher in Blacks (p.10). Hepatitis C is the leading infectious disease among adults ages 35 and over and the 2nd leading in ages 25-34 and 3rd leading in ages 15-24 (p.11).

Hepatitis C case reports were widely scattered in all areas of NETC but highest in ZIP Codes 76040 and 76054.



2. Chlamydia

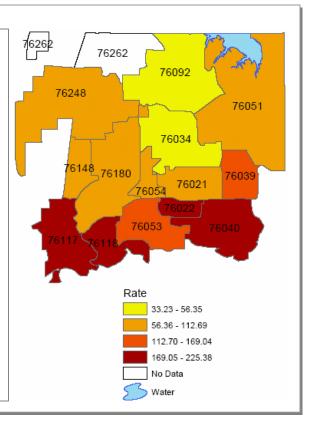
Chlamydia is a sexually transmitted genital infection presenting primarily as a urethritis in males and as mucopurulent cervicitis in females. Clinical manifestations of chlamydia infection are often difficult to distinguish from that of gonococcal infection. However, 1-25 percent of sexually active men and up to 70 percent of sexually active women with chlamydia infections are asymptomatic.

In females, complications and sequelae include Salpingitis, an infection of the ducts connecting uterus to ovaries with subsequent risk of infertility, ectopic pregnancy and chronic pelvic pain.

In 2003, chlamydia was the most common sexually transmitted disease in both NETC and Tarrant County. However, the rate for NETC (108.2/100,000 pop) is much lower than that of Tarrant County (306.6/100,000) (p.5).

It is the 2nd leading infectious disease in NETC, more common in females than males (p.9) and is the leading infection in all races/ethnicities (p.10), and in ages 15-34 (p.11).

Chlamydia rates were highest in ZIP Codes 76117, 76118, 76022 and 76040.

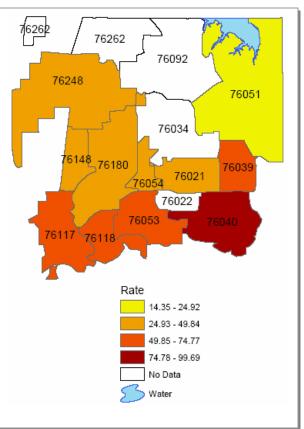


3. Gonorrhea

Gonorrhea, caused by *Neisseria gonorrhoeae*, is the 3rd leading infectious disease in NETC residents reported to Tarrant County Public Health. According to a report from the CDC, the incidence of gonorrhea is highest in high-density urban areas among people under 24 year of age who have multiple sex partners and engage in unprotected sexual intercourse.

In 2003, the incidence of gonorrhea in NETC (32.0/100,000) is lower than that of Tarrant County (139.5/100,000) (p.5). Gonorrhea incidence rates in males and females are comparable (p.9). Among designated race/ethnicity and age groups, Blacks and young adults ages 20-24 followed by 15-19 had the highest incidence rates (pp.10 & 11).

In 2003, the highest rate of gonorrhea was found in ZIP Code 76040.

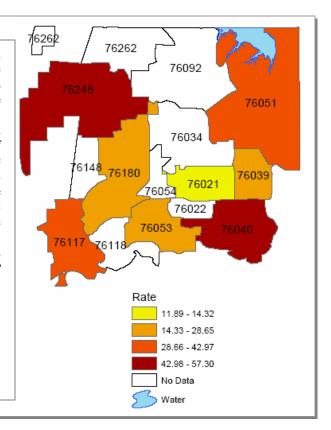


4. Aseptic Meningitis

Aseptic or viral meningitis, the most common type of meningitis, is caused by an infection with one of several types of viruses. Aseptic meningitis is serious but rarely fatal in people with normal immune systems.

In 2003, the incidence rate of viral meningitis in NETC (26.0 cases/100,000pop) is lower than that of Tarrant County (29.6/100,000) (p.5). Aseptic meningitis is more common in males than females (p.9). Among race/ethnic groups, Hispanics have the highest rates followed by Whites (p.10). Aseptic meningitis also is the leading infectious disease among children under 5 years of age (p.11).

In 2003, the geographical distribution revealed clusters of viral or aseptic meningitis cases in ZIP Codes 76248 and 76040.

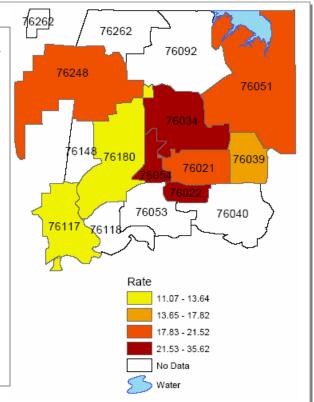


5. Salmonellosis

Salmonellosis is a bacteria enteric infection commonly presenting with a sudden onset of headache, abdominal pain, diarrhea, nausea and sometimes vomiting and fever. It is the most common food-borne illness in NETC and in Tarrant County and the 5th and the 7th leading infectious disease in NETC and Tarrant County respectively.

In 2003, the incidence rate for salmonellosis was lower in NETC (21.9/100,000) than Tarrant County (24.0/100,000) (p.5). Salmonellosis is most common in children and in the elderly. It is the $2^{\rm nd}$ leading infectious disease in children below 5 years, the $3^{\rm rd}$ in ages 5-9 and the $2^{\rm nd}$ in people over 55 of age (p.11).

In 2003, ZIP Codes 76034, 76054 and 76022 had the highest rates of salmonellosis.

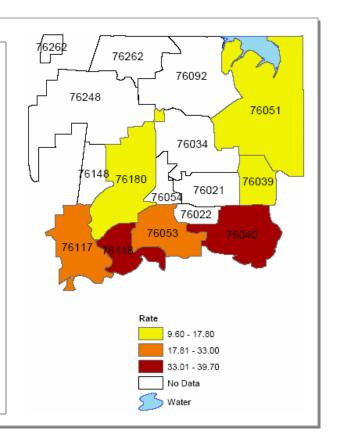


6. HIV & AIDS

The virus is spread by unprotected sexual intercourse with an infected person, by needle-sharing among injecting drug users, or less commonly and now very rarely, through transfusions of infected blood.

