M.A.P. II

Monitoring and Assessment Project
2002 - 2004

Tarrant County Public Health

Safeguarding our community's health

Tarrant County
MAP II : Monitoring and Assessment Project
2002-2004

Tarrant County Public Health

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Preface

Tarrant County Public Health's (TCPH) mission is to safeguard our community's health. TCPH strives to accomplish this by providing services that promote good health, prevent disease and injury, protect the community, and reduce the physical and fiscal impact of health threats for Tarrant County residents. The Monitoring and Assessment Project (M.A.P.) was designed to help accomplish TCPH's mission by collecting, compiling, analyzing, and disseminating information about the health status of Tarrant County residents.

The initial preparation for M.A.P. II began in February 2006 with input solicited from community stakeholders early in the planning stages. Through the stakeholder input and a team effort at TCPH, the final M.A.P. II report will provide invaluable information for Tarrant County residents.

The first M.A.P. (M.A.P. I) contained health data from 2000-2001. M.A.P. II is an expansion of M.A.P. I and includes health data from various sources for 2002-2004. Specifically, M.A.P. II provides data for nine domains with 49 health indicators in Tarrant County. Data for each indicator are presented overall, by gender, by race/ethnicity, and by age group. Comparisons between Tarrant County, Texas, and the United States are included, and the health status of Tarrant County's residents is compared to the Healthy People 2010 objectives.

M.A.P. was designed to provide comparative data over time to monitor changes in health status. It is a useful tool for identifying problematic areas in Tarrant County so that specific programs and resources can target appropriate areas of concern. It is intended that M.A.P. II in combination with M.A.P. I and other M.A.P. related reports will provide the basis for discussion on how to improve the health of Tarrant County residents by identifying both positive and negative trends in the selected health indicators.

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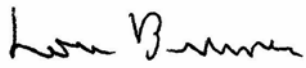

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Table of Contents

Preface i
Table of Contents iv
Introduction vi

Domain I. Demographics and Socioeconomics
Definitions and Data Sources 1
Indicator I-1. Population Distribution 3
Indicator I-2. Poverty 7
Indicator I-3. Income 15
Indicator I-4. Unemployment 20
Indicator I-5. Disadvantaged Students 23
Indicator I-6. Educational Attainment 26
Indicator I-7. Language Proficiency 31
Indicator I-8. Single-Parent Households 35
Indicator I-9. All Cause Mortality 38

Domain II. Quality of Life
Definitions and Data Sources 42
Indicator II-1. Years of Potential Life Lost 43

Domain III. Health Resources
Definitions and Data Sources 47
Indicator III-1. Health Professional Shortage Areas and Medically Underserved Areas 48
Indicator III-2. Health Care Professionals 50
Indicator III-3. Medicaid Participating Health Care Professionals 51
Indicator III-4. Ratio of Medicaid Eligibles to Participating Primary Care Professionals 51
Indicator III-5. Local Health Services in Tarrant County 52

Domain IV. Maternal and Child Health
Definitions and Data Sources 54
Indicator IV-1. Infant Mortality 56
Indicator IV-2. Child Mortality 60
Indicator IV-3. Prenatal Care in First Trimester 64
Indicator IV-4. Low Birth Weight Infants 68
Indicator IV-5. Teen Pregnancy Rate 72

Domain V. Chronic Diseases
Definitions and Data Sources 75
Indicator V-1. Heart Disease Mortality 77
Indicator V-2. Cancer Mortality 81
Indicator V-3. Cerebrovascular Diseases Mortality 90
Indicator V-4. Chronic Lower Respiratory Diseases Mortality 94
Indicator V-5. Hypertension Morbidity 98
Indicator V-6. Heart Disease Morbidity 102
Indicator V-7. Diabetes Mellitus Morbidity 106
Indicator V-8. Obesity Morbidity 110

Domain VI. Infectious Diseases
Definitions and Data Sources 114
Indicator VI-1. Early Syphilis 116
Indicator VI-2. Gonorrhea 120
Indicator VI-3. Chlamydia 124
Indicator VI-4. Acute Hepatitis B 128
Indicator VI-5. Chronic Hepatitis C 131
Indicator VI-6. HIV 135
Indicator VI-7. Tuberculosis 139

Domain VII. Environmental Health
Definitions and Data Sources 143
Indicator VII-1. Enteric Diseases 144
Indicator VII-2. Hepatitis A 156
Indicator VII-3. Lead Poisoning in Children 159
Indicator VII-4. Air Quality 163
Indicator VII-5. Water Quality 167

Domain VIII. Social and Mental Health
Definitions and Data Sources 169
Indicator VIII-1. Suicide 171
Indicator VIII-2. Mental Health 176
Indicator VIII-3. Substance Abuse 181
Indicator VIII-4. Child Abuse and Neglect 192
Indicator VIII-5. Crime Arrests 196
Indicator VIII-6. Divorce 203
Indicator VIII-7. Homelessness 206

Domain IX. Injuries
Definitions and Data Sources 208
Indicator IX-1. Intentional Injury Deaths: Homicide 209
Indicator IX-2. Unintentional Injury Deaths 214

Appendix
A. Tarrant County Health Care Facilities 219
B. M.A.P. Community Partners 223
C. M.A.P. Data Sources 224

Introduction

The Monitoring & Assessment Project (M.A.P.) is a Tarrant County Public Health (TCPH) initiative designed to use secondary data from various sources to produce a comprehensive community health status report. The purpose of M.A.P. is to establish a community health profile for accurate, periodic assessment of our community's progress towards health-related objectives. Monitoring the community's health status through M.A.P. reflects TCPH's mission of safeguarding our community's health by promoting community health, preventing disease and injury, and assuring a healthy and safe environment. This report provides detailed health information from the second M.A.P. project conducted by TCPH, expanding on the indicators from M.A.P. I. M.A.P. I indicators were based on the Texas Strategic Health Status Indicators (TSHSI) project of the Texas Department of State Health Services. These indicators were adapted for Tarrant County and geocoded on a sub-county level using Geographic Information System (GIS) technology. The selected indicators presented for Tarrant County are compared to Texas, the United States, and the Healthy People 2010 objectives.

This report includes indicators classified into the following nine domains:

- **Domain I. Demographics and Socioeconomics**
  - population distribution, poverty, income, unemployment, disadvantaged students, educational attainment, language proficiency, single-parent households, all cause mortality
- **Domain II. Quality of Life**
  - years of potential life lost
- **Domain III. Health Resources**
  - health professional shortage areas and medically underserved areas, Medicaid participating health care professionals, local health services in Tarrant County
- **Domain IV. Maternal and Child Health**
  - infant mortality, child mortality, prenatal care, low birth weight infants, teen pregnancy
- **Domain V. Chronic Diseases**
  - heart disease mortality, cancer mortality, cerebrovascular diseases mortality, chronic lower respiratory diseases mortality, hypertension morbidity, heart disease morbidity, diabetes morbidity, obesity morbidity
- **Domain VI. Infectious Diseases**
  - early syphilis, gonorrhea, chlamydia, acute hepatitis B, chronic hepatitis C, HIV, tuberculosis
- **Domain VII. Environmental Health**
  - enteric diseases, hepatitis A, lead poisoning in children, air quality, water quality
- **Domain VIII. Social and Mental Health**
  - suicide, mental health, substance abuse, child abuse and neglect, crime arrests, divorce, homelessness
- **Domain IX. Injuries**
  - intentional injuries, unintentional injuries

Key findings from M.A.P. II include the following for 2002-2004.

- The increase in Tarrant County's population from 2002-2003 and 2003-2004 was greater than the increase in population for Texas and the United States. Overall, the socioeconomic profile of Tarrant County was better than Texas. The poverty status in Tarrant County was lower than the United States and Texas; while, the per capita income in Tarrant County was higher than Texas. Unemployment in Tarrant County was higher than the United States, but lower than Texas. Educational attainment was similar to the United States, but higher than Texas.

- In 2004, Tarrant County met 26 percent of corresponding Healthy People 2010 objectives. Healthy People 2010 objectives were met for the following health indicators: acute hepatitis B, hepatitis C, hepatitis A, campylobacteriosis, E. *coli* 0157:H7, air quality, and child abuse and neglect.

- Overall improvement was demonstrated in 45 percent of the health indicators from 2002-2004. The improved health indicators included overall poverty status, per capita income, unemployment, educational attainment, rate of all cause mortality, years of potential life lost, rate of teen pregnancy, rate of heart disease mortality, rate of cerebrovascular diseases mortality, rate of early syphilis, rate of acute hepatitis B, rate of chronic hepatitis C, rate of hepatitis A, rate of E. *coli* 0157:H7, rate of salmonellosis, rate of direct alcohol related deaths, number of crime arrests among youth, and rate of unintentional injuries.

- A decline in the health status was observed for 33 percent of the indicators from 2002-2004. These indicators included percent of disadvantaged students, rate of infant mortality, percent of prenatal care in the first trimester, rate of gonorrhea, rate of chlamydia, rate of HIV, rate of campylobacteriosis, rate of shigellosis, rate of suicide, rate of child abuse and neglect, number of crime arrests among adults, rate of homicides, and number of homeless persons.

Both M.A.P. I and M.A.P. II provide detailed information about the health status of Tarrant County while providing a repeated measure of changes over time. These data highlight areas for improvement and identify areas for targeted interventions.

These data should be interpreted cautiously. Limitations to the information provided in this report are 1) data were collected from different organizations/programs using different methods; 2) data may have been collected for other purposes; 3) criteria for data collection may have changed over time; and 4) some of the data (e.g. heart disease morbidity, diabetes morbidity) are self-reported data. All data for each indicator, however, were collected by the same means for this report.

Demographics and Socioeconomics

Definitions and Data Sources

Population Estimates and Projections

- Population estimates by age, sex, and race/ethnicity for the years 2002, 2003, & 2004 and five-year projections
- Data Source - Texas Population Estimates and Projections Program Texas Department of State Health Services http://soupfin.tdh.state.tx.us

Poverty Rate

- Percent of population below poverty level
- Data Source - United States Census Bureau

Per Capita Income

- Numerator - Total personal income
- Denominator - Population estimates
- Data Source - United States Census Bureau

Unemployment Rate

- Percent of all civilians 16 and older who were neither “at work” nor “with a job but not at work” during the reference week, and were looking for work during the past four weeks
- Data Source - United States Census Bureau

Disadvantaged Students

- Disadvantaged - percent of enrolled students who are economically disadvantaged
- Data Source - Texas Education Authority
- More Information - http://www.tea.state.tx.us/adhocrpt/index.html

Educational Attainment

- Percent of persons aged 25 years and older who have graduated from high school
- Data Source – United States Census Bureau

Limited English Proficiency

- Percent of persons, aged 5 years and older who speak English "not well" or “not at all”
- Data Source - United States Census Bureau

Linguistic Isolation

- Percent of persons 5 years and older who are linguistically isolated
- ***Linguistically isolated*** - A household in which no person age 14 years or older speaks only English and no person age 14 years and older who speaks a language other than English speaks English "very well" is classified as "linguistically isolated." All members of a linguistically isolated household are defined as linguistically isolated, including members under 14 who may speak only English.
- Data Source - United States Census Bureau

Single-Parent Households

- Percent of "own children" who are living with only one parent. "Own child" is a never-married child under 18 years who is a son or daughter by birth, a stepchild, or an adopted child of the householder.
- Data Source - United States Census Bureau

All Cause Mortality

- Mortality rate for all causes
- Numerator - all deaths
- Denominator - estimated population
- Rate - per 100,000 population (Age adjusted to the 2000 standard population)
- Data Source - Texas Department of State Health Services, Center for Health Statistics

Indicator I-1. Population Distribution

Tarrant County had an estimated population of 1,526,403 in 2002 and has been growing rapidly with a 2.1 percent increase from 2002 to 2003 and a 2 percent increase from 2003 to 2004. The proportion of males and females remained unchanged for 2002-2004, and each gender increased by a consistent percent each year (Table I-1).

Table I-1: Tarrant County Population Estimates by Gender

	2002		2003		2004		% Change	% Change	Projections
	Number	%	Number	%	Number	%	(2002-2003)	(2003-2004)	2009
Male	757,142	49.6	773,928	49.6	790,058	49.7	2.2	2.1	870,014
Female	769,261	50.4	785,158	50.4	800,212	50.3	2.1	1.9	873,734
Total	1,526,403	100	1,559,086	100	1,590,270	100	2.1	2.0	1,743,748

Data Source: Texas population estimates and projections program, Texas Department of State Health Services

The highest percent of population estimates occurred in the 35 to 54 year age group in 2002-2004. However, the highest percent change from 2002-2003 (5.5% increase) and 2003-2004 (4.2% increase) was seen in the 55 to 74 year age group (Table I-2).

Table I-2: Tarrant County Population Estimates by Age

Age Group	2002		2003		2004		% Change	% Change	Projections
in years	Number	%	Number	%	Number	%	(2002-2003)	(2003-2004)	2009
0-4	121,633	8.0	127,261	8.2	130,774	8.2	4.6	2.8	140,186
5-19	347,255	22.7	352,100	22.6	357,549	22.5	1.4	1.5	385,315
20-34	357,001	23.4	362,927	23.3	368,847	23.2	1.7	1.6	399,592
35-54	455,536	29.8	460,386	29.5	467,392	29.4	1.1	1.5	505,549
55-74	188,077	12.3	198,352	12.7	206,629	13.0	5.5	4.2	250,482
75+	56,901	3.7	58,060	3.7	59,079	3.7	2.0	1.8	62,624

Data Source: Texas population estimates and projections program, Texas Department of State Health Services

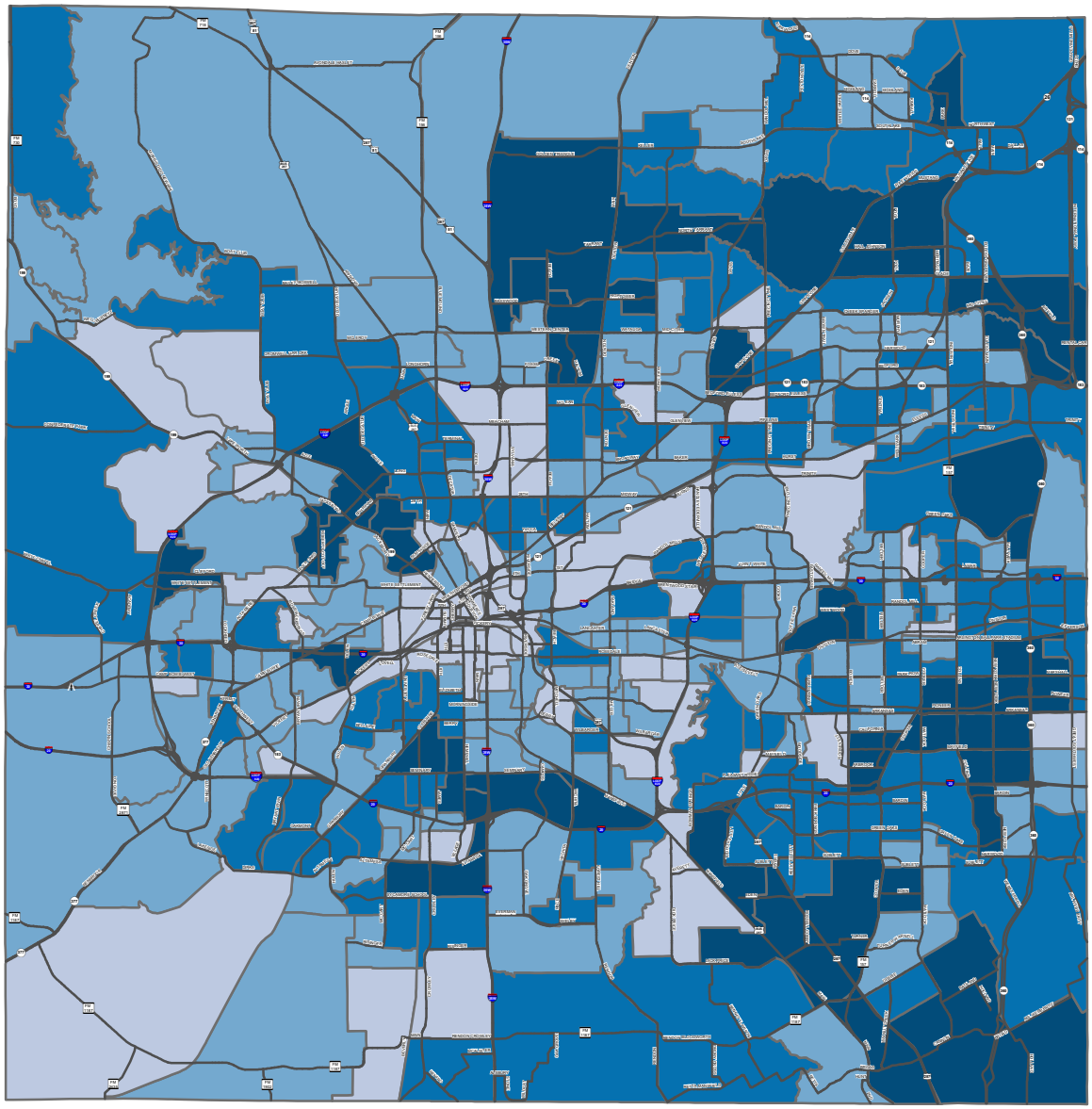
Hispanics and Other racial/ethnic groups had the highest percent increase in population estimates from 2002-2003 and 2003-2004. Each year, the percent of the population that was Hispanic increased, while the percent of the population that was White decreased (Table I-3).

Table I-3: Tarrant County Population Estimates by Race/Ethnicity

	2002		2003		2004		% Change	% Change	Projections
	Number	%	Number	%	Number	%	(2002-2003)	(2003-2004)	2009
White	922,004	60.4	919,473	59	917,584	57.7	-0.3	-0.2	894,600
Black	201,572	13.2	207,460	13.3	212,853	13.4	2.9	2.6	237,224
Hispanic	328,174	21.5	352,033	22.6	374,527	23.6	7.3	6.4	498,165
Other	74,653	4.9	80,120	5.1	85,306	5.4	7.3	6.5	113,759

Data Source: Texas population estimates and projections program, Texas Department of State Health Services

Figure I-1.1: Geographic Distribution of Population in Tarrant County



Legend

< 2729 | 2730 - 4653 | 4654 - 6578 | > 6578 | Major Roads

1 inch equals 5 miles

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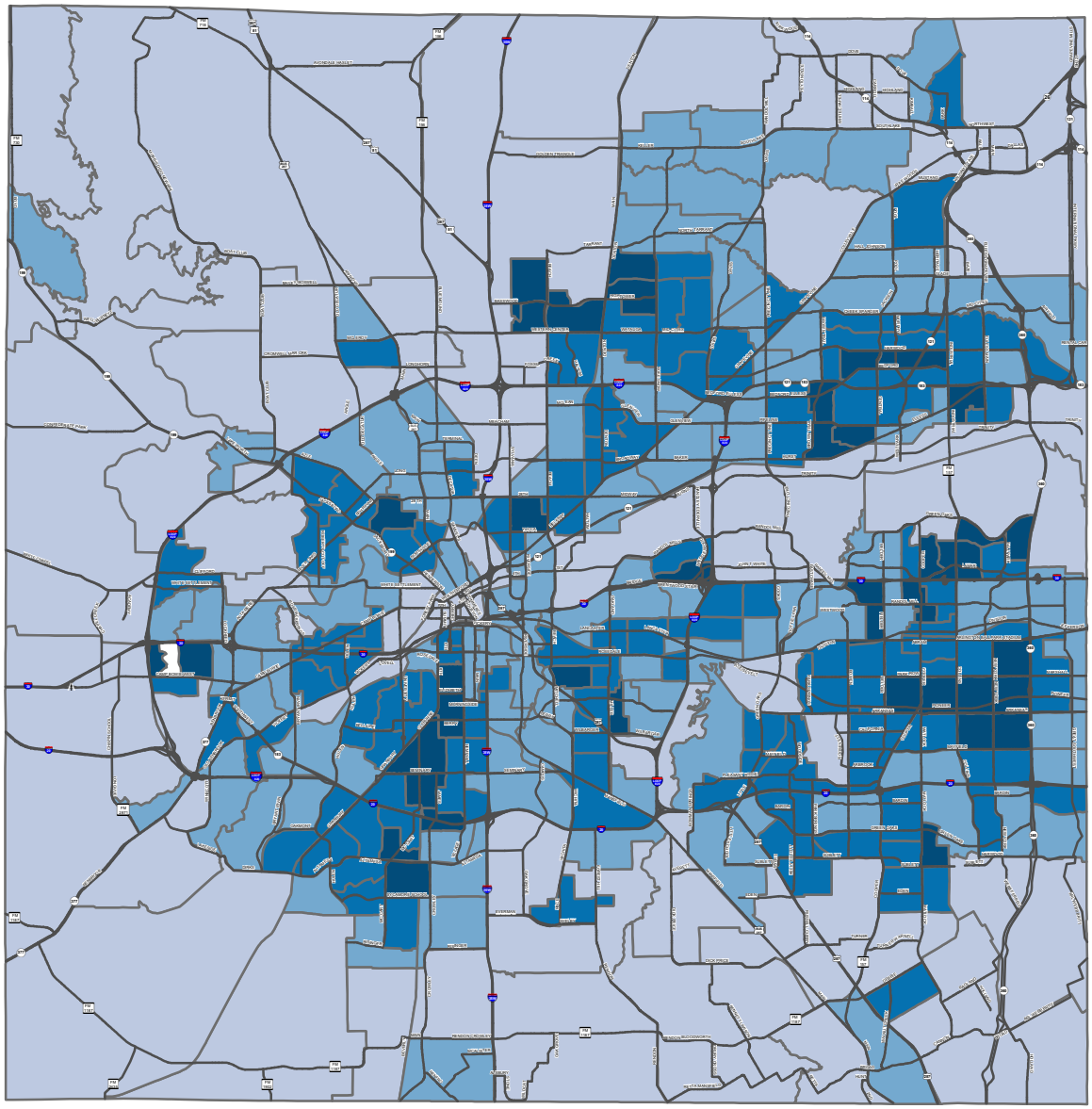
Figure I-1.2: Geographic Distribution of Population Density in Tarrant County



People per square mile

< 1245 | 1245 - 3345 | 3346 - 5445 | > 5445 | Major Roads

1 inch equals 5 miles

Public Health

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The preceding maps show the geographic distribution of the population and the population density of Tarrant County. Figure I-1.1 shows population distribution by year 2000 census tract. The eastern part of Tarrant County shows the most heavily populated census tracts with the less populated tracts in central and southwest Tarrant County. In Figure I-1.2, Population Density, eastern and central Tarrant County are densely populated, while northwest, southwest and southeast Tarrant County are less densely populated. These maps used year 2000 population data. Population estimates are not available at the census tract level.

Comparison with Texas and the United States

The percent increase in population in Tarrant County was higher than in Texas and the United States in 2002-2003 and 2003-2004 (Table I-4).

Table I-4: Population Estimates of Tarrant County, Texas, and the United States

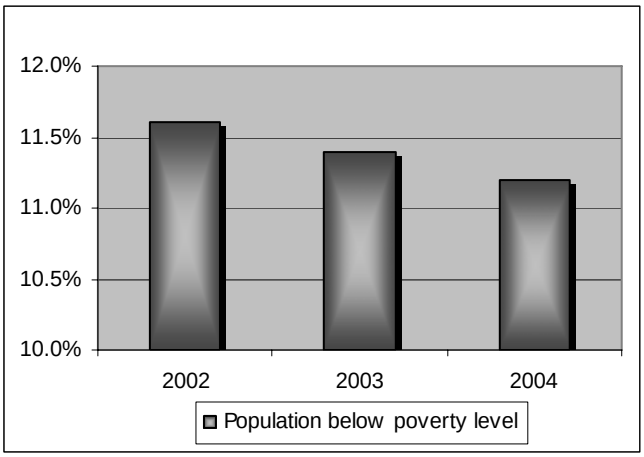
	2002	2003	2004	% Change (2002-2003)	% Change (2003-2004)
Tarrant County	1,526,403	1,559,086	1,590,270	2.1	2.0
Texas	21,779,893	22,118,509	22,490,022	1.6	1.7
United States	280,540,330	282,909,885	285,691,501	0.8	1.0

Data Source**:** Texas Department of State Health Services; United States Census Bureau

Indicator I-2. Poverty

The percent of individuals at or below the federal poverty level in Tarrant County was comparable each year with a slight decrease from 11.6 percent in 2002, to 11.4 percent in 2003, and 11.2 percent in 2004 (Figure I-2).

Figure I-2: Overall Poverty Status, Tarrant County, 2002-2004



Data Source: United States Census Bureau

Among all racial/ethnic groups, Others had the highest percent of population living at or below the federal poverty level for 2002-2003. Blacks had the second highest percentage of the population living at or below the federal poverty level in 2002-2003. In 2004, however, Blacks, followed by Whites, had the highest percentage of the population living at or below the federal poverty level (Table I-5).

Table I-5: Tarrant County Poverty Status by Race

	2002	
	Number	**Percent***
White	98,833	9.2
Black	32,035	17.2
Asian	4,085	7.2
Other	30,378	23.2
2 or more races	7,806	16.3
	2003	
	Number	**Percent***
White	97,666	9.0
Black	38,054	18.7
Asian	7,693	12.1
Other	29,667	19.9
2 or more races	1,166	5.3
	2004	
	Number	**Percent***
White	118,381	10.5
Black	34,456	16.8
Asian	3,356	4.9
Other	10,022	8.4
2 or more races	N/A	N/A

*Percent in each race group
N/A Data not available
Data Source: United States Census Bureau

In 2002 and 2003, approximately five times more Hispanics than non-Hispanics lived at or below the federal poverty level. In 2004, two and a half times more Hispanics than non-Hispanics lived at or below the federal poverty level (Table I-6).

Table I-6: Tarrant County Poverty Status by Ethnicity

	2002	
	Number	Percent*
Hispanic	75,572	22.9
Non-Hispanic	54,039	4.6
	2003	
	Number	Percent*
Hispanic	77,859	22.4
Non-Hispanic	50,529	4.3
	2004	
	Number	Percent*
Hispanic	65,746	18.3
Non-Hispanic	63,168	7.1

*Percent in each ethnic group
Data Source: United States Census Bureau

Among family types, a higher percent of families with single female householders was poor compared to married-couple families and single male-headed households each year (Table I-7).

Table I-7: Tarrant County Poverty Status by Family Type

	2002	
Type of Family	Number	Percent*
Married-Couple Families	12,892	4.5
Male Householder, no wife present	3,886	13.9
Female Householder, no husband present	19,407	28.1
	2003	
Type of Family	Number	Percent*
Married-Couple Families	14,702	5.0
Male Householder, no wife present	2,162	9.4
Female Householder, no husband present	15,358	21.1
	2004	
Type of Family	Number	Percent*
Married-Couple Families	12,097	4.2
Male Householder, no wife present	1,082	3.9
Female Householder, no husband present	19,684	26.5

*Percent in each family type
Data Source: United States Census Bureau

For 2002-2004, the highest percent of persons living at or below the federal poverty level was 18-64 years of age. The percent of the population living at or below the federal poverty level that was 5 years of age increased each year (Table I-8).

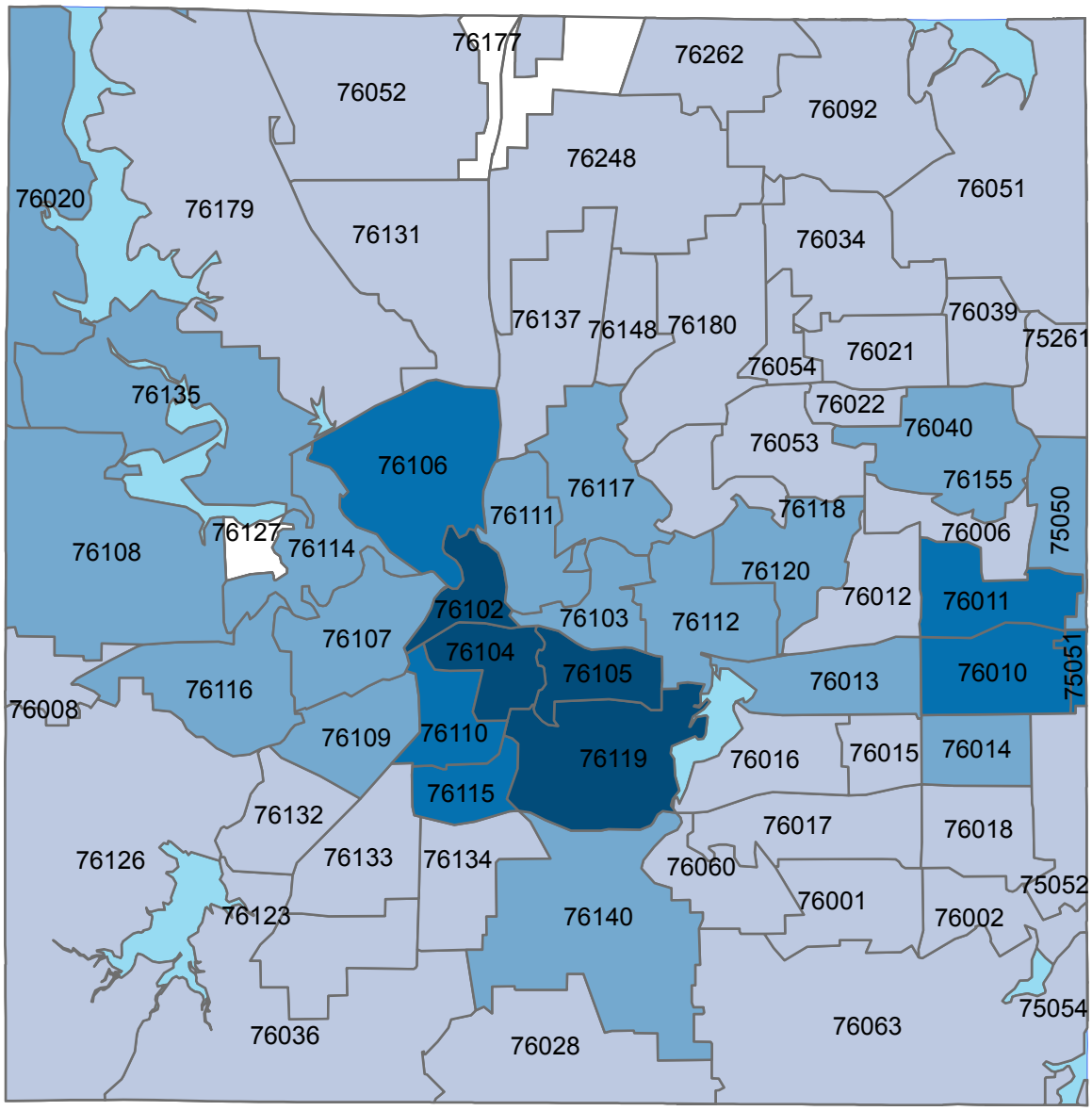
Table I-8: Poverty Status by Age, Tarrant County, 2002-2004

Age Group in years	2002 Number	2002 Percent*
0-4	24,839	14.3
5	1,227	0.7
6-11	21,269	12.3
12-17	20,338	11.7
18-64	97,862	56.5
65-74	4,708	2.7
75+	3,064	1.8
Age Group in years	**2003 Number**	**2003 Percent***
0-4	27,883	16.0
5	3,160	1.8
6-11	19,114	10.9
12-17	17,160	9.8
18-64	96,435	55.2
65-74	5,601	3.2
75+	5,360	3.1
Age Group in years	**2004 Number**	**2004 Percent***
0-4	24,990	14.3
5	4,018	2.3
6-11	19,849	11.4
12-17	18,727	10.7
18-64	100,287	57.5
65-74	3,488	2.0
75+	3,120	1.8

*Percent in each year
Data Source: United States Census Bureau

In Figure I-3, year 2000 poverty data are illustrated by ZIP code. The ZIP codes with the highest poverty percentages are 76104, 76102, 76105, and 76119. The northern and southern ZIP codes demonstrate the lowest percentages of poverty. Current poverty estimates are not available at the ZIP code level.

Figure I-3: Geographic Distribution of Poverty



Legend

1% - 8.25%	16.51% - 24.75%	Excluded Data	
8.26% - 16.5%	24.76% - 33%	Water	1 inch equals 5 miles

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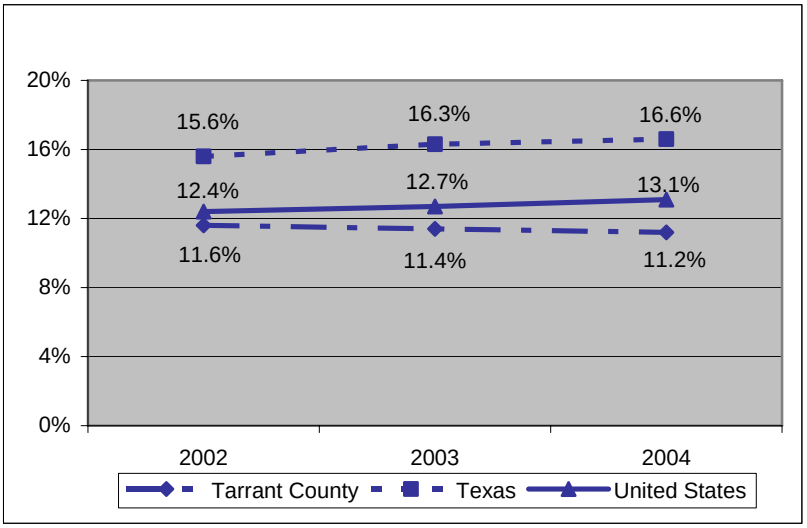
Comparison with Texas and the United States

The percent of the population living at or below the federal poverty level in Tarrant County was lower than that of Texas and the United States in 2002-2004. The percent in Tarrant County slightly decreased, while the percent in Texas and the United States increased each year (Figure I-4).

Figure I-4: Overall Poverty Status in Tarrant County, Texas, and the United States, 2002-2004



Data Source: United States Census Bureau

The percent of Blacks living at or below the federal poverty level in Tarrant County was lower than Texas and the United States each year. The percent of Whites living in poverty in Tarrant County was also lower than Texas and the United States in 2002-2003. In 2004, however, the percent of Whites living in poverty in Tarrant County was lower than Texas, but higher than the United States. The percent of Asians in Tarrant County living at or below the poverty level was also lower than Texas and the United States in 2002 and 2004 (Table I-9).

Table I-9: Poverty Status by Race, Tarrant County, Texas, and the United States, 2002-2004

	2002		
	Tarrant County	**Texas**	**United States**
White	9.2%	13.7%	9.7%
Black	17.2%	20.7%	24.1%
Asian	7.2%	10.5%	11.7%
Other	23.2%	23.9%	21.4%
2 or more races	16.3%	16.5%	18.2%
	2003		
	Tarrant County	**Texas**	**United States**
White	9.0%	14.0%	10.1%
Black	18.7%	24.8%	24.6%
Asian	12.1%	12.1%	11.5%
Other	19.9%	23.4%	21.6%
2 or more races	5.3%	20.1%	17.4%
	2004		
	Tarrant County	**Texas**	**United States**
White	10.5%	15.0%	10.3%
Black	16.8%	22.1%	25.6%
Asian	4.9%	10.4%	24.6%
Other	8.4%	23.6%	22.1%
2 or more races	N/A	17.6%	17.2%

N/A Data not available
Data Source: United States Census Bureau

In 2002 and 2003, Tarrant County had a lower percentage of Hispanics at or below the federal poverty level compared to Texas, but a slightly higher percentage of Hispanics in poverty compared to the United States. In 2004, Tarrant County had the lowest percentage of Hispanics at or below the federal poverty level compared to Texas and the United States (Table I-10).

Table I-10: Poverty Status by Ethnicity, Tarrant County, Texas, and the United States, 2002-2004

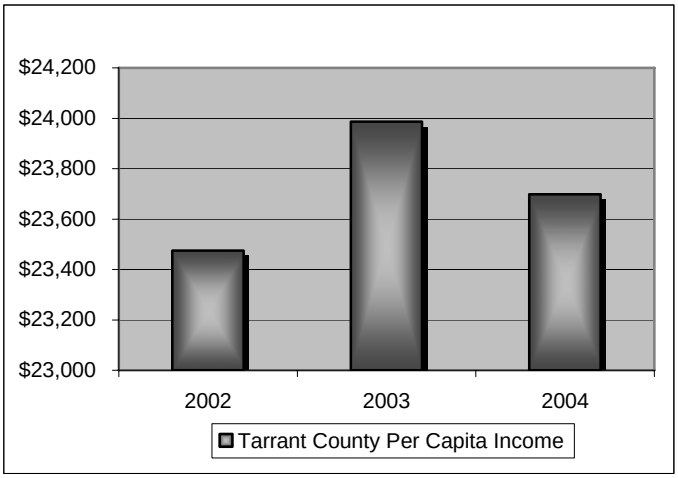
	2002		
	Tarrant County	**Texas**	**United States**
Hispanic	22.9%	26.6%	21.4%
Non-Hispanic	4.6%	5.8%	6.6%
	2003		
	Tarrant County	**Texas**	**United States**
Hispanic	22.4%	26.9%	21.8%
Non-Hispanic	4.3%	5.5%	6.7%
	2004		
	Tarrant County	**Texas**	**United States**
Hispanic	18.3%	27.5%	22.0%
Non-Hispanic	7.1%	8.3%	8.8%

Data Source: United States Census Bureau

Indicator I-3. Income

The average per capita income in Tarrant County slightly increased from $23,475 in 2002 to $23,907 in 2003, but then slightly decreased to $23,699 in 2004 (Figure I-5).

Figure I-5: Per Capita Income, Tarrant County, 2002-2004



Data Source: United States Census Bureau

In 2002-2004, the per capita income in Tarrant County was highest among Others, followed by Whites, Asians, Blacks, then multiple races. In 2004, there was almost a $13,000 difference in the per capita income between Others and Blacks (Table I-11).

Table I-11: Per Capita Income by Race, Tarrant County, 2002-2004

	2002	2003	2004
White	$26,465	$27,645	$26,435
Black	$15,894	$16,062	$16,861
Asian	$25,097	$17,807	$21,290
Other	$40,526	$30,859	$29,526
2 or more races	$10,433	$14,206	$11,978

Data Source: United States Census Bureau

The per capita income of non-Hispanics was more than twice that of Hispanics in 2002-2004 (Table I-12).

Table I-12: Per Capita Income by Ethnicity, Tarrant County, 2002-2004

	2002	2003	2004
Hispanic	$12,354	$12,526	$12,937
Non-Hispanic	$29,313	$30,929	$30,130

Data Source: United States Census Bureau

The per capita income among males was approximately $10,000 higher than females in 2002-2004 (Table I-13).

Table I-13: Per Capita Income by Gender, Tarrant County, 2002-2004

	2002	2003	2004
Male	$34,869	$32,297	$32,280
Female	$22,682	$23,168	$21,907
Total	$28,239	$27,236	$27,263

Data Source: United States Census Bureau

Approximately a quarter of the Tarrant County population had a family income in the $25,000 to $49,999 range in 2002-2004. In 2004, 21 percent of the Tarrant County population had a family income of $100,000 and above (Table I-14)

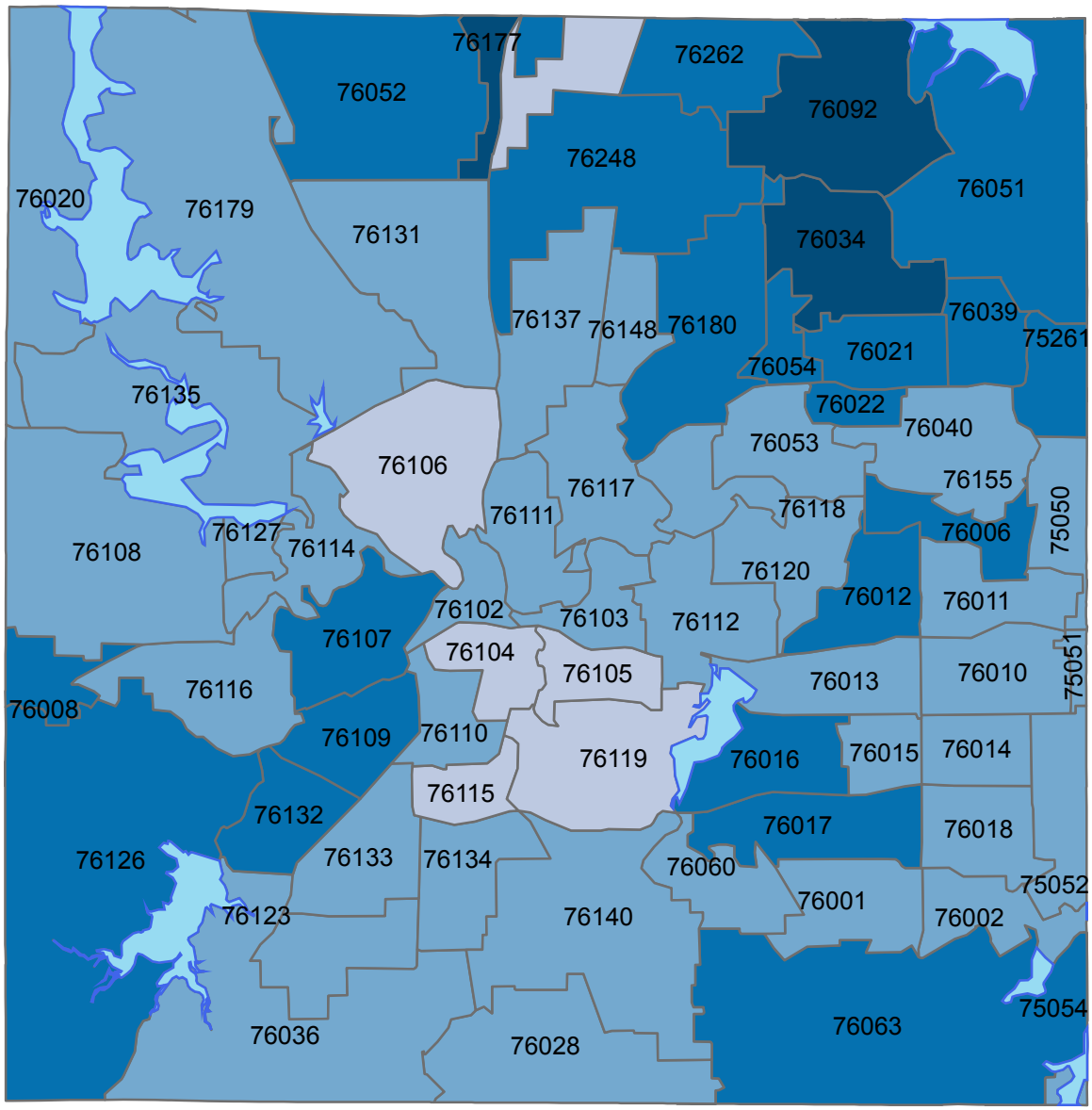
Table I-14: Family Income, Tarrant County, 2002-2004

Income Group	Percent		
	2002	2003	2004
<$25,000	18.0	16.7	17.0
$25,000-$49,999	24.3	28.3	25.0
$50,000-$74,999	23.1	22.0	2.0
$75,000-$99,999	15.2	13.8	14.0
≥$100,000	19.5	19.2	21.0
Total	100.0	100.0	100.0

Data Source: United States Census Bureau

In Figure I-6 below, the geographic distribution of per capita income from year 2000 census data are shown. ZIP codes 76092, 76034, and 76177 in northeastern Tarrant County have the highest per capita income. The ZIP codes surrounding have the next highest levels of per capita income. The ZIP codes 76106, 76119, 76105, 76115, 76104 in central Tarrant County have the lowest per capita income. Current population estimates are not available at the ZIP code level.