In 2003, the incidence rate of HIV/AIDS in NETC (20.0/100,000) is lower than Tarrant County (39.0/100,000) (p.5). HIV/AIDS is the 3rd leading infectious disease among males, but is not among the leading infections in females (p.9). The HIV/AIDS incidence rate was highest for Blacks and was more than six times that of Hispanics and Whites (p10). The age group with the highest incidence rate was the 35-44 followed by 25-34 (p.11).

In 2003, HIV/AIDS incidence rates are highest is ZIP Codes 76040 and 76118.



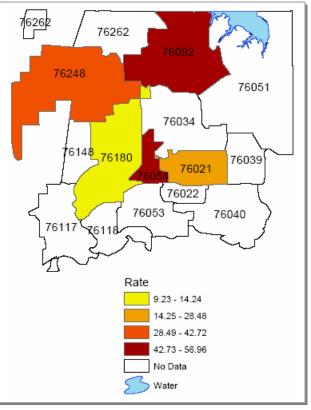
7. Chickenpox

Chickenpox, also known as varicella is an acute, generalized viral disease with sudden onset of slight fever, mild constitutional symptoms and a skin eruption which begins as a maculopapular rash (flat and raised areas) for a few hours, graduates to vesicles for 3-4 days and ends in a granular rash.

Although, chickenpox was the 7th leading infectious disease in NETC in 2003, the incidence rate in NETC (18/100,000) is lower than that of Tarrant County (24/100,000)(p.5).

The incidence of chickenpox is higher in males than females (p.9). It is reported predominantly in Whites (62.3%) (p.10) and is the 3rd, 1st and 2nd leading infectious disease in children under 5 years, 5-9 and 10-14 years respectively (p.11).

In 2003, ZIP Codes 76092 and 76054 in NETC had the highest rates of chickenpox.



Seven Leading Infectious Diseases in Northeast Tarrant County by Gender

• Male

By Rank	Disease	Number of cases	Incidence rate (per 100,000)
1	Hepatitis C, chronic	234	130.0
2	Chlamydia	64	35.5
3	HIV & AIDS	63	35.0
4	Gonorrhea	59	32.8
5	Aseptic meningitis	44	24.4
6	Salmonellosis	38	21.1
7	Chickenpox	37	20.6

• Female

By Rank	Disease	Number of cases	Incidence rate (per 100,000)
1	Chlamydia	331	179.1
2	Hepatitis C, chronic	226	122.3
3	Gonorrhea	64	34.6
4	Aseptic meningitis	56	30.3
5	Salmonellosis	41	22.2
6	Chickenpox	30	16.2
7	Hepatitis B, chronic	30	16.2

Five Leading Infectious Diseases in Northeast Tarrant County by *Race/Ethnicity

By Rank	White	Black	Hispanic	Other
1	Chlamydia 146 (49.0)	Chlamydia 57 (476.4)	Chlamydia 76 (204.0)	Chlamydia Hepatitis B (chronic)
2	Hepatitis C (chronic) 76 (25.5)	Gonorrhea 43 (359.4)	Aseptic meningitis 14 (37.6)	6 (33.6)
3	Aseptic meningitis 66 (22.2)	HIV & AIDS 18 (150.4)	Gonorrhea 12 (32.2)	Gonorrhea 4 (22.4)
4	HIV & AIDS 48 (16.1)	Hepatitis C (chronic) 5 (41.8)	HIV & AIDS 9 (24.2)	
5	Chickenpox 43 (14.4)	Hepatitis B (chronic) 4 (33.4)	Hepatitis C (chronic) 7 (18.8)	-

Disease Name Number of Cases

(Incidence Rate per 100,000)

*The race/ethnicity for many infectious disease cases were not reported particularly hepatitis C.

Five Leading Infectious Diseases in Northeast Tarrant County by Age

	Under 5	5 - 9	10 - 14	15 - 19	20-24
1	Aseptic meningitis 28 (105.7)	Chickenpox 39 (134.4)	Campylobacteriosis 6 (20.4)	Chlamydia 146 (562.5)	Chlamydia 151 (745.5)
2	Salmonellosis 24 (90.6)	Shigellosis 15 (51.7)	Chickenpox 5 (17.0)	Gonorrhea 28 (107.9)	Gonorrhea 35 (172.8)
3	Chickenpox 17 (64.2)	Salmonellosis 13 (44.8)	Aseptic meningitis,	Hepatitis C (chronic) 7 (27.0)	Hepatitis C (chronic) 24 (118.5)
4	Pertussis, Shigellosis	Aseptic Meningitis 9 (31.0)	Chickenpox, Chlamydia	Aseptic meningitis, Pertussis	Aseptic meningitis,
5	9 (34.0)	Pertussis 3 (10.3)	4 (13.6)	3 (11.6)	HIV & AIDS 7 (34.6)
	25-34	35 - 44	45 - 54	55 - 65	65 and Over
1	Chlamydia 80 (151.5)	Hepatitis C (chronic) 139 (199.2)	Hepatitis C (chronic) 213 (391.9)	Hepatitis C (chronic) 26 (90.0)	Hepatitis C (chronic) 16 (57.3)
2	Hepatitis C (chronic) 44 (83.3)	HIV & AIDS 45 (64.5)	Hepatitis B (chronic) 14 (25.8)	Aseptic meningitis, Salmonellosis	Hepatitis A (acute), Salmonellosis
3	Gonorrhea 39 (73.9)	Aseptic meningitis 16 (22.9)	HIV & AIDS 10 (18.4)	4 (13.8)	6 (21.5)
4	Aseptic meningitis 22 (41.7)	Gonorrhea 15 (21.5)	Hepatitis C (acute) 9 (16.6)	Hepatitis A (acute), Hepatitis B (chronic), Gonorrhea,	Meningococcal Disease, West Nile Fever
5	HIV & AIDS 21 (39.8)	Hepatitis B (chronic) Salmonellosis 12 (17.2)	Aseptic meningitis 7 (12.9)	HIV & AIDS 3 (10.4)	3 (10.7)

Disease Name Number of Cases (Incidence rate per 100,000)

Background Information for Statistical Analysis

Death rates in this analysis are crude; they are not age-adjusted. Crude death rates are calculated by total number of deaths caused by a specific disease divided by population and multiplied by 100,000. Comparisons of death rates are an essential public health measure; however, within this context, interpretations should be made with caution because of small numbers. **Rates based on numbers of 20 or less are not recommended for reliable comparison because such rates can fluctuate widely each year.** In addition, any comparisons between locations should be taken with caution because of possible confounding factors.

Mortality Report

In 2002, the overall leading causes of death in NETC are comparable to Tarrant County, and include in order of magnitude: heart disease, cancer, cerebrovascular disease, chronic lower respiratory disease (CLRD) and intentional and unintentional injuries (p.13). The crude death rates for heart disease and CLRD for the report area were comparable to that of Tarrant County; the cancer mortality and intentional and unintentional injuries were lower and the cerebrovascular disease rate was higher in NETC residents than that of Tarrant County. When analyzing the five leading causes of death by gender, the picture changes somewhat for males (p.14). Intentional and unintentional injuries now replace cerebrovascular disease as the 3rd leading cause of death. For females, mental health including Alzheimer's disease, replaces intentional and unintentional injuries as the 5th leading causes of death. Race/ethnicity shows that Whites have a similar pattern to the overall leading causes of death (p.15). For Blacks, intentional and unintentional injuries assumes a greater importance becoming the 3rd leading cause of death followed by diseases related to the perinatal period as the 4th and diabetes mellitus as the 5th leading cause of death. Hispanics also revealed a somewhat different pattern from the overall picture with diabetes mellitus assuming a greater importance as the 3rd leading cause of death followed by cerebrovascular disease and intentional and unintentional injuries. As is expected, there is a gradual increase in the proportion of people dying starting at age 45 (p.16). However, the greatest proportion of deaths (70%) occurred in people aged 65 years and older.

1. Leading Causes of Death, 2002¹

	Cause	Number	NETC death rate*	Tarrant County death rate*
1	Cardiovascular disease	681	177.3	199.4
2	Cancer	488	127.1	144.5
3	Cerebrovascular disease (stroke)	154	40.1	52.3
4	Chronic lower respiratory disease	115	29.9	35.7
5	Intentional and unintentional injuries	106	27.6	31.6

^{1.} There were a total of 2,194 deaths in NETC during the year of 2002.

^{*}Rate represents crude death rates and should be interpreted with caution.

2. Leading Causes of Death by Gender, 2002

4 Males²

	Cause	Number	NE TC death rate*	Tarrant County death rate*
1	Cardiovascular disease	335	176.9	190.6
2	Cancer	274	144.7	153.2
3	Intentional and unintentional injuries	72	38.0	44.6
4	Chronic lower respiratory disease	51	26.9	30.7
5	Cerebrovascular disease	48	25.4	38.1

^{2.} There were a total of 1,057 male deaths in NE TC during the year of 2002.

* Rate represents crude death rates.

♣ Females³

	Cause	Number	NE TC death rate*	Tarrant County death rate*
1	Cardiovascular disease	346	177.7	208.1
2	Cancer	214	109.9	135.9
3	Cerebrovascular disease	106	54.4	66.2
4	Chronic lower respiratory disease	64	32.9	40.6
5	Alzheimer/ mental health	46	23.6	22.4/27.3

^{3.} There were a total of 1,137 female deaths in NE TC during the year of 2002.

* Rate represents crude death rates...

3. Leading Causes of Death by Race/ Ethnicity, 2000

Whites

	Cause	Number
1	Cardiovascular disease	627
2	Cancer	463
3	Cerebrovascular disease	143
4	Chronic lower respiratory disease	113
5	Intentional and unintentional injuries	95

^{4.} There were a total of 2,194 White deaths in NE TC during the year of 2002.

Blacks 5

	Cause	Number
1	Cardiovascular disease	21
2	Cancer	6
3	Intentional and unintentional Injuries	6
4	Diseases relating to perinatal period	4
5	Diabetes mellitus	3

^{5.} There were a total of 53 Black deaths in NE TC during the year of 2002.

4 Hispanics ⁶

	Cause	Number
1	Cardiovascular Disease	22
2	Cancer	15
3	Diabetes mellitus	6
4	Cerebrovascular diseases	5
5	Intentional and unintentional injuries	4

^{6.} There were a total of 77 Hispanic deaths in NE TC during the year of 2002.

4. Number and Percent of Deaths by Age Group, 2002⁷

Age	Number	Percent (%)
less than 1 year	37	1.7%
1- 4 years	7	0.3%
5-9 years	3	0.1%
10-14 years	5	0.2%
15-19 years	14	0.6%
20-24 years	27	1.2%
25-29 years	8	0.4%
30-34 years	19	0.9%
35-39 years	40	1.8%
40-44 years	61	2.8%
45-49 years	85	3.9%
50-54 years	105	4.8%
55-59 years	130	5.9%
60-64 years	118	5.4%
65-69 years	176	8.0%
70-74 years	196	8.9%
75 years and over	1163	53.0%

^{7.} There were a total of 2,194 deaths in the in NE TC during the year of 2002.

Maternal and Child Health in Northeast Tarrant County

1. Infant Mortality in Northeast Tarrant County 2002

Place	Number of deaths	Infant mortality rate (per 1,000 live birth*)
Northeast Tarrant County	36	6.6
Tarrant County	183	6.8
Texas	2,369	6.4
U.S.	27,977	7.0

^{*}There were 6,501 live births in NE TC and 26,819 live births in Tarrant County during the year 2002.