Figure I-6: Geographic Distribution of Per Capita Income



Legend

$0.00 - $12,539.75	$25,398.00 - $37,619.25	Water
$13,111.00 - $25,079.50	$40,186.00 - $50,159.00	

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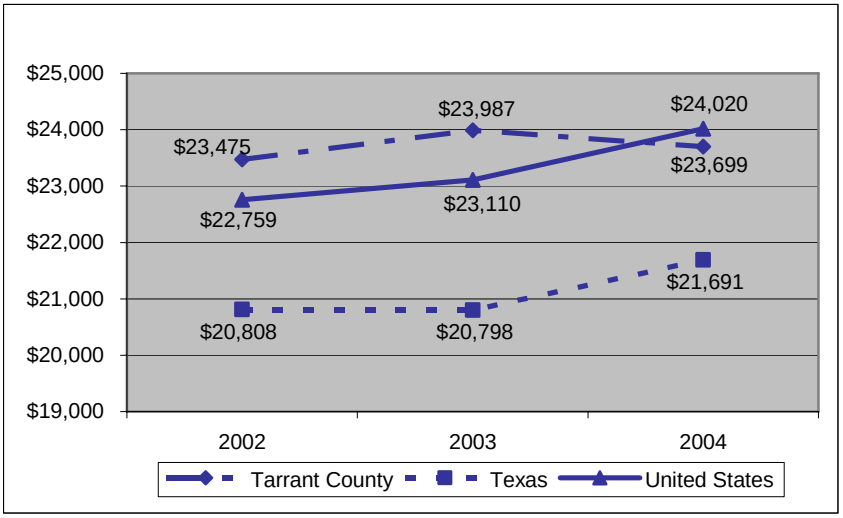
Comparison with Texas and the United States

In 2002 and 2003, Tarrant County had a higher per capita income than Texas and the United States. In 2004, however, the per capita income of Tarrant County was lower than that of the United States, but still higher than Texas (Figure I-7).

Figure I-7: Per Capita Income in Tarrant County, Texas, and the United States, 2002-2004



Data Source: United States Census Bureau

The per capita income for Blacks was the lowest among all racial/ethnic groups in Tarrant County, Texas, and the United States. The per capita income for Whites in Tarrant County was higher than Texas, but comparable to the United States (Table I-15).

Table I-15: Per Capita Income by Race

	2002		
	Tarrant	Texas	United States
White	$26,465	$23,087	$28,849
Black	$15,894	$15,894	$15,388
Asian	$25,097	$24,047	$24,557
Other	$40,526	$57,016	$46,530
2 or more races	$10,433	$12,142	$13,067
	2003		
	Tarrant	Texas	United States
White	$27,645	$23,006	$25,183
Black	$16,062	$16,062	$15,691
Asian	$17,807	$24,202	$24,711
Other	$30,859	$50,747	$45,593
2 or more races	$14,206	$13,009	$12,784
	2004		
	Tarrant	Texas	United States
White	$26,435	$23,801	$26,266
Black	$16,861	$15,987	$16,055
Asian	$21,290	$24,097	$25,786
Other	-	$51,284	$48,460
2 or more races	$11,978	$12,812	$13,736

Data Source: United States Census Bureau

Tarrant County Hispanics had a higher per capita income compared to Texas, but approximately $1,000 to $1,500 less than the national estimate (Table I-16).

Table I-16: Per Capita Income by Ethnicity

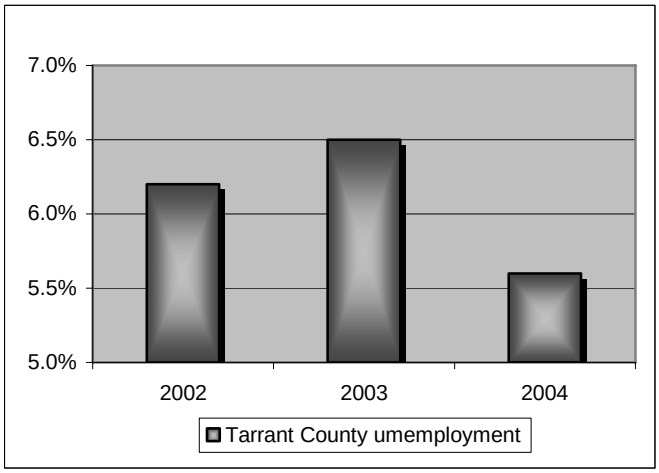
	2002		
	Tarrant	Texas	United States
Hispanic	$12,354	$11,507	$13,443
Non-Hispanic	$29,313	$28,056	$26,054
	2003		
	Tarrant	Texas	United States
Hispanic	$12,526	$11,604	$13,403
Non-Hispanic	$30,929	$28,409	$26,589
	2004		
	Tarrant	Texas	United States
Hispanic	$12,937	$12,365	$14,007
Non-Hispanic	$30,130	$29,524	$27,725

Data Source: United States Census Bureau

Indicator I-4. Unemployment

The unemployment rate (percent of adults of working age in the population who are currently not employed) in Tarrant County increased from 6.2 percent in 2002 to 6.5 percent in 2003, but then decreased to 5.6 percent in 2004 (Figure I-8).

Figure I-8: Unemployment, Tarrant County, 2002-2004

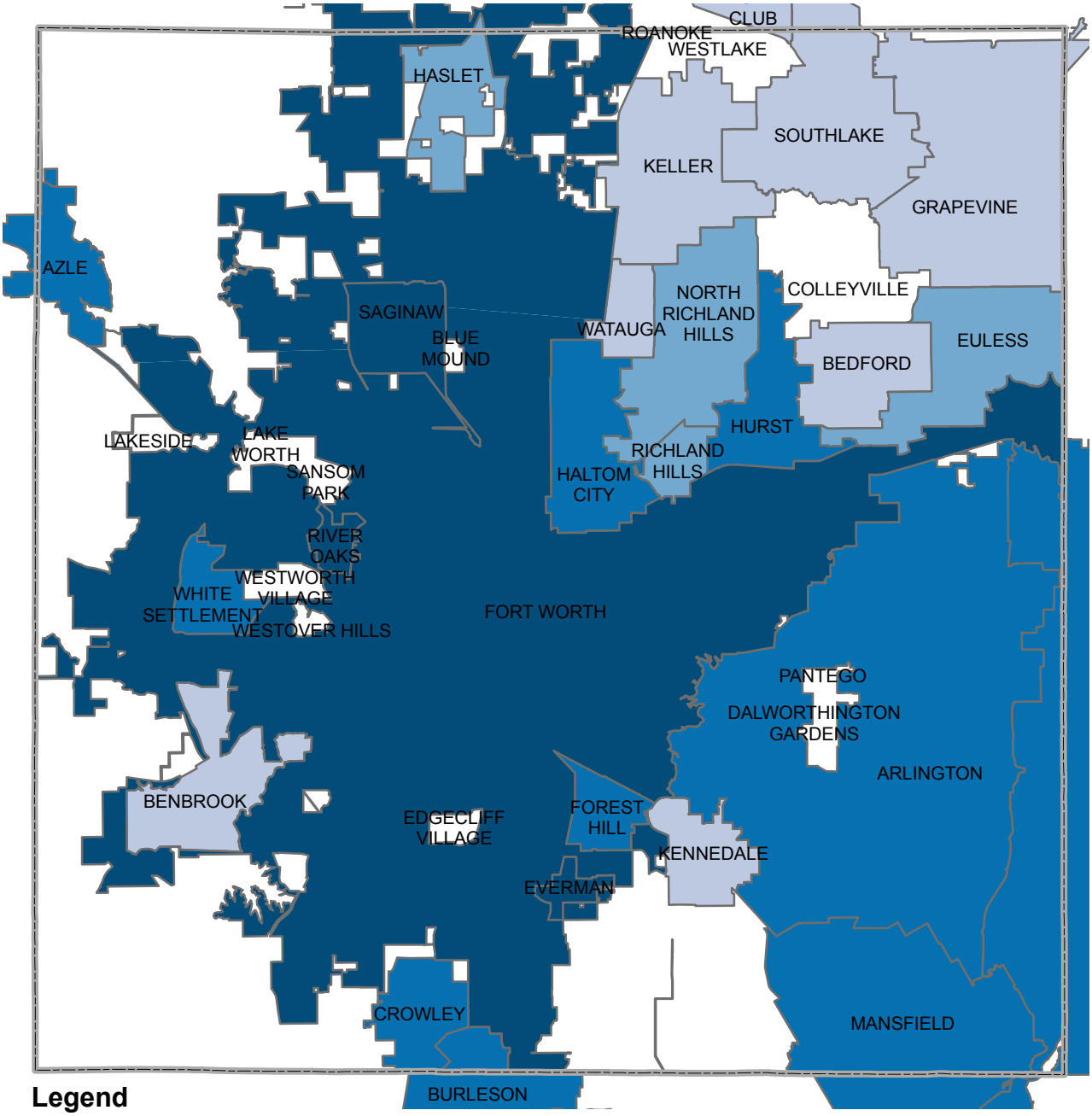


Data Source: NCTCOG

The racial/ethnic distribution of unemployment is not presented due to poor reporting of race and ethnicity for unemployment.

Figure I-9 below illustrates the geographic distribution of unemployment rates by city. Everman, Saginaw, River Oaks, and Fort Worth had the highest unemployment rates, while northeastern Tarrant County, Kennedale, and Benbrook had the lowest. Data were not available for all cities. This information is for 2004 only.

Figure I-9: Geographic Distribution of Unemployment in Tarrant County



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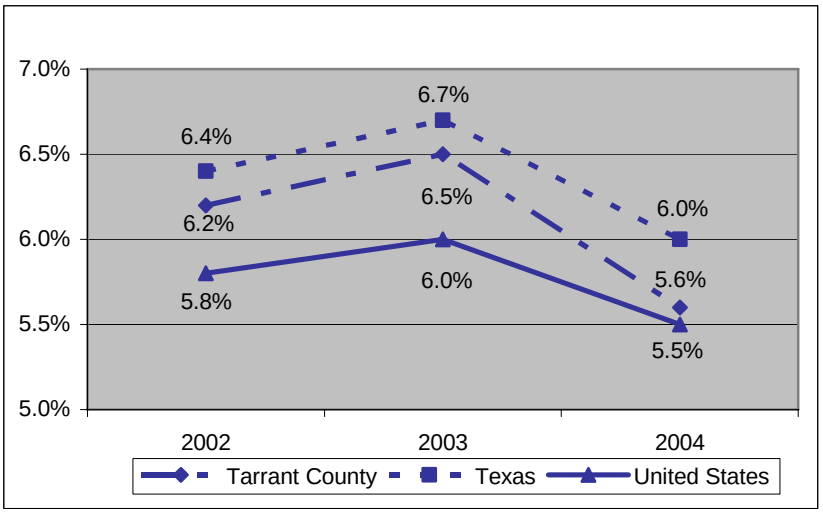
Comparison with Texas and the United States

The percent of overall unemployment in Tarrant County was slightly lower than that of Texas, but higher than the United States (Figure I-10).

Figure I-10: Unemployment in Tarrant County, Texas, and the United States, 2002-2004



Data Source: NCTCOG & Labor Market and Career Information

Indicator I-5. Disadvantaged Students

Disadvantaged refers to percent of enrolled students who are classified as economically disadvantaged. Economically disadvantaged students are those who are eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program or other public assistance programs. Among Tarrant County school districts, the highest percent of disadvantaged students in 2002-2004 was seen in the Masonic Home and School ISD (Table I-17).

Table I-17: Economically Disadvantaged Students by District, Tarrant County, 2002-2004

District	2002-2003 (Percent)	2003-2004 (Percent)	2004-2005 (Percent)
Arlington Classic Academy	7.3	18.9	22.6
Arlington ISD	43.2	46.1	49.2
Azle ISD	30.1	31.3	33.7
Birdville ISD	33.4	36.9	40.5
Burleson ISD	19.1	20.1	23.0
Carroll ISD	1.3	1.5	1.5
Castleberry ISD	55.9	60.5	64.0
Crowley ISD	22.9	28.7	29.8
Eagle Academy of Forth Worth	24.2	44.8	53.8
Eagle Mountain- Saginaw ISD	20.1	21.5	24.1
East Fort Worth Montessori ACA	N/A	91.0	93.6
Erath Excels Academy INC	25.4	61.3	41.0
Everman ISD	69.2	0.1	57.2
Fort Worth Academy of Fine Art	16.8	19.6	19.1
Fort Worth Can Academy	82.1	75.7	83.5
Fort Worth ISD	64.3	69.4	71.5
Grapevine-Colleyville ISD	8.3	9.8	11.0
Hurst-Euless-Bedford ISD	35.1	38.0	37.3
Keller ISD	9.9	11.4	12.6
Kennedale ISD	21.1	20.5	23.9
Lake Worth ISD	80.0	77.6	76.9
Mansfield ISD	22.3	24.1	25.3
Masonic Home and School ISD	100.0	95.8	86.6
Metro Charter Academy	31.2	37.9	34.8
Northwest ISD	19.3	19.0	19.3
Richard Milburn Academy	N/A	47.2	39.3
Theresa B. Lee Academy	50.5	60.5	80.5
Treetops School International	0.7	1.7	6.3
Westlake Academy Charter School	N/A	0.0	0.0
White Settlement ISD	37.6	40.1	41.6

ISD Independent School District
Data Source: Texas Education Agency

Figure I-11: Geographic Distribution of Disadvantaged Students

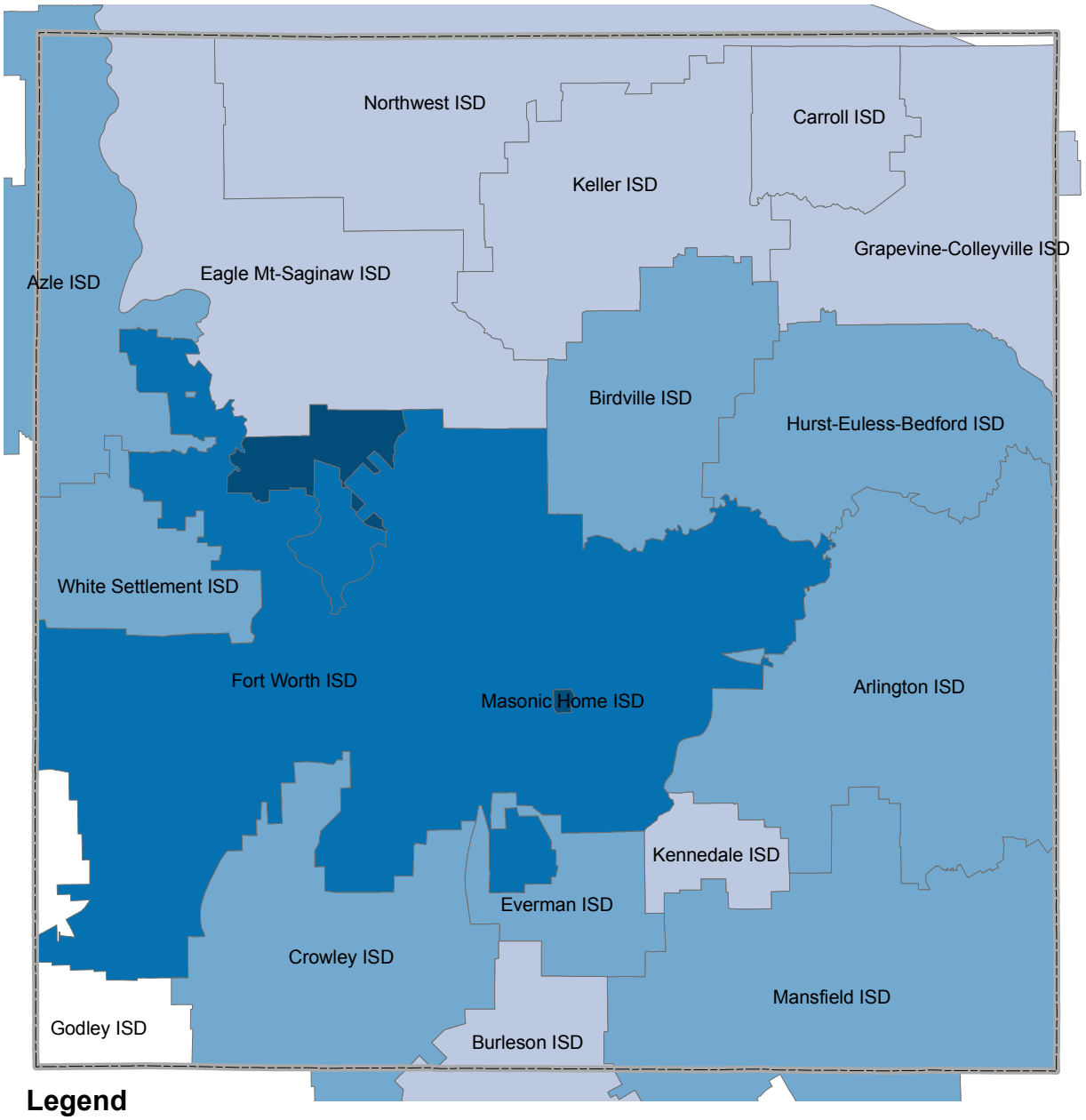


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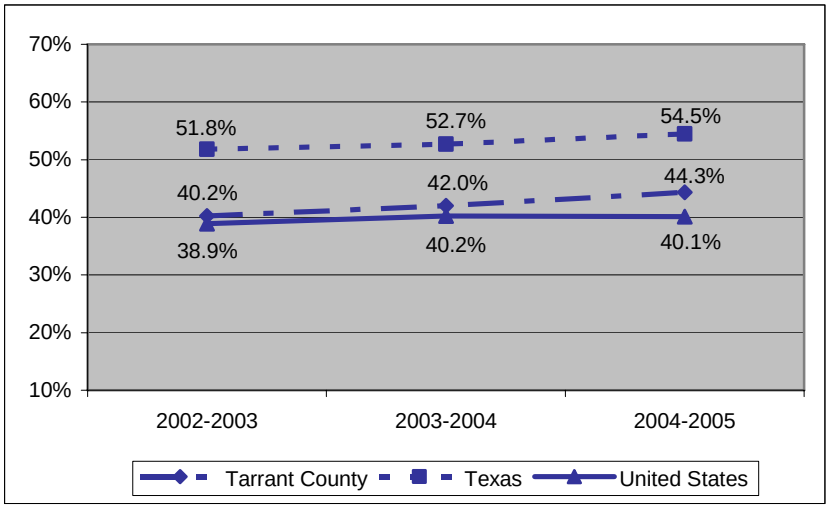
Figure I-11 on the preceding page shows the geographic distribution of disadvantaged students by school district. The district with the highest percent was the Masonic Home and School ISD.

Comparison with Texas and the United States

The percent of disadvantaged students in Tarrant County was lower than Texas, but comparable to the United States for the 2002-2003 and 2003-2004 school years. In the 2004-2005 school year, the percent of disadvantaged students in Tarrant County was lower than Texas, but higher than the United States (Figure I-12).

Figure I-12: Disadvantaged Students in Tarrant County,* Texas,* and the United States, 2002-2004



Data Source: National Center for Education Statistics,
United States Department of Education; *Texas Education Agency

Indicator I-6. Educational Attainment

Educational attainment is defined as the completion of a high school education among individuals 25 years and older. The overall educational attainment for Tarrant County has remained relatively stable in 2002-2004. Asians had the highest percent of educational attainment in 2002 and 2003, while Whites had the highest educational attainment in 2004. The educational attainment in men and women in Tarrant County was comparable in all the three years. However, Asian men consistently had a higher educational attainment compared to Asian women. No such pattern was seen in other racial/ethnic groups (Table I-18).

Table I-18: Educational Attainment by Race,* Tarrant County, 2002-2004

	2002		
	Male	**Female**	**Total**
White	86.8%	86.3%	86.5%
Black	82.8%	77.0%	79.6%
Asian	91.3%	83.4%	87.1%
2 or more races	66.0%	83.9%	75.0%
Other	52.4%	43.2%	48.3%
Total	82.6%	83.1%	82.6%
	2003		
	Male	**Female**	**Total**
White	85.5%	87.8%	86.7%
Black	84.9%	86.0%	85.5%
Asian	94.1%	83.5%	88.7%
2 or more races	93.1%	83.2%	88.9%
Other	48.4%	54.4%	51.3%
Total	83.7%	82.6%	83.7%
	2004		
	Male	**Female**	**Total**
White	86.3%	85.8%	86.0%
Black	86.4%	85.4%	85.8%
Asian	82.9%	81.6%	82.2%
2 or more races	80.7%	93.4%	88.7%
Other	59.2%	52.8%	56.5%
Total	84.1%	83.9%	84.0%

* Percent of adults who completed high school education or more within each race group

Data Source: United States Census Bureau

The percent of non-Hispanics with educational attainment was approximately double that of Hispanics in 2002-2004 (Table I-19).

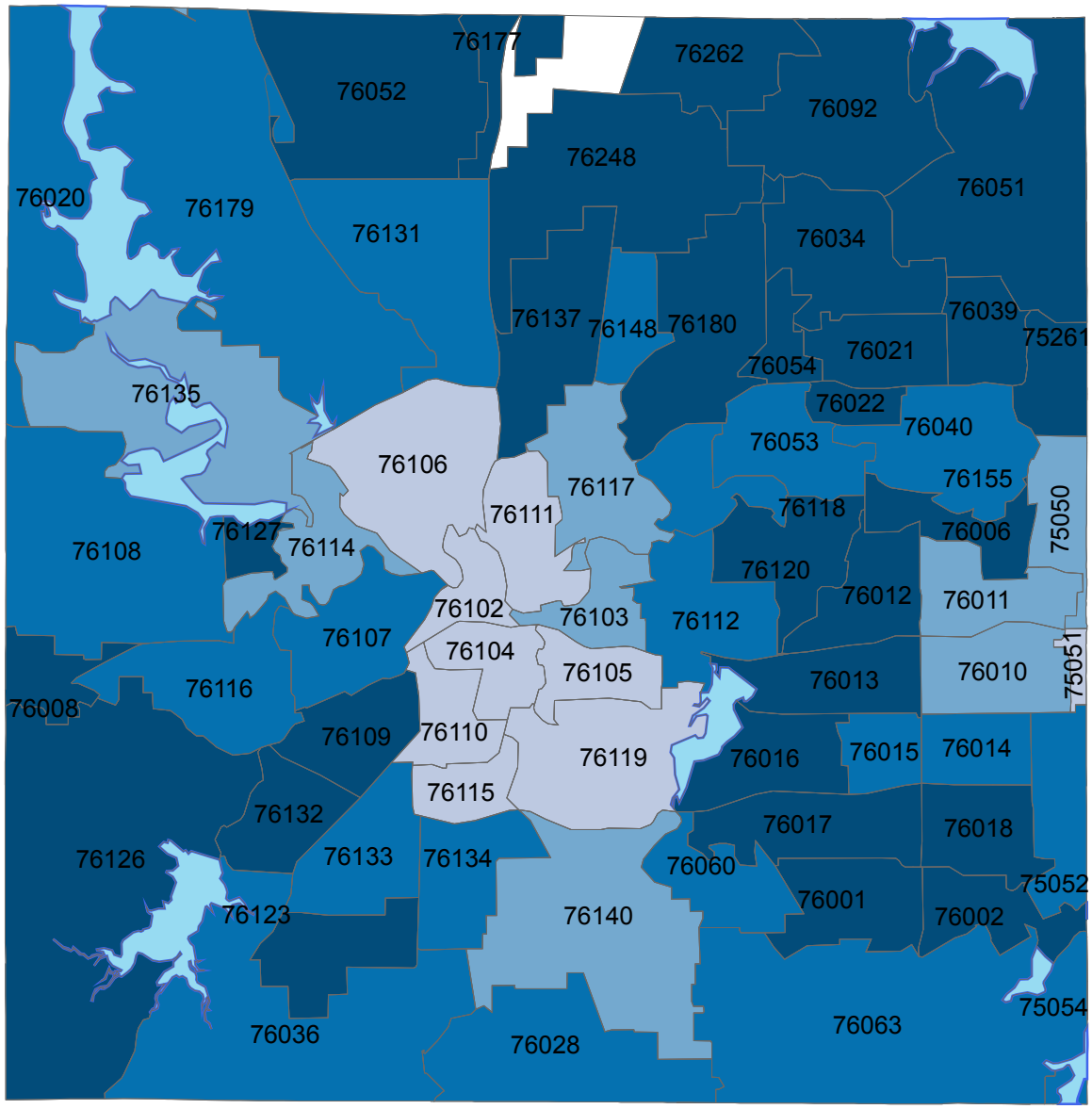
Table 19: Educational Attainment by Ethnicity,* Tarrant County, 2002-2004

	2002		
	Male	**Female**	**Total**
Hispanic	51.3%	51.7%	51.5%
Non-Hispanic	91.9%	90.1%	90.9%
	2003		
	Male	**Female**	**Total**
Hispanic	50.4%	53.9%	52.1%
Non-Hispanic	91.5%	92.4%	92.0%
	2004		
	Male	**Female**	**Total**
Hispanic	57.8%	49.8%	54.1%
Non-Hispanic	92.8%	92.9%	92.8%

* Percent of adults who completed high school education or more within each race group
Data Source: United States Census Bureau

Figure I-13 on the following page illustrates the distribution of educational attainment by ZIP code. The ZIP codes in northeastern, southwestern, and part of Arlington show the highest percentages of the population having completed a high school education. This is year 2000 census data. Current estimates are not available at the ZIP code level.

Figure I-13: Geographic Distribution of Educational Attainment



Legend

34.22% - 61.79%	76.73% - 87.83%	Water	
61.8% - 76.72%	87.84% - 100%	Excluded Data	

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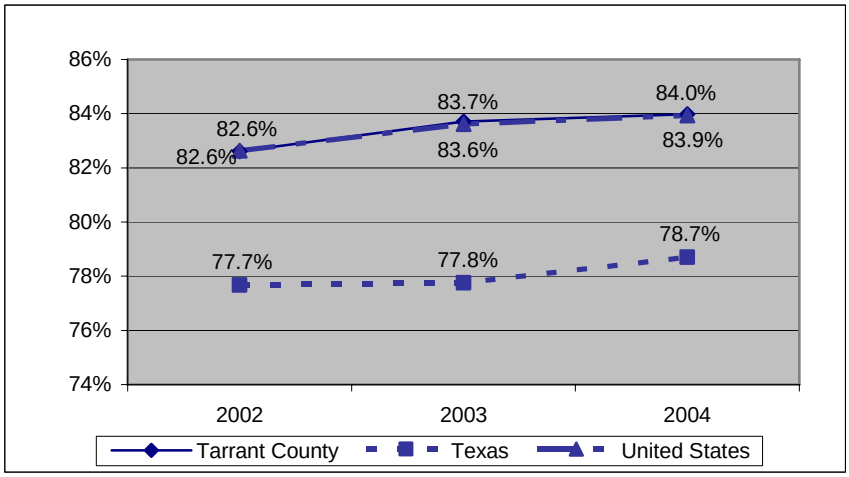
Comparison with Texas and the United States

The percent of individuals with educational attainment in Tarrant County was comparable to that of the nation and higher than that of Texas in 2002-2004 (Figure I-14).

Figure I-14: Educational Attainment in Tarrant County, Texas, and the United States, 2002-2004



Data Source: United States Census Bureau

Comparison with Healthy People 2010 Objective

The overall percent of educational attainment in Tarrant County did not meet the Healthy People 2010 objective of 90 percent in 2002-2004 (Table I-19).

Table I-19: Comparison of Educational Attainment in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
7-1. Increase high school completion to 90% (Baseline: 85% of people aged 18-24 years had completed high school in 1998)	**2000**	**2003**	**2004**
	82.6%	83.7%	84.0%

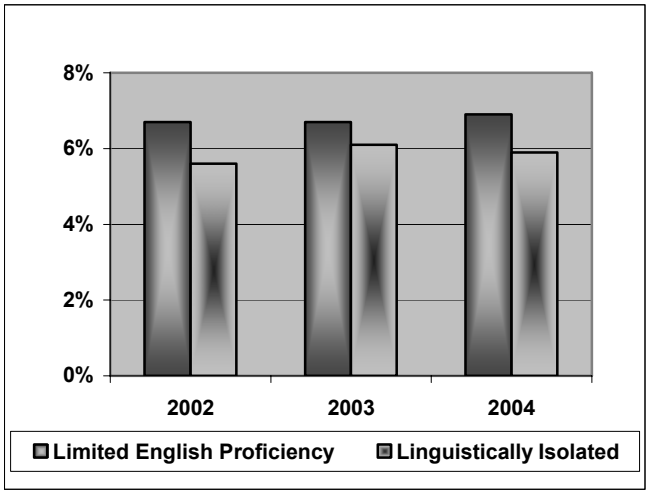
Indicator I-7. Language Proficiency

- **Limited English Proficiency**
- **Linguistic Isolation**

Limited English proficiency is defined as individuals 5 years and older who indicated that they spoke English "not well" or "not at all" on the Census 2000 survey. In Tarrant County, Limited English Proficiency was 6.7 percent in 2002, 6.7 percent in 2003, and 6.9 percent in 2004 (Figure I-9).

A linguistically isolated household is one in which all members 14 years and older speak a non-English language and also speak English less than "very well" (have difficulty with English). The percent of linguistically isolated households in Tarrant County was 5.6 percent in 2002, 6.1 percent in 2003, and 5.9 percent in 2004 (Figure I-15).

Figure I-15: Language Proficiency, Tarrant County, 2002-2004



Data Source: United States Census Bureau

From 2002-2004, Spanish speaking households were found to be the most linguistically isolated. In 2002, more than 27 percent of the Spanish speaking households and more than 24 percent of households who spoke Asian and Pacific Island languages were linguistically isolated. In 2003 and 2004, more than 29 percent of the Spanish speaking households were linguistically isolated. More than 27 percent and 22 percent of households who spoke Asian or Pacific Island languages were linguistically isolated in 2003 and 2004, respectively (Table I-21).

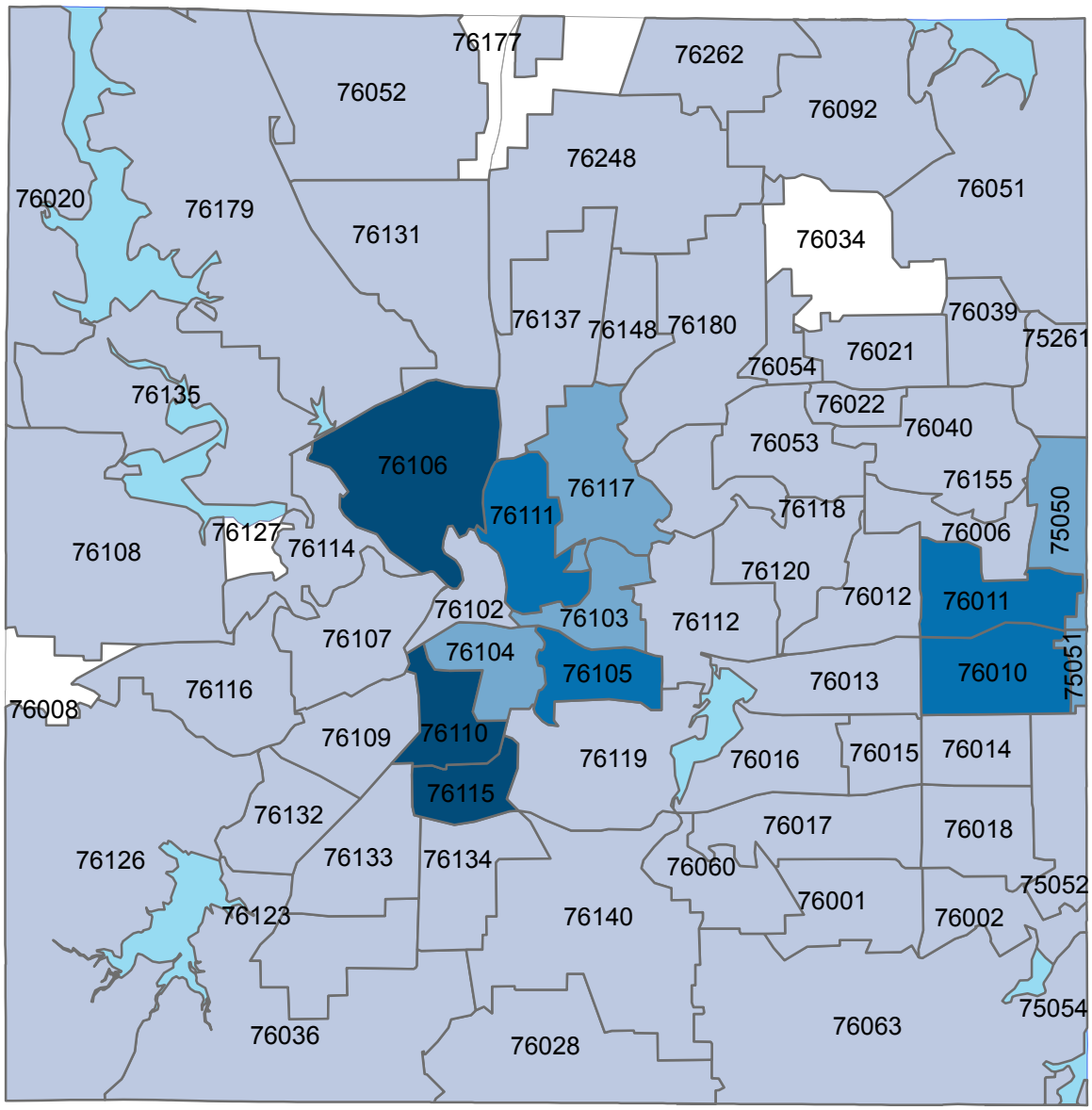
Table I-21: Linguistic Isolation by Household Language, Tarrant County, 2002-2004

Household Language	2002 Number of Households	2002 Linguistically Isolated Households	2002 Percent*
English	425,939		
Spanish	86,039	24,007	27.9
Other Indo-European languages	13,512	2,849	21.0
Asian and Pacific Island languages	13,467	3,296	24.5
Other languages	3,538	319	9.0
Total Household	542,495	30,471	5.6
Household Language	**2003 Number of Households**	**2003 Linguistically Isolated Households**	**2003 Percent***
English	429,220		
Spanish	91,156	26,910	29.5
Other Indo-European languages	14,215	1,208	8.5
Asian and Pacific Island languages	14,103	3,936	27.9
Other languages	5,022	1,466	29.2
Total Household	553,716	33,520	6.1
Household Language	**2004 Number of Households**	**2004 Linguistically Isolated Households**	**2004 Percent***
English	445,285		
Spanish	94,054	28,049	29.8
Other Indo-European languages	15,826	1,761	11.1
Asian and Pacific Island languages	14,283	3,230	22.6
Other languages	3,911	583	14.9
Total Household	573,359	33,623	5.9

*Percent in each household language group
Data Source: United States Census Bureau

Figure I-16 on the next page shows linguistic isolation by ZIP code. ZIP codes 76106, 76110, 76115 had the highest percentages of linguistic isolation. Year 2000 Census data were used for this map. Current estimates do not exist at the ZIP code level.

Figure I-16: Geographic Distribution of Linguistic Isolation



Legend

1% - 4%	9% - 12%	Excluded Data
5% - 8%	13% - 16%	Water

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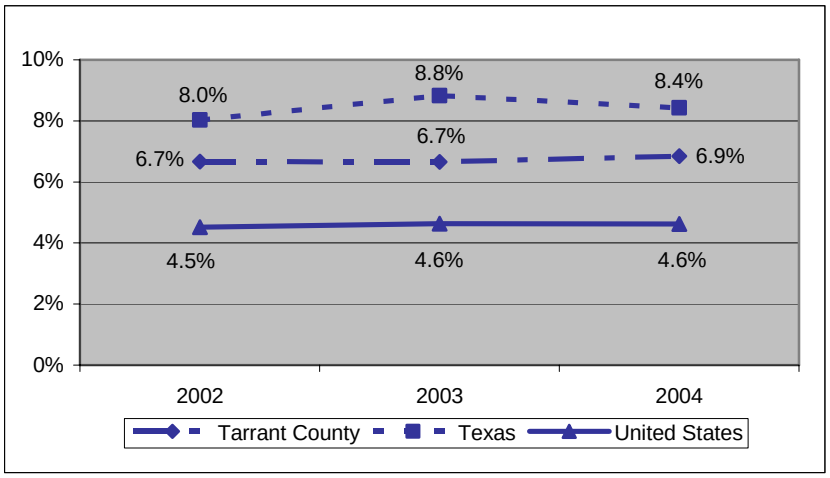
Comparison with Texas and the United States

The percent of Tarrant County households that have limited English proficiency was lower than that of Texas and higher than that of the United States (Figure I-17).

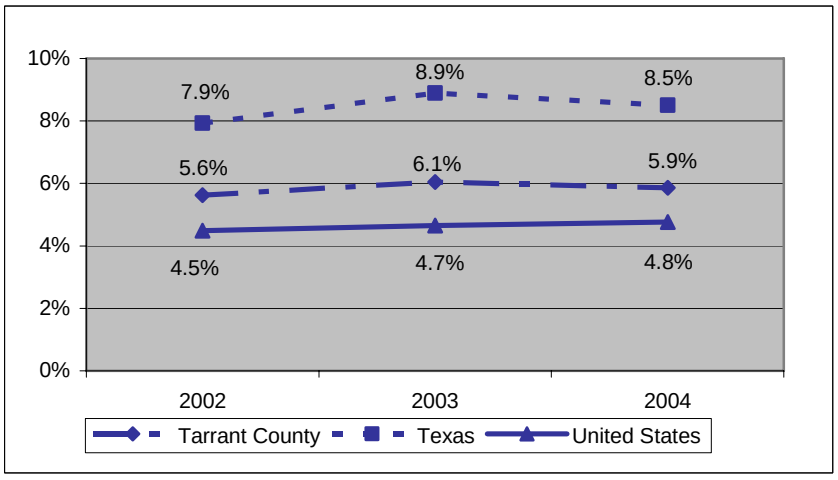
Figure I-17: Limited English Proficiency in Tarrant County, Texas, and the United States, 2002-2004



Data Source: United States Census Bureau

The percent of Tarrant County households that were linguistically isolated was lower than Texas, but higher than the United States (Figure I-18).

Figure I-18: Linguistic Isolation in Tarrant County, Texas, and the United States, 2002-2004

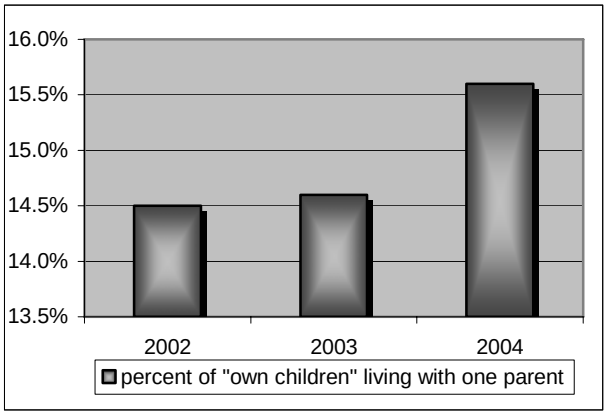


Data Source: United States Census Bureau

Indicator I-8. Single-Parent Households

A single-parent household is defined as a household with either a single male or a single female as head of household. In Tarrant County, the percent of single-parent households with "own children" has been increasing steadily with 14.5 percent in 2002, 14.6 percent in 2003, and 15.6 percent in 2004 (Figure I-19).

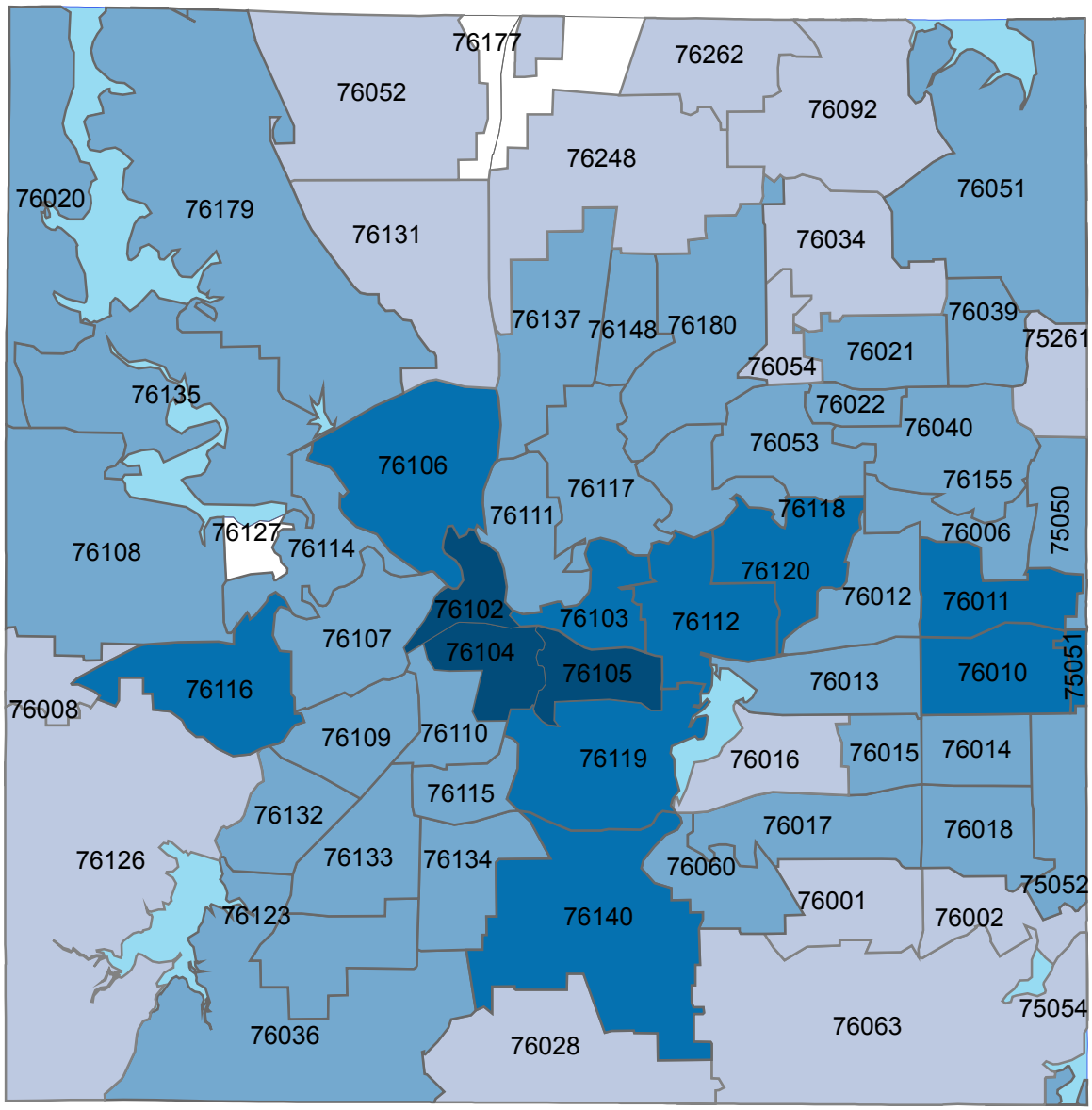
Figure I-19: Single-Parent Households, Tarrant County, 2002-2004



Data Source: United States Census Bureau

In Figure I-20 on the following page, single-parent households are mapped by ZIP code. The ZIP codes with the highest percentage of single-parent households are 76105, 76104, and 76102.

Figure I-20: Geographic Distribution of Single-Parent Households



Legend

4.00% - 14.75%	30.00% - 44.25%	Excluded Data	
15.00% - 29.50%	47.00% - 59.00%	Water	1 inch equals 5 miles

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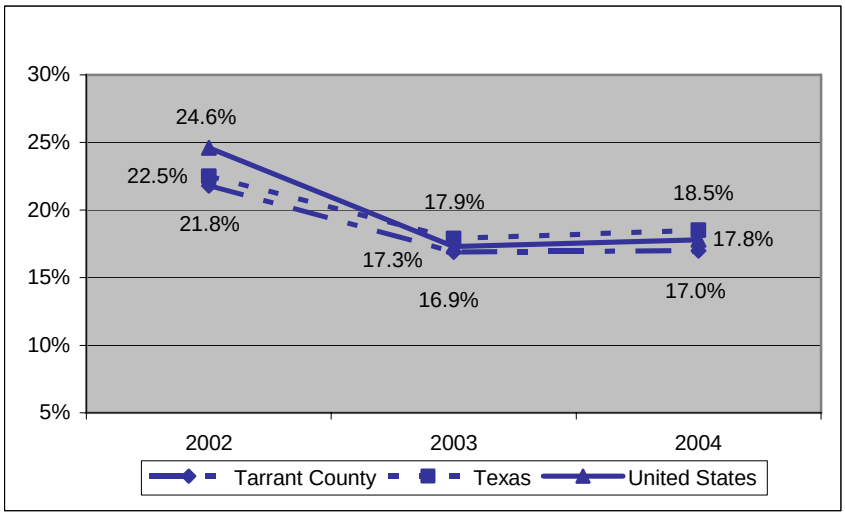
Comparison with Texas and the United States

The percent of single-parent households in Tarrant County has been consistently lower than the state and national estimate of single parent household in 2002-2004 (Figure I-21).