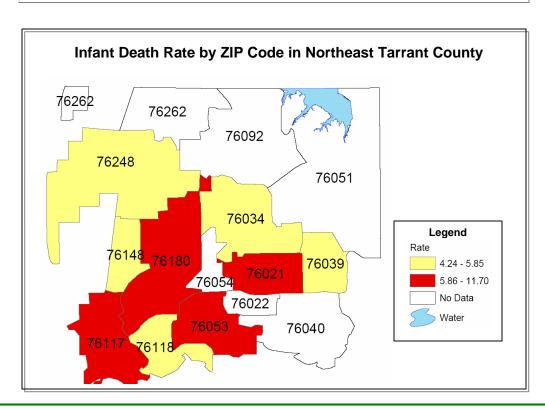
Infant Mortality Report

The infant mortality rate in Northeast Tarrant County (6.6 per 1000 live births) is comparable to that of Tarrant County (6.8) and Texas (6.4), but lower than the nation (7.0) in 2002. The ZIP Code in NETC with the highest infant mortality rate is 76053 (11.7), followed by 76021 (9.1), 76117 (8.6) and 76180 (7.2). The proportion of women who had prenatal care in the first trimester of pregnancy in NETC (84.0%) was higher than that of Tarrant County (79.3%) in 2002.

NETC had a lower rate for teenage births (6.2) than Tarrant County (22.5) and Texas (24.5). Generally, teenage pregnancy and birth, none or inadequate prenatal care, low birth weight and prematurity, maternal smoking and child spacing are factors contributing to infant mortality in Tarrant County and in NETC.

2. Infant Births, Infant Deaths, and Infant Death Rate by Zip Code in Northeast Tarrant County 2000 - 2002

Zip Code	# of births	# of infant deaths	Infant death rate (per 1,000 births)
76021	1,215	11	9.1
76022	569	2	3.5
76034	472	2	4.2
76039	1277	6	4.7
76040	1386	5	3.6
76051	1807	7	3.9
76053	1282	15	11.7
76054	400	0	0.0
76092	674	2	3.0
76117	1508	13	8.6
76118	669	3	4.5
76148	1159	6	5.2
76180	2350	17	7.2
76248	1523	7	4.6
76262	404	0	0.0



3. Prenatal Care in First Trimester 2000 - 2002

	Number	Percentage
NETC ¹	16,033	84.0%
Tarrant County ²	62,338	79.3%

^{1.} There were 19,080 live births in NETC in 2000 - 2002. 2. There were 78,614 live births in Tarrant County in 2000 - 2002.

4. Teenage Births in Northeast Tarrant County Ages 13-17, 2002

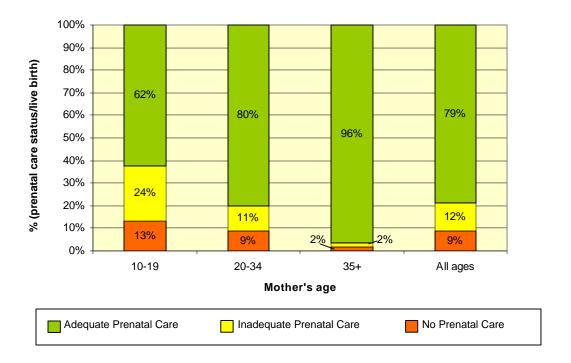
Place	Number	Rate (per 1,000 births)
NETC	141	6.2
Tarrant County	1,223	22.5
Texas	19,730	24.5

5. Risk Factors by Mothers' Age, 2000 - 2002

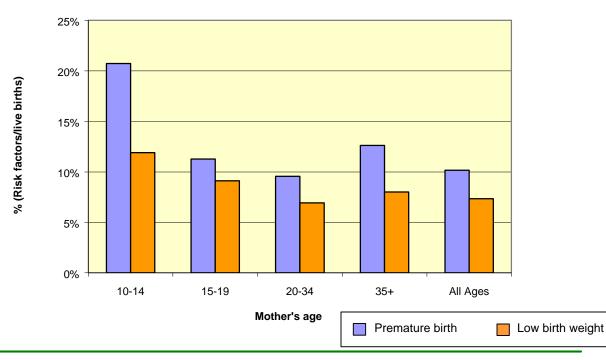
• Infant Death in Northeast Tarrant County, 2000 - 2002

Mother's age	# of births	# of infant deaths	Infant death rate (per 1,000 births)	Tarrant County rate (per 1,000 births)
10-14	23	0	0.0	18.5
15-19	1,416	11	7.8	7.9
20-34	12,402	72	5.8	6.5
35+	2,525	8	3.2	6.6

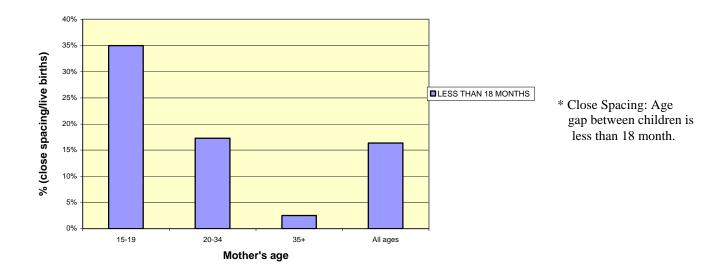
• Prenatal Care in Tarrant County, 2000 - 2002



• Pregnancy Outcome: Low Birth Weight and Premature Births in Tarrant County, 2000-2002



• Close Spacing* in Tarrant County, 2000 - 2002



• Leading Causes of Infant Mortality in Tarrant County

Mothers of all ages

- 1. Pre-term and low birth weight
- Congenital malformations
- 3. Sudden infant death syndrome
- 4. Diseases of the circulatory system

Teen Mothers

- 1. Pre-term and low birth weight
- 2. Sudden infant death syndrome
- 3. Congenital malformations
- 4. Diseases of the circulatory system

Higher Risk of Infant Mortality for Teen Mothers

"Teen mothers are less likely than older women to receive timely prenatal care and are more likely to have no prenatal care at all. They are more likely to smoke and less likely to gain adequate weight during pregnancy. These risk factors place babies born to teenagers at an elevated risk of low birth weight, of serious disability, and of dying during the first year of life."