Figure I-21: Single-Parent Households in Tarrant County, Texas, and the United States, 2002-2004

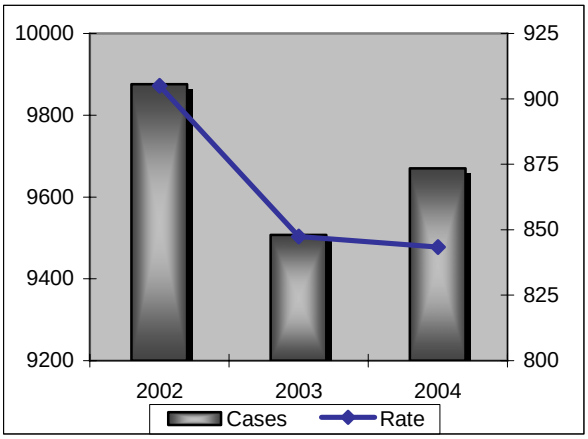


Data Source: United States Census Bureau

Indicator I-9. All Cause Mortality Rate

All cause mortality in Tarrant County decreased from 9,876 deaths (904.9 per 100,000 population) in 2002 to 9,507 deaths (847.4 per 100,000 population) in 2003 and 9,670 deaths (843.4 per 100,000 population) in 2004 (Figure I-22).

Figure I-22: All Cause Mortality, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

The all cause mortality rate among males in Tarrant County was higher than among females for 2002-2004 (Table I-22).

Table I-22: All Cause Mortality by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	4,787	1,028.7	4,642	957.0	4,840	972.4
Female	5,089	806.3	4,865	756.1	4,830	739.4

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

The all cause mortality rate was highest among Blacks, followed by Whites then Hispanics each year. The rate among Blacks was more than one and a half times higher than Hispanics in 2002-2004 (Table I-23).

Table I-23: All Cause Mortality by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	7,729	904.9	7,379	852.9	7,442	850.1
Black	1,338	1,185.2	1,324	1,123.0	1,330	1,081.3
Hispanic	678	653.4	662	627.4	740	629.8
Other	131	408.0	142	395.8	158	385.1

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

The all cause mortality rate increased among older age groups. The rate was highest among the 75 year and older age group, followed by the 65-74 year age group, 55-64 year age group, then the less than 1 year age group (Table I-24).

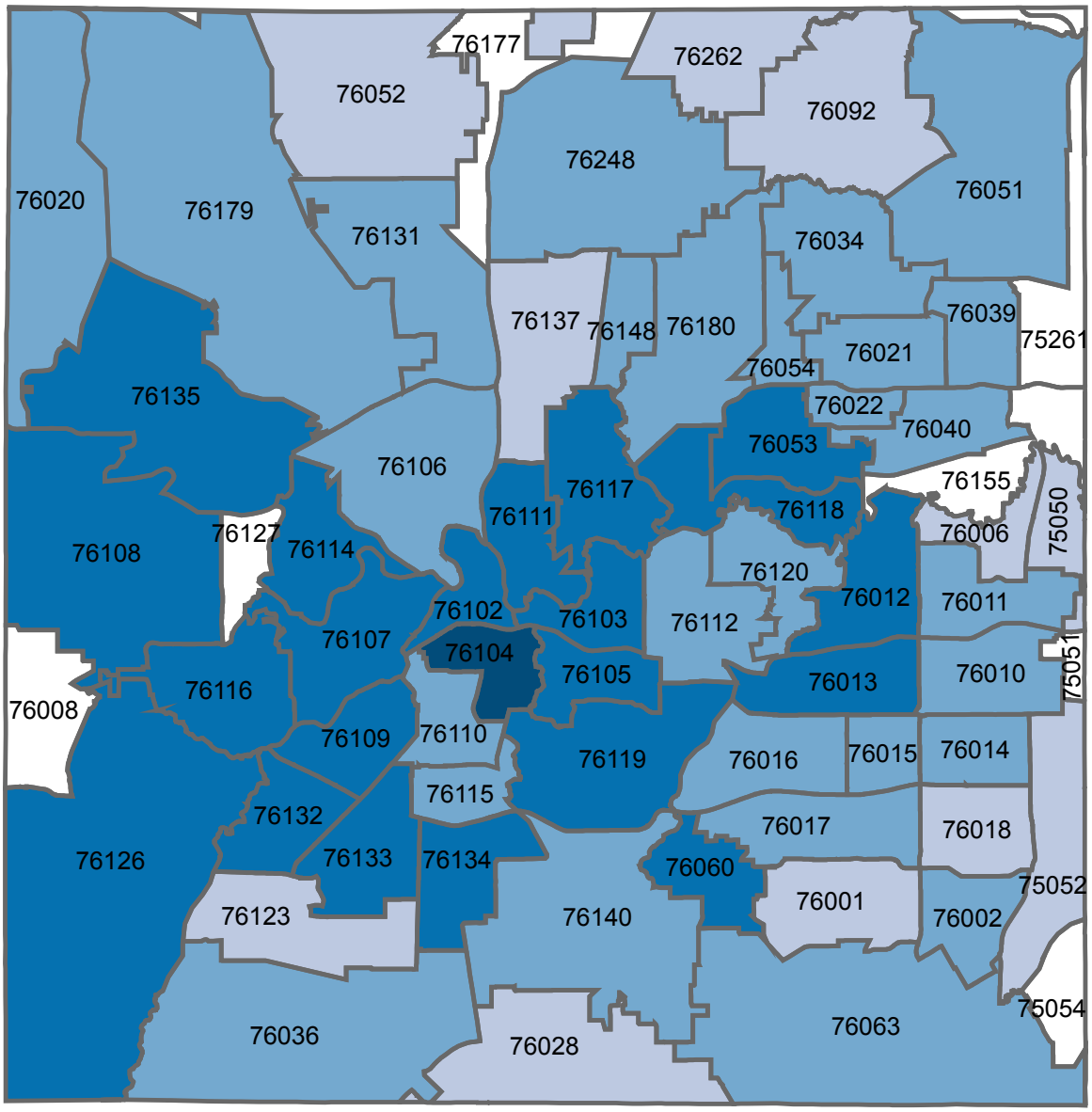
Table I-24: All Cause Mortality by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
<1	183	724.0	208	777.0	177	651.4
1-4	32	33.2	27	26.9	35	33.8
5-14	42	17.7	29	12.1	41	17.0
15-24	167	76.1	153	68.3	181	79.0
25-34	195	78.6	214	84.9	208	81.2
35-44	505	200.0	496	198.0	443	176.3
45-54	883	434.8	836	398.3	871	403.1
55-64	1,138	955.7	1,143	890.1	1,246	918.7
65-74	1,781	2,581.2	1,693	2,420.8	1,708	2,405.4
75+	4,943	8687.0	4,704	8102.0	4,759	8,055.3

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Figure I-23 on the following page illustrates all cause mortality by ZIP code. The ZIP code with the highest rate was 76104. The ZIP codes falling into the next highest quartile were generally located in central and central west Tarrant County.

Figure I-23: Geographic Distribution of All Cause Mortality



Legend

118.86 - 1142.14 | 1142.15 - 2284.28 | 2284.29 - 3426.42 | 3426.43 - 4568.56 | Excluded Data

1 inch equals 5 miles

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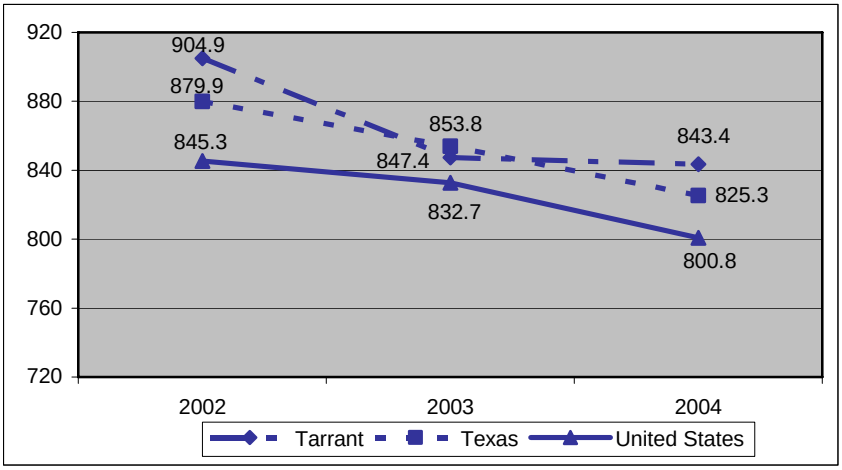
Comparison with Texas and the United States

The all cause mortality rate in Tarrant County in 2002 and 2004 was higher than Texas and the United States. In 2003, the rate in Tarrant County was higher than the United States, but slightly lower than Texas (Figure I-24).

Figure I-24: All Cause Mortality Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services; National Center for Health Statistics

Quality of Life

Definitions and Data Sources

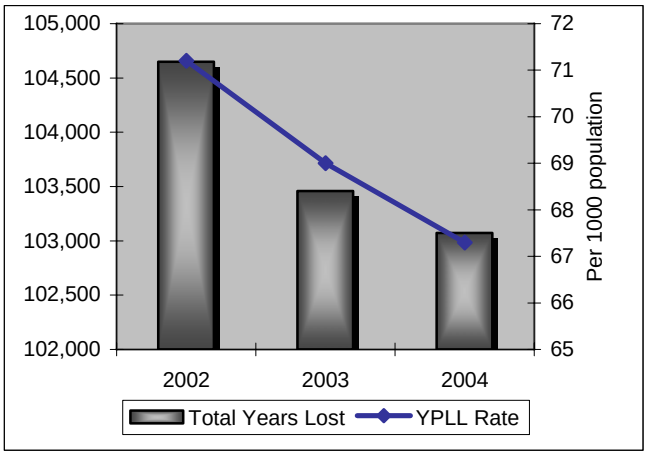
Years of Potential Life Lost (YPLL)

- YPLL - Years of potential life lost in the years
- Numerator – Sum of years of life lost before 75 years of age by persons who die before that age
- Denominator – Estimated population aged 0-74,
- Rate – per 1,000 population
- Data Source - Texas Department of State Health Services, Center for Health Statistics

Indicator II-1. Years of Potential Life Lost

Years of Potential Life Lost (YPLL) is the sum of the years that people who die in a year would have lived had they experienced a normal life expectancy. The total years lost decreased from 104,648 (71.2 per 1,000 population) in 2002 to 103,459 (69.0 per 1,000 population) in 2003 and 103,074 (67.3 per 1,000 population) in 2004 (Figure II-1).

Figure II-1: Overall Years of Potential Life Lost, Tarrant County, 2002-2004



Rate per 1,000 population age 0 to 74
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The YPLL rate in males was slightly more than one and a half times that of females for 2002-2004 (Table II-1).

Table II-1: Years of Potential Life Lost by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Total Years Lost	YPLL Rate	Total Years Lost	YPLL Rate	Total Years Lost	YPLL Rate
Males	63,967	86.8	63,060	83.7	63,726	82.9
Females	40,681	55.5	40,399	54.0	39,348	51.6

Rate per 1,000 population age 0 to 74
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Among race/ethnicity, Blacks had the highest YPLL rate followed by Whites and Hispanics. The YPLL rate in Blacks was approximately two to two and a half times that of Hispanics and Other races (Table II-2).

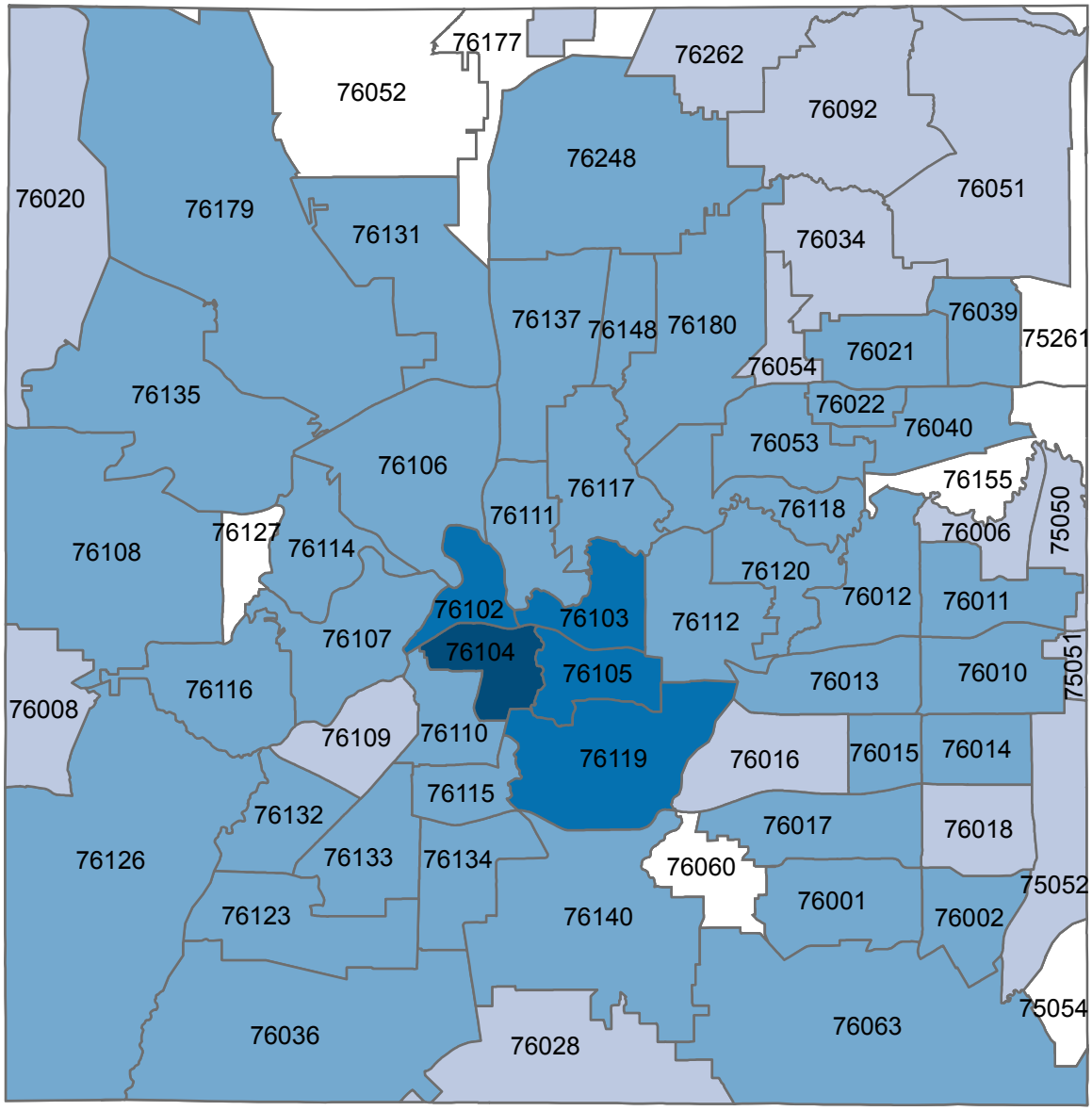
Table II-2: Years of Potential Life Lost by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Total Years Lost	YPLL Rate	Total Years Lost	YPLL Rate	Total Years Lost	YPLL Rate
White	63,803	73.1	63,971	73.5	60,204	69.4
Black	22,460	114.0	22,112	109.1	22,742	109.3
Hispanic	16,162	49.7	14,597	41.8	17,544	47.2
Other	2,224	30.1	2,779	35.1	2,584	30.7

Rate per 1,000 population age 0 to 74
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

On the following page, Figure II-2 shows the distribution of years of potential life lost rate by ZIP code. The ZIP code with the highest rate is 76104. The ZIP codes 76102, 76103, 76105, and 76119 surrounding 76104 are in the next highest quartile.

Figure II-2: Geographic Distribution of Years of Potential Life Lost Rate



Legend

0.17 - 47.26 | 47.27 - 94.53 | 94.54 - 141.79 | 141.80 - 189.06

1 inch equals 5 miles

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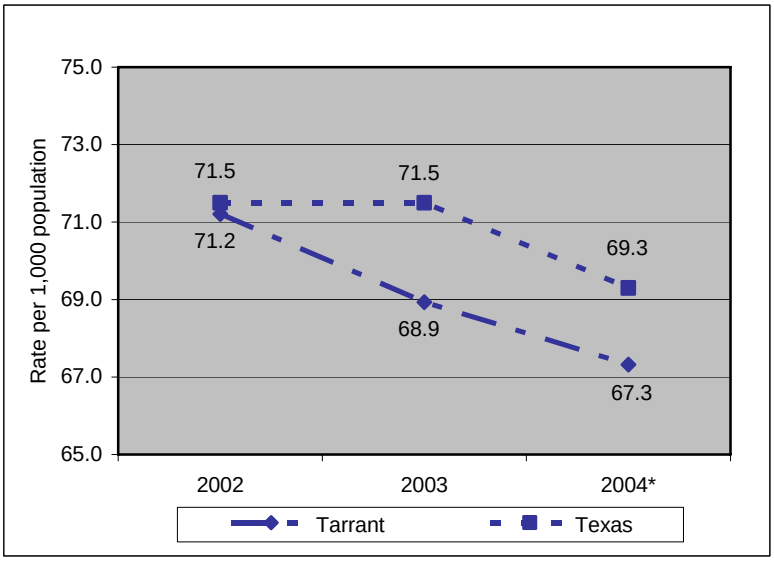
Comparison with Texas and the United States

The YPLL rate in Tarrant County was comparable to that of Texas in 2002, but lower than Texas in 2003-2004. The YPLL data are not available at the national level (Figure II-3).

Figure II-3: Years of Potential Life Lost Rate in Tarrant County and Texas, 2002-2004



Rate per 1,000 population ages 0 to 7
* 2004 data are preliminary
YPLL data are not available for the United States
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Comparison with Healthy People 2010 Objective

There are no corresponding objectives for Years of Potential Life Lost in Healthy People 2010.

Health Resources

Definitions and Data Sources

Health Professional Shortage Areas and Medically Underserved Areas

- Data Source – 2004 Tarrant County community health checkup, Dallas Fort Worth Hospital Council

Health Care Professionals (Primary Care Physicians, Registered Nurses, and Dentists)

- Numerator – Estimated population in Tarrant County
- Denominator – Number of health care professionals
- Rate – per 1,000 population
- Data Source –Dallas Fort Worth Hospital Council

Medicaid Participating Health Care Professionals (Physicians and Dentists)

- Data Source – Texas Medicaid and Healthcare Partnership; Texas Medical Board; Texas State Board of Dental Examiners

Ratio of Medicaid Eligibles to Participating Primary Care Physician (PCP)

- Medicaid eligibles; PCPs; Medicaid eligibles per PCP
- Data Source – Texas Medicaid and Healthcare Partnership; Texas Medical Board; Texas State Board of Dental Examiners; Texas Health and Human Services Commission

Local Health Services in Tarrant County

- Data Source – Tarrant County Public Health; Dallas Fort Worth Hospital Council

Indicator III-1. Health Professional Shortage Areas and Medically Underserved Areas

Table III-1: Health Resources, Tarrant County, 2004

Designation Type	Designated	MUA/MUP Description
HPSA	Partial County and Facility	Poly/Stop Six, CT 1063.00, 1062.02, 1062.01, 1046.04, 1046.01, 1037.02, 1037.01, 1036.01, 1035.00
		Diamond Hill, CT 1050.06, 1050.01, 1011-1008, 1004, 1003, 1002.02, 1002.01, 1005.01, 1005.02
		JPS Primary Care Clinics (Family Health, ObGyn, Med, Ped) in census tract 1040
MUA	Partial County	East Tarrant, Low Income, Census Tracts 1130.02, 1217.01, 1217.01, 1217.02, 1218, 1219.01, 1219.02, 1220-1222, 1228, 1229
		West Tarrant, Census Tracts 1017
		Diamond Hill, Census Tracts 1001.02, 1002.01, 1002.02, 1003, 1004, 1005.01, 1005.02, 1008-1011, 1050.01, 1050.06

HPSA Health Professional Shortage Area
MUA Medically Underserved Area
MUP Medical Underserved Population
Data Source: Dallas Fort Worth Hospital Council

The following information on HPSAs and MUAs is taken directly from the Dallas Fort Worth Hospital Council Community Health Checkup 2004 for Tarrant County.

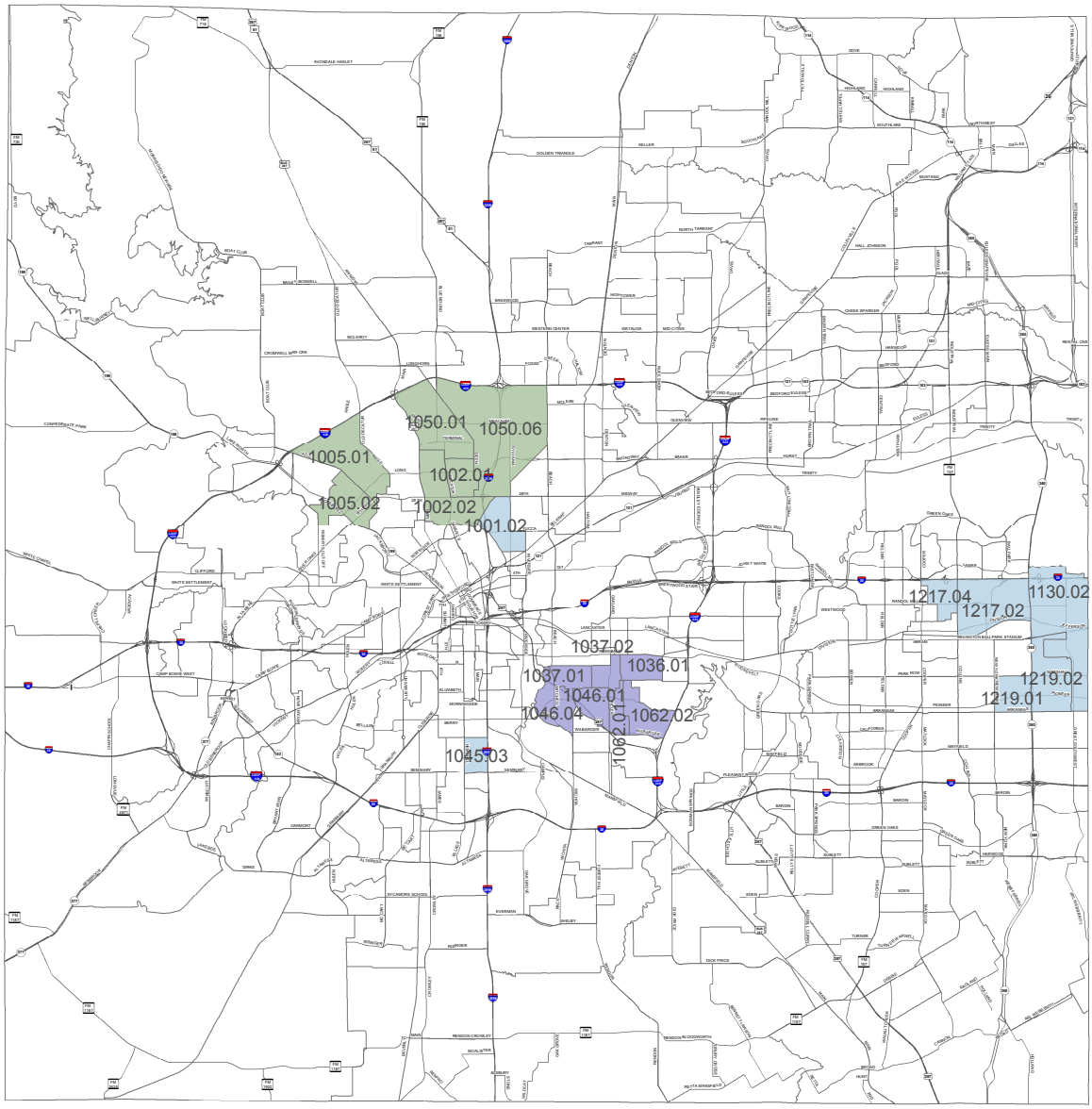
The federal government designates certain geographic areas as Health Professional Shortage Areas (HPSAs) and/or Medically Underserved Areas (MUAs). Generally, there are three major components of the federal HPSA criteria. These include:

1. Rational service area,
2. Population-to-physician ratio,
3. Accessibility of populations to primary care resources in surrounding areas.

An MUA is composed of several components. These include:

1. Ratio of physicians to population,
2. Number of individuals over age 65,
3. Number of individuals below poverty level,
4. Infant mortality rate.

Figure III-1: HPSAs and MUAs by Census Tract in Tarrant County, 2003



Legend

BOTH HPSA MUA

1 inch equals 5 miles

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Indicator III-2. Health Care Professionals

The population to health care professional ratio in Tarrant County was slightly less than Texas in 2002-2004 for primary care physicians, registered nurses, and dentists (Table III-2).

Table III-2: Population to Health Care Professional Ratio, 2002-2004

Health Care Professional	2002		
	Number of HCP	Population per HCP	
	Tarrant	Tarrant	Texas
Primary Care Physicians	1,141	1,337.8	1,463.8
Registered Nurses	9,860	154.8	164.9
Dentists	605	2,523.0	2,815.8
Health Care Professional	**2003**		
	Number of HCP	Population per HCP	
	Tarrant	Tarrant	Texas
Primary Care Physicians	1,142	1,365.2	1,447.7
Registered Nurses	10,224	152.5	161.9
Dentists	633	2,463.0	2,786.1
Health Care Professional	**2004**		
	Number of HCP	Population per HCP	
	Tarrant	Tarrant	Texas
Primary Care Physicians	1,153	1,379.2	1,464.2
Registered Nurses	10,603	150.0	159.7
Dentists	632	2,516.3	2,791.4

HCP Health Care Professional
Data Source: Dallas Fort Worth Hospital Council

Indicator III-3. Medicaid Participating Health Care Professionals

There were 2,081 residents for every primary care physician and 12,110 residents for every dentist that accepted Medicaid in Tarrant County in March 2007. Only current data are available for health care providers accepting Medicaid (Table III-3).

Table III-3: Population to Health Professional Ratio, Tarrant County, 2007

Professionals	Number of HCP	Population per HCP
Primary Care Physicians (PCP)	803	2,081
Dentists	138	12,110

Data Source: Texas Medicaid and Healthcare Partnership; Texas Medical Board; Texas State Board of Dental Examiners
PCP = general practice, family medicine, obstetrics and gynecology, internal medicine, pediatrics, and geriatrics

Indicator III-4. Ratio of Medicaid Eligibles to Participating Primary Care Physicians

There were 129,186 residents in Tarrant County receiving Medicaid in March 2007. There were 161 residents on Medicaid for every primary care physician accepting Medicaid and 936 residents on Medicaid for every dentist accepting Medicaid (Table III-4).

Table III-4: Medicaid Eligible by Primary Care Physicians, Tarrant County, 2007

	Number
Number eligible for Medicaid	129,186
Medicaid Provider (PCP)	803
Medicaid Provider (Dentist)	138
Medicaid eligible per Medicaid Provider (PCP)	161
Medicaid eligible per Medicaid Provider (Dentist)	936

Texas Medicaid and Healthcare Partnership; Texas Medical Board; Texas State Board of Dental Examiners; Texas Health and Human Services Commission
PCP = general practice, family medicine, obstetrics and gynecology, internal medicine, pediatrics, and geriatrics

Indicator III-5. Local Health Services in Tarrant County

There are 22 hospitals and 43 local health clinics providing health services in Tarrant County. A list of locations is included as Appendix A. Figure III-2 on the following page shows a map of locations of local health services.

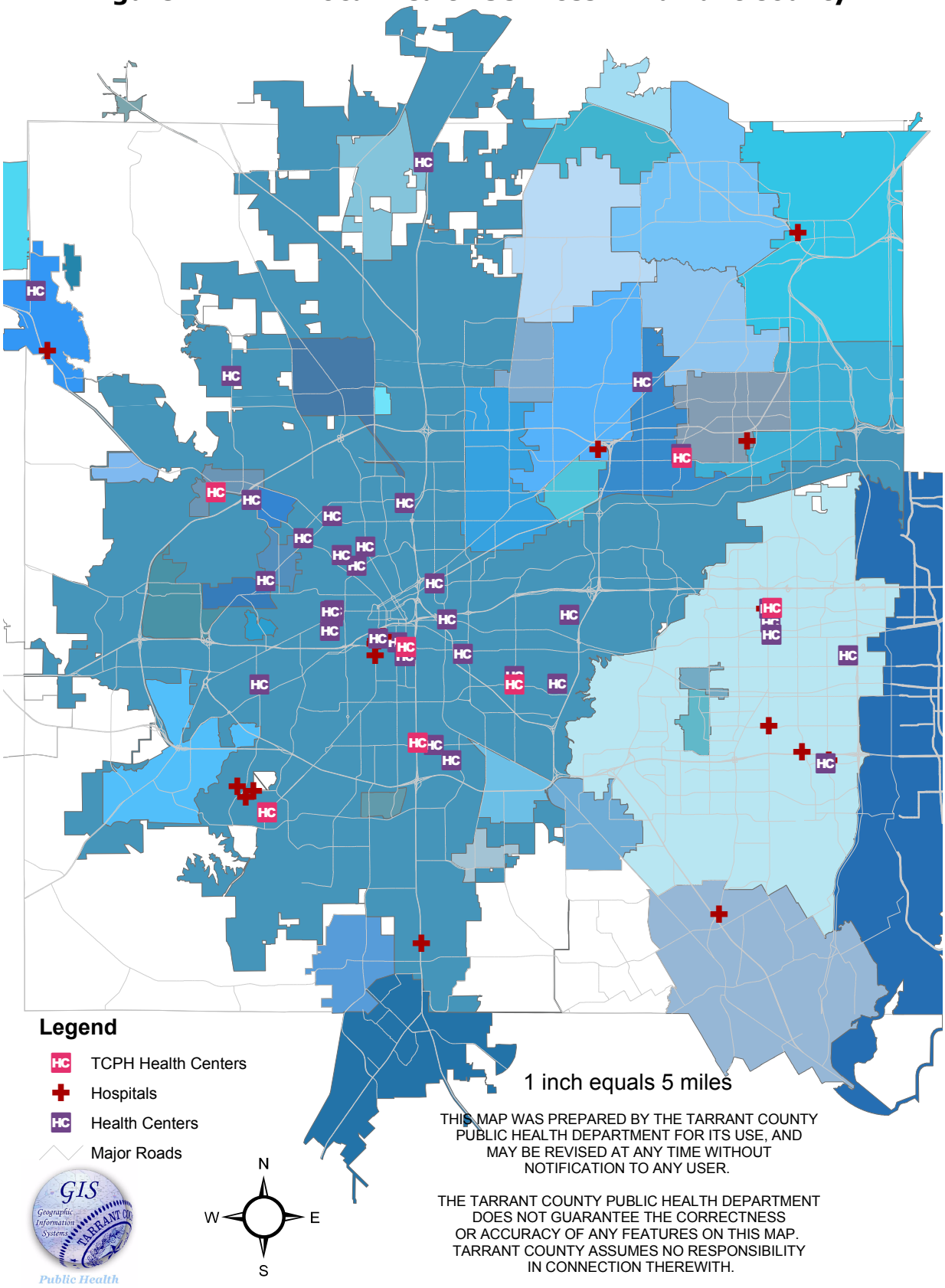
The distribution for the market share of hospital admissions remained stable for the larger hospitals in Tarrant County in 2002-2004.

Table III-5: Market Share of Hospital Admissions, Tarrant County, 2002-2004

Hospital	2002	2003	2004
Arlington Memorial Medical Center	9.0%	10.4%	9.8%
Baylor All Saints Fort Worth	7.3%	6.7%	6.5%
Baylor Regional Grapevine	N/A	3.8%	5.0%
Cook Childrens Medical Center	3.7%	N/A	4.50%
Harris Methodist Fort Worth	16.8%	16.1%	16.1%
Harris Methodist HEB	7.4%	7.1%	7.5%
John Peter Smith Hospital	11.5%	12.1%	11.7%
Medical Center of Arlington	6.0%	7.0%	6.2%
North Hills Hospital	4.7%	4.4%	4.7%
Osteopathic Medical Center of Texas*	4.7%	4.4%	-
Plaza Medical Center	4.5%	4.3%	4.8%
Remaining hospitals	24.5%	23.7%	23.3%

* Osteopathic Medical Center closed in October 2004
N/A not available
Data Source: Dallas Fort Worth Hospital Council

Figure III-2: Local Health Services in Tarrant County



Maternal and Child Health

Definitions and Data Sources

Infant Mortality

- Infant - Under 1 year old
- Numerator - Number of deaths to infants born in 2002 & 2003
- Denominator - Number of live births
- Rate - per 1,000 population
- Source - Texas Department of State Health Services, Center for Health Statistics, linked Birth Infant Death File
- Note: 2004 data not available

Child Mortality

- Child - Age 1 to 14 years (inclusive)
- Numerator - Number of deaths to children in the age group
- Denominator - Estimated population ages 1 – 14 years
- Rate - per 100,000 population
- Source - Texas Department of State Health Services, Bureau of Vital Statistics

Prenatal Care in First Trimester

- Numerator - Number of births to mothers who had at least one prenatal visit in the first three months of pregnancy
- Denominator - Number of births
- Data Source - Texas Department of State Health Services, Bureau of Vital Statistics
- Note: 2004 data not available

Low Birth Weight

- Low Birth Weight - Less than 2,500 grams (approximately 5lb 9oz or less.)
- Numerator - Number of births with low birth weight
- Denominator - Number of births with known birth weight
- Data Source - Texas Department of State Health Services, Bureau of Vital Statistics
- Note: 2004 data not available

Teen Pregnancy

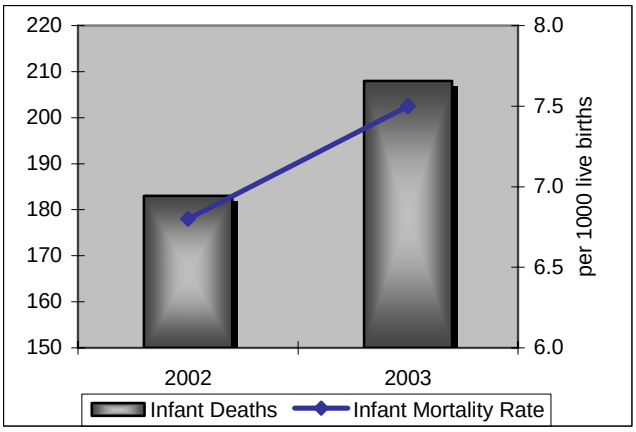
- Teen Pregnancy - Live births plus fetal deaths plus abortions for mothers 13-19 years of age
- Numerator - Number of teen pregnancies
- Denominator - Estimated population of females in this age group

- Rate - per 1,000 population
- Data Source - Texas Department of State Health Services, Bureau of Vital Statistics
- Population estimates from the Texas State Data Center and Office of the State Demographer
- Note: 2004 data not available

Indicator IV-1. Infant Mortality

Infant deaths include infants less than 1 year old who have died. In 2003, the infant mortality rate was 7.5 per 1,000 live births, which was higher than the infant mortality rate of 6.8 per 1,000 live births in 2002. The total number of infant deaths in 2002 and 2003 was 183 and 208, respectively (Figure IV-1).

Figure IV-1: Infant Mortality Rate, Tarrant County, 2002-2003



Rate per 1,000 live births
Data Source: Texas Department of State Health Services

In 2002, infant mortality rate was highest among Blacks followed by Hispanics and Whites. Blacks also had the highest infant mortality rate in 2003, with Whites having the second highest rate. The rate in Blacks was more than two and a half times the rate in Whites in 2002 and slightly more than twice the rate in Whites in 2003. Others had the lowest infant mortality rate in both years (Table IV-1).

Table IV-1: Infant Mortality Rate by Race/Ethnicity, Tarrant County, 2002- 2003

	2002		2003	
	Cases	Rate	Cases	Rate
White	65	5.4	85	7.0
Black	57	14.6	63	16.1
Hispanic	55	5.8	55	5.5
Other	6	4.5	5	3.6

Rate per 1,000 live births
Data Source: Texas Department of State Health Services

In 2002-2003, the infant mortality rate was highest among mothers 17 years of age and younger. Mothers 40 years of age and older had the smallest number of infant deaths in 2002 and 2003. (Table IV-2).

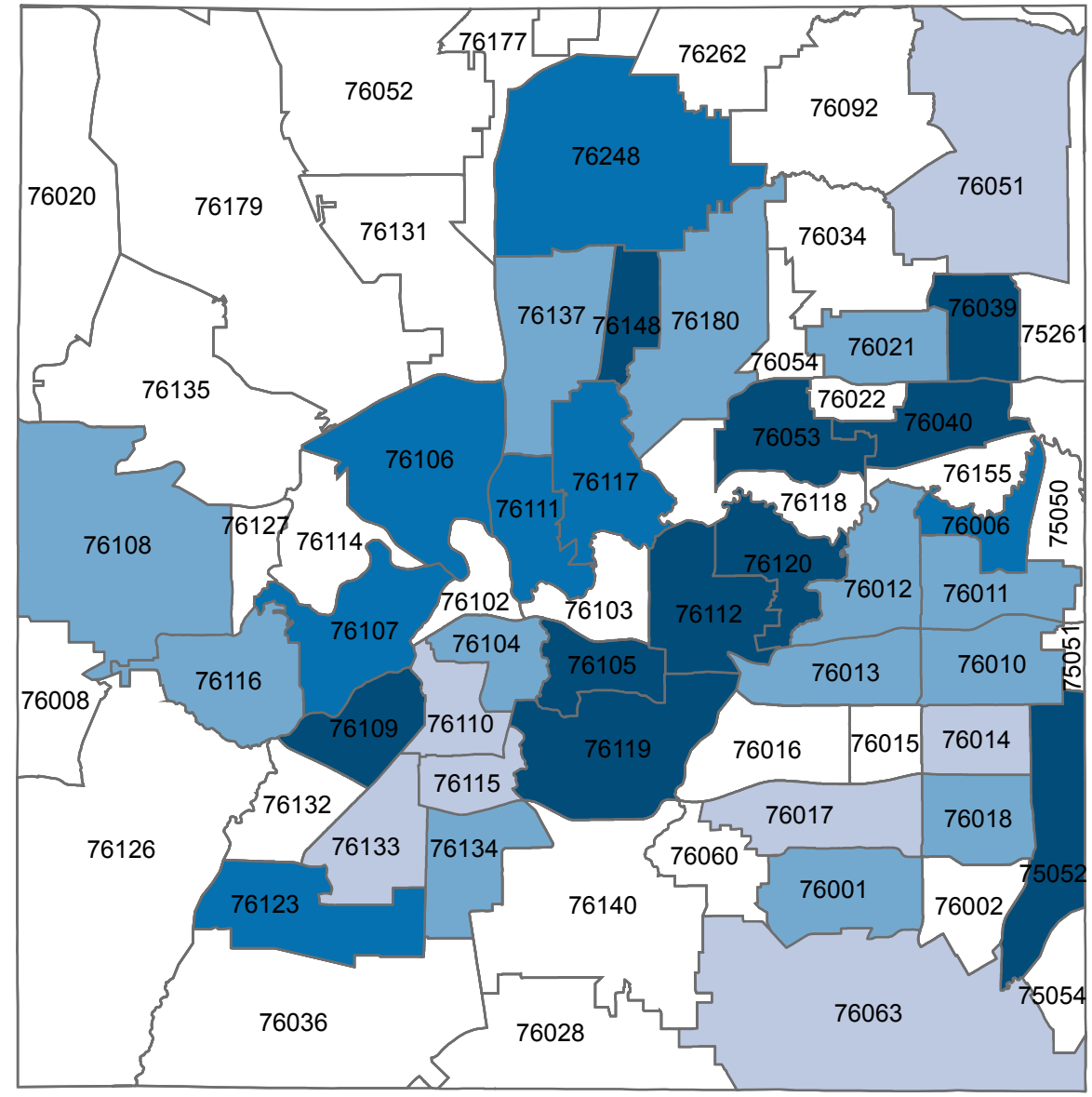
Table IV-2: Infant Mortality Rate by Maternal Age, Tarrant County, 2002-2003

Age Group in years	2002		2003	
	Cases	Rate	Cases	Rate
0-17	9	7.4	15	12.6
18-39	163	6.5	184	7.1
40+	<5	@	<5	@

Rate per 1,000 live births
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

Figure IV-2 on the next page shows the geographic distribution of infant mortality for Tarrant County. The data are generally evenly distributed across all quartiles.

Figure IV-2: Geographic Distribution of Infant Mortality



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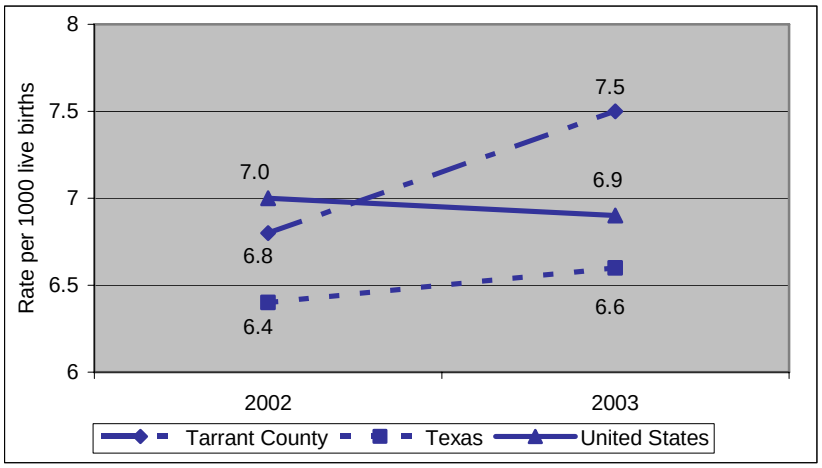
Comparison with Texas and the United States

In 2002, the infant mortality rate in Tarrant County was lower than that seen in the United States and higher than that of Texas. In 2003, the infant mortality rate in Tarrant County was higher than Texas and United States (Figure IV-3).

Figure IV-3: Infant Mortality Rates in Tarrant County, Texas, and the United States*, 2002-2003



Rate per 1,000 live births
Data Source: Texas Department of State Health Services;
* United States Department of Health & Human Services

Comparison with Healthy People 2010 Objective

In Tarrant County, the infant mortality rate of 6.8 per 1,000 live births in 2002 and 7.5 per 1,000 live births in 2003 markedly exceeded the Healthy People 2010 objective of 4.5 per 1,000 live births (Table IV-3).

Table IV-3: Comparison of Infant Mortality Rate in Tarrant County with Healthy People 2010 Objective

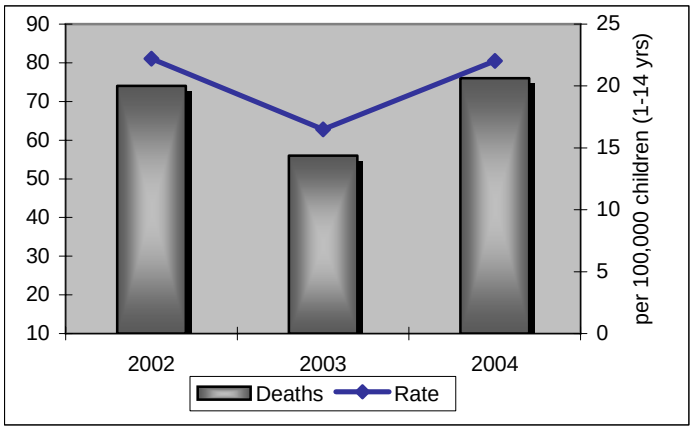
Healthy People 2010 Objective	Tarrant County	
	2002	2003
16-1C. Reduce infant deaths to 4.5 per 1,000 live births. (Baseline: 7.2 per 1,000 in 1998-preliminary data)	6.8	7.5

Rate per 1,000 live births

Indicator IV-2. Child Mortality

Child deaths include children 1-14 years of age who have died. The number of child deaths decreased from 74 (22.2 per 100,000 children) in 2002 to 56 (16.5 per 100,000 children) in 2003, but then increased again to 76 (22.0 per 100,000 children) in 2004 (Figure IV-4).

Figure IV-4: Child Mortality Rate, Tarrant County, 2002-2004



Rate per 100,000 children (1-14 years)
Data Source: Texas Department of State Health Services

In 2002-2004, the child mortality rate for males was approximately one to one and a half times higher than for females (Table IV-4).

Table IV-4: Child Mortality Rate by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	39	23.0	29	16.8	44	25.1
Female	35	21.4	27	16.2	32	18.9

Rate per 100,000 children (1-14 years)
Data Source: Texas Department of State Health Services

Among all racial/ethnic groups, the child mortality rate was highest among Blacks in 2002 and 2004. Compared to Whites, the child mortality rate in Blacks was approximately two and a half times higher in 2002 and approximately three times higher in 2004. In 2003 however, Blacks had approximately half the child mortality rate observed in Whites. From 2002-2004, the child mortality rate declined in all racial/ethnic groups except Blacks; wherein, the mortality rate increased from 39.9 per 100,000 children (1-14 years) in 2002 to 48.1 per 100,000 children (1-14 years) in 2004 (Table IV-5).

Table IV-5: Child Mortality Rate by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	29	17.1	34	20.3	27	16.3
Black	21	39.9	6	11.3	26	48.1
Hispanic	21	22.1	11	10.8	21	19.5
Other	3	@	5	30.3	<3	@

Rate per 100,000 children (1-14 years)
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

From 2002-2004, the child mortality rate was highest for the 1-4 year age group, followed by the 10-14 year age group, then the 5-9 year age group. From 2002-2004, there has been a slight increase in the child mortality rate for the 1-4 year age group and the 5-9 year age group, and a decline in the mortality rate for the 10-14 year age group (Table IV-6).

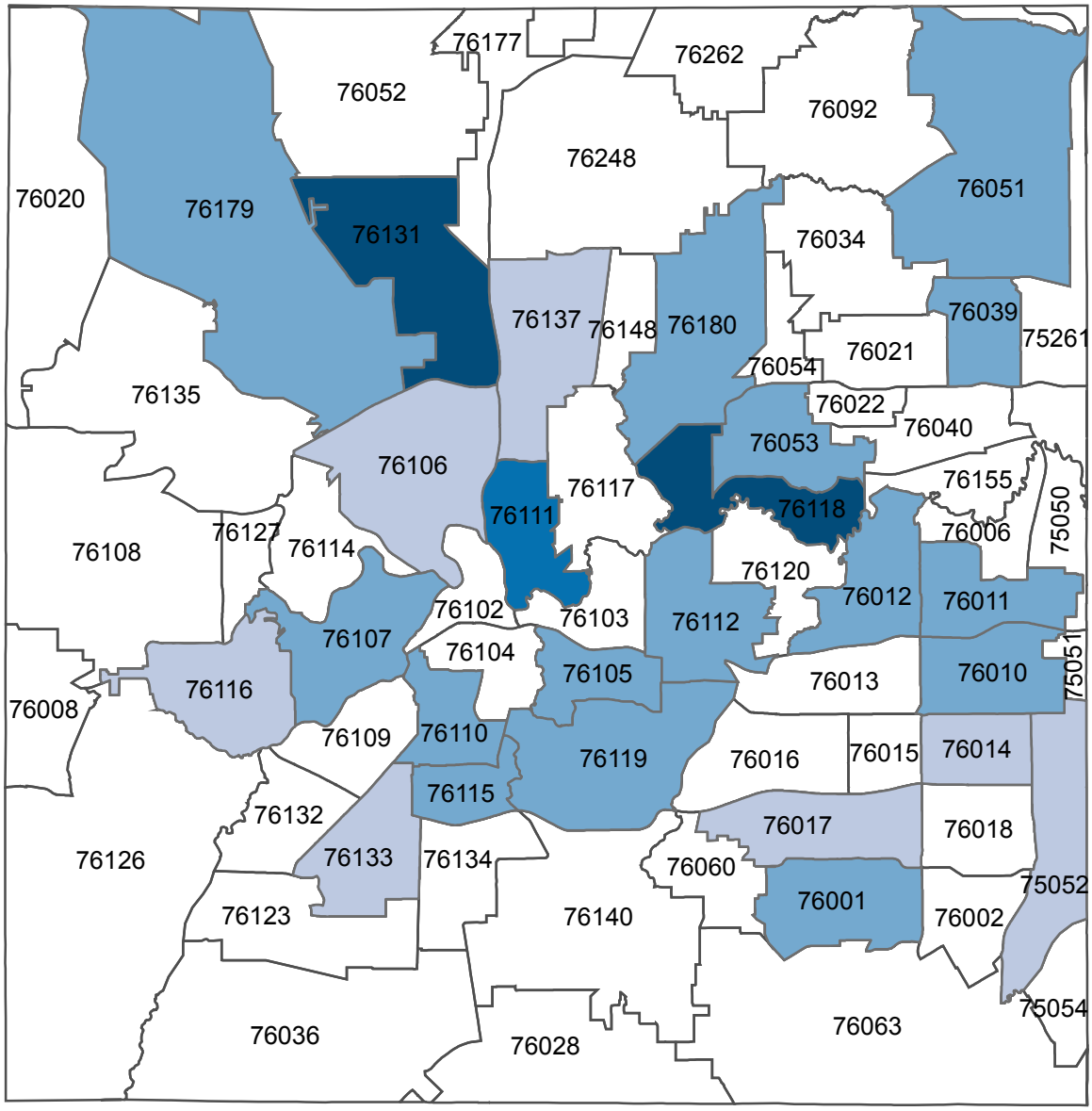
Table IV-6: Child Mortality Rate by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
1-4	32	33.2	27	26.9	35	33.8
5-9	15	12.8	13	11.0	17	14.3
10-14	27	22.7	16	13.2	24	19.7

Rate per 100,000 children (1-14 years)
Data Source: Texas Department of State Health Services

Figure IV-5 on the following page illustrates the distribution of child mortality by ZIP code. The ZIP codes with the highest child mortality rate were 76131 and 76118.

Figure IV-5: Geographic Distribution of Child Mortality



Rate per 100,000

21.35 - 32.41 | 32.42 - 64.81 | 64.82 - 97.22 | 97.23 - 129.63 | Excluded Data

1 inch equals 5 miles

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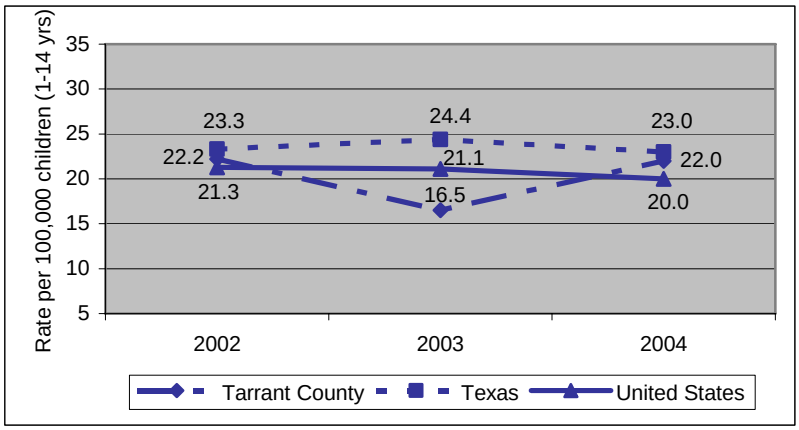
Comparison with Texas and the United States

The child mortality rate in Tarrant County was comparable to the rate in Texas and the United States in 2002 and 2004; however, the rate in Tarrant County was lower than Texas and the United States in 2003 (Figure IV-6).

Figure IV-6: Child Mortality Rate in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 children (1-14 years)
Data Source: Texas Department of State Health Services; Centers for Disease Control and Prevention, National Center for Health Statistics

Comparison with Healthy People 2010 Objective

In Tarrant County, the child mortality rate for 1-4 years of age markedly exceeded the Healthy People 2010 objective of 18.6 per 100,000 population. The child mortality rate for children 5-9 years of age in Tarrant County was almost comparable to that of the Healthy People 2010 objective in 2002 and 2003, but was slightly higher than the Healthy People 2010 objective in 2004 (Table IV-7).

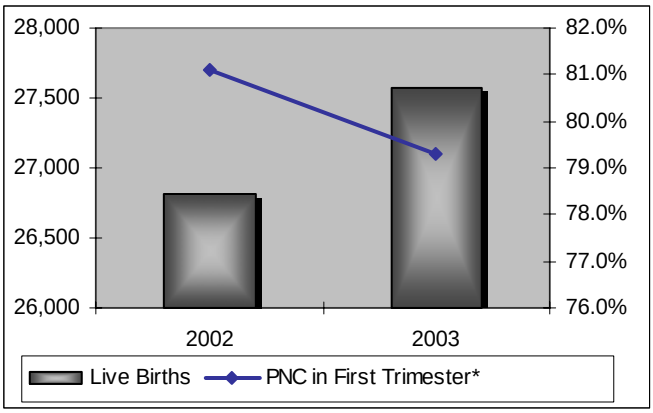
Table IV-7: Comparison of Child Mortality Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
16-2a. Reduce child deaths for ages 1-4 to 18.6 per 100,000. (Baseline: 34.6 per 100,000 in 1998-preliminary data)	33.2	26.9	33.8
16-2b. Reduce child deaths for ages 5-9 to 12.3 per 100,000. (Baseline: 17.7 per 100,000 in 1998-preliminary data)	12.8	11.0	14.3

Indicator IV-3. Prenatal Care in First Trimester

Of the 26,818 live births in Tarrant County for 2002, 81.1 percent of mothers received prenatal care during the first trimester. In 2003, there were 27,574 live births with 79.3 percent of mothers having received prenatal care during the first trimester (Figure IV-7).

Figure IV-7: Prenatal Care in First Trimester, Tarrant County, 2002-2003



Prenatal Care is self-reported
*Percent of live births in each prenatal care group
Data Source: Texas Department of State Health Services

Among all racial/ethnic groups, the percentage of prenatal care in the first trimester of pregnancy was slightly lower in 2003 compared to 2002. In both years, the highest and the lowest percentages of prenatal care in the first trimester of pregnancy were seen in Whites and Hispanics, respectively (Table IV-8).

Table IV-8: Prenatal Care in First Trimester by Race/Ethnicity, Tarrant County, 2002-2003

	2002		2003	
	Live Births	PNC in First Trimester n (%)*	Live Births	PNC in First Trimester n (%)*
White	12,054	10,633 (88.2)	12,206	10,731 (87.9)
Black	3,892	3,115 (80.0)	3,920	3,105 (79.2)
Hispanic	9,545	6,884 (72.1)	10,053	6,876 (68.4)
Other	1,328	1,112 (83.7)	1,395	1,148 (82.3)

PNC Prenatal Care
Prenatal Care is self-reported
* Percent of live births in each racial/ethnic group
Data Source: Texas Department of State Health Services

The likelihood of receiving prenatal care in the first trimester increased with increasing maternal age. In 2002 and 2003, mothers 17 years and younger had the lowest percentage of prenatal care in the first trimester, and mothers 40 years and older had the highest percentage of prenatal care in the first trimester (Table IV-9).

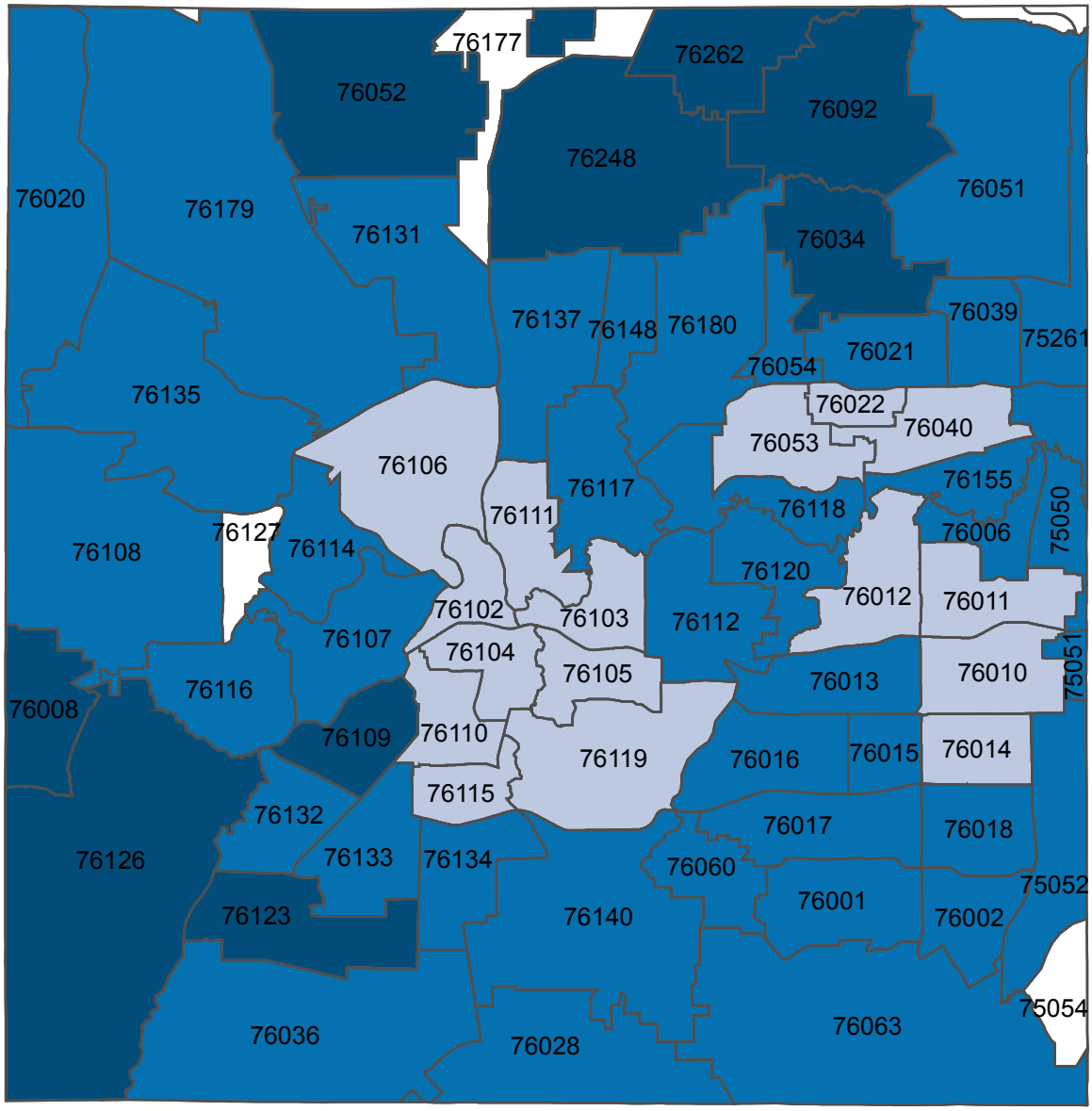
Table IV-9: Prenatal Care in First Trimester by Maternal Age, Tarrant County, 2002-2003

Age Group in years	2002 Live Births	2002 PNC in First Trimester n (%)*	2003 Live Births	2003 PNC in First Trimester n (%)*
≤17	1,223	799 (65.3)	1,188	796 (67.0)
18-39	25,083	20,500 (81.7)	25,864	20,623 (79.7)
40+	512	444 (86.8)	521	440 (84.5)

PNC Prenatal Care
Prenatal Care is self-reported
* Percent of live births in each maternal age group
Data Source: Texas Department of State Health Services

On the following page, Figure IV-8 shows the distribution of prenatal care received in the first trimester by ZIP code. The ZIP codes receiving the highest percentage of prenatal care are in the north and southwestern parts of the county. The areas receiving the lowest percentage of care are in central Tarrant County and parts of Arlington.

Figure IV-8: Geographic Distribution of Prenatal Care in First Trimester



Legend

59.93 - 74.99 | 75.00 - 89.99 | 90.00 - 100.00

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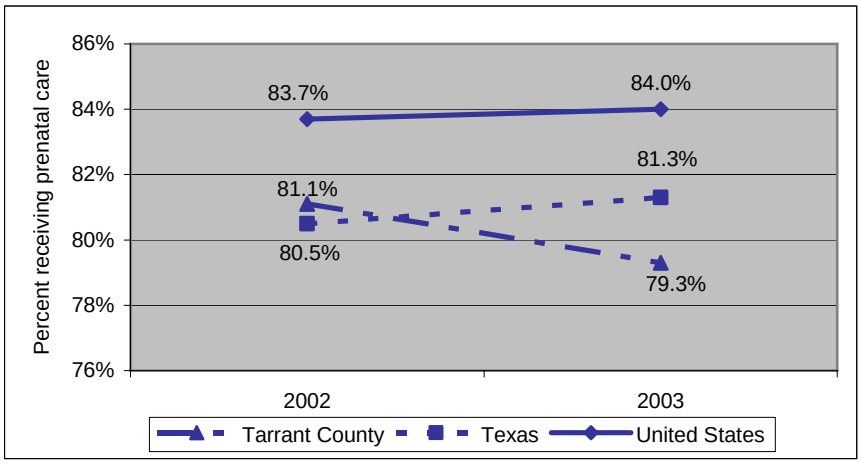
Comparison with Texas and the United States

The percentage of mothers receiving prenatal care during the first trimester in Tarrant County was comparable to Texas, but lower than the United States in 2002. The percentage receiving prenatal care in the first trimester in Tarrant County declined in 2003 to lower than Texas and the United States. While the percentage in Texas and the United States increased from 2002-2003, the percentage in Tarrant County decreased (Figure VI-9).

Figure IV-9: Prenatal Care in First Trimester in Tarrant County, Texas, and the United States, 2002-2003



Prenatal Care is self-reported
*Percent of live births in each prenatal care group
Data Source: Texas Department of State Health Services; Centers for Disease Control and Prevention, National Center for Health Statistics

Comparison with Healthy People 2010 Objective

In 2002 and 2003, Tarrant County did not meet the Healthy People 2010 objective of increasing the proportion of pregnant women who received prenatal care in the first trimester to 90 percent (Table IV-10).

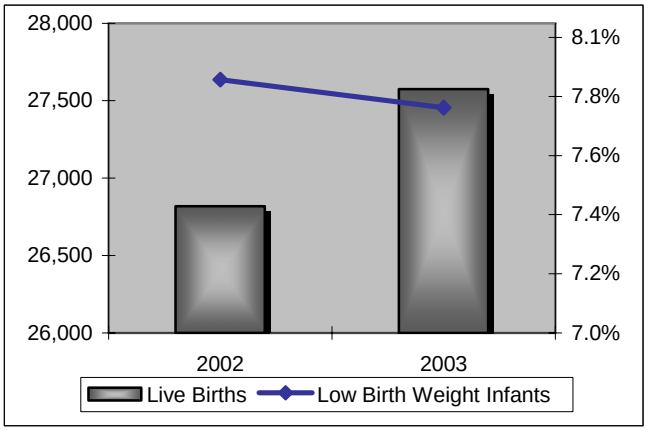
Table IV-10: Prenatal Care in First Trimester in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County	
	2002	2003
16-6a. Increase the proportion of pregnant women who receive prenatal care in the first trimester to 90 percent. (Baseline: 83 percent in 1998-preliminary data).	81.1%	79.3%

Indicator IV-4. Low Birth Weight Infants

Low birth weight infants include live births weighing less than 2,500 grams. There were 26,819 live births in 2002 with 7.9 percent being low birth weight infants. In 2003, there were 27,574 live births with 7.8 percent low birth weight infants. The percent of low birth weight infants was comparable in 2002 and 2003 (Figure IV-10).

Figure IV-10: Low Birth Weight Infants, Tarrant County, 2002-2003



Data Source: Texas Department of State Health Services

In 2002-2003, Blacks had the highest percent of low birth weight infants. Compared to Whites, the percent of low birth weight infants in Blacks was approximately two times higher. The percent of low birth weight infants in Hispanics was comparable to that seen in Whites (Table IV-11).

Table IV-11: Low Birth Weight Infants by Race/Ethnicity, Tarrant County, 2002-2003

	2002		2003	
	Live Births	Low Birth Weight Infants n (%)	Live Births	Low Birth Weight Infants n (%)
White	12,054	833 (6.9)	12,206	843 (6.9)
Black	3,892	509 (13.1)	3,920	550 (14.0)
Hispanic	9,545	657 (6.9)	10,053	644 (6.4)
Other	1,328	115 (8.7)	1,395	113 (8.1)

Data Source: Texas Department of State Health Services

Mothers 17 years of age and younger and 40 years of age and older were found to have a higher risk of having low birth weight infants compared to mothers in the 18-39 year age group. Mothers in the 18-39 year age group consistently had the lowest percent of low birth weight infants in 2002-2003 (Table IV-12).

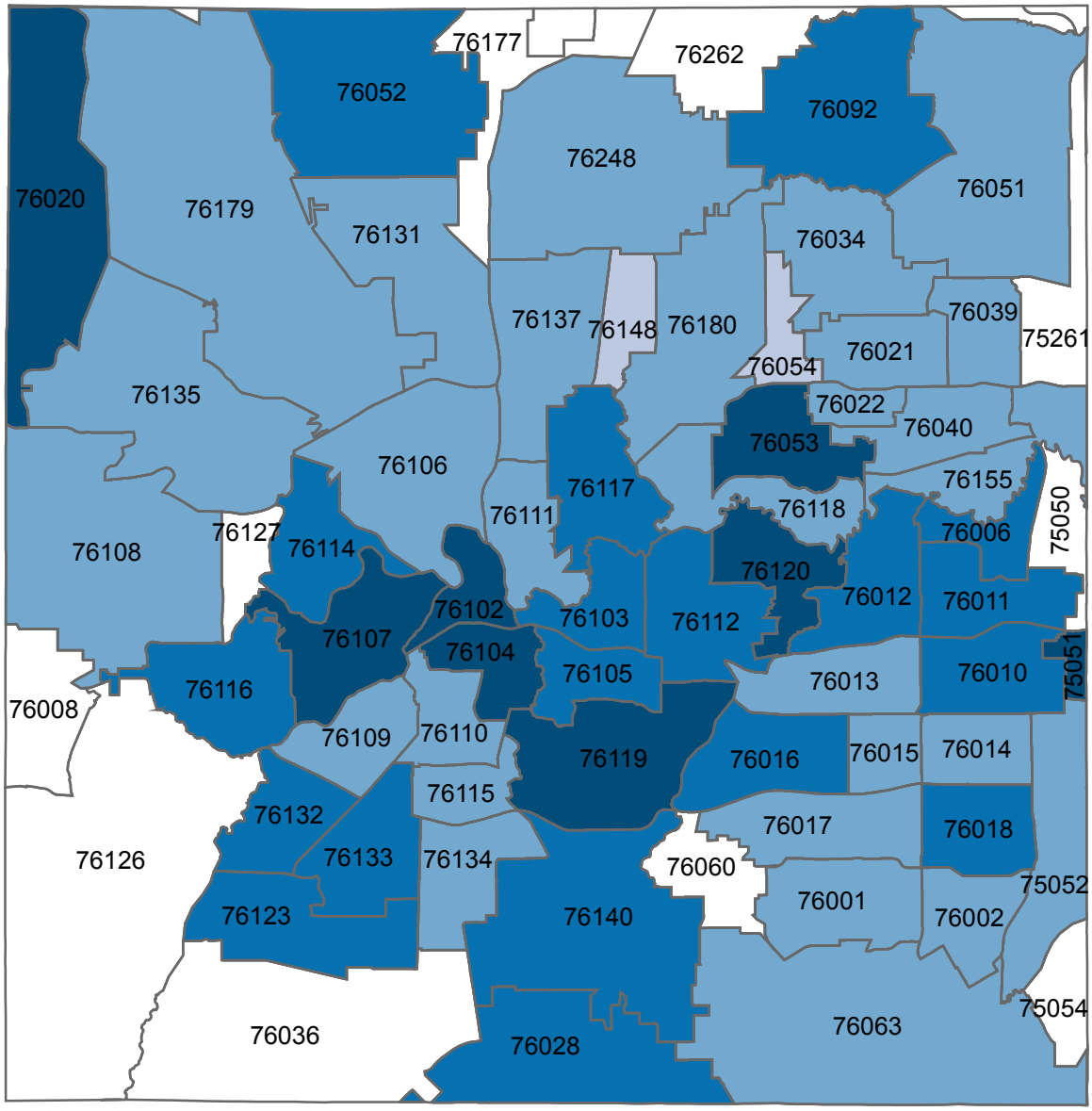
Table IV-12: Low Birth Weight Infants by Maternal Age, Tarrant County, 2002-2003

	2002		2003	
Age Group in years	Live Births	Low Birth Weight Infants n (%)	Live Births	Low Birth Weight Infants n (%)
≤17	1,223	132 (10.8)	1,188	116 (9.8)
18-39	25,083	1,933 (7.7)	25,864	1,973 (7.6)
40+	512	49 (9.6)	521	61 (11.7)

Data Source: Texas Department of State Health Services

Figure IV-11 on the following page illustrates the distribution of low birth weight infants by ZIP code. Central Tarrant County shows the most ZIP codes falling into the highest quartile for low birth weight infants with surrounding ZIP codes falling into the next highest quartile.

Figure IV-11: Geographic Distribution of Low Birth Weight Infants



Legend

4.76% - 5.00% | 5.01% - 7.90% | 7.91% - 10.00% | 10.01% - 15.35% | Excluded Data

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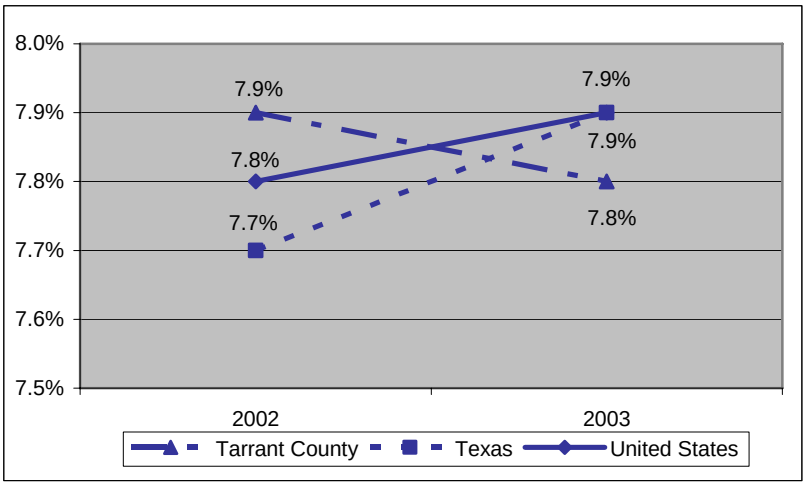
Comparison with Texas and the United States

The percent of low birth weight infants in Tarrant County was comparable to that in Texas and the United States for 2002-2003 (Figure IV-12).

Figure IV-12: Low Birth Weight Infants in Tarrant County, Texas, and the United States, 2002-2004



Data Source: Texas Department of State Health Services; Centers for Disease Control and Prevention, National Center for Health Statistics

Comparison with Healthy People 2010 Objective

In 2002-2003, the percent of low birth weight infants in Tarrant County did not meet the Healthy People 2010 objective of reducing the low birth weight infants to 5% of live births (Table IV-13).

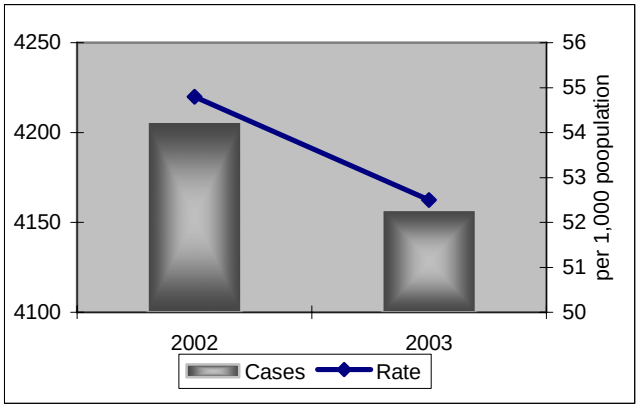
Table IV-13: Low Birth Weight Infants in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County	
	2002	**2003**
16-10 Reduce low birth weight infants to 5% (Baseline:7.6% in 1998-preliminary data)	7.9%	7.8%

Indicator IV-5. Teen Pregnancy Rate

The number of teen pregnancies decreased from 4,206 (54.8 per 1,000 population) in 2002 to 4,157 (52.5 per 1,000 population) in 2003 (Figure IV-13).

Figure IV-13: Teen Pregnancy, Tarrant County, 2002-2003



Rate per 1,000 female (age 13-19) population
Data Source: Texas Department of State Health Services

The teen pregnancy rate in Tarrant County was highest among Hispanics and lowest among Others for 2002-2003. The teen pregnancy rate for Blacks was two and a half times greater than for Whites (Table IV-14).

Table IV-14: Teen Pregnancy Rate by Race/Ethnicity, Tarrant County, 2002-2003

	2002		2003	
	Number	Rate	Number	Rate
White	1,431	34.9	1,373	33.4
Black	939	74.3	874	66.3
Hispanic	1,742	90.3	1,817	87.4
Other	93	24.1	91	22.0

Rate per 1,000 female (age 13-19) population
Data Source: Texas Department of State Health Services

The highest rate of teen pregnancy occurred in the 18-19 year age group, while the lowest rate occurred in the 13-14 year age group. The teen pregnancy rate was approximately 3 times higher in the 18-19 year age group than the 15-17 year age group (Table IV-15).

Table IV-15: Teen Pregnancy Rate by Age, Tarrant County, 2002-2003

Age Group in years	2002		2003	
	Number	Rate	Number	Rate
13-14	85	3.7	85	3.6
15-17	1,436	43.4	1,383	40.6
18-19	2,685	129.8	2,689	125.7

Rate per 1,000 female (age 13-19) population
Data Source: Texas Department of State Health Services

The birth outcomes for teen pregnancies were similar for 2002 and 2003 (Table IV-16).

Table IV-16: Teen Pregnancy by Birth Outcome, Tarrant County, 2002-2003

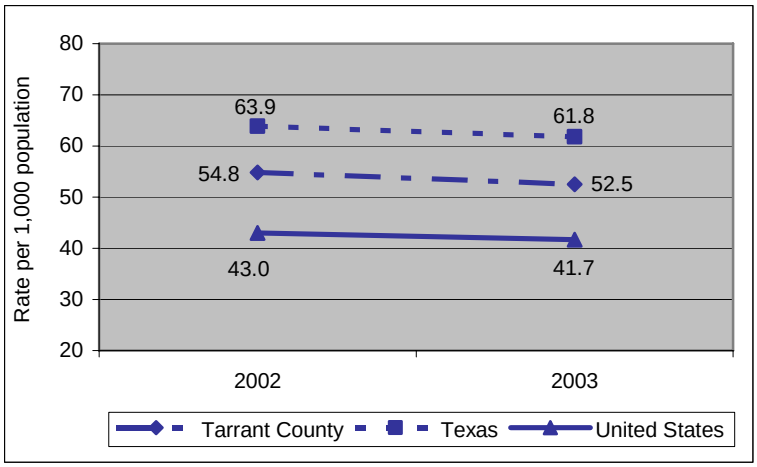
	2002		2003	
	Number	Percent	Number	Percent
Live birth	3,381	80.4	3,299	79.4
Abortion	800	19.0	842	20.3
Fetal death	25	0.6	16	0.4

Rate per 1,000 female (age 13-19) population
Data Source: Texas Department of State Health Services

Comparison with Texas and the United States

The teen pregnancy rate in Tarrant County was higher than that of the United States, but lower than the rate for Texas for 2002-2003 (Figure IV-14).

Figure IV-14: Teen Pregnancy Rate in Tarrant County, Texas, and the United States, 2002-2004



Rate per 1,000 female (age 13-19) population
Data Source: Texas Department of State Health Services; Centers for Disease Control and Prevention, National Center for Health Statistics

Comparison with Healthy People 2010 Objective

There are no corresponding Healthy People 2010 objectives.

Chronic Diseases

Definitions and Data Sources

Age Adjusted Mortality Rates

- ICD-10 codes
  - Diseases of heart: I00-I09, I11, I13, I20-I51
  - Cancer: C00-C97
  - Cerebrovascular diseases: I60-I69
  - Chronic Lower Respiratory Disease: J40-J47
- Numerator – Number of deaths in 2002, 2003, and 2004
- Denominator - Estimated population
- Rate – per 100,000, age adjusted to the 2000 standard population
- Data Source – Department of State Health Services, Center for Health Statistics

Hypertension Morbidity

- Numerator – Total number of respondents responding yes to the question "Ever been told you have high blood pressure/hypertension by a health professional?"
- Denominator – Total number of survey respondents
- Data Source – Behavioral Risk Factor Surveillance System (BRFSS), Tarrant County, 2004
- Note: 2002, 2003 data not included

Heart Disease Morbidity

- Numerator – Total number of respondents who were categorized into the 'Yes' category
- Denominator – Total number of survey respondents
- Data Source – Behavioral Risk Factor Surveillance System (BRFSS), Tarrant County, 2004
- Note: 2002, 2003 data not included; Heart disease (yes/no) is a calculated variable

Diabetes Mellitus Morbidity

- Numerator – Total number of respondents responding yes to the question "Ever been told you have diabetes by a health professional?"
- Denominator – Total number of survey respondents
- Data Source – Behavioral Risk Factor Surveillance System (BRFSS), Tarrant County, 2004
- Note: 2002, 2003 data not included

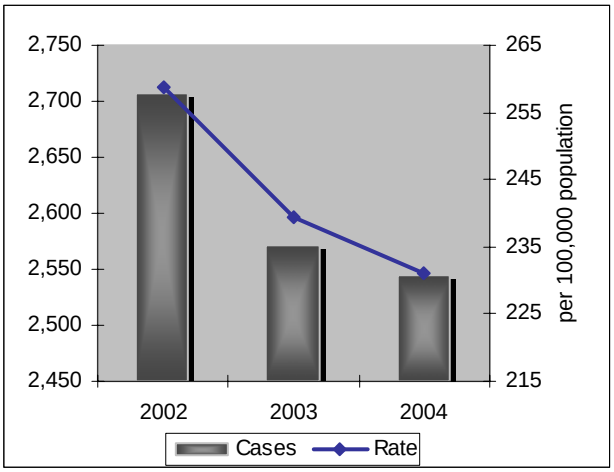
Obesity Morbidity

- Numerator – Total number of respondents with BMI ≥ 30
- Denominator – Total number of survey respondents
- Data Source – Behavioral Risk Factor Surveillance System (BRFSS), Tarrant County, 2004
- Note: 2002, 2003 data not included

Indicator V-1. Heart Disease Mortality

Heart disease is the leading cause of death in the United States and in Tarrant County. However, it is noteworthy that in Tarrant County, the overall number of deaths as well as the mortality rate of heart disease has been on a steady decline with 2,708 deaths (258.7 per 100,000 population) in 2002, 2,572 deaths (239.4 per 100,000 population) in 2003, and 2,544 deaths (231.2 per 100,000) in 2004 (Figure V-1).

Figure V-1: Heart Disease Mortality, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

In both males and females in Tarrant County, there has been a steady decline in the number of deaths and the mortality rate of heart disease. Although the actual number of deaths was higher in females compared to males in 2002 and 2003, the mortality rate has been consistently higher in males (Table V-1).

Table V-1: Heart Disease Mortality by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	1,306	297.5	1,268	276.5	1,276	271.0
Female	1,402	227.0	1,304	207.9	1,268	198.8

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

In all three years, the mortality rate of heart disease was highest among Blacks, with a rate approximately one and a half times higher than Whites. Others had the lowest heart disease mortality rate. In all racial/ethnic groups, there was steady decline in the actual number of deaths as well as the mortality rate of heart disease from 2002-2004 (Table V-2).

Table V-2: Heart Disease Mortality by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	2,132	252.2	2,040	238.4	2,035	234.8
Black	399	385.2	377	341.0	342	296.6
Hispanic	144	190.5	123	156.3	132	153.9
Other	33	118.7	32	92.6	35	99.8

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Heart disease mortality rate increased with age and was highest in the 75 years and older age group. A steady decline in the heart disease mortality rate was observed in the 45-54, 65-74, and 75 years and over age groups from 2002-2004 (Table V-3).

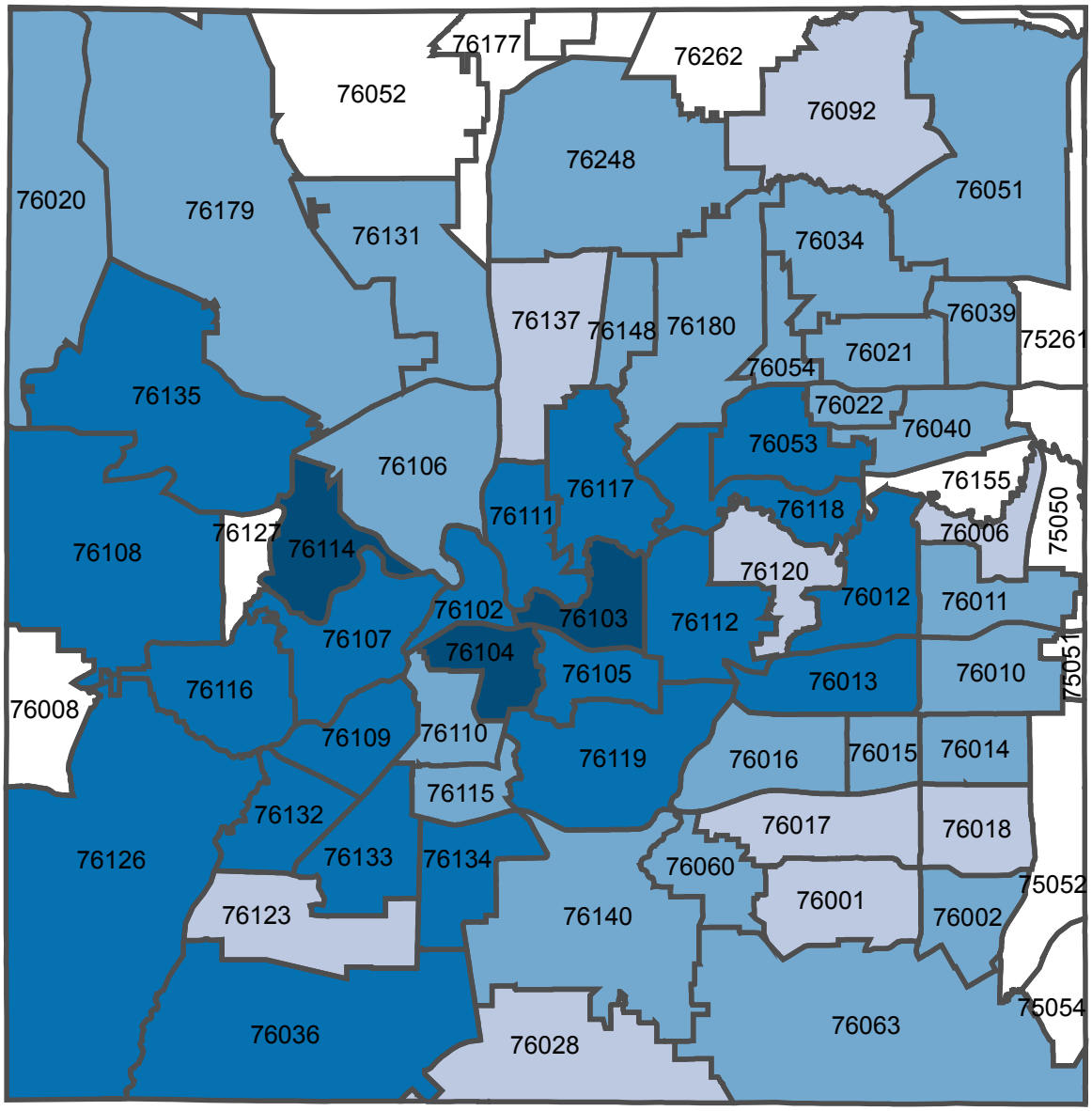
Table V-3: Heart Disease Mortality by Age, Tarrant County, 2002-2004

Age Group in years	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
0-34	38	2.18	27	1.5	32	1.7
35-44	87	34.5	91	36.3	78	31.0
45-54	209	102.9	205	97.7	192	88.8
55-64	289	242.7	296	230.5	336	247.7
65-74	501	726.1	452	646.3	422	594.3
75+	1,583	2,782.0	1,501	2,585.3	1,484	2,511.9

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Figure V-2 on the following page illustrates the geographic distribution of heart disease deaths by ZIP code. The ZIP codes with the highest death rates are 76104, 76103, and 76114. The ZIP codes within the next highest quartile are located in the central, central west, and southwest portions of Tarrant County.

Figure V-2: Geographic Distribution of Deaths from Heart Disease



Legend

36.98 - 98.03 | 98.04 - 196.07 | 196.08 - 294.10 | 294.11 - 392.13 | Excluded Data

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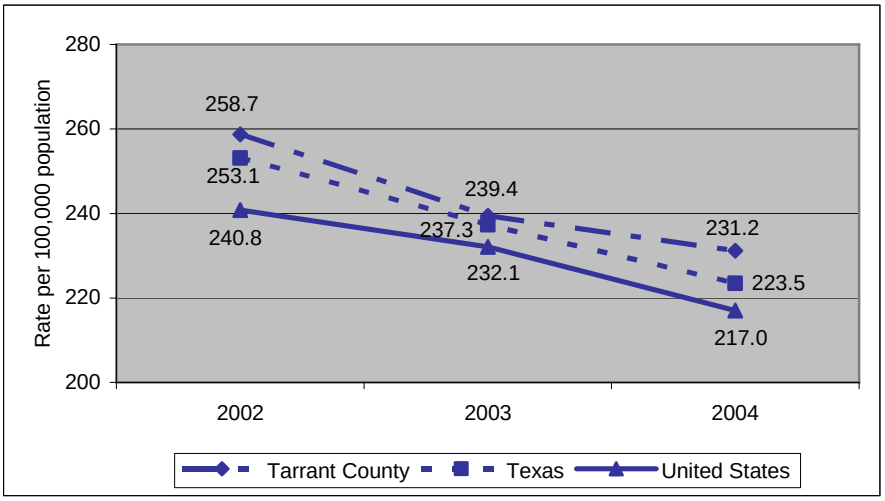
Comparison with Texas and the United States

The rate of heart disease mortality decreased from 2002-2004 in Tarrant County, Texas, and the United States. Rates in Tarrant County, however, have been consistently higher than Texas and the United States (Figure V-3).

Figure V-3: Heart Disease Mortality Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, National Center for Health Statistics

Comparison with Healthy People 2010 Objective

Although the mortality rate of heart disease in Tarrant County declined steadily since 2002, it has been consistently (approximately one and a half times) higher than the Healthy People 2010 objective of 166 per 100,000 population (Table V-4).

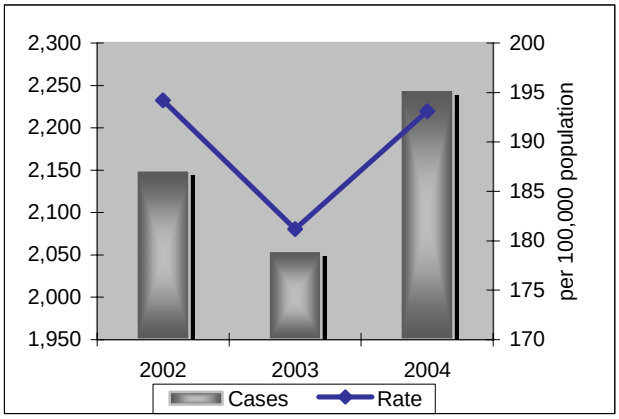
Table V-4: Comparison of Heart Disease Mortality Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
12-1 Reduce coronary heart disease death to 166 per 100,000 population. (Baseline: 208 deaths per 100,000 population in 1998-preliminary data).	258.7	239.4	231.2

Indicator V-2. Cancer Mortality

Cancer is the second leading cause of death in the United States and in Tarrant County. All cancer mortality in Tarrant County has varied since 2002, declining from 2,150 deaths (194.2 per 100,000 population) in 2002 to 2,055 deaths (181.2 per 100,000 population) in 2003 then increasing again to 2,245 deaths (193.1 per 100,000 population) in 2004 (Figure V-4).