- US Dept. of Health and Human Services, 1999

Northeast Tarrant County Demographic Profile

1. Population

♣ Total Population and Population Change, 2000 -2002

	NETC	Tarrant County	Percent (%) of Tarrant County Population
2000 population (Census)	364,889	1,446,219	25.2%
2002 population (estimates)	384,085	1,488,700	25.8%
% Population change	19,196	42,481	0.60%

Demographic Characteristics of Northeast Tarrant County Population

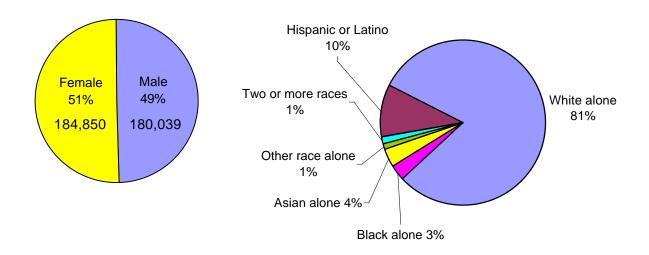
North East Tarrant County has a population of 364,889 and represents about a quarter (25.2%) of Tarrant County's total population in 2000. NETC's population distribution is comparable for gender and has an older population than Tarrant County as a whole (p.25). The median ages for NETC cities are higher than that of Tarrant County (32.3) except for Watauga (31.9). Euless and Watauga are cities with a large amount of new affordable housing development. Thirty percent (30.0%) of NETC's population is under 20 years of age. This is comparable to that of Tarrant County (30.9%). The majority of NETC residents are White (81.0%), followed by Hispanic (10.0%), Asian (4.0%) and Black (3.0%) (p.24).

The majority of the households are headed by married couples, with the proportion ranging from 73 percent in Euless to 97 percent in Westlake (p.26). The proportion of female-headed households varies from city to city. It was highest in Haltom City (19.0%) and lowest in Colleyville (3.0%). The average family size in NETC ranged from 2.71 in Westlake to 3.48 in Southlake. Three cities, Southlake (3.48), Keller (3.3) and Watauga (3.33), have a higher average family size than Tarrant County (3.22). The unemployment rate for NETC (2.3%) was lower than that of Tarrant County (3.2%) in 2000 (p.27). However, changes in the economy which have affected unemployment rates since 2000 are not reflected in these data. The unemployment rates for years later than 2000 are not available because they are only enumerated during the census year.

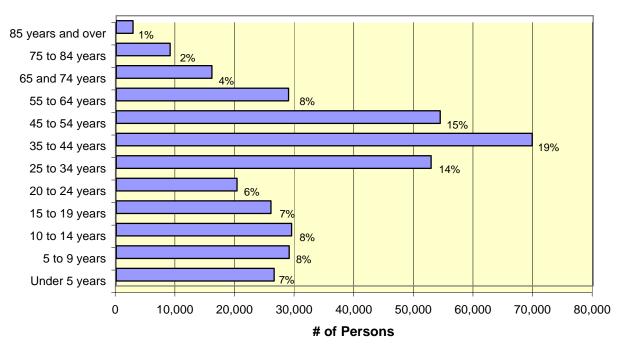
The major industries in NETC are services (16.0%), finance, insurance, real estate, rental and leasing (14.0%) and construction (13.0%) (p.26). The median family income in NETC ranged from a high of \$136,023 in Southlake to a low of \$42,706 in Haltom City (p.28). Cities in NETC, with the exception of Haltom City (\$42,706) and Richland Hills (\$50,377), have median family income higher than that of Tarrant County (\$54,068) and Texas (\$45,861). The per capita income ranged from \$50,418 in Colleyville to \$17,740 in Haltom City. Most cities in NETC have a higher per capita income than Tarrant County (\$22,445) and Texas (\$19,617) except Haltom City (\$17,740), Richland Hills (\$20,247) and Watauga (\$19,872). Overall, the proportion of NETC residents with household incomes greater than \$50,000 is higher than Tarrant County and the reverse is true for those with household incomes less than \$50,000 (p.28). The proportion of families with an income below the poverty level ranges from one percent in Colleyville, Keller and Southlake to eight percent in Haltom City. Except for Haltom City, the proportion of families with an income below the poverty level in all NETC cities is lower than Tarrant County (8.0%) (p.29).

Population by Gender

Population by Race/Ethnicity



Population by Age



2. Median Age, 2000

Median Age								
	Bedford	Colleyville	Euless	Grapevine	Haltom City	Hurst		
Both sexes	36.2	40.0	32.2	34.3	32.3	36.6		
Male	35.2	40.5	31.9	33.4	31.3	35.2		
Female	37.1	39.5	32.5	35.1	33.4	37.9		
	Keller	N. Richland Hills	Richland Hills	Southlake	Watauga	Westlake		
Both sexes	35.0	34.7	39.7	36.7	31.6	47.1		
Male	35.1	33.5	38.0	37.1	31.2	47.8		
			41.4	36.4	31.9	46.5		

3. Major Industry, 2000

10 Major Industries in Northeast Tarrant County						
	Population	Percent				
Services (except public administration)	142,819	16%				
Finance, insurance, real estate and rental and leasing	123,404	14%				
Construction	113,891	13%				
Agriculture, forestry, fishing and hunting, and mining	91,664	10%				
Manufacturing	83,228	9%				
Retail trade	74,303	8%				
Information	64,273	7%				
Transportation and warehousing, and utilities	62,600	7%				
Educational, health and social services	42,196	5%				
Public administration	40,876	4%				
Arts, entertainment, recreation, accommodation and food services	37,679	4%				
Wholesale trade	29,902	3%				