Figure V-4: All Cancer Mortality, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Similar trends were also observed for all cancer mortality by gender. From 2002-2004, males had approximately a one and a half times higher all cancer mortality rate than females (Table V-5).

Table V-5: All Cancer Mortality by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	1,130	246.6	1,050	222.3	1,186	239.4
Female	1,020	160.3	1,005	153.9	1,059	160.2

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Among all racial/ethnic groups, Blacks had the highest and Others had the lowest all cancer mortality rate from 2002-2004. Compared to Whites, the all cancer mortality rates were approximately 1.3 times higher in Blacks and approximately 1.2 times lower in Hispanics (Table V-6).

Table V-6: All Cancer Mortality by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	1,727	198.0	1,619	183.3	1,732	193.5
Black	266	249.3	217	235.6	298	255.1
Hispanic	129	133.7	134	147.1	172	169.5
Other	28	76.8	31	103.0	43	103.9

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

From 2002-2004, the all cancer mortality rate in Tarrant County increased with age and was highest in the 75 years and older age group, followed by the 65-74 year age group. In all age groups except the 65-74 year age group, the all cancer mortality rate in 2004 was comparable or lower than the rate observed in 2002 (Table V-7).

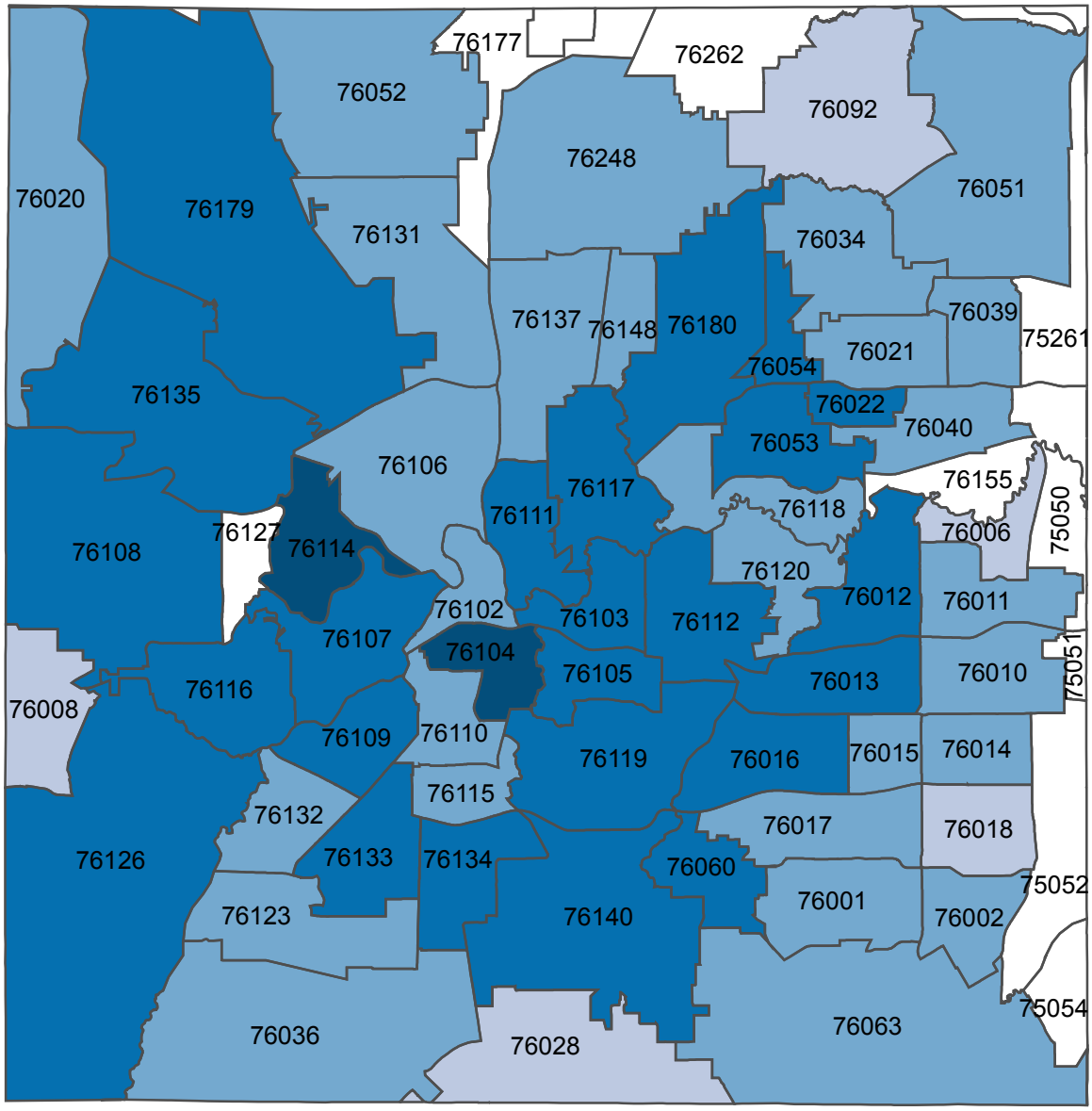
Table V-7: All Cancer Mortality Rate by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-34	33	1.9	28	1.5	38	2.1
35-44	87	34.5	68	27.1	86	34.2
45-54	236	116.2	233	111.0	226	104.6
55-64	414	347.7	388	302.1	446	328.9
65-74	550	797.1	550	786.4	592	833.7
75+	830	1,459	788	1,357.2	857	1,450.6

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Figure V-5 on the following page shows the distribution of all cancer deaths by ZIP code. The ZIP codes in the highest quartile are 76104 and 76114.

Figure V-5: Geographic Distribution of All Cancer Deaths



Rate per 100,000

29.05 - 73.29 | 73.30 - 146.57 | 146.58 - 219.86 | 219.87 - 293.15 | Excluded Data

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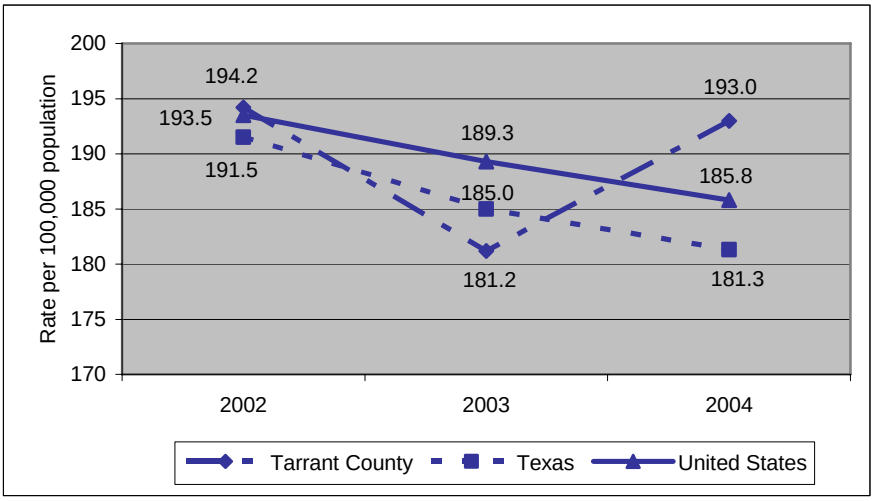
Comparison with Texas and the United States

The all cancer mortality rate in Tarrant County was comparable to Texas and the United States in 2002, and lower than Texas and the United States in 2003. In 2004, however, the rate in Tarrant County was higher than Texas and the United States (Figure V-6).

Figure V-6: All Cancer Mortality Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjusted to 2000 standard population
Data Source: Texas Department of State Health Services; National Center for Health Statistics

Comparison with Healthy People 2010 Objective

Tarrant County did not meet the Healthy People 2010 objective of reducing the overall cancer death rate to 159.9 per 100,000 population in 2002-2004 (Table V-8).

Table V-8: Comparison of All Cancer Mortality Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
12-1 Reduce the overall cancer death rate to 159.9 per 100,000 population. (Baseline: 202.4 deaths per 100,000 population in 1998-preliminary data).	194.2	181.2	193.1

Top Three Cancer Mortality

The three most frequent types of cancer mortality in Tarrant County were lung, colorectal, and breast cancer for 2002-2004. The mortality rates for lung and breast cancers were highest for 2004 (Table V-9).

Table V-9: Three Most Frequent Types of Cancer Mortality, Tarrant County, 2002-2004

	2002			2003			2004		
	Cancer	Cases	Rate	Cancer	Cases	Rate	Cancer	Cases	Rate
1	Lung	646	58.4	Lung	637	56.4	Lung	686	59.5
2	Colorectal	201	17.9	Colorectal	184	16.4	Colorectal	188	16.6
3	Breast	164	14.2	Breast	160	13.4	Breast	180	14.5

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Three Most Frequent Types of Cancer Mortality among Males

The three most frequent types of cancer mortality among males in Tarrant County were lung, colorectal, and prostate cancer for 2002-2004. For all three types of cancer, the mortality rate decreased from 2002-2003, but then increased from 2003-2004 (Table V-10).

Table V-10: Three Most Frequent Types of Cancer Mortality in Males, Tarrant County, 2002-2004

	2002			2003			2004		
	Cancer	Cases	Rate	Cancer	Cases	Rate	Cancer	Cases	Rate
1	Lung	368	78.2	Lung	359	73.7	Lung	396	78.5
2	Colorectal	105	21.7	Colorectal	91	19.6	Colorectal	100	20.3
3	Prostate	95	25.0	Prostate	91	23.1	Prostate	99	24.9

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

1. Lung Cancer

The lung cancer mortality rate was highest among Black males for 2002-2004. The rate for Black males was approximately one and a half times that of White males and more than three times that of Hispanic males (Table V-11).

Table V-11: Lung Cancer Mortality in Males by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	298	79.8	287	75.2	315	81.2
Black	55	130.1	60	128.6	53	111.5
Hispanic	13	36.7	8	26.5	19	36.8
Other	<3	@	4	20.3	9	57.1

Rate per 100,000 population
Age adjustment uses 2000 standard population
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

2. Colorectal Cancer

The colorectal cancer mortality rate was highest among Black males for 2002-2004. The rate for Black males was almost two times the rate of White males in 2002 and 2004 (Table V-12).

Table V-12: Colorectal Cancer Mortality in Males by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	81	21.6	68	18.8	75	19.6
Black	18	41.1	11	24.0	17	36.5
Hispanic	3	@	12	28.5	7	16.5

Rate per 100,000 population
Age adjustment uses 2000 standard population
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

3. Prostate Cancer

The prostate cancer mortality rate was highest among Black males for 2002-2004. The rate for Black males ranged from approximately one and a half times the rate for White males in 2003 to approximately three and half times the rate for White males in 2002 (Table V-13).

Table V-13: Prostate Cancer Mortality in Males by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	68	21.5	75	23.1	73	22.0
Black	22	74.7	13	38.4	16	53.7
Hispanic	5	17.1	3	@	9	36.0

Rate per 100,000 population
Age adjustment uses 2000 standard population
Other race not included due to small numbers
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

Three Most Frequent Types of Cancer Mortality among Females

The top three most frequent types of cancer mortality among females in Tarrant County for 2002-2004 were lung, breast, and colorectal cancer. The mortality rate of all three types of cancer remained relatively stable each year (Table V-14).

Table V-14: Three Most Frequent Types of Cancer Mortality in Females, Tarrant County, 2002-2004

	2002			2003			2004		
	Cancer	Cases	Rate	Cancer	Cases	Rate	Cancer	Cases	Rate
1	Lung	278	44.5	Lung	278	43.3	Lung	290	45.0
2	Breast	163	24.8	Breast	158	23.3	Breast	177	25.6
3	Colorectal	96	14.9	Colorectal	93	14.2	Colorectal	88	13.5

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

1. Lung Cancer

The lung cancer mortality rate was highest for White females for 2002-2004. In 2004, the rate among Black females increased to almost equal that of White females (Table V-15).

Table V-15: Lung Cancer Mortality in Females by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	246	49.6	236	46.7	244	48.2
Black	24	37.2	26	36.6	31	47.8
Hispanic	4	@	11	22.9	10	22.7
Other	4	@	5	40.9	5	15.8

Rate per 100,000 population
Age adjustment uses 2000 standard population
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

2. Breast Cancer

The breast cancer mortality rate was highest among Black females for 2002-2004. The rate for Hispanic females doubled from 2003-2004 (Table V-16).

Table V-16: Breast Cancer Mortality in Females by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	130	25.7	114	22.2	128	25
Black	20	30.2	27	36.7	27	34.4
Hispanic	12	19.5	12	13.9	19	27.8
Other	<3	@	5	20.8	3	@

Rate per 100,000 population
Age adjustment uses 2000 standard population
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services

3. Colorectal Cancer

The colorectal mortality rate was highest among Black females for 2002-2004. The rate among Black females decreased by 42 percent from 2003-2004. The rate among Hispanic females steadily decreased each year (Table V-17).

Table V-17: Colorectal Cancer Mortality in Females by Race/Ethnicity, Tarrant County, 2002-2004

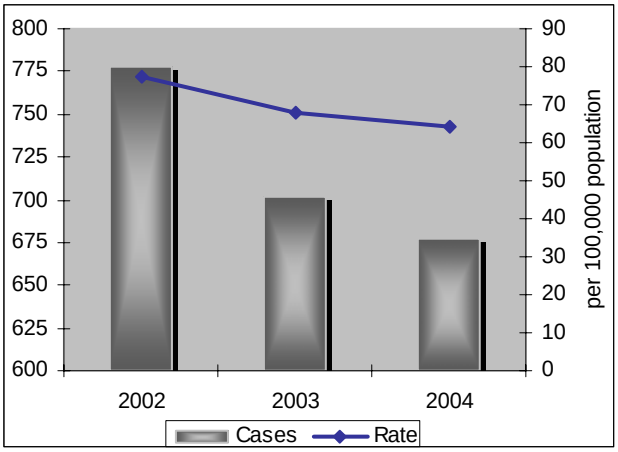
	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	76	14.9	71	13.5	72	13.8
Black	13	19.2	18	27.3	11	15.8
Hispanic	7	14.7	5	8.6	5	7.7

Rate per 100,000 population
Age adjustment uses 2000 standard population
Other race not included due to small numbers
Data Source: Texas Department of State Health Services

Indicator V-3. Cerebrovascular Diseases Mortality

Cerebrovascular diseases constitute the third leading cause of death in the United States and in Tarrant County. There has been a steady decline in the actual number as well the overall mortality rate of cerebrovascular diseases in Tarrant County with 778 deaths (77.3 per 100,000 population) in 2002, 702 deaths (67.8 per 100,000 population) in 2003, and 677 deaths (64.1 per 100,000 population) in 2004 (Figure V-7).

Figure V-7: Cerebrovascular Diseases Mortality, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

The cerebrovascular diseases mortality rates by gender also declined from 2002-2004, similar to the overall cerebrovascular diseases mortality rates in Tarrant County. Compared to males, a consistently higher number of deaths and mortality rates of cerebrovascular diseases were seen in females (Table V-18).

Table V-18: Cerebrovascular Diseases Mortality by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	281	69.7	254	61.4	272	63.0
Female	497	80.5	448	71.4	405	64.0

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Among all racial/ethnic groups, cerebrovascular diseases mortality rates declined from 2002-2004. In all the three years, Blacks had the highest mortality rate. Compared to Whites, the mortality rates were 1.4 to 1.8 times higher in Blacks, and 1.2 to 1.5 times lower in Hispanics (Table V-19).

Table V-19: Cerebrovascular Diseases Mortality by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	628	76.0	523	62.5	527	62.2
Black	103	106.7	112	111.6	95	91.7
Hispanic	33	50.6	50	66.5	40	51.8
Other	14	65.4	17	64.5	15	27.3

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

As was expected, the cerebrovascular diseases mortality rate increased with age in 2002-2004. Although higher mortality rates were observed in the 65 years and older age group, a steady decline in the mortality rate was documented in this particular group (Table V-20).

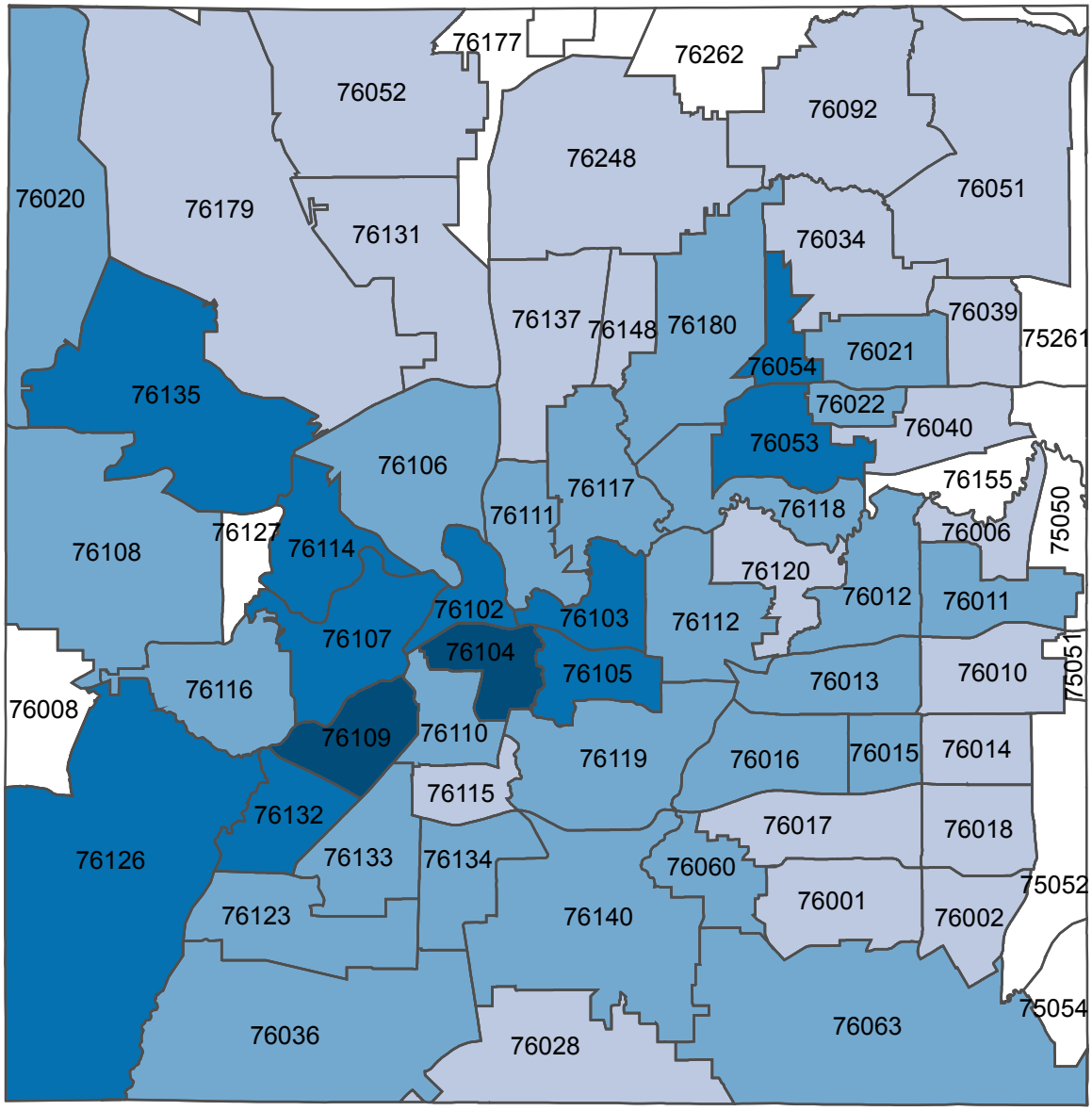
Table V-20: Cerebrovascular Diseases Mortality by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-34	6	0.3	8	0.4	8	0.4
35-44	18	7.1	18	7.2	12	4.8
45-54	38	18.7	31	14.8	42	19.4
55-64	46	38.6	53	41.3	49	36.1
65-74	115	166.7	98	140.1	81	114.1
75+	555	975.4	494	850.8	485	820.9

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

In Figure V-8 on the following page, the death rates by ZIP code from cerebrovascular diseases are mapped. The ZIP codes in the highest quartile are 76104 and 76109. ZIP codes falling within the second quartile were generally in the southern part of the county.

Figure V-8: Geographic Distribution of Deaths from Cerebrovascular Diseases



Rate per 100,000

10.67 - 34.74 | 34.75 - 69.48 | 69.49 - 104.22 | 104.23 - 138.96 | Excluded Data

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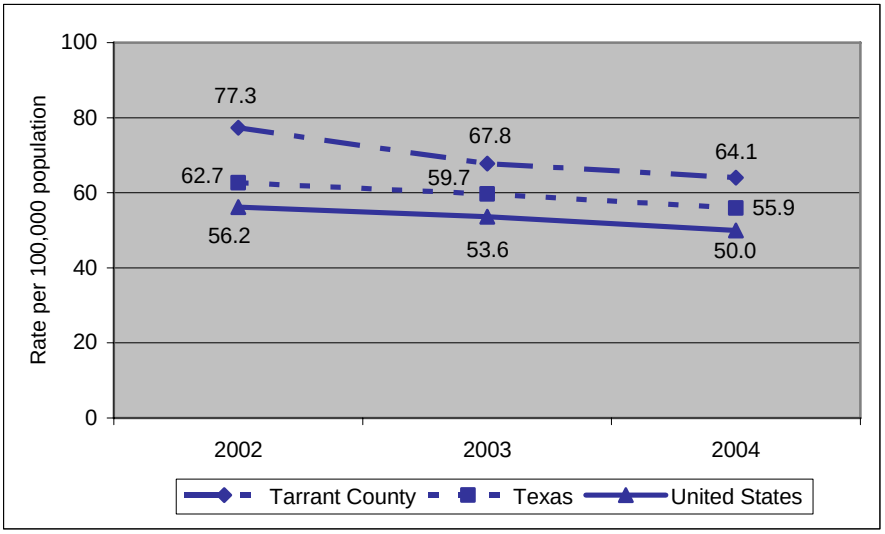
Comparison with Texas and the United States

Although the cerebrovascular diseases mortality rate in Tarrant County decreased from 2002-2004, rates in Tarrant County consistently remained higher than Texas and the United States (Figure V-9).

Figure V-9: Cerebrovascular Diseases Mortality Rates, Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services; National Center for Health Statistics

Comparison with Healthy People 2010 Objective

Although the cerebrovascular diseases (stroke) mortality rates in Tarrant County were 1.3 to 1.6 times higher than the Healthy People 2010 objective, a steady decline in the mortality rate since 2002 is encouraging (Table V-21).

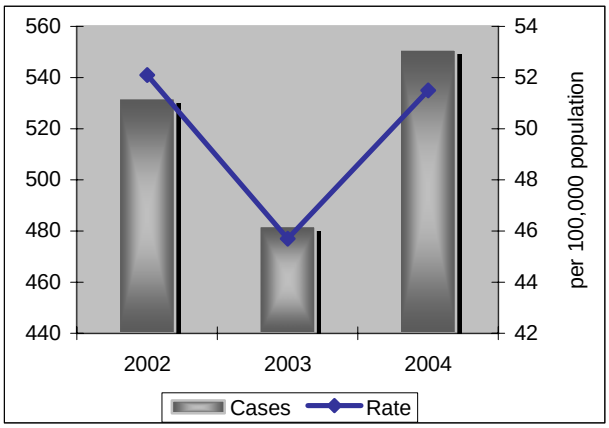
Table V-21: Comparison of Cerebrovascular Diseases Mortality Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
12-1 Reduce stroke deaths to 48 per 100,000 population (Baseline: 60 deaths per 100,000 population in 1998-preliminary data).	77.3	67.8	64.1

Indicator V-4. Chronic Lower Respiratory Diseases Mortality

Chronic lower respiratory diseases constitute the fourth leading cause of death in Tarrant County. The number of deaths decreased from 532 (52.1 per 100,000 population) in 2002 to 482 (45.7 per 100,000 population) in 2003. In 2004, however, the number of deaths rose to 551 (51.5 per 100,000 population) (Figure V-10).

Figure V-10: Chronic Lower Respiratory Diseases Mortality Rate, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

From 2002-2004, the mortality rate of chronic lower respiratory diseases in males was approximately 1.2 to 1.3 times higher than that of females (Table V-22).

Table V-22: Chronic Lower Respiratory Diseases Mortality Rate by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	227	57.7	223	52.5	256	59.4
Female	305	49.6	259	41.8	295	46.6

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Among all racial/ethnic groups, Whites consistently had the highest mortality rate from chronic lower respiratory diseases. In Whites, the mortality rate was approximately 1.2 to 1.8 times higher than Blacks and approximately 2.9 times higher than Hispanics (Table V-23).

Table V-23: Chronic Lower Respiratory Diseases Mortality Rate by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	487	58.4	426	50.2	492	57.5
Black	34	31.9	44	41.8	39	36.6
Hispanic	9	16.6	11	12.1	18	20.0

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

The chronic lower respiratory diseases mortality rate increased with age and was approximately 2 to 3 times higher in the 75 years and older age group as compared to the 65-74 year age group (Table V-24).

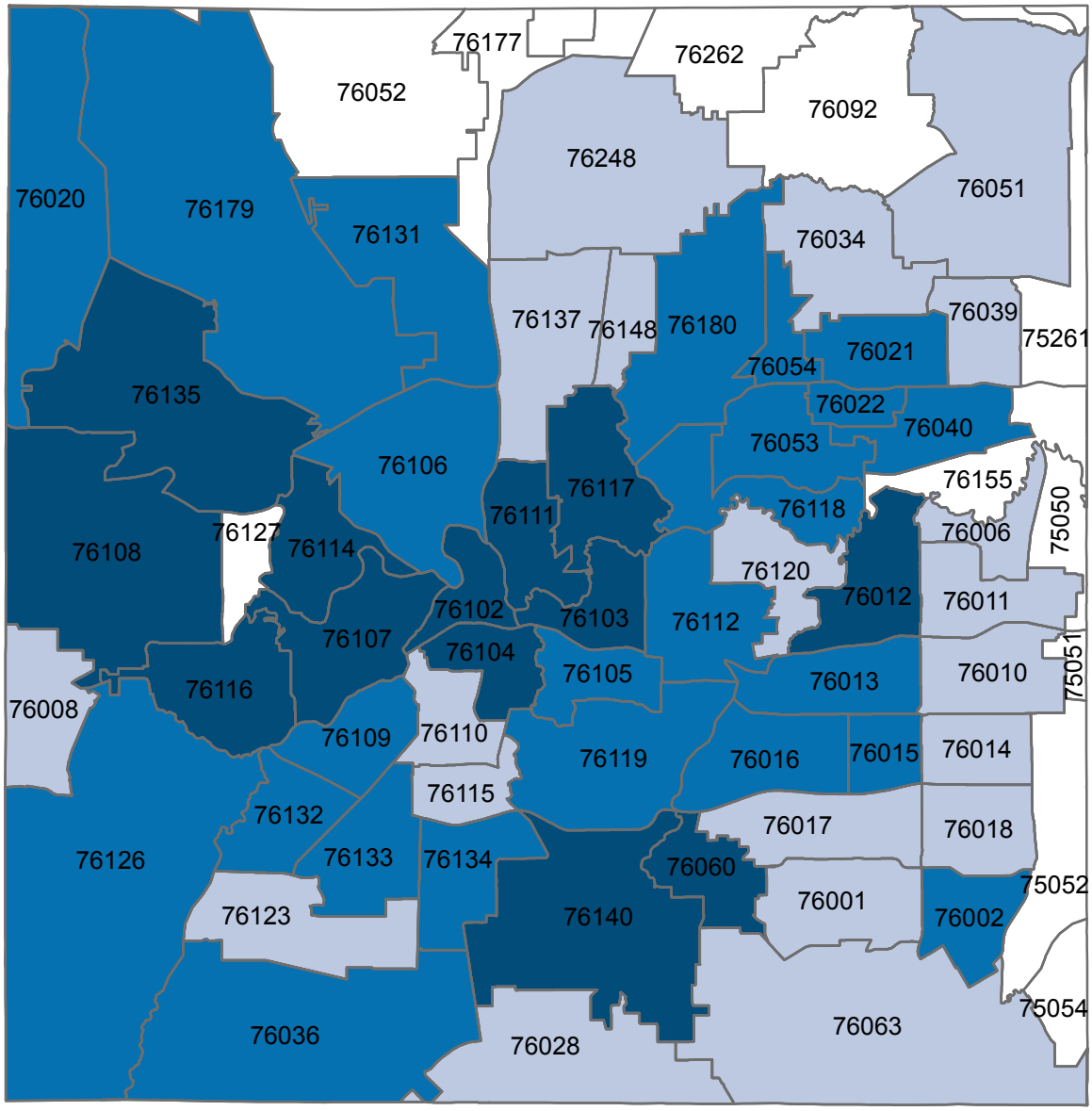
Table V-24: Chronic Lower Respiratory Diseases Mortality Rate by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-34	7	0.4	6	0.3	6	0.3
35-44	7	2.8	5	2.0	6	2.4
45-54	17	8.4	15	7.1	13	6.0
55-64	50	42.0	54	42.1	62	45.7
65-74	133	192.8	136	194.5	153	215.5
75+	318	558.9	265	456.4	311	526.4

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services

Figure V-11 on the following page depicts the distribution of chronic lower respiratory diseases by ZIP code. ZIP codes with the highest rates were located in central and central west Tarrant County, with the exception of 76012 in Arlington and 76140 and 76060 in Fort Worth and Kennedale, respectively.

Figure V-11: Geographic Distribution of Deaths from Chronic Lower Respiratory Diseases



Rate per 100,000

9.46 - 25.76 | 25.77 - 51.51 | 51.52 - 78.05 | Excluded Data

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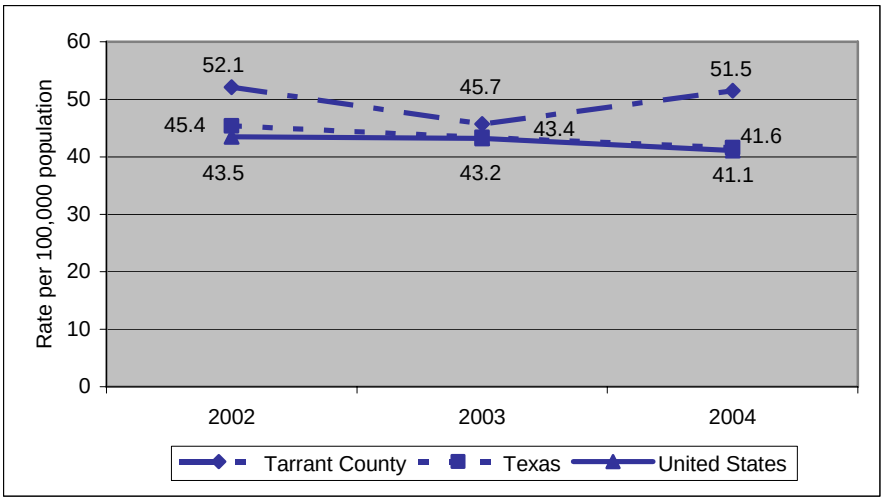
Comparison with Texas and the United States

The chronic lower respiratory diseases mortality rate in Tarrant County was higher than Texas and the United States in 2002-2004 (Figure V-12).

Figure V-12: Chronic Lower Respiratory Diseases Mortality Rates in Tarrant County, Texas and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services; National Center for Health Statistics

Comparison with Healthy People 2010 Objective

There were no corresponding Healthy People 2010 objectives for chronic lower respiratory diseases.

Indicator V-5. Hypertension Morbidity

The CDC defines high blood pressure in adults as a systolic (top number) blood pressure of 140 mmHg or greater or a diastolic (lower number) blood pressure of 90 mmHg or greater. Normal blood pressure is defined as a systolic blood pressure of less than 120 mmHg and a diastolic blood pressure of less than 80 mmHg. High blood pressure can result in several serious conditions such as heart disease (e.g. heart failure, heart attack), damage to the eyes, kidney disease, and kidney failure (CDC, 2007).

In 2004, of the 2,506 Tarrant County Behavioral Risk Factor Surveillance System (BRFSS) survey respondents, 23.1 percent reported having been diagnosed with hypertension (Table V-25).

Table V-25: Hypertension in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Hypertension		
	n	Percent*	95% CI
2004	717	23.1	21.1 - 25.1

n Represents the number of respondents who reported having doctor diagnosed hypertension
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

A comparable percentage of male and female survey respondents reported having been diagnosed with hypertension (Table V-26).

Table V-26: Hypertension by Gender in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Hypertension		
	n	Percent*	95% CI
Males	277	23.1	20.1 - 26.4
Females	440	23.0	20.6 - 25.6

n Represents the number of respondents who reported having doctor diagnosed hypertension
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Blacks constituted the highest percentage of survey respondents who reported having been diagnosed with hypertension, followed by Whites then Hispanics (Table V-27).

Table V-27: Hypertension by Race/Ethnicity in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Hypertension		
	n	Percent*	95% CI
White	462	25.8	23.3 - 28.5
Black	173	32.2	26.5 - 38.6
Hispanic	67	12.5	9.3 - 16.6
Other	11	14.6	7.1 - 27.6

n Represents the number of respondents who reported having doctor diagnosed hypertension
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

The prevalence estimate of hypertension increased with age in Tarrant County, and was highest in the 65 years and older population (Table V-28).

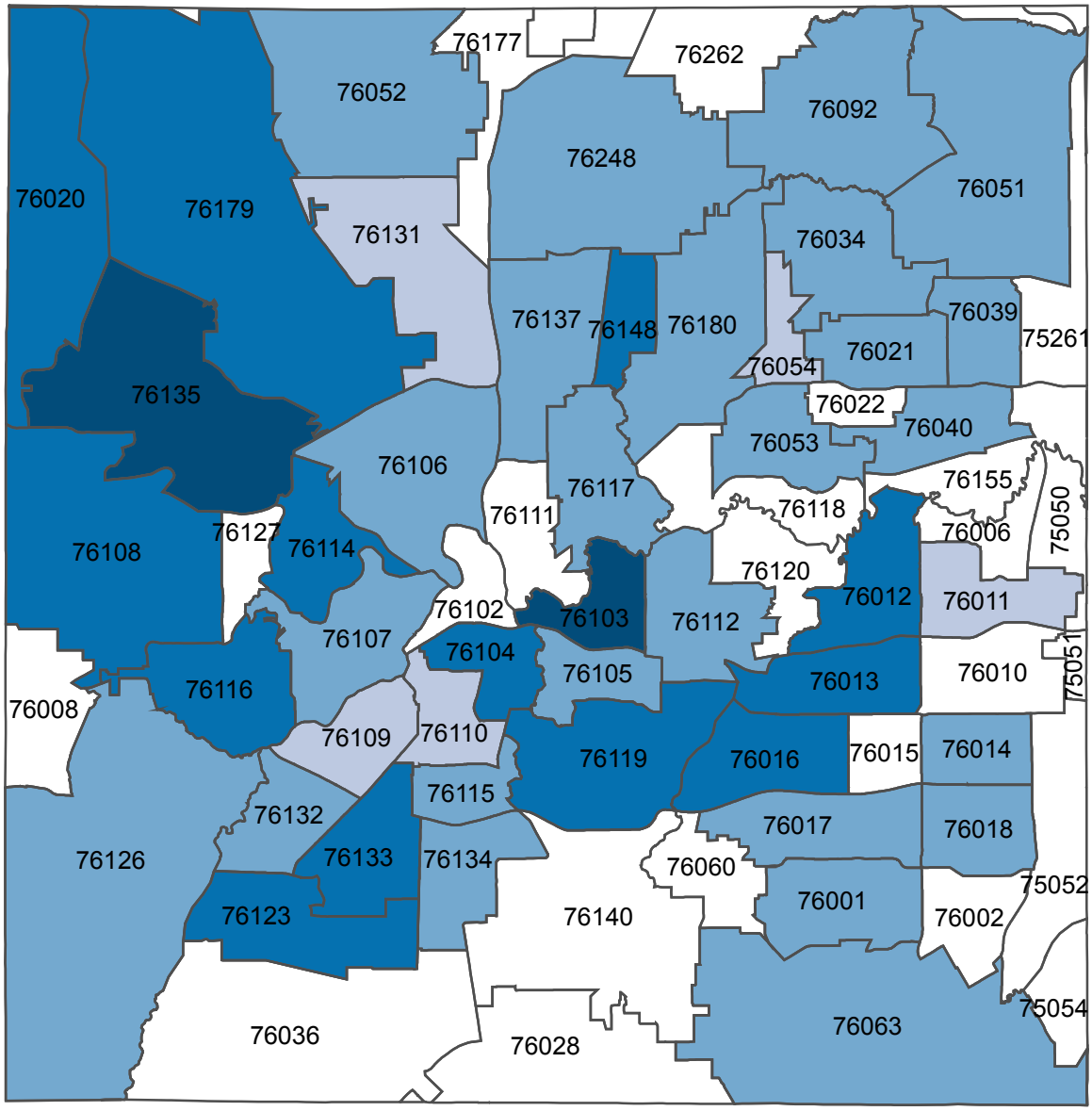
Table V-28: Hypertension by Age in Adults, Tarrant County, 2004; (N = 2,506)

Age Group in years	Doctor Diagnosed Hypertension		
	n	Percent*	95% CI
18-24	6	1.4	0.6 - 3.3
25-34	41	8.8	6.1 - 12.5
35-44	96	17.5	13.7 - 22.0
45-54	142	29.2	24.2 - 34.8
55-64	167	43.6	37.6 - 49.9
65+	259	60	54.3 - 65.4

n Represents the number of respondents who reported having doctor diagnosed hypertension
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Figure V-13 on the following page shows the geographic distribution of hypertension. The ZIP codes where the highest percentage of survey respondents answered that they had doctor diagnosed hypertension were 76103 and 76135.

Figure V-13: Geographic Distribution of Hypertension



Weighted Percent

7.00% - 12.75% | 12.76% - 25.50% | 25.51% - 38.25% | 38.26% - 51.00% | Excluded Data

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Comparison with Texas and the United States

The prevalence estimate for hypertension in Tarrant County in 2004 was not significantly lower than that in Texas and in the nation in 2003 (Table V-29).

Table V-29: Hypertension in Tarrant County, Texas, and the United States

	Prevalence Estimate	95% CI
Tarrant County	23.1%	21.1-25.1
Texas[1,2]	24.6%	23.4-25.8
United States [1,2]	24.8%	-

[1] Data Source: National Center for Chronic Disease Prevention & Health Promotion
[2] Data provided for 2003. Nationwide & Texas data are not available for questions in this category for 2004.
CI Confidence interval

Comparison with Healthy People 2010 Objective

Extreme caution is advised in comparing the prevalence estimates of hypertension in Tarrant County to that of the Healthy People 2010 objective, as the former is not an age adjusted estimate (Table V-30).

Table V-30: Comparison of Hypertension Morbidity in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County
	2004
12-9. Reduce the proportion of adults with high blood pressure to 16 percent. [Baseline: 28 percent of adults aged 20 years and older had high blood pressure in 1988–94 (age adjusted to the year 2000 standard population)].	23.10%

*Weighted to population characteristics; not age adjusted

Indicator V-6. Heart Disease Morbidity

Heart disease includes several different heart conditions, with coronary artery disease being the most common. Heart disease can cause significant morbidity, a heart attack, and heart failure. It is the leading cause of death in the United States, Texas, and Tarrant County. Risk factors for heart disease include high blood pressure, high blood cholesterol, cigarette smoking, diabetes, and obesity. Persons can lower their risk for heart disease by preventing/treating high blood pressure and high cholesterol, participating in physical activity, controlling their weight, and ensuring proper nutrition (CDC, 2007).

In 2004, of the 2,506 Tarrant County Behavioral Risk Factor Surveillance System (BRFSS) survey respondents, 5.5 percent of respondents reported having been diagnosed with heart disease (Table V-31).

Table V-31: Heart Disease in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Heart Disease		
	n	Percent*	95% CI
2004	178	5.5	4.6 - 6.7

n Represents the number of respondents who reported having doctor diagnosed heart disease
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

A comparable percentage of male and female survey respondents reported having been diagnosed with heart disease (Table V-32).

Table V-32: Heart Disease by Gender in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Heart Disease		
	n	Percent*	95% CI
Males	77	5.8	4.3 - 7.6
Females	101	5.3	4.1 - 6.8

n Represents the number of respondents who reported having doctor diagnosed heart disease
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Others constituted the highest percentage of survey respondents who reported having been diagnosed with heart disease, followed by Blacks then Whites (Table V-33).

Table V-33: Heart Disease by Race/Ethnicity in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Heart Disease		
	n	Percent*	95% CI
White	119	6.5	5.2 - 8.1
Black	7	6.6	4.3 - 9.9
Hispanic	13	1.4	0.7 - 2.7
Other	6	9.1	3.5 - 21.7

n Represents the number of respondents who reported having doctor diagnosed heart disease
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

The prevalence estimates of heart disease increased with age in Tarrant County, and were highest in 65 years and older population (Table V-34).

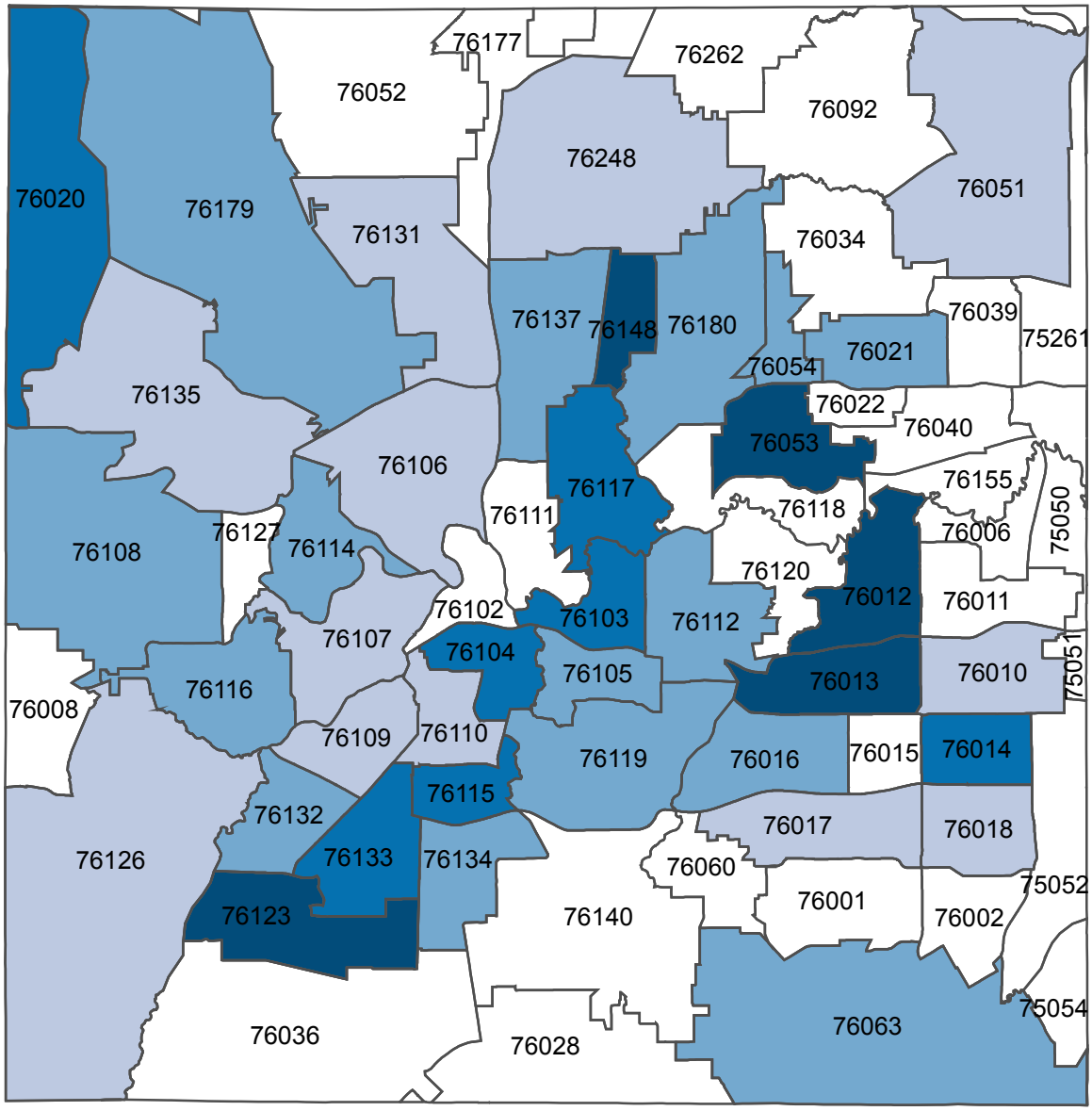
Table V-34: Heart Disease by Age in Adults, Tarrant County, 2004; (N = 2,506)

Age Group in years	Doctor Diagnosed Heart Disease		
	n	Percent*	95% CI
18-24	2	0.4	0.1 - 1.5
25-34	9	0.8	0.3 - 1.9
35-44	16	3.9	2.1 - 7.2
45-54	19	4.0	2.2 - 6.9
55-64	30	9.0	5.8 - 13.9
65+	102	24.6	20.0 - 29.8

n Represents the number of respondents who reported having doctor diagnosed heart disease
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Figure V-14 on the following page shows the geographic distribution of heart disease. The ZIP codes with the highest percentages of respondents who reported having heart disease are 76148, 76053, 76012, 76013, and 76123.

Figure V-14: Geographic Distribution of Heart Disease



Weighted Percent

0.83% - 4.01% | 4.02% - 8.03% | 8.04% - 12.04% | 12.05% - 16.05% | Excluded Data

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Comparison with Texas and the United States

The prevalence estimate for heart disease in Tarrant County in 2004 was approximately 1.4 times lower than that seen in Texas (Table V-35).

Table V-35: Heart Disease in Tarrant County, Texas, and the United States

	Prevalence Estimate	95% CI
Tarrant County	5.5%	4.6 - 6.7
Texas*	7.6%	6.2 - 9.1
United States	NA	-

* Data Source: Texas Council on Cardiovascular Disease and Stroke. Cardiovascular Disease in Texas: A Risk Factor Report, 1999. Available at http://www.dshs.state.tx.us/chs/brfss/reports

Comparison with Healthy People 2010 Objective

There were no corresponding Healthy People 2010 objectives for heart disease.

Indicator V-7. Diabetes Mellitus Morbidity

Diabetes is a disease in which a person's body either does not produce enough insulin or does not properly use its insulin. This causes the blood glucose (or sugar) level to be high. Symptoms of diabetes include frequent urination, excessive thirst, unexplained weight loss, extreme hunger, sudden vision changes, tingling or numbness in hands or feet, feeling very tired, very dry skin, sores that are slow to heal, and increased susceptibility to infections. Risk factors for diabetes include obesity, older age, family history of diabetes, and impaired glucose tolerance. Complications of diabetes include heart disease and stroke, high blood pressure, blindness, kidney disease, nervous system disease, amputations, and dental disease (CDC, 2007).

In 2004, of the 2,506 Tarrant County Behavioral Risk Factor Surveillance System (BRFSS) survey respondents, 5.9 percent reported having been diagnosed with diabetes mellitus or "diabetes" (Table V-36).

Table V-36: Diabetes in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Diabetes		
	n	Percent*	95% CI
2004	217	5.9	5.0 - 7.0

n Represents the number of respondents who reported having doctor diagnosed diabetes mellitus
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

A higher percentage of male respondents than female respondents reported having been diagnosed with diabetes (Table V-37).

Table V-37: Diabetes by Gender in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Diabetes		
	n	Percent*	95% CI
Males	88	6.2	4.8 - 8.1
Females	129	5.6	4.5 - 6.9

n Represents the number of respondents who reported having doctor diagnosed diabetes mellitus
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Blacks constituted the highest percentage of survey respondents who reported having been diagnosed with diabetes, followed by Whites then Hispanics (Table V-38).

Table V-38: Diabetes by Race/Ethnicity in Adults, Tarrant County, 2004; (N = 2,506)

	Doctor Diagnosed Diabetes		
	n	Percent*	95% CI
White	26	5.8	4.7 - 7.2
Black	58	9.2	6.3 - 13.3
Hispanic	29	5.2	3.4 - 7.9
Other	1	1.5	0.2 - 9.8

n Represents the number of respondents who reported having doctor diagnosed diabetes mellitus
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

The prevalence estimates of diabetes increased with age in Tarrant County and were highest in the 65 years and older population (Table V-39).

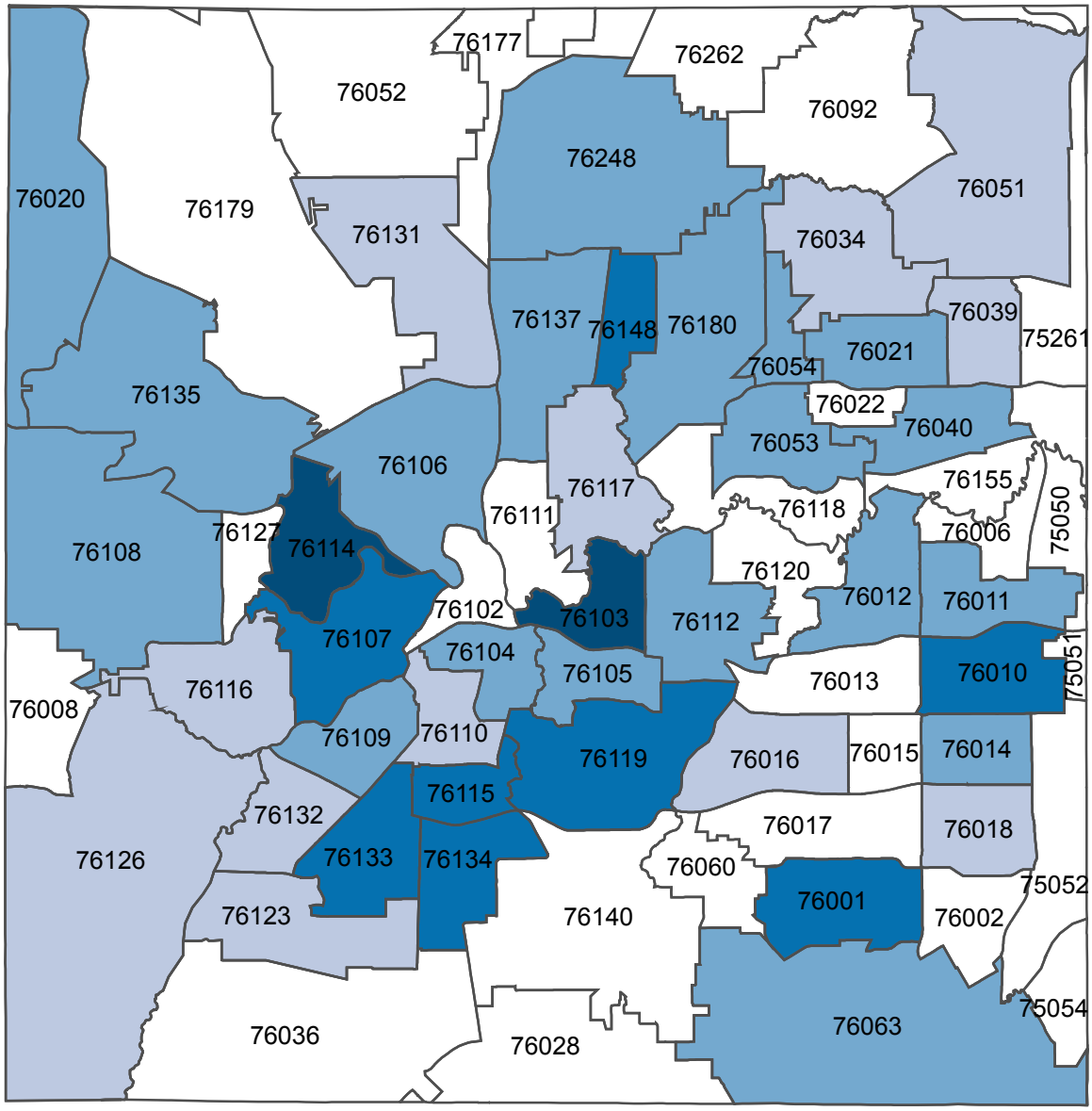
Table V-39: Diabetes by Age in Adults, Tarrant County Adults, 2004; (N = 2,506)

Age Group in years	Doctor Diagnosed Diabetes		
	n	Percent*	95% CI
18-24	0	--	--
25-34	6	1.3	0.4 - 3.9
35-44	24	3.0	1.8 - 5.1
45-54	42	7.5	5.1 - 10.9
55-64	57	13.0	9.6 - 17.3
65+	85	18.9	14.9 - 23.6

n Represents the number of respondents who reported having doctor diagnosed diabetes mellitus
* Percentages are weighted to population characteristics
CI Confidence interval
Data Source: BRFSS 2004, Tarrant County Public Health

Figure V-15 maps the geographic distribution of diabetes in Tarrant County. The ZIP codes where survey respondents reported having the highest percentage of diabetes are 76103 and 76114.

Figure V-15: Geographic Distribution of Diabetes



Rate per 100,000

1.20 - 4.55 | 4.56 - 9.10 | 9.11 - 13.65 | 13.66 - 18.20 | Excluded Data

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Comparison with Texas and the United States

The prevalence estimate for diabetes mellitus in Tarrant County in 2004 was approximately 1.2 to 1.3 times lower compared to the Texas and the United States estimate (Tale V-40).

Table V-40: Diabetes in Tarrant County, Texas, and the United States

	Prevalence Estimate	95% CI
Tarrant County	5.9%	5.0-7.0
Texas*	7.7%	6.9-8.5
United States*	7.1%	-

* Data Source: National Center for Chronic Disease Prevention & Health Promotion

Comparison with Healthy People 2010 Objective

No appropriate diabetes related Healthy People 2010 objective was found to compare with the Tarrant County BRFSS weighted prevalence estimates of diabetes.

Indicator V-8. Obesity Morbidity

Obesity is associated with an increased risk for hypertension, dyslipidemia (high cholesterol or high triglycerides), type 2 diabetes, coronary artery disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, and some cancers.

Of the 2,506 Tarrant County Behavioral Risk Factor Surveillance System (BRFSS) survey respondents in 2004, 26.2 percent of respondents were obese. Survey respondents with a body mass index (BMI) greater than 30 were categorized as being obese (Table V-41).

Table V-41: Obesity in Adults, Tarrant County, 2004; (N = 2,506)

	BMI > 30		
	n	Percent*	95% CI
2004	626	26.2	23.8 - 28.7

n Represents the number of respondents who are obese
* Percentages are weighted to population characteristics
CI Confidence interval
BMI Body mass index
Data Source: BRFSS 2004, Tarrant County Public Health

Approximately equal proportions of male and female survey respondents were obese (Table V-42).

Table V-42: Obesity by Gender in Adults, Tarrant County, 2004; (N = 2,506)

	BMI > 30		
	n	Percent*	95% CI
Males	236	26.9	23.1 - 31.0
Females	390	25.5	22.8 - 28.4

n Represents the number of respondents who are obese
* Percentages are weighted to population characteristics
CI Confidence interval
BMI Body mass index
Data Source: BRFSS 2004, Tarrant County Public Health

Blacks constituted the highest percentage of survey respondents who were obese, followed by Hispanics then Whites (Table V-43).

Table V-43: Obesity by Race/Ethnicity in Adults, Tarrant County, 2004; (N = 2,506)

	BMI > 30		
	n	Percent*	95% CI
White	342	23.5	20.8 - 26.5
Black	167	42.6	35.6 - 50.0
Hispanic	106	27.7	21.9 - 34.3
Other	9	15.8	7.2 - 31.1

n Represents the number of respondents who are obese
* Percentages are weighted to population characteristics
CI Confidence interval
BMI Body mass index
Data Source: BRFSS 2004, Tarrant County Public Health

Highest proportions of respondents who were obese were observed in the 35 to 55 year age group. BMI tended to decline steadily in respondents in the older age groups (Table V-44).

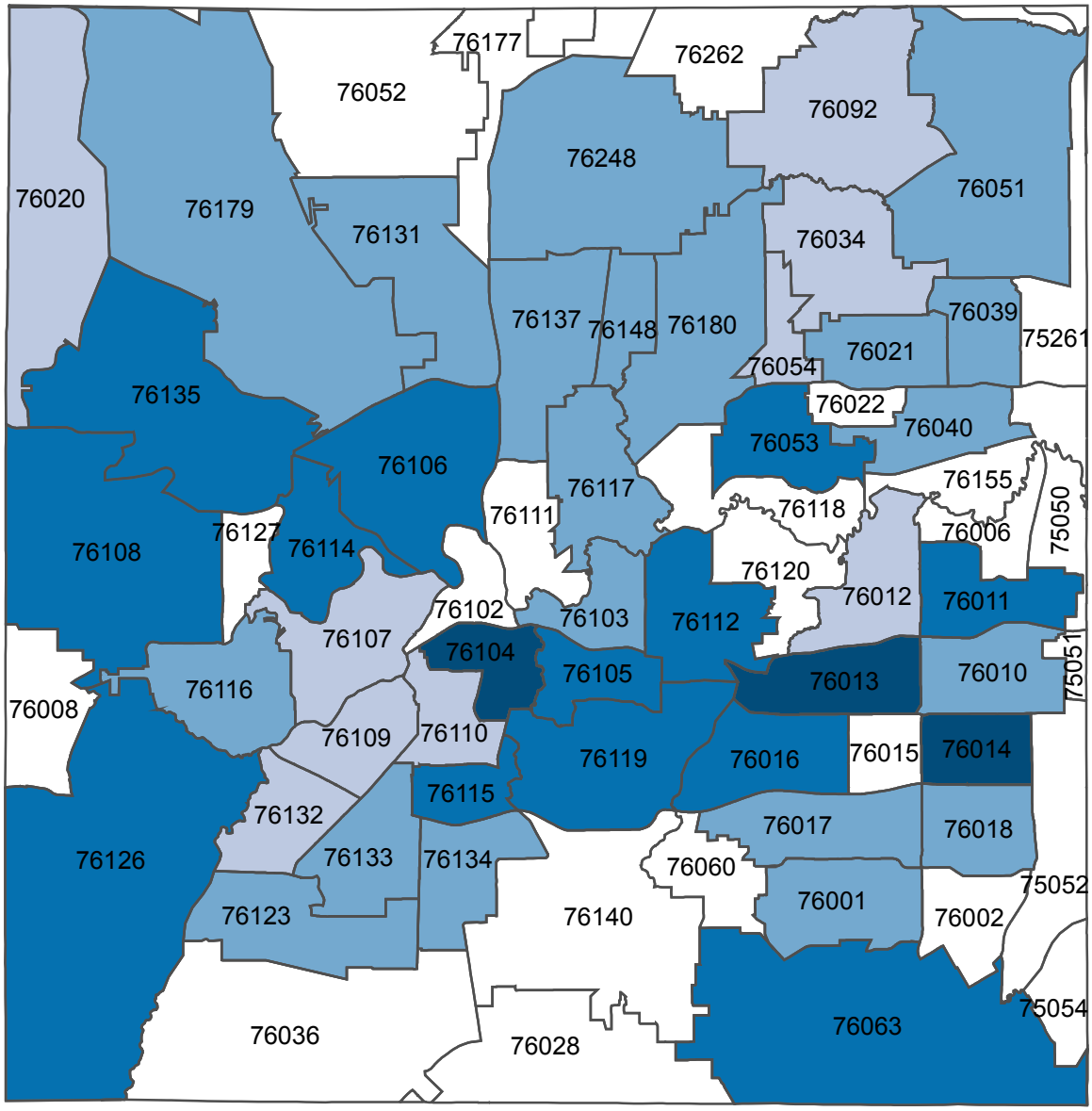
Table V-44: Obesity by Age in Adults, Tarrant County, 2004; (N = 2,506)

Age Group	BMI > 30		
in years	n	Percent*	95% CI
18-24	28	12.7	7.9 - 20.0
25-34	103	25.8	20.4 - 32.0
35-44	156	30.5	25.6 - 35.8
45-54	142	30.8	25.5 - 36.6
55-64	106	28.8	23.2 -35.1
65+	88	21.3	17.1 - 26.3

n Represents the number of respondents who are obese
* Percentages are weighted to population characteristics
CI Confidence interval
BMI Body mass index
Data Source: BRFSS 2004, Tarrant County Public Health

On the following page, Figure V-16 shows the geographic distribution of obesity as reported by survey respondents. The ZIP codes whose respondents reported the highest percentages of obesity are 76104, 76013, and 76014.

Figure V-16: Geographic Distribution of Obesity



Weighted Percent

3.5% - 14.64% | 14.65% - 29.28% | 29.29% - 43.93% | 43.94% - 58.57% | Excluded Data

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Comparison with Texas and the United States

The prevalence estimate for obesity in Tarrant County in 2004 was slightly higher than that in Texas and approximately 1.2 times higher than the United States' estimate (Table V-45).

Table V-45: Obesity in Tarrant County, Texas, and the United States

	Prevalence Estimate	95% CI
Tarrant County	26.2%	23.8-28.7
Texas[1]	25.8%	24.4-27.2
United States[1]	23.5%	23.2-23.8

[1] Data Source: Texas Department of State Health Services

Comparison with Healthy People 2010 Objective

In Tarrant County, the proportion of obese adults (20 years and older) was approximately 1.8 times higher than the Healthy People 2010 objective of 15 percent (Table V-46).

Table V-46: Comparison of Obesity Morbidity in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County
19-2. Reduce obesity in adults 20 years and older to 15% (Baseline: 23% in 1998-1999)	**2004** 26.7% (in adults 20 years and older)*

*Weighted to population characteristics

Infectious Diseases

Definitions and Data Sources

Early Syphilis

- Numerator – incidence of early syphilis (primary syphilis, secondary syphilis, early latent syphilis)
- Denominator – Estimated population
- Rate – per 100,000 population
- Data Source – Tarrant County Public Health, Division of Adult Health Services

Gonorrhea

- Numerator – incidence of gonorrhea cases
- Denominator – Estimated population
- Rate – per 100,000 population
- Data Source - Tarrant County Public Health, Division of Adult Health Services

Chlamydia

- Numerator – incidence of chlamydia cases
- Denominator - Estimated population
- Rate – per 100,000 population
- Data Source – Tarrant County Public Health, Division of Adult Health Services

Hepatitis B

- Numerator - incidence of acute hepatitis B cases
- Denominator - Estimated population
- Rate - per 100,000 population
- Data Source – Tarrant County Public Health, Division of Adult Health Services

Hepatitis C

- Numerator - incidence of chronic hepatitis C cases
- Denominator - Estimated population
- Rate - per 100,000 population
- Data Source – Tarrant County Public Health, Division of Epidemiology and Health Information

HIV

- Numerator - incidence of HIV cases (does not include AIDS cases)
- Denominator - Estimated population
- Rate - per 100,000 population

- Data Source - Tarrant County Public Health, Division of Epidemiology and Health Information

Tuberculosis

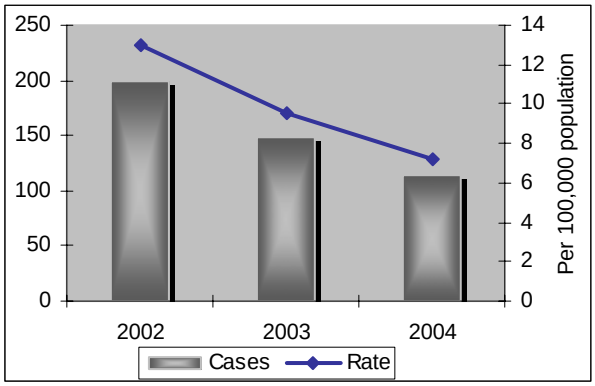
- Numerator - incidence of TB cases
- Denominator - Estimated population
- Rate - per 100,000 population
- Data Source – Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention

Indicator VI-1. Early Syphilis

Syphilis is a sexually transmitted disease cased by *Treponema pallidum*. Syphilis can be categorized into three different stages: primary stage, secondary stage, and early latent stage. Each stage is associated with different symptoms; however, infection with syphilis may be asymptomatic for several years. A single sore (or chancre) may appear in the primary stage, lasting three to six weeks. The secondary stage is associated with a skin rash and mucous membrane lesions. During early latent syphilis, symptoms may include damage to internal organs such as the brain, nerves, eyes, heart, blood vessels, liver, bones, and joints. If untreated, infection with syphilis may result in difficulty coordinating movements, paralysis, numbness, gradual blindness, dementia, and death (CDC, 2007).

Early syphilis is of special public health importance because it is a treatable condition. It includes primary, secondary, and early latent syphilis. In Tarrant County, the number of cases and incidence rate of syphilis demonstrated a steady decline from 199 cases (13.0 per 100,000 population) in 2002 to 148 cases (9.5 per 100,000 population) in 2003 and 115 cases (7.2 per 100,000 population) in 2004 (Figure VI-1).

Figure VI-1: Early Syphilis, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

The cases and incidence rate of early syphilis have declined from 2002-2004 in both males and females. In 2002 and 2004, the rate of early syphilis was higher in males than females. In 2003, the rate was comparable in males and females (Table VI-1).

Table VI-1: Early Syphilis by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	104	13.7	73	9.4	81	10.3
Female	95	12.3	75	9.6	34	4.2

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

In 2002 and 2003, the highest rate of early syphilis in Tarrant County was observed in Blacks, followed by Hispanics then Whites. In 2004, the highest rate of early syphilis was observed in Blacks, followed by Whites then Hispanics. The rate of early syphilis in Blacks was approximately 7 to 15 times higher than Whites and approximately 6 to 12 times higher than Hispanics (Table VI-2).

Table VI-2: Early Syphilis by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	40	4.3	28	3.1	38	4.1
Black	127	63.0	98	47.2	65	30.5
Hispanic	30	9.1	21	6.0	9	2.4

Rate per 100,000 population
Other category not mentioned due to small numbers
Data Source: Tarrant County Public Health, Division of Adult Health Services

From 2002-2004, the rate of early syphilis declined in all age groups. In 2002, the highest rate of early syphilis was seen in the 30-39 year age group, followed closely by the 20-29 and 40-54 year age groups. In 2003 and 2004, however, the highest rate was observed in the 20-29 year age group, followed by the 30-39 and 40-54 year age groups (Table VI-3).

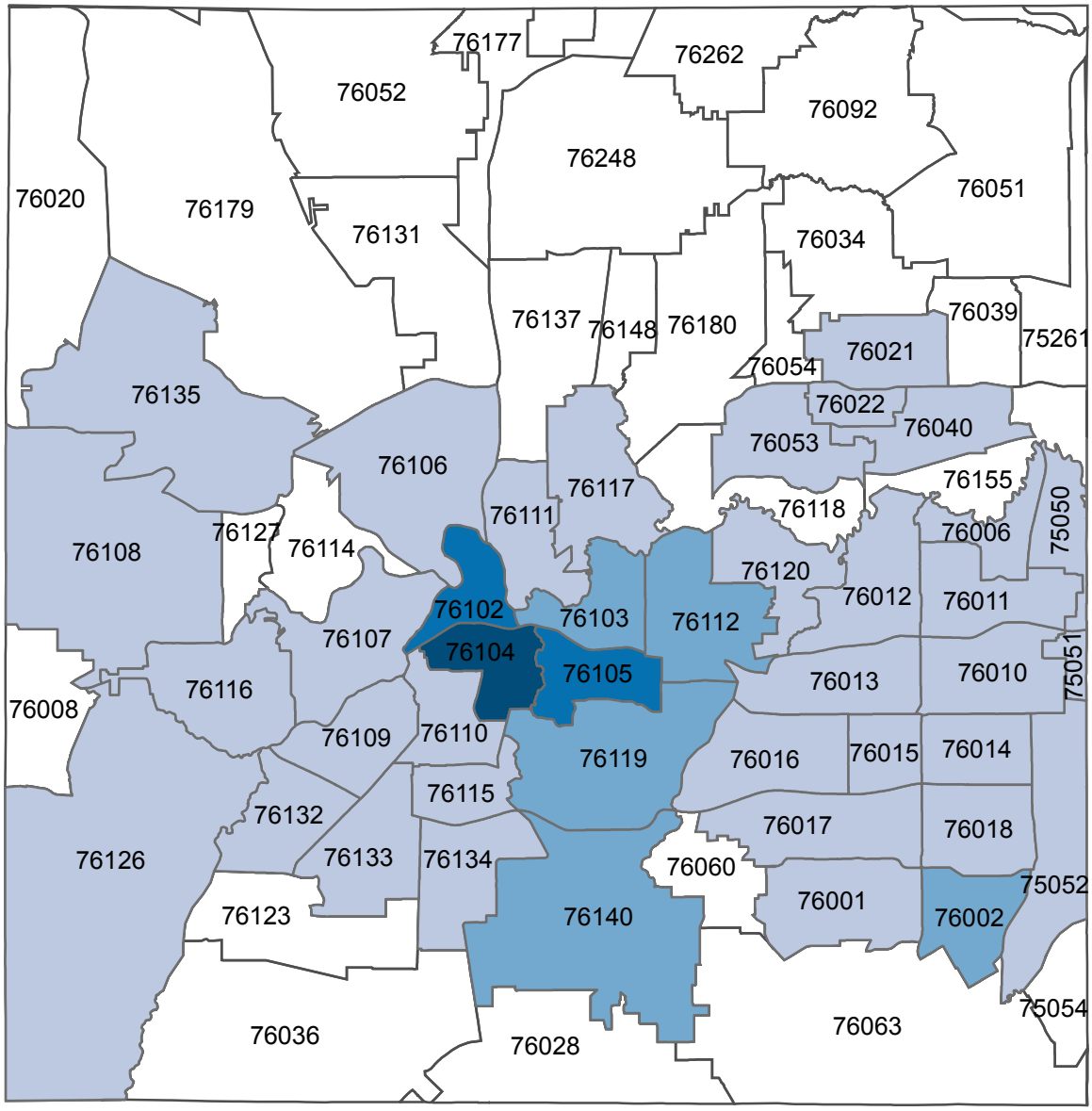
Table VI-3: Early Syphilis by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
10-19	20	8.7	15	6.4	8	3.6
20-29	48	21.0	51	22.1	34	14.4
30-39	59	23.2	37	14.5	33	12.9
40-54	58	17.6	40	11.8	31	9.0
55 +	14	5.7	5	1.9	9	3.4

Rate per 100,000 population
No cases were observed in the 0-9 year age group
Data Source: Tarrant County Public Health, Division of Adult Health Services

On the following page, Figure VI-2 illustrates the distribution of early syphilis by ZIP code. 76104 had the highest rate of syphilis. ZIP codes 76102 and 76105 fell into the next highest quartile.

Figure VI-2: Geographic Distribution of Early Syphilis Cases



Rate per 100,000

4.15 - 20.94 | 20.95 - 41.88 | 41.89 - 62.82 | 62.83 - 83.76 | Excluded Data

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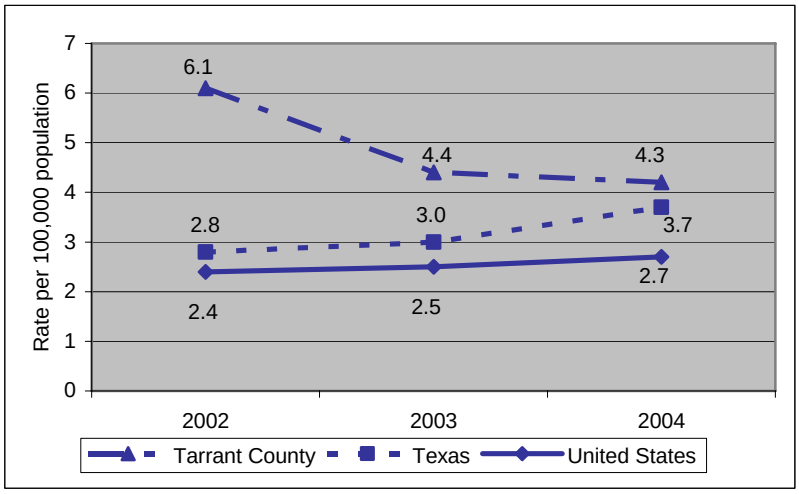
Comparison with Texas and the United States

The syphilis incidence rate (only primary and secondary syphilis) in Tarrant County was more than two times the rate in Texas and two and a half times the rate in the United States in 2002. The rate in Tarrant County steadily decreased from 2002-2004, while the rate in Texas slightly increased and the rate in the United States remained relatively stable. In 2004, the syphilis incidence rate in Tarrant County was slightly higher than Texas and one and a half times higher than the United States (Figure VI-3).

Figure VI-3: Syphilis* Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
* Syphilis includes only primary and secondary syphilis
Data Source: Tarrant County Public Health, Division of Adult Health Services

Comparison with Healthy People 2010 Objective

Tarrant County did not meet the Healthy People 2010 goal of 0.2 cases of primary and secondary syphilis per 100,000 population in 2002-2004 (Table VI-4).

Table VI-4: Comparison of Incidence of Syphilis in Tarrant County with Healthy People 2010 Objective

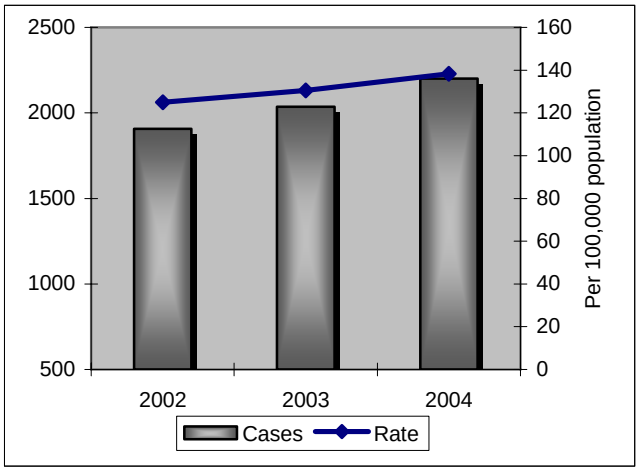
Healthy People 2010 Objective	Tarrant County		
25-3. Eliminate sustained domestic transmission of primary and secondary syphilis to 0.2 cases per 100,000 population (Baseline: 3.2 cases of primary and secondary syphilis per 100,000 population occurred in 1997)	**2002**	**2003**	**2004**
	6.1	4.4	4.3

Indicator VI-2. Gonorrhea

Gonorrhea is a sexually transmitted disease (STD) caused by the bacterium *Neisseria gonorrhoeae*. Gonorrhea is the second most commonly reported disease in both Tarrant County and the United States. 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 (CDC, 2007). Since infection with gonorrhea can be asymptomatic, screening is important.

In Tarrant County, the number of cases and incidence rate of gonorrhea increased from 1,907 cases (124.9 per 100,000 population) in 2002 to 2,036 cases (130.6 per 100,000 population) in 2003 and 2,200 cases (138.3 per 100,000 population) in 2004 (Figure VI-4).

Figure VI-4: Gonorrhea, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

In 2002-2004, the number of gonorrhea cases and incidence rate were higher in females than males. The rate increased in both genders each year (Table VI-5).

Table VI-5: Gonorrhea by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	908	119.9	1,003	129.6	1,057	133.8
Female	997	129.6	1,030	131.2	1,143	142.8

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

In 2002-2004, the number of gonorrhea cases and incidence rate were highest for Blacks, followed by Hispanics then Whites. The incidence rate of gonorrhea in Blacks was over 20 times that of Whites and 10 times that of Hispanics. The rate increased among Blacks and Whites each year (Table VI-6).

Table VI-6: Gonorrhea by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	250	27.1	273	29.7	293	31.9
Black	1,227	608.7	1,296	624.7	1,542	724.4
Hispanic	239	72.8	210	59.7	248	66.2
Other	10	13.4	8	10.0	12	14.1

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

From 2002-2004, the incidence rate of gonorrhea steadily increased in all age groups except the 0-9 and 55 years and older age groups. Each year, close to 80 percent of all gonorrhea cases occurred among teenagers and young adults. The rate of gonorrhea was highest in the 20-29 and 10-19 year age groups, followed by the 30-39 year age group (Table VI-7).

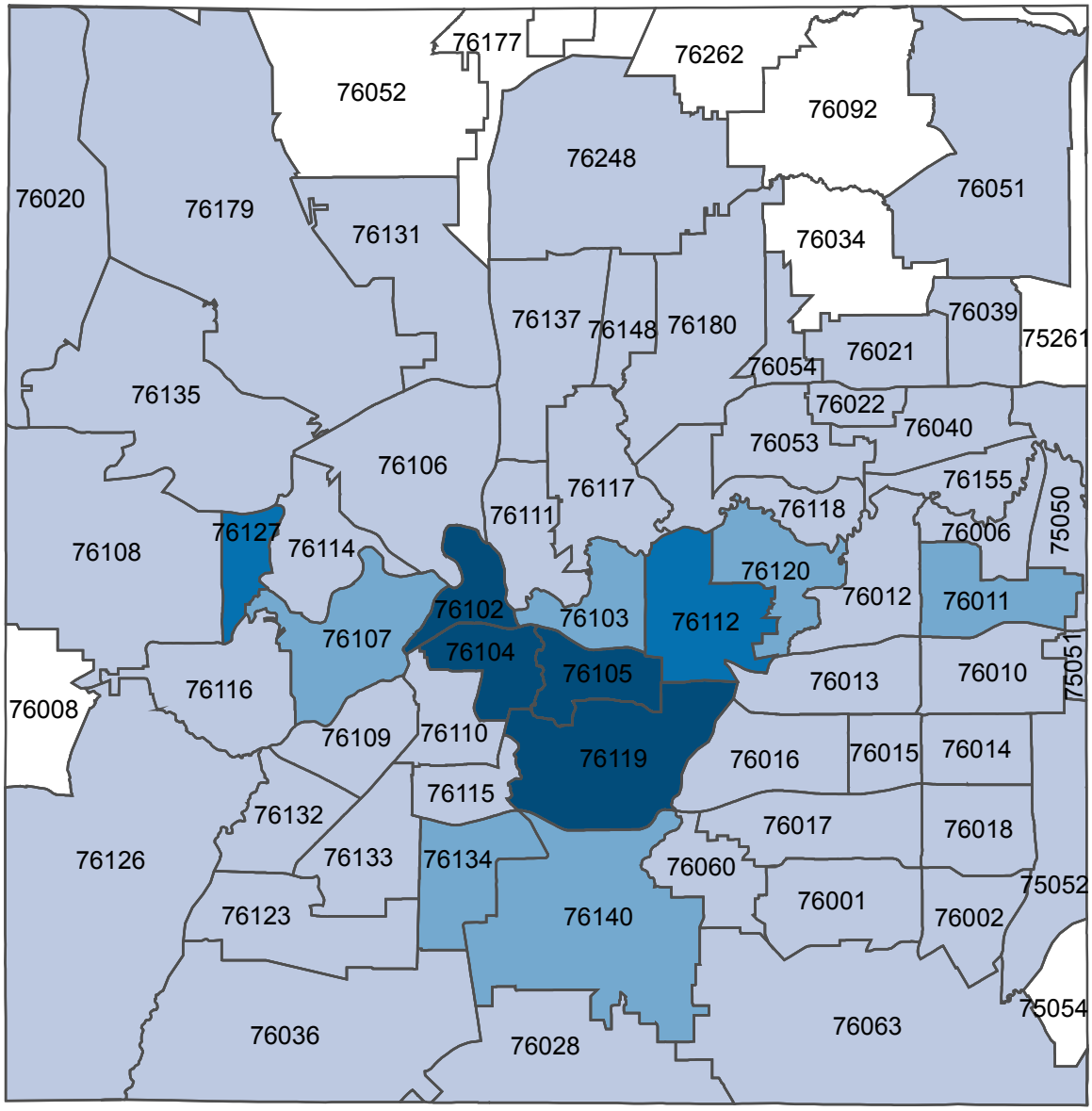
Table VI-7: Gonorrhea by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-9	6	2.5	3	@	<3	@
10-19	626	272.6	686	293.0	705	295.7
20-29	895	392.2	926	400.7	1,013	430.4
30-39	225	88.5	264	103.8	304	118.8
40-54	125	37.9	130	38.5	152	44.1
55+	18	7.3	17	6.6	22	8.3

Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Adult Health Services

The ZIP codes with the highest rate of gonorrhea occurred in 76102, 76104, 76105, and 76119, in central Tarrant County, as shown on Figure VI-5 on the following page.

Figure VI-5: Geographic Distribution of Gonnorrhea Cases



Rate per 100,000

19.13 - 167.04 | 167.05 - 334.08 | 334.09 - 501.11 | 501.12 - 668.15 | Excluded Data

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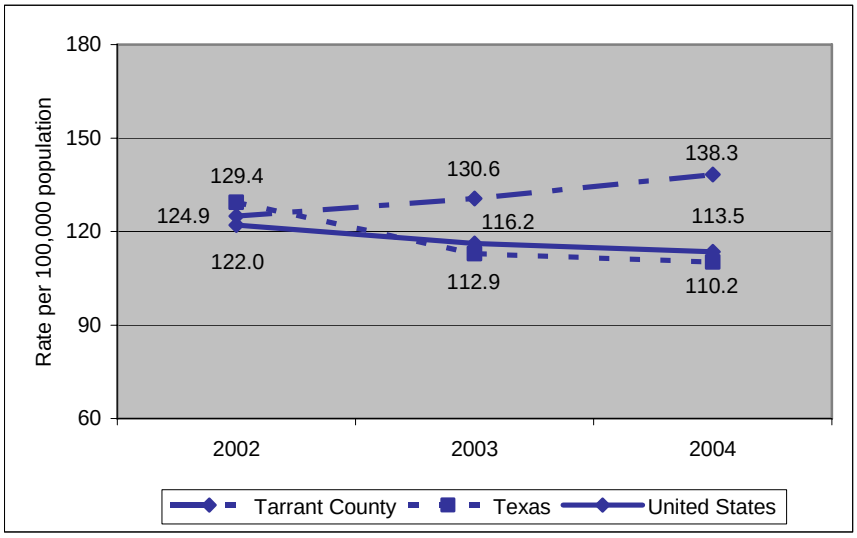
Comparison with Texas and the United States

The incidence rate of gonorrhea in Tarrant County was lower than Texas but higher than the United States in 2002. In 2003 and 2004, the rate in Tarrant County was higher than both Texas and the United States (Figure VI-6).

Figure VI-6: Gonorrhea Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

The incidence rate of gonorrhea in Tarrant County exceeded the Healthy People 2010 objective in 2002-2004 (Table VI-8).

Table VI-8: Comparison of Incidence of Gonorrhea in Tarrant County with Healthy People 2010 Objective

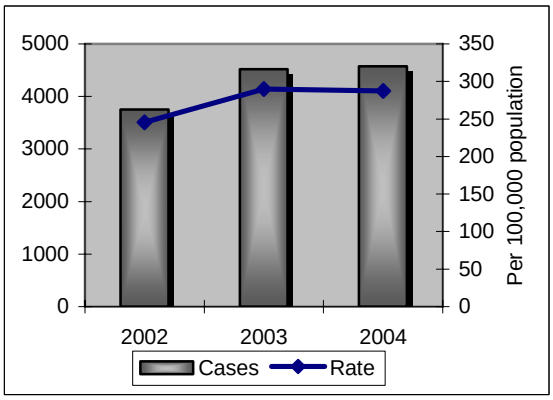
Healthy People 2010 Objective	Tarrant County		
25-2 Reduce gonorrhea rates to 19 new cases per 100,000 population	**2002**	**2003**	**2004**
(Baseline: 123 new cases of gonorrhea per 100,000 population occurred in 1997)	124.3	130.6	138.3

Indicator VI-3. Chlamydia

Chlamydia is a bacterial infection caused by the bacterium *Chlamydia trachomatis*. Chlamydia is not only the most reported sexually transmitted disease (STD) in Tarrant County, but is also the most commonly reported STD in the United States. 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 (CDC, 2007). Since infection with chlamydia is usually asymptomatic, screening is important.

In Tarrant County, the number of new chlamydia cases increased from 3,749 (245.6 per 100,000) in 2002 to 4,518 (289.8) in 2003, then remained relatively steady at 4,572 (287.5 per 100,000) in 2004 (Figure VI-7).

Figure VI-7: Chlamydia, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

The number of cases and incidence rate of chlamydia increased in females from 2002-2004. A higher number of cases and higher rate occurred among females each year. A progressive widening of the gap between males and females was observed from 2002-2004. The rate in females was 3.9 times that of males in 2002, 4.4 times that of males in 2003, and 4.6 times that of males in 2004 (Table VI-9).

Table VI-9: Chlamydia by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	752	99.3	829	107.1	807	102.1
Female	2,988	388.4	3,684	469.2	3,764	470.4

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

The incidence rate of chlamydia increased among all racial/ethnic groups each year, except Hispanics. The rate among Hispanics remained relatively stable from 2003-2004. The number of cases and incidence rate of chlamydia were highest among Blacks, followed by Hispanics then Whites each year. The rate in Blacks was over 2 times more than Hispanics and between 8 and 11 times more than Whites (Table VI-10).

Table VI-10: Chlamydia by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	600	65.1	781	84.9	1,032	112.5
Black	1,518	753.1	1,657	798.7	1,946	914.2
Hispanic	1,059	322.7	1,208	343.1	1,280	341.8
Other	31	41.5	40	49.9	73	85.6

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

From 2002-2004, the incidence rate of chlamydia was highest among the 20-29 year age group followed by the 10-19 year age group. The rate increased each year among the 20-29 year age group and the 55 years and older age group (Table VI-11).

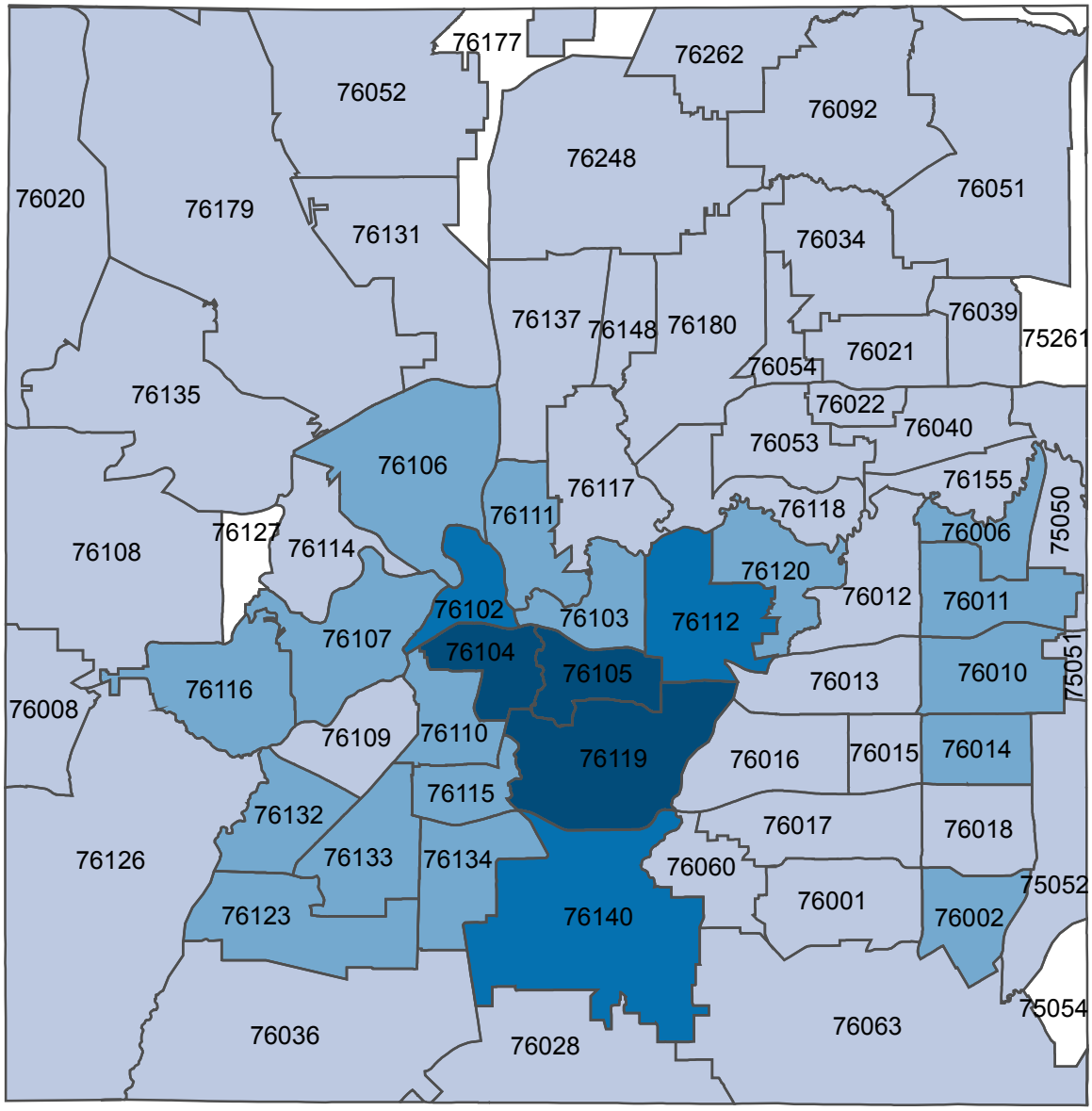
Table VI-11: Chlamydia by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-9	4	1.7	13	5.3	7	2.8
10-19	1,406	612.2	1,752	748.4	1,750	734.1
20-29	1,901	833.1	2,266	980.5	2,343	995.4
30-39	314	123.5	370	145.5	357	139.5
40-54	65	19.7	77	22.8	103	29.9
55+	10	4.1	15	5.8	9	3.4

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

Figure VI-8 on the following page shows the distribution of chlamydia cases by ZIP code. ZIP codes 76104, 76105, and 76119 were in the highest quartile, followed by 76102, 76112 and 76140 in the next highest quartile.