4. Families by Type, 2000

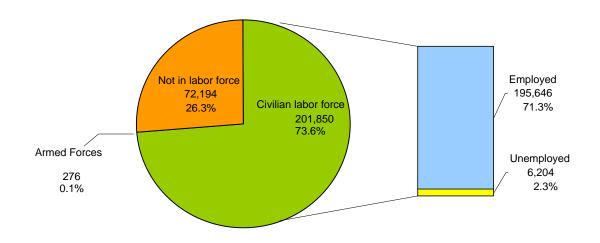
	Fa	milies by Ty	pe			
	Bedford	Colleyville	Euless	Grapevine	Haltom City	Hurst
Total Families	20,317	6,360	19,234	15,746	15,014	14,088
Married-couple households	81%	96%	77%	84%	73%	79%
Male-headed households, no wife present	5%	1%	6%	4%	9%	7%
Female-headed households, no husband present	14%	3%	17%	11%	19%	15%
Average family size	2.93	3.24	3.05	3.14	3.19	2.99
	Keller	N. Richland Hills	Richland Hills	Southlake	Watauga	Westlak
Total Families	8,811	20,757	3,152	6,422	7,110	83
Married-couple households	94%	81%	77%	96%	82%	97%
Male-headed households, no wife present	2%	5%	7%	1%	6%	0%
Female-headed households, no husband present	4%	14%	16%	3%	12%	3%
Average family size	3.3	3.09	2.99	3.48	3.33	2.71

	Tarrant County
Total Families	371,565
Married-couple households	77%
Male-headed households, no wife present	6%
Female-headed households, no husband present	17%
Average family size	3.22

5. Employment Status, 2000

Employment among population 16 years and over							
	NETC Tarrant County						
	Number	Percent (%)	Number	Percent (%)			
In labor force	202,126	73.7%	752,129	70.5%			
Civilian labor force	201,850	73.6%	749,489	69.2%			
Employed	195,646	71.3%	715,387	66.1%			
Unemployed	6,204	2.3%	341,02	3.2%			
In Armed Forces	276	0.1%	2,640	0.2%			
Not in labor force	72,194	26.3%	330,245	30.5%			

Employment Status among Population 16 years and over in NETC



Definition (Census Bureau)

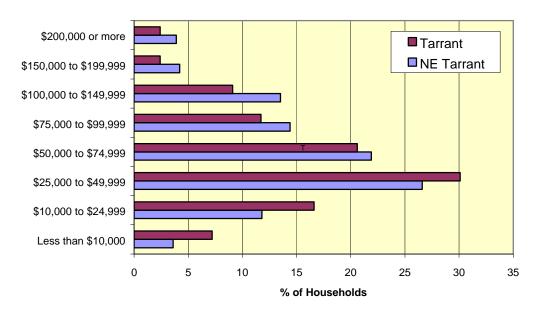
- Not in labor force. All people 16 years old and over who are not classified as members of the labor force. This category consists mainly of students, individuals taking care of home or family, retired workers, seasonal workers enumerated in an off-season who were not looking for work, institutionalized people (all institutionalized people are placed in this category regardless of any work activities they may have done in the reference week), and people doing only incidental unpaid family work (fewer than 15 hours during the reference week).
- Unemployed. All civilians 16 years old and over were classified as unemployed if they were neither "at work" nor "with a job but not at work" during the reference week, were looking for work during the last 4 weeks.

6. Income, 2000

Income						
	Bedford	Colleyville	Euless	Grapevine	Haltom City	Hurst
Median household income	\$ 54,436	\$ 117,419	\$ 49,582	\$ 71,680	\$ 38,818	\$ 50,369
Median family income	\$ 71,017	\$ 121,499	\$ 54,697	\$ 84,940	\$ 42,706	\$ 57,955
Per capita income	\$ 29,466	\$ 50,418	\$ 23,764	\$ 31,549	\$ 17,740	\$ 23,247
	Keller	N. Richland Hills	Richland Hills	Southlake	Watauga	Westlake
Median household income	\$ 86,232	\$ 56,150	\$ 43,377	\$ 131,549	\$ 56,751	\$ 74,375
Median family income	\$ 90,129	\$ 64,718	\$ 50,377	\$ 136,023	\$ 57,969	\$ 80,000
Per capita income	\$ 31,986	\$ 25,516	\$ 20,247	\$ 47,597	\$ 19,872	\$ 39,206
					1	

	Tarrant County	Texas
Median household income	\$ 46,179	\$ 39,927
Median family income	\$ 54,068	\$ 45,861
Per capita income	\$ 22,445	\$19,617

Household Income in NETC



7. Poverty Status by Family Type

Poverty by Family Type							
	Bedford	Colleyville	Euless	Grapevine	Haltom City	Hurst	
Families below poverty level	2%	1%	6%	3%	8%	5%	
Married-couple households	1%	1%	4%	2%	6%	3%	
Male-headed households, no wife present	4%	7%	8%	16%	5%	5%	
Female-headed households, no husband present	8%	8%	13%	9%	17%	15%	
Individuals below poverty level	4%	1%	7%	5%	10%	7%	
	Keller	N. Richland Hills	Richland Hills	Southlake	Watauga	Westlake	
Families below poverty level	1%	3%	4%	1%	4%	3%	
Married-couple households	1%	1%	2%	1%	2%	3%	
Male-headed households, no wife present	0%	1%	5%	11%	4%	0%	
Female-headed households, no husband present	0%	14%	11%	15%	15%	0%	
	1%	5%	6%	2%	4%	3%	

	Tarrant County
Families below poverty level	8%
Married-couple households	4%
Male-headed households, no wife present	11%
Female-headed households, no husband present	23%
Individuals below poverty level	11%

Northeast Tarrant County Programs and Services

Northeast Tarrant County is made up of twelve vibrant, diverse and largely suburban cities: Bedford, Colleyville, Euless, Grapevine, Haltom City, Hurst, Keller, North Richland Hills, Richland Hills, Southlake, Watauga and Westlake. This section of the report highlights the programs and services Tarrant County Public Health (TCPH) provides to residents in this area.

TCPH provides services aimed at promoting, achieving and maintaining a healthy standard of living for all Tarrant County residents. Safeguarding the community's health involves building and maintaining relationships with businesses, school districts, community groups and other organizations involved in addressing existing and emerging health issues. On a daily basis, public health staff are involved in a multitude of activities including performing laboratory tests, administering vaccines to Northeast Tarrant County international travelers, providing the Women, Infant and Children (WIC) program, inspecting food service establishments, delivering medications to homeless tuberculosis clients, investigating suspected disease outbreaks, providing immunization and child health screening services aimed at keeping kids healthy and in school and providing resources for area youth, educators and others to learn more about the health issues through targeted events and activities.

Through a staff of approximately 340 and funding resources totaling approximately \$27 million, Tarrant County Public Health services truly touch everyone, every day, everywhere.

Northeast Tarrant County residents receive comprehensive public health services provided from four TCPH service centers in Northeast Tarrant County, including three WIC nutrition program service centers and one full-service public health center. The public health center, located at 813 Brown Trail, provides a variety of services including child health screens, immunizations, pregnancy testing, tuberculosis (TB) skin testing and the WIC program. In 2003, the Brown Trail service center provided immunization to 13,760 clients and the WIC nutrition program located in this center and on Martha Street in Euless served over 40,000 NETC clients.

Additionally, more than half of the cities in Northeast Tarrant County are active in the department's West Nile Virus Mosquito Surveillance Program. The program aids the cities in the collection and testing of mosquitoes to help provide a clearer picture of the presence and spread of West Nile virus in Tarrant County.

Highlights of Public Health Activity in Northeast Tarrant County

Bioterrorism and Emergency Preparedness

During 2002, Tarrant County Public Health (TCPH) received \$1.6 million in initial federal funding to strengthen county-wide capacities to respond to public health threats and emergencies. Annual continuation funding has since been provided through the Department of State Health Services (formerly Texas Department of Health). With these funds, TCPH has established teams of public health professionals, known as Health Response Teams to serve different geographic areas of the county, including one in the northeast sector. This team includes an epidemiology investigator and public health nurse, and provides vital links between public health, first responders including fire and police, local and regional officials, schools, hospitals, community leaders, volunteers and other interested citizens to work more closely for comprehensive community based emergency preparedness planning and response. Joint planning, training and preparatory exercises are occurring, as well as collaborative identification of available resources and additional resources needed to strengthen the public health emergency response capacity.

Other county-wide public health emergency preparedness activities include:

- Participating in regional planning efforts for the development of county-wide response plan, including mutual aid agreements
- Developing and exercising plans for possible large scale biological threats such as mass smallpox vaccination clinics and mass distribution of emergency supplies from the Strategic National Stockpile
- Expansion of the Health Alert Network system to receive and distribute urgent local, state and national health threat information 24/7
- Providing laboratory response capacity for handling and identifying high level biological threat agents
- Providing active, county-wide epidemiological surveillance for health threats
- Developing strategies to educate the public regarding health threats and safety

• Recruiting and training medical health professionals and other types of volunteers for the DFW Medical Reserve Corps whom would be necessary to carry out a full-scale public health response in an event of a public health emergency.

West Nile Activities

North Texas cities and counties are expanding mosquito surveillance programs for the West Nile virus (WNV). Together with Tarrant County, 29 cities are helping to collect and assemble data that provides a better understanding of the prevalence of West Nile virus in local mosquitoes. By participating in this program, these cities are able to make a contribution to the large data sets and analysis that they would not be able to obtain from only a city-wide sampling area. By analyzing the trends of the entire county, cities can better anticipate when and how to respond to WNV.

West Nile virus is an arthropod borne virus that is transmitted by mosquitoes from birds to horses and man. The virus resides in birds and is transmitted by a mosquito bite to "dead end" hosts like horses and man which cannot further spread the virus to other organisms. It was first detected in New York City in 1999 and reached North Central Texas in 2002. The disease spread much faster than anticipated and reached this area several years earlier than was originally predicted. With the high degree of public concern, the local cities and Tarrant County implemented a surveillance program in 2003 to detect the disease and keep local governments and citizens informed about the presence of the virus.

Local governments and Tarrant County Public Health are continuing the program. Since WNV will return to North Central Texas for the foreseeable future, TCPH and participating cities will continue to detect, identify and educate the community about the disease. The program involves coordinating the efforts of 29 cities in Tarrant County to sample multiple mosquito population 'pools' (mosquitoes collected at one site) to detect the virus. In Northeast Tarrant County the cities of Colleyville, Grapevine, Hurst, Haltom City, North Richland Hills, Richland Hills, Bedford, Keller, Southlake and the DFW Airport are all participating and actively sampling areas across their cities to survey for the presence of the virus.

TCPH tests for the presence of the virus in samples brought from the cities using a DNA based test (RT-PCR) that is sensitive, fast and reliable. By testing for the virus in either the mosquito itself and the blood present in the mosquito's stomach, the cities get an accurate measurement of the prevalence of the virus in their city. The method is fast with a turnaround time of a few days, so the county and city managers can make quick decisions about actions and

preventative measures to take. Once the city government is informed, they determine the appropriate response for their jurisdiction, such as bite prevention activities and/or mosquito control.

Last season the West Nile Virus Monitoring program yielded some very helpful information about the virus. Over 21 percent (21.9%) of 636 pools of mosquito populations tested in Tarrant County were found to be positive for WNV. In NETC, 213 mosquito pools were tested with 22 percent testing positive for WNV. Figure 1 below shows the number of positive mosquito pools detected each month for the whole county.