Figure VI-8: Geographic Distribution of Chlamydia Cases



Rate per 100,000

8.77 - 227.00 | 227.01 - 454.00 | 454.01 - 681.00 | 681.01 - 908.00 | Excluded Data

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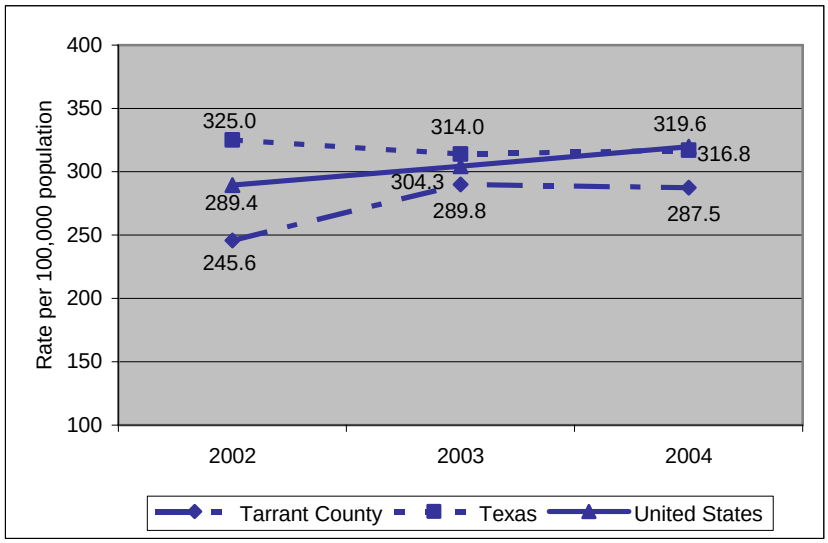
Comparison with Texas and the United States

From 2002-2004, the incidence rate of chlamydia in Tarrant County was lower than Texas and the United States each year (Figure VI-9).

Figure VI-9: Chlamydia Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

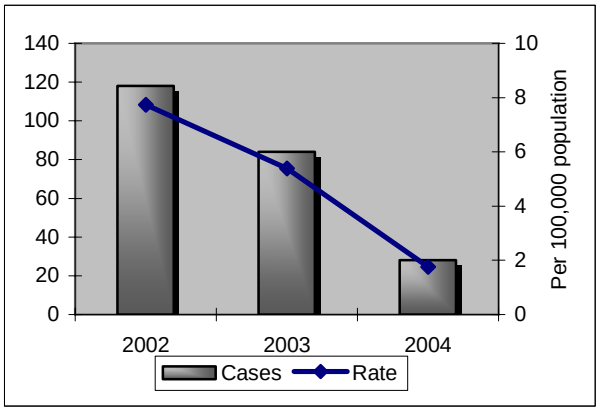
There were no corresponding Healthy People 2010 objectives.

Indicator VI-4. Acute Hepatitis B

Hepatitis B is a liver disease caused by the hepatitis B virus (HBV). Symptoms of hepatitis B infection include jaundice, fatigue, abdominal pain, loss of appetite, nausea, vomiting, and joint pain. An estimated 30 percent of infected persons are asymptomatic with symptoms less common in children than in adults. In approximately 90 to 95 percent of persons infected with hepatitis B, the infection resolves on its own. Potential long-term effects, if it does not resolve, include liver disease, liver cancer, liver transplant, and death. Hepatitis B is spread through sexual contact with an infected person, sharing needles, accidental needle sticks, and transmission from mother to child. Some preventive measures include practicing safe sex, not injecting illegal drugs, not sharing needles, and getting vaccinated (CDC, 2007). Since a large number of persons with hepatitis B are asymptomatic, the number of true cases is not known.

In Tarrant County, the number of cases and incidence rate of acute hepatitis B steadily declined from 118 cases (7.7 per 100,000 population) in 2002 to 84 cases (5.4 per 100,000 population) in 2003 and 28 cases (1.8 per 100,000 population) in 2004 (Figure VI-10).

Figure VI-10: Acute Hepatitis B, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

The number of cases and incidence rate of hepatitis B have declined from 2002-2004 in both males and females. The decline in rates was steeper in females than males. The incidence rate of hepatitis B was higher for females in 2002 and 2003, but higher for males in 2004 (Table VI-12).

Table VI-12: Acute Hepatitis B by Gender, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
Male	6.6	5.3	1.9
Female	8.7	5.5	1.6

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services

Data on the racial/ethnic distribution of acute hepatitis B in Tarrant County are not available.

From 2002-2004, the incidence rate of hepatitis B declined in all age groups. For the 30-39 year age group, the rate did not change from 2002-2003, but declined in 2004. For 2002 and 2003, the 30-39 year age group had the highest rate followed by the 50 years and older age group. In 2004, the highest incidence rate was observed among the 50 years and older age group (Table VI-13).

Table VI-13: Acute Hepatitis B by Age, Tarrant County, 2002-2004

Age Group	2002	2003	2004
in years	Rate	Rate	Rate
10-19	@	@	0.0
20-29	9.6	4.3	3.8
30-39	12.2	12.2	1.2
40-49	9.4	5.9	@
50+	11.8	8.6	4.9

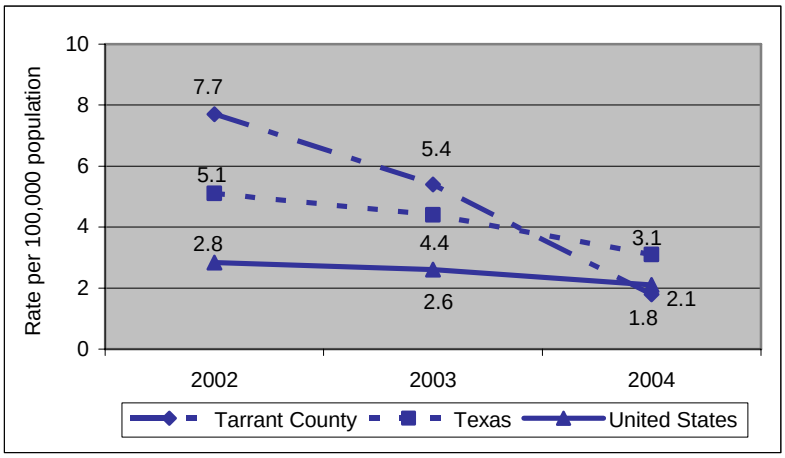
Rate per 100,000 population
No cases were observed in the 0-9 year age group
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Adult Health Services

The geographic distribution of hepatitis B infection is not available.

Comparison with Texas and the United States

The incidence rate of acute hepatitis B in Tarrant County was higher than Texas and the United States in 2002 and 2003. In 2004, however, the rate in Tarrant County was lower than Texas and comparable to the United States (Figure VI-11).

Figure VI-11: Acute Hepatitis B Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Adult Health Services; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

One Healthy People 2010 objective was identified to compare with the rate of hepatitis B in Tarrant County. The rate in Tarrant County did not meet the Healthy People 2010 objective for persons 40 years of age and older in 2002 and 2003, but did meet the stated goal in 2004 (Table VI-14).

Table VI-14: Comparison of Incidence of Hepatitis B in Tarrant County with Healthy People 2010 Objective

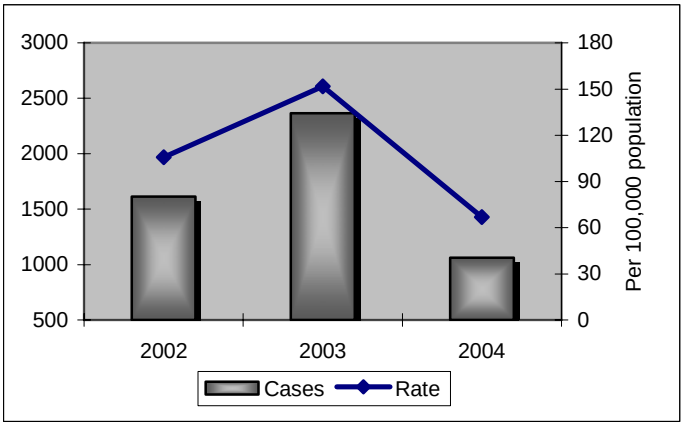
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
14-3c. Reduce hepatitis B rates in 40 years or older to 3.8 new cases per 100,000 population (Baseline: 15.0 cases of hepatitis B per 100,000 population occurred in 1997)	10.4	7.1	2.5

Indicator VI-5. Chronic Hepatitis C

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV). Chronic hepatitis C infection occurs in 55 to 85 percent of infected persons. Symptoms of hepatitis C infection include jaundice, fatigue, dark urine, abdominal pain, loss of appetite, and nausea; though, 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. 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 are asymptomatic, the number of true cases is not known; however, it is estimated that 3.2 million Americans have chronic hepatitis C (CDC, 2007).

In Tarrant County, the number of cases and incidence rate of chronic hepatitis C increased from 1,614 cases (105.7 per 100,000 population) in 2002 to 2,366 cases (151.8 per 100,000 population) in 2003 then decreased to 1,062 cases (66.8 per 100,000 population) in 2004 (Figure VI-12).

Figure VI-12: Chronic Hepatitis C, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

In both males and females, the incidence rate of chronic hepatitis C increased from 2002-2003, then decreased in 2004. The rate was 1.3 times higher among males than females each year (Table VI-15).

Table VI-15: Chronic Hepatitis C by Gender, Tarrant County, 2002-2004

	2002 Rate	2003 Rate	2004 Rate
Male	119.9	156.7	74.4
Female	89.4	117.4	56.2

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Data on the racial/ethnic distribution of chronic hepatitis C in Tarrant County are not available.

The incidence rate of chronic hepatitis C increased from 2002-2003 then decreased in 2004 in all age groups except the 0-9 year age group. The highest rate of chronic hepatitis C was observed in the 40-49 year age group, followed by 50 years and older, then 30-39 year age groups (Table VI-16).

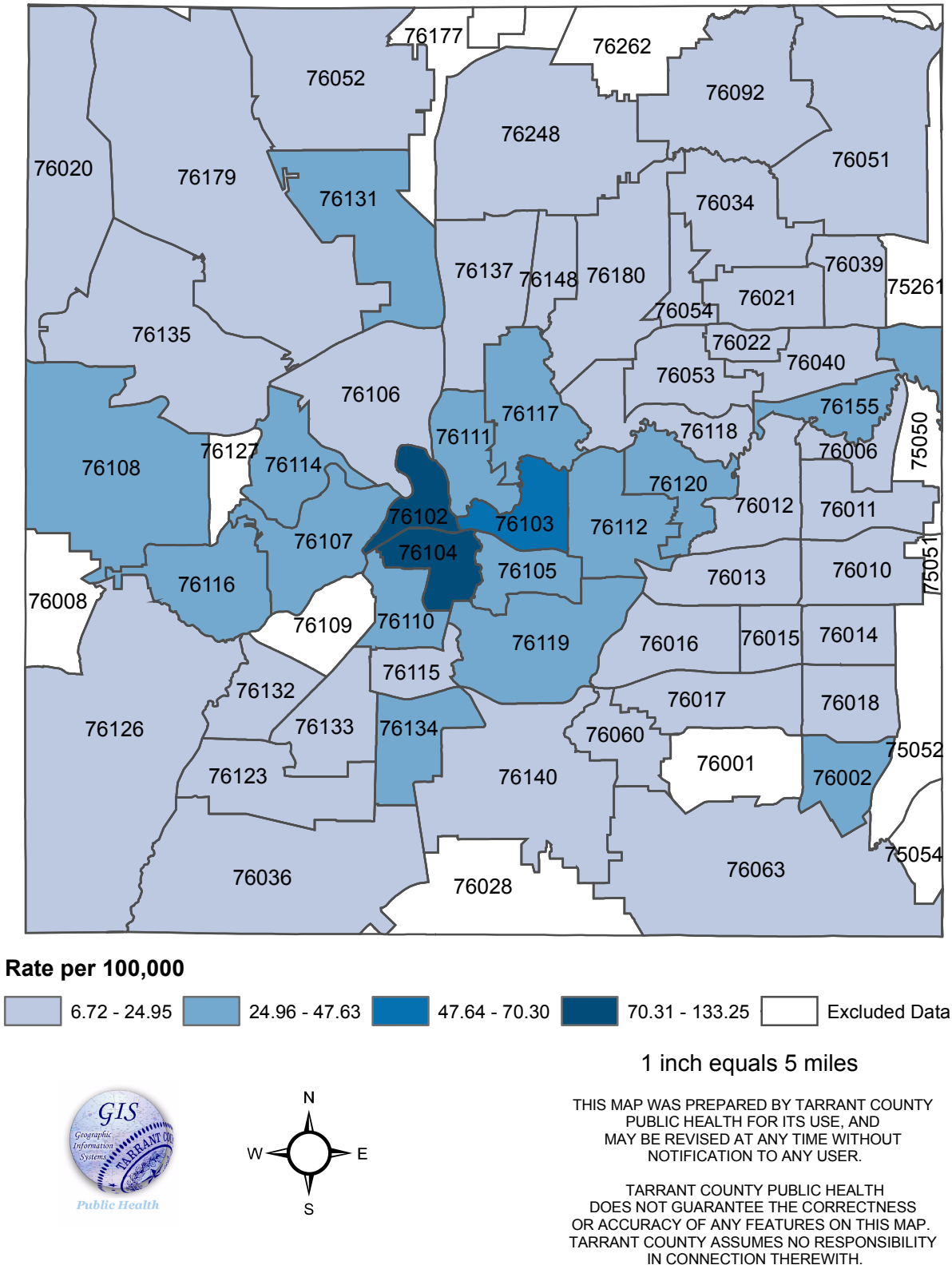
Table VI-16: Chronic Hepatitis C by Age, Tarrant County, 2002-2004

Age Group in years	2002 Rate	2003 Rate	2004 Rate
0-9	7.9	6.5	2.0
10-19	6.1	8.1	4.6
20-29	44.3	76.2	31.4
30-39	120.8	176.6	77.4
40-49	215.3	296.8	128.1
50+	188.6	274.2	124.9

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Figure VI-13 on the following page shows the distribution of chronic hepatitis C cases by ZIP code. The ZIP codes in the highest quartile were 76102 and 76104. Generally speaking, the higher rates were located in central Tarrant County.

Figure VI-13: Geographic Distribution of Chronic Hepatitis C Cases



Rate per 100,000

6.72 - 24.95 | 24.96 - 47.63 | 47.64 - 70.30 | 70.31 - 133.25 | Excluded Data

1 inch equals 5 miles

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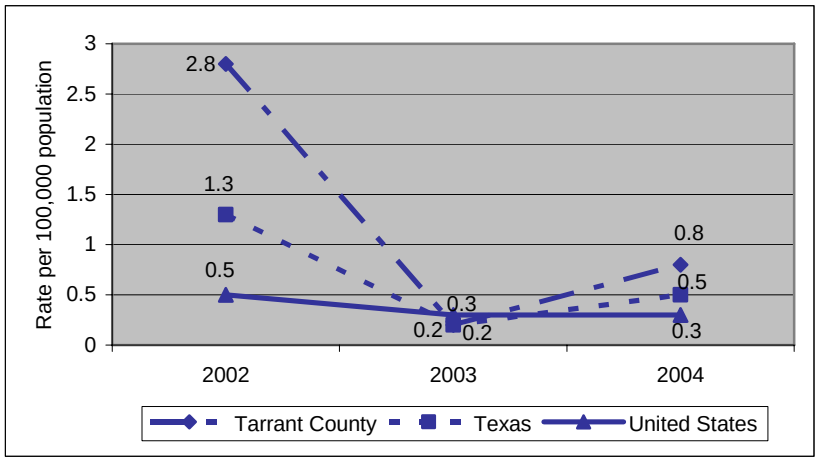
Comparison with Texas and the United States

The incidence rate of acute hepatitis C was used to compare between Tarrant County, Texas, and the United States. The rate of acute hepatitis C in Tarrant County was more than 2 times the rate in Texas and more than 5 times the rate in the United States in 2002. In 2003, the incidence rates were comparable for all three. In 2004, the rate in Tarrant County was slightly higher than Texas and the United States (Figure VI-14).

Figure VI-14: Acute Hepatitis C Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Comparison with Healthy People 2010 Objective

The incidence rate of acute hepatitis C in Tarrant County met the Healthy People 2010 objective in 2003 and 2004 (Table VI-17).

Table VI-17: Comparison of Incidence of Acute Hepatitis C in Tarrant County with Healthy People 2010 Objective

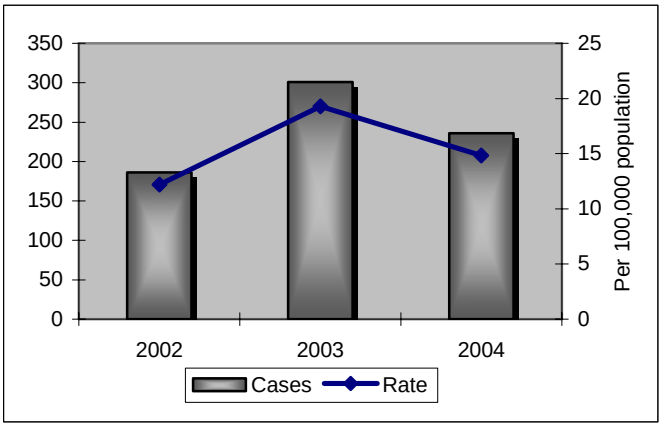
Healthy People 2010 Objective	Tarrant County		
14-9. Reduce hepatitis C to 1 new case per 100,000 population (Baseline: 2.4 per 100,000 population in selected counties in 1996)	**2002**	**2003**	**2004**
	2.8	0.2	0.8

Indicator VI-6. 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 25% of persons infected with HIV do not know they have it. 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 (CDC, 2007). Since a large number of persons with HIV are asymptomatic, the number of true cases can only be estimated.

In Tarrant County, the number of cases and incidence rate of HIV increased from 186 cases (12.2 per 100,000 population) in 2002 to 301 cases (19.3 per 100,000 population) in 2003, but then decreased to 236 cases (14.8 per 100,000 population) in 2004 (Figure VI-15).

Figure VI-15: HIV, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The same overall pattern of a rise and decline in HIV from 2002-2004 was observed in both males and females. The incidence rate of HIV among males was 2.5 to 3 times higher than among females each year (Table VI-18).

Table VI-18: HIV by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	139	18.4	227	29.3	169	21.4
Female	47	6.1	74	9.4	67	8.4

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

For all racial/ethnic groups, the incidence rate of HIV increased from 2002-2003, then decreased from 2003-2004. In 2002, the highest rate was observed among Blacks, followed by Whites then Hispanics. In 2003, the highest rate was observed among Blacks, followed by Hispanics then Whites. In 2004, the highest rate was observed among Blacks, and the rates for Whites and Hispanics were comparable (Table VI-19).

Table VI-19: HIV by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	82	8.9	127	13.8	93	10.1
Black	79	39.2	118	56.9	100	47.0
Hispanic	23	7.0	52	14.8	36	9.6
Other	2	@	4	@	7	8.2

Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of HIV increased from 2002-2003 then decreased from 2003-2004 in each age group, except the 45-54 year age group. The rate decreased from 2002-2003 then increased in 2004 among 45-54 year olds. The highest incidence rates of HIV occurred among the 25-34 and 35-44 year age groups each year (Table VI-20).

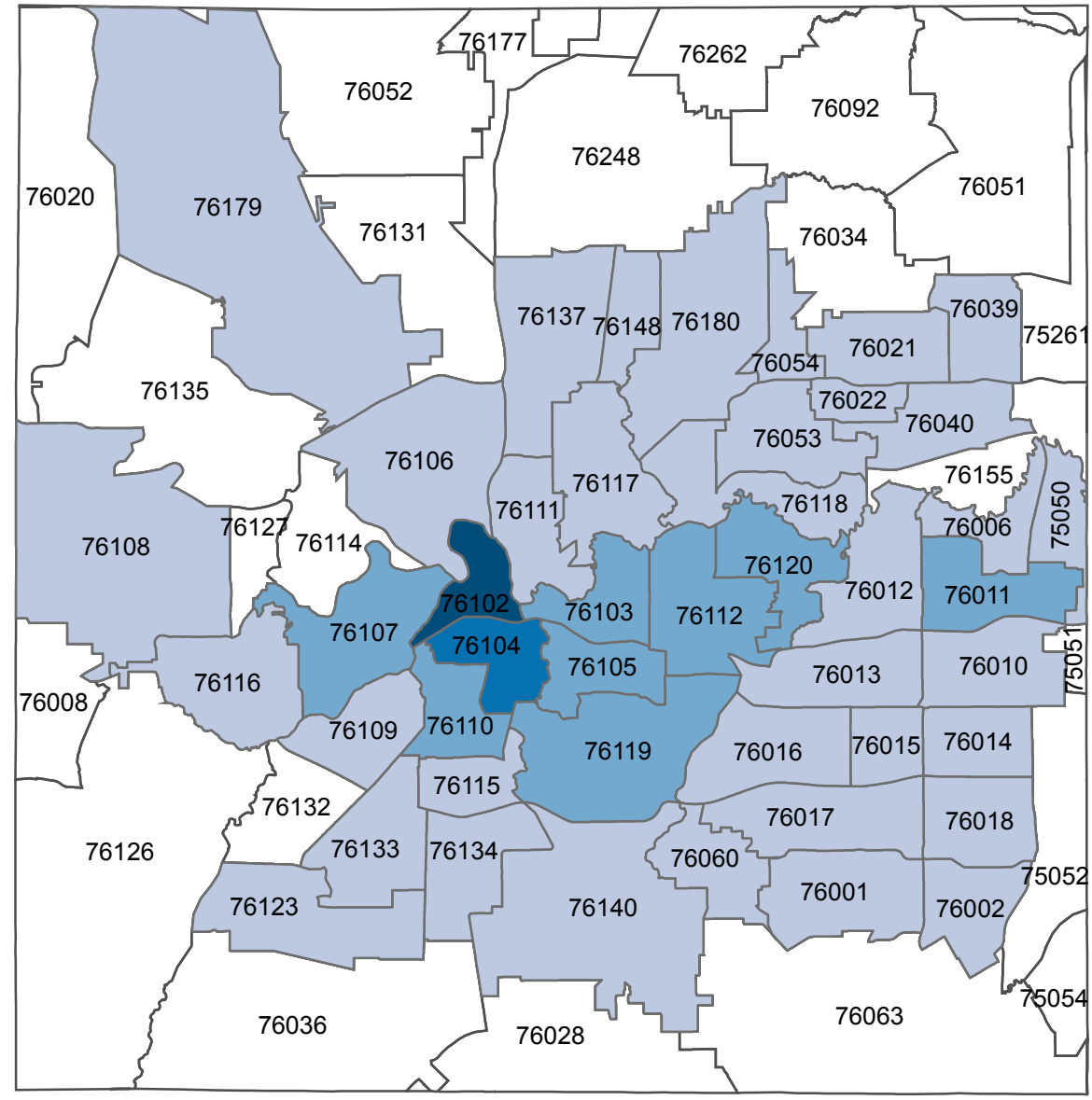
Table VI-20: HIV by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
15 - 24	29	13.2	57	25.4	32	14.0
25 - 34	59	23.8	101	40.1	86	33.6
35 - 44	60	23.8	104	41.5	73	29.0
45 - 54	27	13.3	21	10.0	35	16.2
55 - 64	5	4.2	13	10.1	7	5.2

Rate per 100,000 population
Age groups 1-14 and above 64 are not included due to small numbers
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Figure VI-16 on the following page shows the distribution of HIV by ZIP code. ZIP code 76102 had the highest HIV rate, followed by 76104. ZIP codes in the second quartile were generally located in central Tarrant County.

Figure VI-16: Geographic Distribution of HIV Cases



Rate per 100,000

5.28 - 25.70 | 25.71 - 51.39 | 51.40 - 77.09 | 77.10 - 102.78 | Excluded Data

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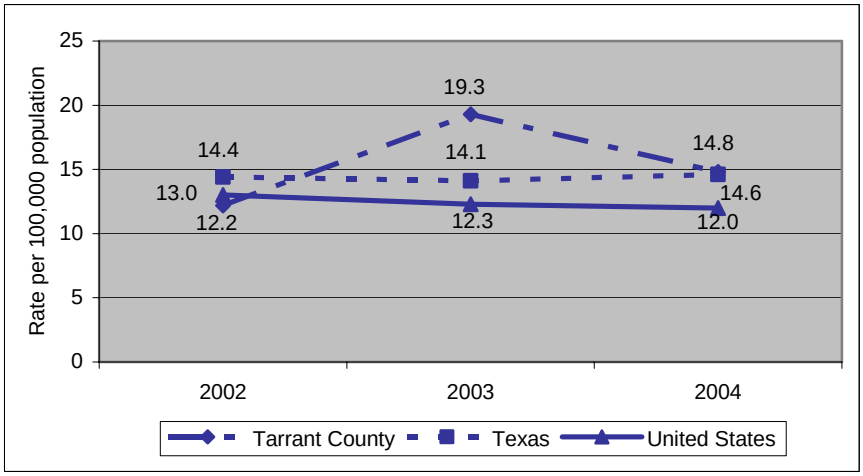
Comparison with Texas and the United States

The incidence rate of HIV in Tarrant County was slightly lower than both Texas and the United States in 2002. In 2003, the rate in Tarrant County was higher than Texas and the United States. In 2004, the rate in Tarrant County was higher than the United States, but comparable to Texas (Figure VI-17).

Figure VI-17: HIV Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

The Healthy People 2010 goals include the incidence of AIDS infection among persons 13 years of age and older. The incidence rate of AIDS in Tarrant County exceeded the Healthy People 2010 objective for persons 13 years of age and over in 2002-2004 (Table VI-21).

Table VI-21: Comparison of Incidence of AIDS in Tarrant County with Healthy People 2010 Objective

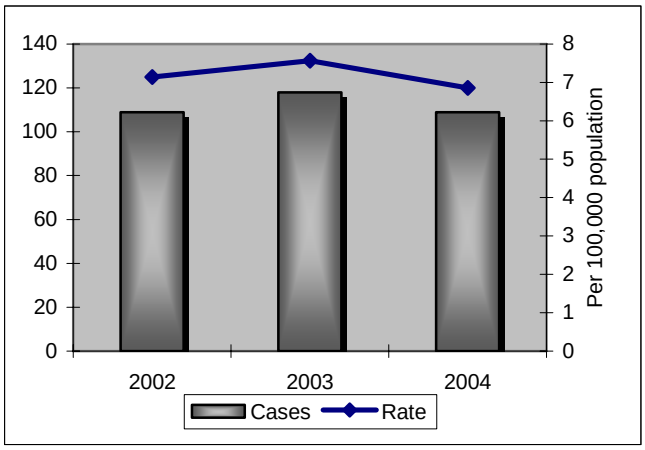
Healthy People 2010 Objective	Tarrant County		
13-1. Reduce AIDS among adolescents and adults (13 and older) to 1.0 new case per 100,000 persons.	**2002**	**2003**	**2004**
(Baseline: 19 cases of AIDS per 100,000 population aged 13 years and older in 1998)	4.9	3.4	2.6

Indicator VI-7. Tuberculosis

Tuberculosis (TB) is caused by the bacteria *Mycobacterium tuberculosis*. TB usually affects the lungs, but may also affect other areas such as the brain, kidneys, or spine. A person can have active or latent TB. TB is spread through the air from person to person when someone with active TB coughs or sneezes. Symptoms of active TB infection may include a bad cough lasting 3 weeks or longer, chest pain, coughing up blood or sputum, weakness or fatigue, weight loss, no appetite, chills, fever, and sweating at night. Persons with latent TB cannot spread TB and generally have no symptoms. TB can be treated with medicine under close supervision of a health care provider (CDC, 2007).

In Tarrant County, the number of cases of TB slightly increased from 109 cases (7.1 per 100,000 population) in 2002 to 118 cases (7.6 per 100,000 population) in 2003 then decreased to 109 cases (6.9 per 100,000 population) in 2004 (Figure VI-18).

Figure VI-18: Tuberculosis, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention

The incidence rate of TB was higher among males than females from 2002-2004. The rate among males increased from 2002-2003, then decreased in 2004. The rate among females remained unchanged each year (Table VI-22).

Table VI-22: Tuberculosis by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	62	8.2	70	9.0	60	7.6
Female	47	6.1	48	6.1	49	6.1

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention

The incidence rate of TB was lowest among Whites each year. The rate was highest among Blacks for 2002-2003 and Others for 2004. The rate among Blacks was over 12 times higher than Whites in 2003 (Table VI-23).

Table VI-23: Tuberculosis by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	26	2.8	18	2.0	16	1.7
Black	39	19.3	51	24.6	33	15.5
Hispanic	33	10.1	30	8.5	40	10.7
Other	11	14.7	19	23.7	20	23.4

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention

The incidence rate of TB increased from 2002-2003 then decreased in 2004 for the 0-9, 10-19, and 55 year and older age groups. The rate steadily decreased in the 20-34 year age group. Each year, the highest rate occurred in the 55 and older age group, while the lowest rate was observed in the 10-19 year age group (Table VI-24).

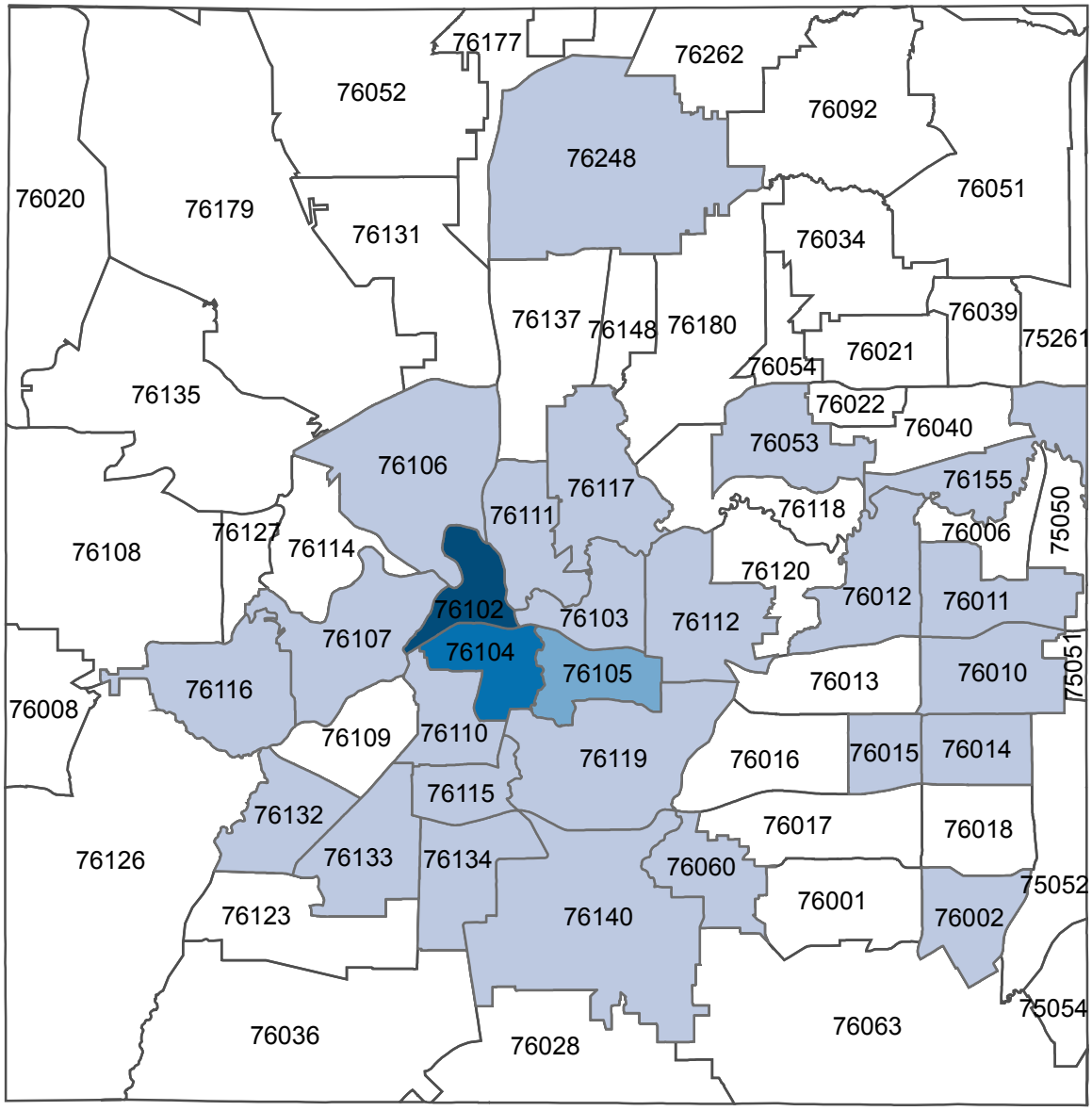
Table VI-24: Tuberculosis by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-9	6	2.5	11	4.5	7	2.8
10-19	4	1.7	9	3.8	5	2.1
20-34	28	7.8	28	7.7	27	7.1
35-54	43	9.4	35	7.6	41	8.8
55+	28	11.4	35	13.6	29	10.9

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention

Figure VI-19 on the following page shows the distribution of tuberculosis cases by ZIP code. The ZIP code with the highest rate was 76102, with 76104 and 76105 falling in the third and second quartile. All 3 ZIP codes are adjacent to each other in central Tarrant County.

Figure VI-19: Geographic Distribution of Tuberculosis Cases



Rate per 100,000

5.06 - 21.41 | 21.42 - 47.39 | 47.40 - 73.11 | 73.12 - 114.64 | Excluded Data

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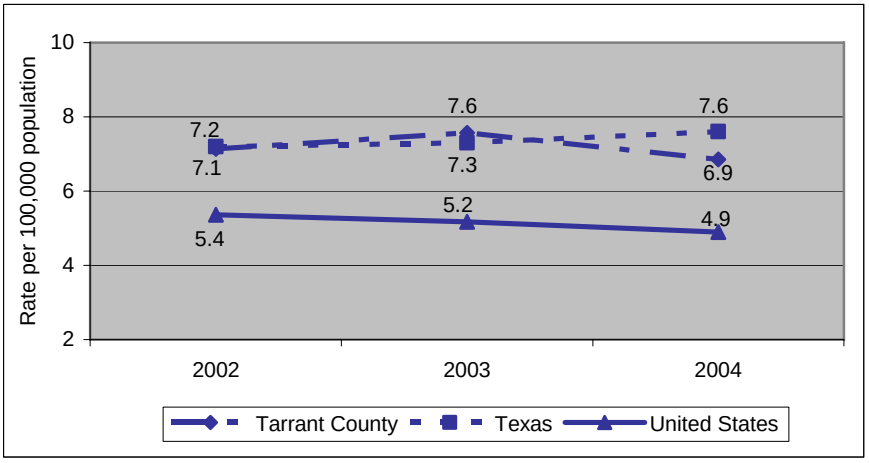
Comparison with Texas and the United States

The incidence rate of tuberculosis in Tarrant County was comparable to that of Texas, but higher than the United States in 2002-2003. In 2004, the rate in Tarrant County was lower than Texas, but higher than the United States (Figure VI-20).

Figure VI-20: Tuberculosis Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Tuberculosis Elimination and Prevention; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

The incidence rate of tuberculosis in Tarrant County exceeded the Healthy People 2010 objective by approximately 7 times in 2002-2004 (Table VI-25).

Table VI-25: Comparison of Incidence of Tuberculosis in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
14-11. Reduce tuberculosis to 1.0 new case per 100,000 population.	**2002**	**2003**	**2004**
(Baseline: 6.8 new cases of tuberculosis per 100,000 population in 1998)	7.1	7.6	6.9

Environmental Health

Definitions and Data Sources

Enteric Disease

- Numerator – number of cases of water-borne and food-borne diseases: Pathogens included – Campylobacter species, *E coli* 0157:H7, Salmonella species, Shigella
- Denominator – Estimated population
- Rate – per 100,000 population
- Data Source – Tarrant County Public Health, Division of Epidemiology and Health Information

Hepatitis A

- Numerator – incidence of hepatitis A cases
- Denominator – Estimated population
- Rate – per 100,000 population
- Data Source – Tarrant County Public Health, Division of Epidemiology and Health Information

Lead Poisoning in Children

- Numerator – incidence of elevated blood lead levels (≥ 10µg/dL in children ≤ 14 years of age)
- Denominator – Estimated population
- Rate – per 1,000 population
- Population estimates obtained from the Texas State Data Center and Office of the State Demographer
- Data Source – Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

Air Quality

- Annual number of days in which the ambient air monitors record an index that exceeds an air quality standard
- Data Source – Texas Commission on Environmental Quality (TCEQ)

Water Quality

- Population supplied by public water systems in Tarrant County
- Data Source – Texas Commission on Environmental Quality (TCEQ); Texas Department of State Health Services, Texas Fluoridation Project

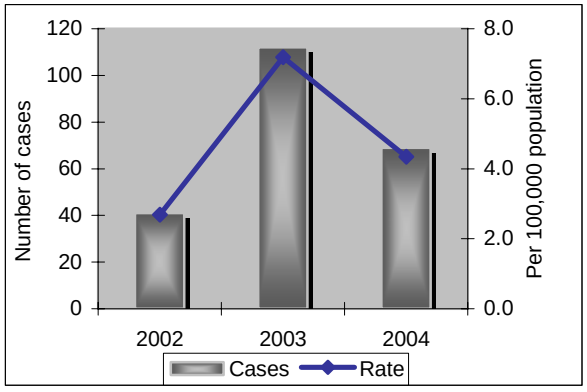
Indicator VII-1. Enteric Diseases

Campylobacteriosis

Campylobacteriosis is a bacterial disease caused by the bacterium *Campylobacter*. Symptoms may include diarrhea, cramping, abdominal pain, and fever. Symptoms generally start 2 to 5 days after infection and last for a week. Symptoms usually reside on their own; however infection can be severe in immune-compromised individuals. Infection generally occurs as a result of handling raw poultry or eating raw or undercooked poultry. Cooking poultry thoroughly, not consuming unpasteurized milk, washing hands before and after handling raw poultry, and not cross contaminating kitchen utensils are the best preventive measures (CDC, 2007).

The number of reported cases of campylobacteriosis in Tarrant County more than doubled from 41 (2.7 per 100,000 population) in 2002 to 112 (7.2 per 100,000 population), then decreased to 69 (4.3 per 100,000 population) in 2004 (Figure VII-1).

Figure VII-1: Campylobacteriosis, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of campylobacteriosis infection in Tarrant County was higher for males than females for 2002-2004. The rates for both males and females increased from 2002-2003, then decreased from 2003-2004 (Table VII-1).

Table VII-1: Campylobacteriosis by Gender, Tarrant County, 2002-2004

	2002 Rate	2003 Rate	2004 Rate
Male	3.2	8.5	5.0
Female	1.8	5.7	4.0

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Among racial/ethnic groups, the incidence rate of campylobacteriosis in Tarrant County was highest for Others in 2002 and Hispanics in 2003 and 2004. The incidence rate for Whites and Blacks increased each year (Table VII-2).

Table VII-2: Campylobacteriosis by Race/Ethnicity, Tarrant County, 2002-2004

	2002 Rate	2003 Rate	2004 Rate
White	1.4	2.5	2.9
Black	@	1.5	2.8
Hispanic	0	9.6	7.2
Other	11.4	4.1	5.9

Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The highest incidence rate of campylobacteriosis occurred in the 0-9 year age group for 2002-2004. The second highest rate for 2003 and 2004 occurred in the 10-19 year age group (Table VII-3).

Table VII-3: Campylobacteriosis by Age, Tarrant County, 2002-2004

Age Group in years	2002 Rate	2003 Rate	2004 Rate
0-9	4.7	16.1	9.6
10-19	1.8	7.6	6.3
20-34	1.5	6.4	3.5
35-54	2.9	3.8	2.0
55+	1.2	7.2	3.0

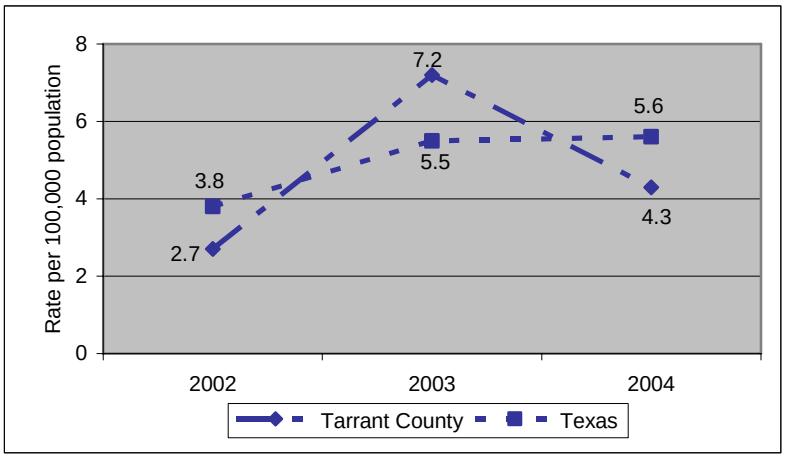
Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The geographic distribution of campylobacteriosis infection is not available.

Comparison with Texas and the United States

The incidence rate of campylobacteriosis in Tarrant County was lower than Texas for 2002 and 2004. In 2003, however, the rate in Tarrant County was higher than Texas (Figure VII-2).

Figure VII-2: Campylobacteriosis in Tarrant County and Texas, 2002-2004



Rate per 100,000 population
United States data not available
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Texas Department of State Health Services

Comparison with Healthy People 2010 Objective

The incidence rate of campylobacteriosis met the Healthy People 2010 objective in 2002-2004. In 2004, the rate in Tarrant County was only approximately one third of the Healthy People 2010 goal (Table VII-4).