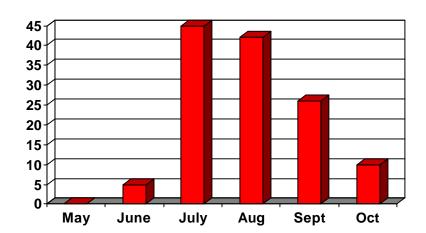


Figure 1. Distribution of West Nile Virus Positive Mosquito Pools in Tarrant County

The data in the chart above gives the cities and the county a useful predictive measure of when and how to focus WNV response efforts for the 2004 season. With the continued support of the city governments and staff, TCPH has been able to prepare and generate useful information about the spread of West Nile virus. A great deal of data is now available to make comparisons to previous years, and to better predict future conditions. Through the cities' efforts and citizen interest, the local governments and Tarrant County are more informed about this virus than if we would be operating independently. The cities continued support is greatly appreciated and we look forward to additional seasons of working together to monitor WNV.

In addition to the mosquito surveillance activities the Tarrant County Public Health also monitors human cases of WNV disease in Tarrant County. Figure 2 depicts the confirmed and

suspect human cases of WNV in 2003. Of the 38 cases that were diagnosed in Tarrant County, 31.6 percent (12) occurred among residents of Northeast Tarrant County.

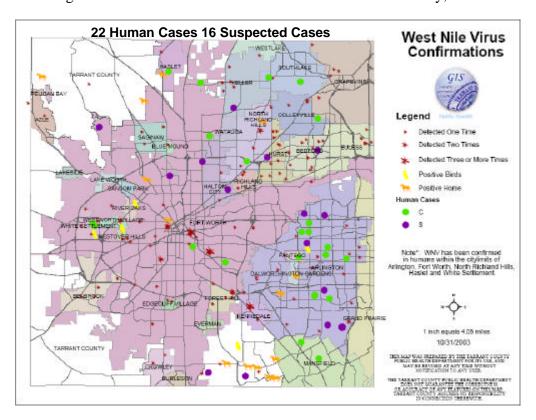


Figure 2. Human Cases of West Nile virus in Tarrant County, 2003

Travel Health Services

The Tarrant County Public Health established the International Travel Clinic in 1994 to provide a one-stop resource for international travelers by offering preventive medical advice, vaccine services and information about destination countries.

In response to community needs, the clinic, now known as Travel Health Services, expanded its services to Southlake in June 2001 and to Arlington in June 2002. As a critical part of its mission, TCPH assures a county-wide coverage, tailoring specific services to locations with the greatest demand. The Southlake area, in the vicinity of the DFW Airport, has demonstrated a particular need for a travel health program. The clinic in Southlake serves all of Northeast Tarrant County. Tarrant County also provides passport services at this location to enhance the convenience of obtaining travel-related services.

Southlake Travel Health Services is located in Town Hall in Town Square, which is at the corner of Southlake Boulevard and Carroll Avenue. Since its opening, the clinic has proven to be a popular service, especially during the busy travel seasons, with a total of 1,535 clients visiting the clinic in Southlake. The clinic is open on varying days of the week and clients are seen by appointment. The clinic is staffed by a physician or nurse who see between 10 and 15 people daily. Since its inception, a total of 1,525 clients have been seen at the clinic in Southlake. Most of these clients are from the Southlake and Keller area and some from Dallas County. Because the Southlake office is not open full time, general travel information and the scheduling of appointments is handled through TCPH's central Travel Health Services office in Fort Worth at 817-321-4707.

Summary and Conclusion

This report is intended to provide a condensed public health profile of the Northeast Tarrant County residents and highlight the services provided to them by Tarrant County Public Health. Relevant findings include:

- Overall, NETC residents appear to be in better health than the rest of the county in terms of indicators that were considered in this report.
- The incidence rates of all seven leading infectious diseases are lower in NETC than in Tarrant County as a whole.
- The geographic distribution of infectious disease shows that ZIP Code 76040 always had the highest rate or was among the ZIP Codes with the highest rates of infectious diseases except salmonellosis and chickenpox. Chickenpox assumes a higher importance as the 7th leading cause of infectious disease in NETC, whereas it does not rank among the seven leading causes of infectious disease in Tarrant County.
- The incidence rates for the five leading causes of death in NETC were either comparable or lower than those of Tarrant County.
- The infant mortality rate in NETC was comparable to that of Tarrant County.
- Indicators for negative birth outcomes such as teenage pregnancy and inadequate prenatal care are lower than those of Tarrant County.

Although the NETC population scored higher than the rest of the county in most of the indicators presented in this report, there is still a need for continuous improvement. In comparison to Healthy People 2010 objectives, many of the indicators fall short of the national goal:

Health Indicators	NETC (rate per /100,000)	Tarrant County (rate per /100,000)	Healthy 2010 Objectives (rate per /100,000)
Gonorrhea	32.0	139.5	19.0
Salmonellosis	20.8	24.0	6.8
Cardiovascular disease	177.3	175.7	166.0
Cancer	127.1	149.7	159.9
Cerebrovascular disease (Stroke)	40.1	36.5	48.0
Chronic lower respiratory disease	29.9	30.1	60.0
Intentional and unintentional injuries	27.6	45.6	3.0 (intentional) 20.8 (unintentional)
Infant mortality	6.6 per 1,000 live births	6.8 per 1,000 live births	4.5 per 1,000 live births
Prenatal care in the first trimester	84.0%	79.3%	90%

Timely health information, accurate analysis and scientifically sound inferences are essential to effective public health interventions. TCPH continuously monitors the health status of its local communities and strives to share its findings with these communities. As the County's public health agency, it aims to promote and assure a healthy standard of living for all Tarrant County communities. TCPH is committed to leading county's efforts to achieve our vision of *Healthy People in Healthy Communities*.

Data Sources

- ♣ Tarrant County Public Health, Division of Epidemiology and Health Information
- ♣ Tarrant County Public Health, Division of Adult Health Services
- Department of State Health Services (formerly Texas Department of Health),
 Department of Vital Statistics
- 4 U.S. Census Bureau, United States Department of Commerce
- Centers for Disease Control and Prevention, National Center for Health Statistics,
 United States Department of Health and Human Services



TARRANT COUNTY
PUBLIC HEALTH