Table VII-4: Comparison of Incidence of Campylobacteriosis in Tarrant County with Healthy People 2010 Objective

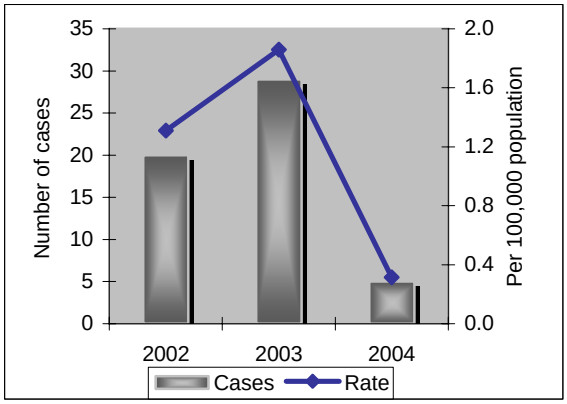
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
10-1a. Reduce *campylobacter* species infections to 12.3 cases per 100,000 population (Baseline: 24.6 per 100,000 population in 1997).	2.7	7.2	4.3

E. coli 0157:H7

Infection with *E. coli* O157:H7 constitutes the most common foodborne illness. Symptoms may include severe bloody diarrhea and abdominal cramps. Symptoms usually reside in 5 to 10 days. Infection may become severe, especially in children and the elderly, causing kidney failure and death. Infection is generally caused by eating meat that is not thoroughly cooked, drinking unpasteurized milk, consuming contaminated sprouts, lettuce, spinach, and salami, and by swimming in or drinking water contaminated with raw sewage. Hand washing and thoroughly cooking meat, especially ground beef, are the best preventive measures (CDC, 2007).

The number of reported cases of *E. coli* 0157:H7 infection in Tarrant County increased from 20 (1.3 per 100,000 population) in 2002 to 29 (1.9 per 100,000 population) in 2004, but then drastically decreased to 5 (0.3 per 100,000 population) in 2004 (Figure VII-3).

Figure VII-3: *E. coli* 0157:H7 Infection, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of reported *E. coli* 0157:H7 infection slightly increased in both males and females from 2002-2003. The rates among males and females were similar for each year (Table VII-5).

Table VII-5: *E. coli* 0157:H7 Infection by Gender, Tarrant County, 2002-2004

	2002 Rate	2003 Rate	2004 Rate
Male	1.2	1.7	@
Female	1.5	1.7	@

Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Data on the race/ethnicity distribution of *E. coli* O157:H7 infections in Tarrant County are not available for 2002-2003. The number of cases in 2004 is too small for rate calculation; therefore, race/ethnicity data are not presented.

In 2002 and 2003, the incidence rate of *E. coli* O157:H7 infection was highest in the 0-9 year age group, followed by the 10-19 year age group (Table VII-6).

Table VII-6: *E. coli* 0157:H7 Infection by Age, Tarrant County, 2002-2004

Age Group in years	2002 Rate	2003 Rate	2004 Rate
0-9	3.8	3.0	@
10-19	2.7	2.7	0.0
20-34	0	2.0	0.0
35-54	0.9	@	@
55+	@	2.8	@

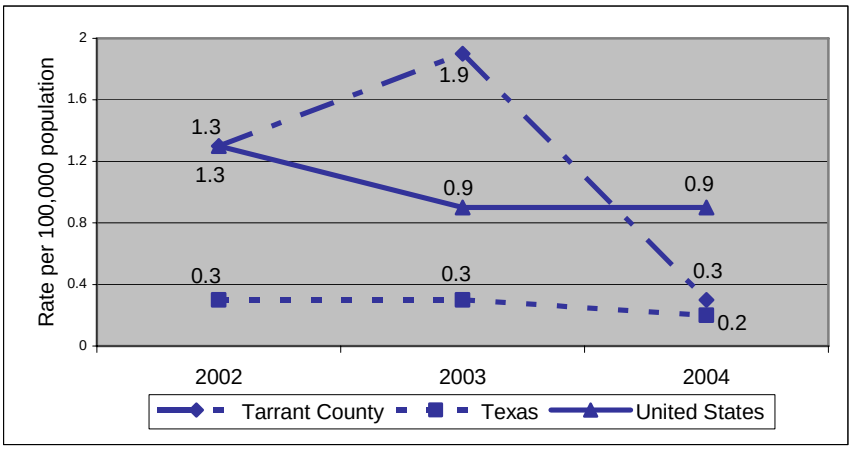
Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The geographic distribution of *E. coli* O157:H7 infection is not available.

Comparison with Texas and the United States

The incidence rate of *E. coli* O157:H7 infection in Tarrant County was equal to that of the United States, but higher than Texas in 2002. In 2003, the rate in Tarrant County was double that of the United States and more than six times that of Texas. The incidence rate drastically decreased in 2004, falling to lower than the rate in the United States and comparable to Texas (Figure VII-4).

Figure VII-4: *E. coli* O157:H7 Infection in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Centers for Disease Control and Prevention, Summary of Notifiable Diseases

Comparison with Healthy People 2010 Objective

The incidence rate of *E. coli* O157:H7 infection in Tarrant County did not meet the Healthy People 2010 Objective for 2002 and 2003. In 2004, however, the rate of *E. coli* O157:H7 infection in Tarrant County was approximately one third that of the Healthy People 2010 goal (Table VII-7).

Table VII-7: Comparison of Incidence of *E. coli* O157:H7 in Tarrant County with Healthy People 2010 Objective

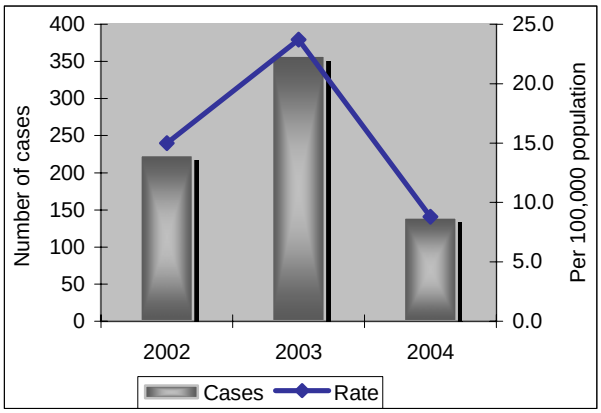
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
10-1b. Reduce escherichia coli O157:H7 infections to 1.0 case per 100,000 population (Baseline: 2.1 per 100,000 population in 1997).	1.3	1.9	0.3

Salmonellosis

Salmonellosis is a bacterial disease caused by the bacterium *Salmonella*. The most common symptoms are diarrhea, fever, and stomach pain that start 12 to 72 hours after infection. Symptoms usually last 4 to 7 days, and treatment is not necessary for most people. In some cases, however, severe complications may occur. The diarrhea may be severe enough for hospitalization, or the infection may spread to the blood stream. This could result in death if not medically treated. Salmonellosis can 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, elderly, and immune-compromised persons are at a higher risk of infection (CDC, 2007).

The number of reported cases of salmonellosis in Tarrant County increased from 224 (15.0 per 100,000 population) in 2002 to 358 (23.7 per 100,000 population) in 2004, but then drastically decreased to 140 (8.8 per 100,000 population) in 2004 (Figure VII-5).

Figure VII-5: Salmonellosis, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of salmonellosis in Tarrant County was similar for males and females in 2002 and 2004. In 2003, the rate among males was higher than females (Table VII-8).

Table VII-8: Salmonellosis by Gender, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
Male	14.0	24.8	8.5
Female	14.8	19.6	8.4

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of salmonellosis in Tarrant County was lowest among Blacks and highest among Others in 2004. Data for the racial/ethnic distribution of salmonellosis in Tarrant County are not available for 2002-2003 (Table VII-9).

Table VII-9: Salmonellosis by Race/Ethnicity, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
White	-	-	7.0
Black	-	-	4.2
Hispanic	-	-	7.5
Other	-	-	8.2

Rate per 100,000 population
Rates for race/ethnicity are not available for 2002-2003
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of salmonellosis was highest among the 0-9 year age group for 2002-2004. For each age group, the rate peaked in 2003 then declined in 2004, reaching the lowest point for all three years (Table VII-10).

Table VII-10: Salmonellosis by Age, Tarrant County, 2002-2004

Age Group	2002	2003	2004
in years	Rate	Rate	Rate
0-9	45.8	88.8	25.6
10-19	9.0	13.8	3.8
20-34	6.1	9.5	6.0
35-54	8.3	9.1	6.2
55+	9.5	17.5	5.3

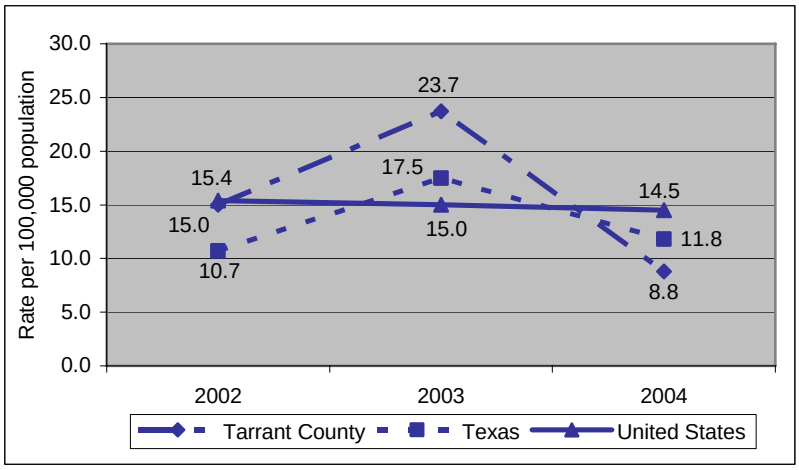
Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The geographic distribution of salmonellosis infection is not available.

Comparison with Texas and the United States

The incidence rate of salmonellosis in Tarrant County was comparable to that of the United States and higher than Texas for 2002. In 2003, the incidence rate in Tarrant County was higher than Texas and the United States. In 2004, however, the incidence rate was lower in Tarrant County than Texas and the United States in 2004 (Figure VII-6).

Figure VII-6: Salmonellosis in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Centers for Disease Control and Prevention, Summary of Notifiable Diseases

Comparison with Healthy People 2010 Objective

The incidence rate of salmonellosis in Tarrant County did not meet the Healthy People 2010 Objective for 2002-2004 (Table VII-11).

Table VII-11: Comparison of Incidence of Salmonellosis in Tarrant County with Healthy People 2010 Objective

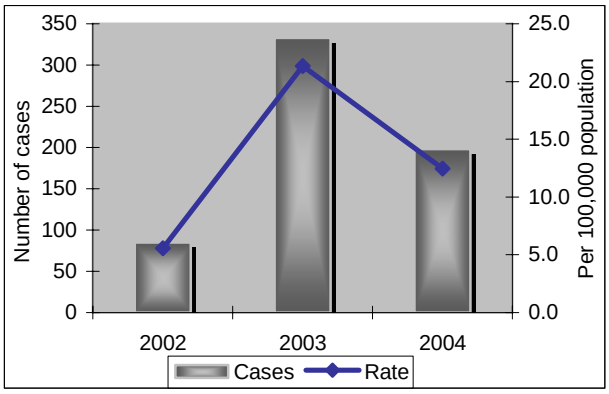
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
10-1d. Reduce *salmonella* species infections to 6.8 cases per 100,000 population (Baseline: 13.7 per 100,000 population in 1997).	15.0	23.7	8.8

Shigellosis

Shigellosis is a bacterial disease caused by the bacterium *Shigella*. The most common symptoms are diarrhea (often bloody), fever, and stomach pain that start 24 to 48 hours after infection. Symptoms usually last 5 to 7 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, especially in young children or the elderly. Shigellosis may cause seizures in children less than 2 years of age when a high fever is present. Shigellosis is spread through the fecal-oral route. Persons are generally infected by consuming contaminated food or water. Hand washing and maintaining good personal hygiene are the best preventive measures (CDC, 2007).

The number of reported cases of shigellosis in Tarrant County increased from 85 (5.6 per 100,000 population) in 2002 to 333 (21.4 per 100,000 population) in 2004, but then decreased to 198 (12.5 per 100,000 population) in 2004 (Figure VII-7).

Figure VII-7: Shigellosis, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

No apparent trends in the incidence rate of shigellosis in Tarrant County for 2002-2004 were observed. The incidence rate was higher for males in 2002, but higher for females in 2003 and 2004 (Table VII-12).

Table VII-12: Shigellosis by Gender, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
Male	6.2	19.1	10.6
Female	4.9	22.7	13.9

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Data for the racial/ethnic distribution of shigellosis in Tarrant County are not available for 2002-2003. In 2004, the incidence rate of shigellosis in Tarrant County was highest among Hispanics and lowest among Whites (Table VII-13).

Table VII-13: Shigellosis by Race/Ethnicity, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
White	-	-	8.3
Black	-	-	13.6
Hispanic	-	-	16.6
Other	-	-	9.4

Rate per 100,000 population
Rates for race/ethnicity are not available for 2002-2003
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of shigellosis in Tarrant County was highest for the 0-9 year age group for 2002-2004. The incidence rate increased by more than 4 and a half times from 2002-2003, but then decreased by approximately 40 percent in the 0-9 year age group from 2003-2004 (Table VII-14).

Table VII-14: Shigellosis by Age, Tarrant County, 2002-2004

Age Group	2002	2003	2004
in years	Rate	Rate	Rate
0-9	21.8	98.5	57.2
10-19	1.3	12.4	3.4
20-34	0.9	13	8.4
35-54	2.7	4.4	2.4
55+	@	3.2	@

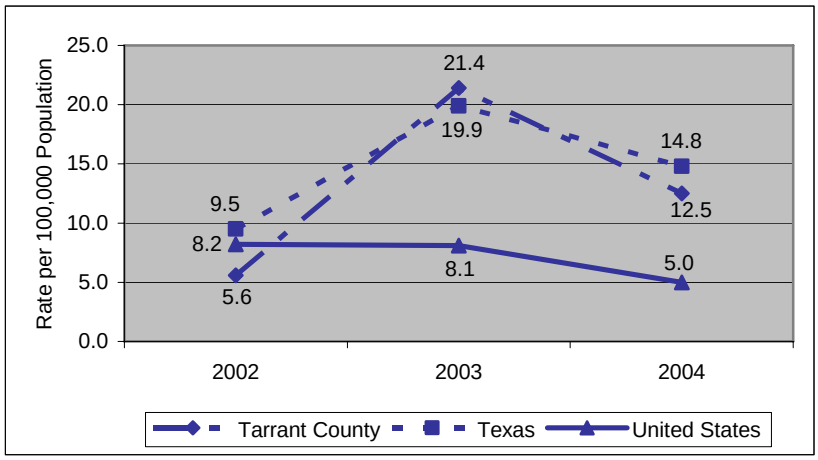
Rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The geographic distribution of shigellosis infection is not available.

Comparison with Texas and the United States

The incidence rate of shigellosis in Tarrant County was lower than that of Texas and the United States in 2002. The rates for 2003-2004 were comparable to that of Texas, but more than the United States (Figure VII-8).

Figure VII-8: Shigellosis in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Centers for Disease Control and Prevention, Summary of Notifiable Diseases

Comparison with Healthy People 2010 Objective

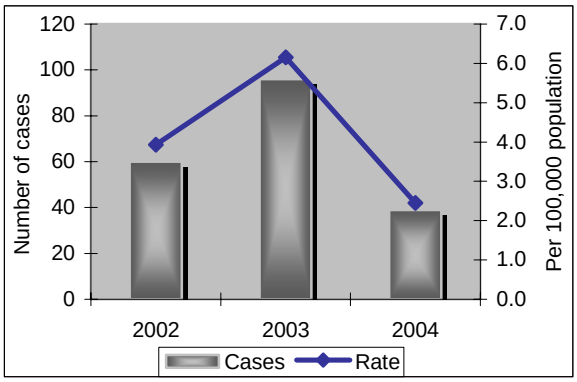
There are no corresponding Healthy People 2010 Objectives.

Indicator VII-2. Hepatitis A

Hepatitis A is a liver disease caused by the hepatitis A virus (HAV). Symptoms of hepatitis A infection include jaundice, fatigue, abdominal pain, loss of appetite, nausea, dark urine, and fever. Some people infected with hepatitis A may not have any symptoms, and symptoms are more common in the elderly. If symptoms are present, they usually last less than 2 months. Hepatitis A is spread through the fecal-oral route. Preventive measures include getting vaccinated and hand washing after using the bathroom, after changing diapers, and before eating or preparing food. About one third of Americans demonstrate evidence of prior infection with hepatitis A (CDC, 2007).

The number of reported cases of hepatitis A in Tarrant County increased from 60 (3.9 per 100,000 population) in 2002 to 96 (6.2 per 100,000 population) in 2004, but then decreased to 39 (2.5 per 100,000 population) in 2004 (Figure VII-9).

Figure VII-9: Hepatitis A, Tarrant County, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The incidence rate of hepatitis A in Tarrant County was higher for males than females in 2002 and 2003. In 2004, the incidence rate was higher for females. From 2003-2004, the rate among males decreased by approximately 73 percent (Table VII-15).

Table VII-15: Hepatitis A by Gender, Tarrant County, 2002-2004

	2002 Rate	2003 Rate	2004 Rate
Male	5.2	7.1	1.9
Female	2.5	5.4	2.9

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

Data for the racial/ethnic distribution of hepatitis A in Tarrant County are not available for 2002-2003. In 2004, the incidence rate was highest among Hispanics (Table VII-16).

Table VII-16: Hepatitis A by Race/Ethnicity, Tarrant County, 2002-2004

	2002	2003	2004
	Rate	Rate	Rate
White	-	-	2.0
Black	-	-	@
Hispanic	-	-	2.7
Other	-	-	@

Rate per 100,000 population
@ Numerator too small for rate calculation
Rates for race/ethnicity are not available for 2002-2003
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The highest incidence rate of hepatitis A occurred in the 20-34 year age group for 2002, the 55 year and older age group for 2003, and the 10-19 year age group for 2004 (Table VII-17).

Table VII-17: Hepatitis A by Age, Tarrant County, 2002-2004

Age Group	2002	2003	2004
in years	Rate	Rate	Rate
0-9	4.3	3.8	0.0
10-19	2.2	2.7	4.6
20-34	5.0	4.3	2.4
35-54	4.2	6.6	1.3
55+	3.7	14.3	4.5

Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information

The geographic distribution of hepatitis A infection is not available.

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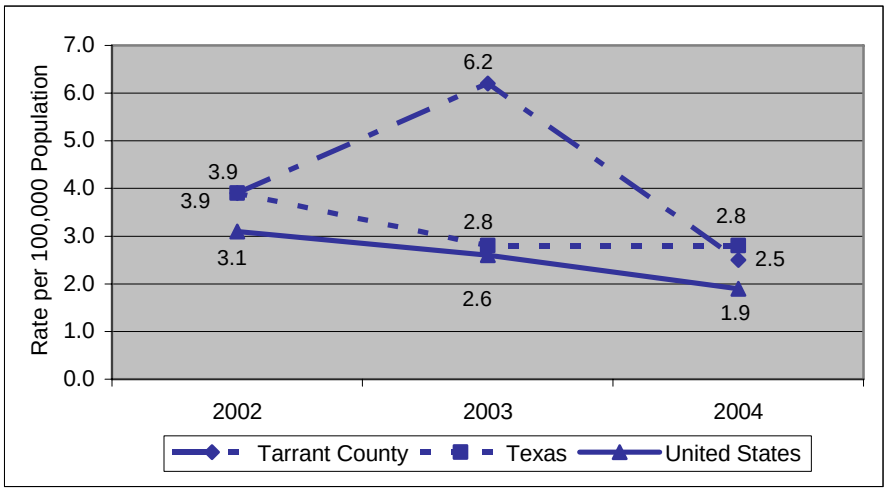
Comparison with Texas and the United States

The incidence rate of hepatitis A in Tarrant County was comparable to Texas, but higher than the United States, for 2002 and 2004. In 2003, the incidence rate in Tarrant County was more than double that of Texas and the United States (Figure VII-10).

Figure VII-10: Hepatitis A in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Data Source: Tarrant County Public Health, Division of Epidemiology and Health Information; Centers for Disease Control and Prevention, Summary of Notifiable Diseases

Comparison with Healthy People 2010 Objective

The incidence rate of hepatitis A in Tarrant County met the Healthy People 2010 Objective for 2002-2004. In 2004, the incidence rate of hepatitis A in Tarrant County was less than half of the Healthy People 2010 Objective (Table VII-18).

Table VII-18: Comparison of Incidence of Hepatitis A in Tarrant County with Healthy People 2010 Objective

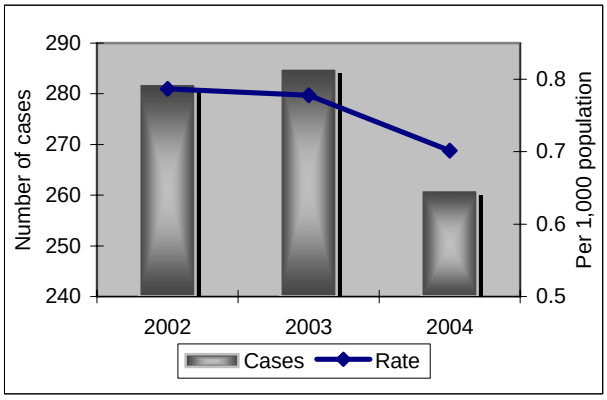
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
14-6. Reduce Hepatitis A incidence to 4.5 cases per 100,000 population (Baseline: 11.3 per 100,000 in 1997)	3.9	6.2	2.5

Indicator VII-3. Lead Poisoning in Children

Lead poisoning may go unrecognized since no obvious symptoms may be present. The effects of lead poisoning, however, can be serious, potentially resulting in learning disabilities, behavioral problems, seizures, coma, and death. The most common exposure to lead is through lead paint in older homes. Other sources include hobbies, work, drinking water (e.g. lead pipes), and home health remedies (e.g. azarcon and greta). Children under 6 years of age are at a greater risk for lead poisoning (CDC, 2007). An elevated blood lead level in children, defined as a blood lead level 10 µg/dL or greater, is a precursor of lead toxicity and lead poisoning.

The number of reported cases of lead poisoning in children up to 14 years of age in Tarrant County remained relatively stable with 282 cases (0.8 per 1,000 population) in 2002, 285 cases (0.8 per 1,000 population) in 2003, and 261 cases (0.7 per 1,000 population) in 2004 (Figure VII-11).

Figure VII-11: Lead Poisoning, Tarrant County, 2002-2004



Rate per 1,000 population
Includes confirmed and unconfirmed cases
Data Source: Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

The incidence rate for lead poisoning in children up to 14 years of age in Tarrant County was comparable for males and females in 2002. In 2003-2004, the number of cases of lead poisoning was higher in males than females. The rate in females slightly decreased each year; while, the rate among males stayed the same (Table VII-19).

Table VII-19: Lead Poisoning by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	142	0.8	153	0.8	143	0.8
Female	140	0.8	132	0.7	118	0.6

Rate per 1,000 population
Includes confirmed and unconfirmed cases
Data Source: Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

The incidence rate of lead poisoning in Hispanic children was at least three times higher than the rate for Black children in 2002-2004 (Table VII-20).

Table VII-20: Lead Poisoning by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	22	0.1	27	0.1	14	0.1
Black	36	0.6	25	0.4	23	0.4
Hispanic	184	1.8	162	1.5	153	1.3

Rate per 1,000 population
There were missing data for race/ethnicity for 13% in 2002, 24% in 2003, and 26% in 2004
Includes confirmed and unconfirmed cases
Data Source: Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

The highest incidence rate for lead poisoning occurred in children 1-3 years of age for 2002-2004. Rates declined as age increased each year (Table VII-21).

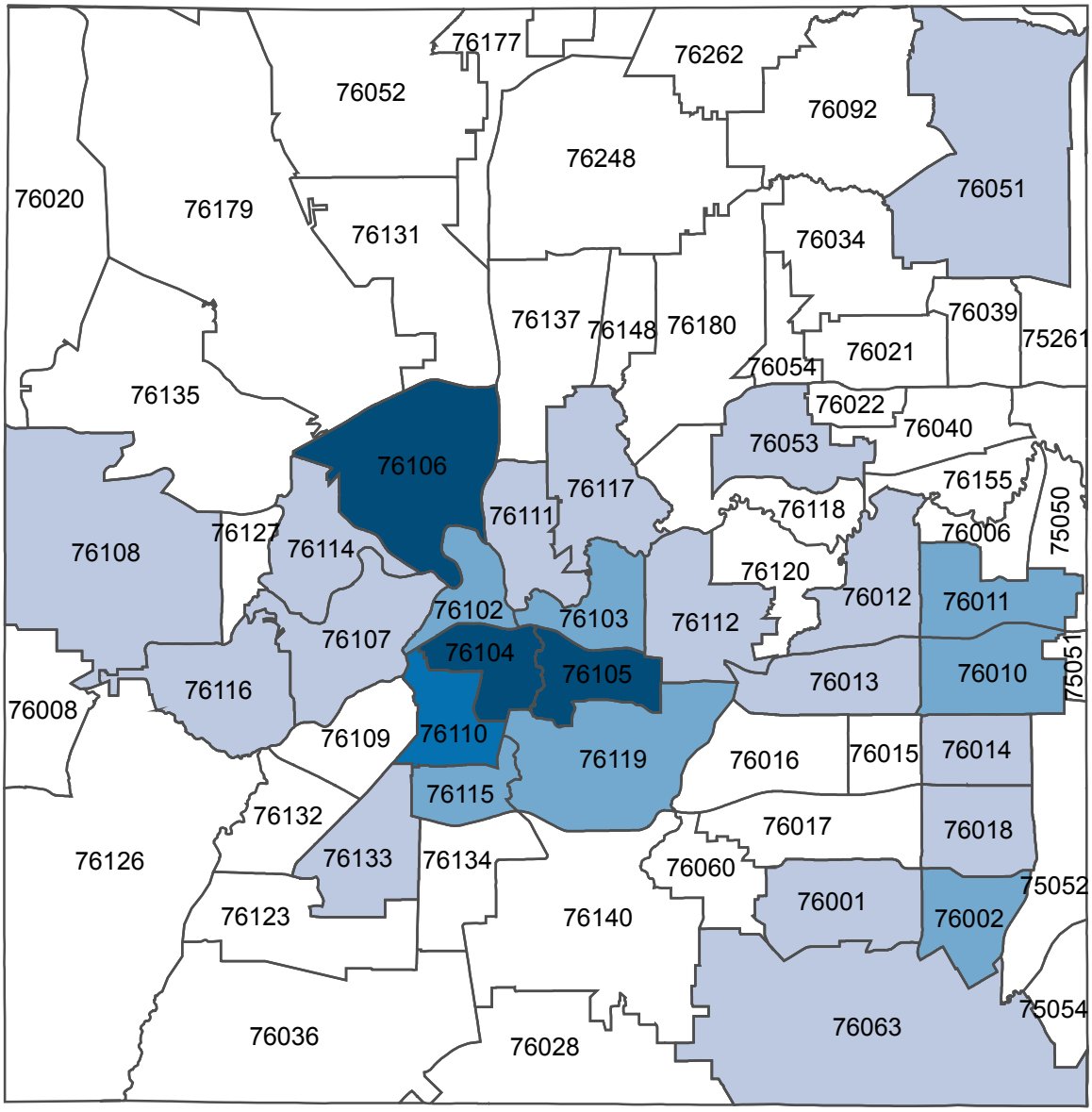
Table VII-21: Lead Poisoning by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
<1	30	1.2	26	1.0	28	1.0
1-3	188	2.6	198	2.6	175	2.2
4-6	44	0.6	38	0.5	45	0.6
7-10	18	0.2	12	0.1	7	0.1
11-14	< 3	@	11	0.1	6	0.1

Rate per 1,000 population
@ Numerator too small for rate calculation
Includes confirmed and unconfirmed cases
Data Source: Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

Figure VII-12 on the following page illustrates the geographic distribution of lead poisoning in children up to and including the age of 14. The three highest ZIP codes were 76104, 76105, and 76106 in central Tarrant County.

Figure VII-12: Geographic Distribution of Lead Poisoning in Children



Legend

22.71 - 80.27 | 80.28 - 160.54 | 160.55 - 240.81 | 240.82 - 321.08 | Excluded Data

1 inch equals 5 miles

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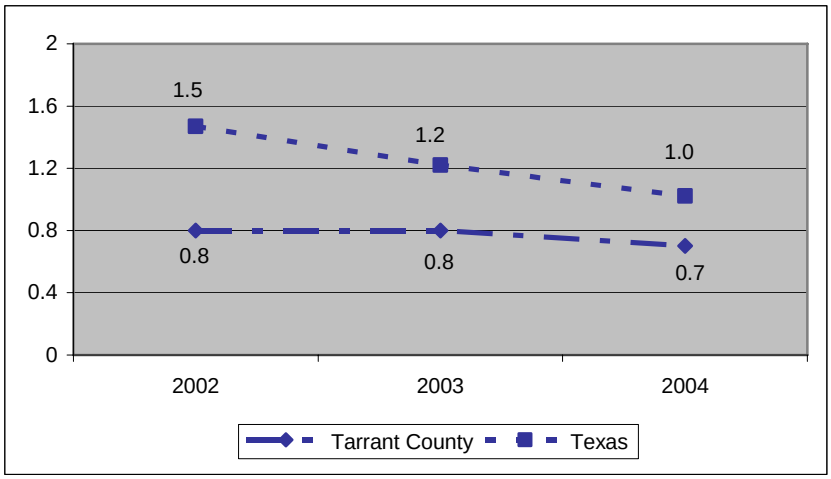
TARRANT COUNTY PUBLIC HEALTH DOES NOT GUARANTEE THE CORRECTNESS OR ACCURACY OF ANY FEATURES ON THIS MAP. TARRANT COUNTY ASSUMES NO RESPONSIBILITY IN CONNECTION THEREWITH.

Comparison with Texas and the United States

The incidence rate of lead poisoning among children up to 14 years of age was lower in Tarrant County than in Texas for 2002-2004 (Figure VII-13).

Figure VII-13: Lead Poisoning in Tarrant County and Texas, 2002-2004



Rate per 1,000 population
United States data are not available
Includes confirmed and unconfirmed cases
Data Source: Texas Department of State Health Services, Texas Childhood Lead Poisoning Prevention Program

Comparison with Healthy People 2010 Objective

The Healthy People 2010 objective for blood lead levels in children 1-6 years of age is 0 percent. Tarrant County did not reach total elimination of elevated lead levels in children for 2002-2004 (Table VII-22).

Table VII-22. Comparison of Child Lead Poisoning in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
8-11. Total elimination of blood lead levels in children. (Baseline: 4.4% of 1-6 year old children had lead levels exceeding 10 µg/dL during 1991-1994).	0.2%	0.2%	0.1%

Indicator VII-4. Air Quality

Air Quality

According to the Environmental Protection Agency (EPA), the total emissions of the six principal air pollutants (also called the criteria pollutants): nitrogen dioxide (NO2), ozone (O3), sulfur dioxide (SO2), particulate matter (PM), carbon monoxide (CO), and lead (Pb); have declined by 53 percent between 1970 and 2005. Despite the dramatic increase in the gross domestic product, vehicle miles traveled, energy consumption, and the United States population, the air toxic emissions, in addition to the above mentioned air pollutants, have declined. These reductions are the result of implementing stationary and mobile source regulations (Annual Report, EPA, 2006). Emissions of air pollutants, however, continue to play an important role in a number of air quality issues. About 141 million tons of pollution is emitted into the atmosphere each year in the United States (Air Emissions Trends, EPA).

In cities, air may be severely polluted not only by transportation but also by the burning of fossil fuels (oil and coal) in generating stations, factories, office buildings, homes, and the incineration of garbage. Air pollution from cities also affects rural areas for many miles downwind. Airborne pollutants from other sources include insecticides, herbicides, radioactive fallout, and dust from fertilizers, mining operations, and livestock feedlots.

Everyday levels of air pollution may insidiously affect health and behavior. From both the clinical and public health perspective, air pollution remains a relevant topic for health professionals. Although dramatic air pollution episodes associated with readily evident excess mortality now are unlikely, ozone, acid aerosols, and total particles may be responsible for adverse health effects at current levels of exposure. The health effects ascribed to exposure to air pollution are diverse, ranging from minor physiologic disturbances to death from respiratory and cardiovascular disease (Bascom et al 1996).

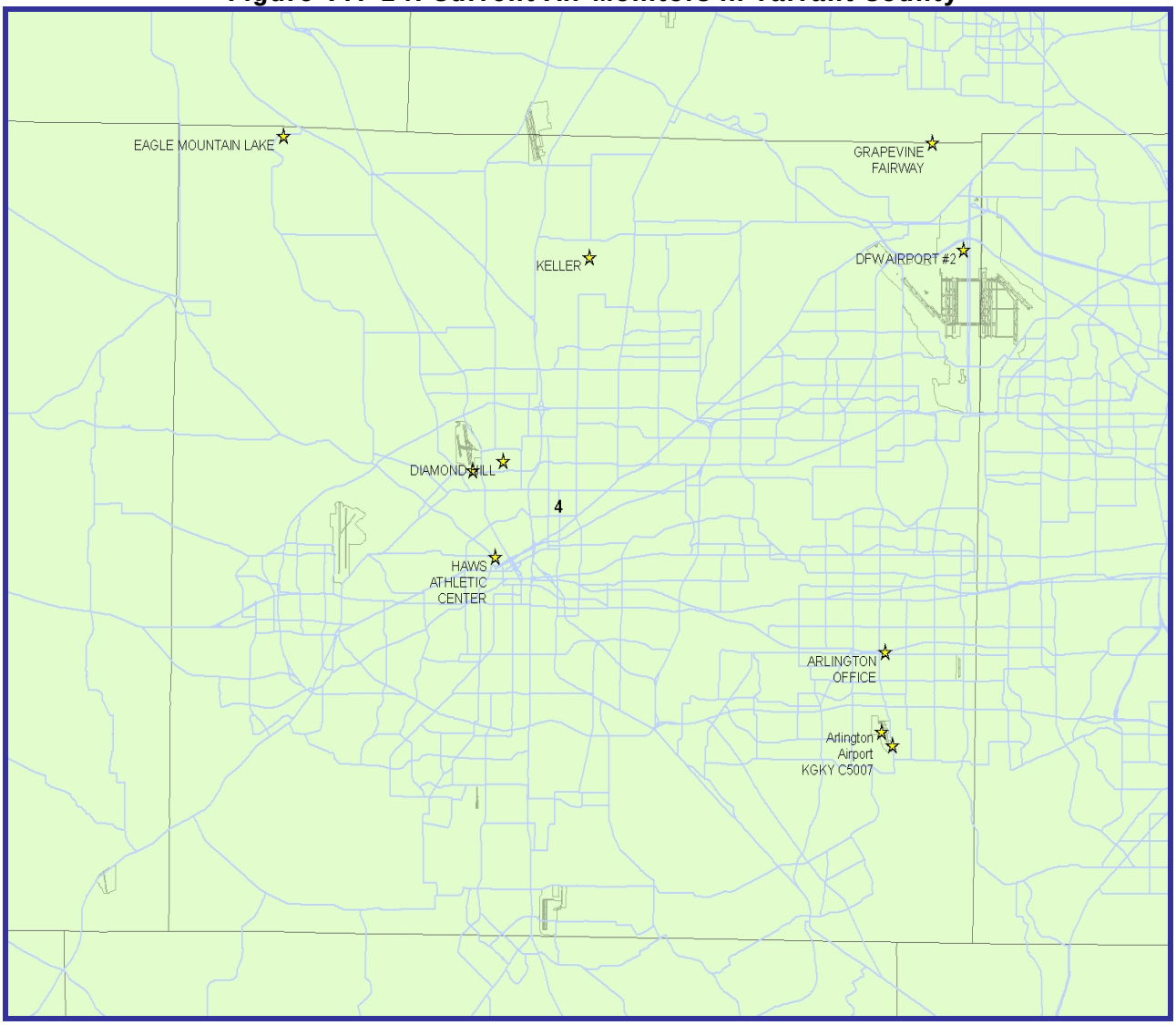
The most widespread and persistent urban pollution problems are ozone and particulate matter. Stringent National Ambient Air Quality Standards have been implemented as part of the national efforts to control these pollutants. In 1997, the EPA revised the primary (health) and secondary (welfare) National Ambient Air Quality Standards (NAAQS) for ozone by establishing 8-hour standards. One-hour standards have been in place since 1979 (Air Trends, EPA).

- One-hour standard for Ozone: The 1-hour standards are met when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is equal to or less than 1.
- Eight-hour standard for Ozone: The 8-hour standards are met when the 3-year average of the annual fourth highest daily maximum 8-hour average concentration is less than 0.08 ppm.

Current Status

Tarrant County's annual number of days with a violation of EPA air quality standards for the 1-hour standard for ozone (smog) was 13 in 2002, 2 in 2003, and 2 in 2004.
The annual number of days with a violation of EPA air quality standards for the 8-hour standard for ozone (smog) was 79 in 2002, 64 in 2003, and 30 in 2004.
Tarrant County did not violate the EPA air quality standards for any of the other criteria pollutants. (http://www.epa.gov/air/data/monvals.html) (Figure 14).

Figure VII-14: Current Air Monitors in Tarrant County



Data Source: Texas Commission on Environmental Quality

Comparison with Texas and the United States

The comparison of air quality in Tarrant County with that of Texas and the United States is difficult for the following reasons:

1) There is no established protocol for comparing areas of the state, and
2) State and local air quality measures are different from national air quality measures.

The annual number of days for which the ambient air monitors exceeded the EPA air quality standards is reported here for the years 2002-2004. The state of Texas monitors the number of days that exceed the state's healthy air standards, and has a different standard for each city. Hence the air quality measure in Texas is not comparable with other states.

EPA classifies the national air quality measurements in a bimodal format:
Attainment - air pollution levels do not exceed the primary and secondary national ambient air quality standards for a pollutant, and
Non-Attainment - air pollution levels persistently exceed the primary and secondary national ambient air quality standards for a pollutant.

According to EPA air quality standards, Tarrant County was a non-attainment geographic region for ozone in 2002, 2003, and 2004. No violations were recorded for other criteria pollutants during the same time frame. Texas had several metropolitan areas of non-attainment for ozone and particulate matter, but no metropolitan areas of non-attainment for other criteria pollutants in these three years.

Comparison with Healthy People 2010 Objective

The Healthy People 2010 Objectives 8-1 are tied to the EPA definition of non-attainment geographic regions for the various air quality measurements. As per the EPA air quality standards, Tarrant County was a non-attainment geographic region for ozone in 2002-2004. No violations were recorded for other criteria pollutants during the same time frame. Thus, by measurements for the HP 2010 objectives, 100 percent of Tarrant County's population was exposed to unhealthy ozone levels in the air. For other criteria pollutants, Tarrant County met and exceeded the HP 2010 objectives for air quality in 2002-2004 (Table VII-23).

Table VII-23: Comparison of Air Quality in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
8-1. Reduce the proportion of persons exposed to air that does not meet the U.S. Environmental Protection Agency's (EPA's) health-based standards for harmful air pollutants to 0%			
8-1a. Ozone (Baseline: 43% in 1997): aimed to achieve the objective by 2012	a. 100%	a. 100%	a. 100%
8-1b. Particulate matter, 10µm or less in diameter (PM 10) (Baseline: 12% in 1997)	b. 0%	b. 0%	b. 0%
8-1c. Carbon monoxide (Baseline: 19% in 1997)	c. 0%	c. 0%	c. 0%
8-1d. Nitrogen dioxide (Baseline: 5% in 1997)	d. 0%	d. 0%	d. 0%
8-1e. Sulfur dioxide (Baseline: 2% in 1997)	e. 0%	e. 0%	e. 0%
8-1f. Lead (Baseline: < 1 in 1997)	f. 0%	f. 0%	f. 0%

Indicator VII-5. Water Quality

In Tarrant County, there are 84 community water systems that serve a population of 1,625,891 with public water in compliance with the Primary Drinking Water Regulations (NPDWR). The NPDWT consists of legally enforceable standards that apply to public water systems. Primary drinking water standards protect the public's health by limiting the levels of contaminants in drinking water. Further information on primary drinking water standards is available from the Environmental Protection Agency at http://www.epa.gov/safewater. Not all Tarrant County residents use a public water system. The total population served by Tarrant County public water systems includes some residents outside of Tarrant County. A system may cross the county border (Table VII-24).

Table VII-24*: City Water Systems in Tarrant County and Fluoridation

Utility's Name	Current Population being Served	Fluoridated Water
City of Arlington	355,500	Y
City of Azle	10,300	Y
City of Bedford	48,390	Y
City of Colleyville	22,394	Y
City of Crowley	9,960	Y
City of Dalworthington Gardens	2,500	Y
City of Euless	46,166	Y
City of Everman	5,688	Y
City of Forest Hill	12,387	Y
City of Fort Worth	671,728	Y
City of Grapevine	47,599	Y
City of Haltom City	39,000	Y
City of Haslet	1,350	N
City of Hurst	37,893	Y
City of Keller	38,400	Y
City of Kennedale	6,482	Y
City of Lake Worth	5,207	Y
City of Mansfield	50,247	Y
City of North Richland Hills	61,115	Y
City of Pelican Bay	1,470	Y
City of Richland Hills	8,047	Y
City of River Oaks	7,055	N
City of Saginaw	18,561	Y
City of Sansom Park	4,233	N
City of Southlake	21,497	Y
City of Westworth Village	2,250	Y
City of White Settlement	14,862	Y
Other Systems	75,610	
Total	1,625,891	

* Includes current data acquired February 2007
Y The water is fluoridated N The water is not fluoridated
Other Systems includes fluoridated and non-fluoridated water
Data Source: Texas Commission on Environmental Quality; Texas Department of State Health Services, Texas Fluoridation Project

Fluoridated drinking water is known to enhance the resistance of teeth against decay and to promote re-mineralization, which helps in repairing early decay before the damage is visible. A system with fluoridated water is categorized as natural, adjusted or consecutive. A natural system is naturally fluoridated; while, fluoride is added to an adjusted system. A consecutive system draws its water from another fluoridated system.

Water quality data are live data representing current time. These data were acquired February 2007.

Social and Mental Health

Definitions and Data Sources

Suicide Rates

- Numerator – Number of deaths due to suicide: ICD-10 codes X60 – X84, Y87.0
- Denominator – Estimated population
- Rate – per 100,000 population, age adjusted to the 2000 standard population
- Data Source – Texas Department of State Health Services, Center for Health Statistics

Mental Health

- Number of clients who received mental health services from Mental Health Mental Retardation of Tarrant County (MHMRTC)
- Data Source: Mental Health Mental Retardation of Tarrant County

Substance Abuse

➢ Substance abuse deaths

- Numerator – Total direct alcohol and drug related deaths
- Denominator – Estimated population
- Rate – per 100,000 population (not age adjusted)
- Data Source – Texas Department of State Health Services, Mental Health and Substance Abuse Program Services

➢ Substance abuse treatment

- Number of clients who received DSHS funded substance abuse treatment services
- Data Source – Texas Department of State Health Services, BHIPS Data, Mental Health and Substance Abuse Services

Child Abuse Rates

- Numerator – Number of confirmed cases of child abuse and neglect
- Denominator –Estimated population of children 17 years and younger
- Rate – per 1,000 population
- Data Source – Texas Department of Protective and Regulatory Services
- Population estimates obtained from the Texas State Data Center and Office of the State Demographer

Crime Arrests Rates

- Number of arrests for youth and adults
- Data Source – Texas Department of Public Safety

Divorce Rates

- Numerator – Number of divorces
- Denominator – Estimated population
- Rate – per 1,000 population
- Data Source – Texas Department of State Health Services, Texas Vital Statistics

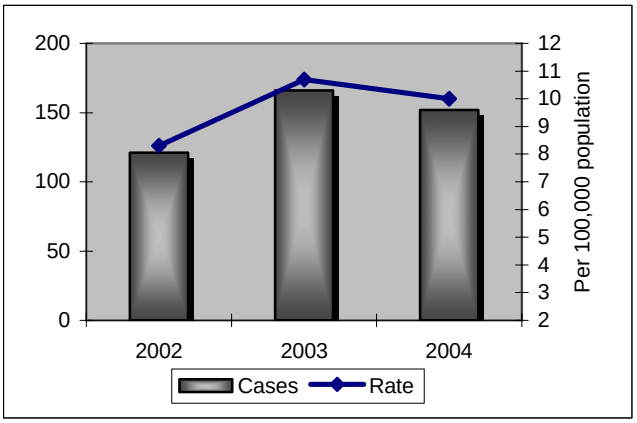
Homelessness

- Estimated homeless population, 2002 and 2004
- Data Source – Tarrant County Homeless Survey prepared by the Tarrant County Development Division in cooperation with the Tarrant County Homeless Coalition

Indicator VIII-1. Suicide

The number of deaths in Tarrant County attributed to suicide increased from 121 (8.3 per 100,000 population) in 2002 to 166 (10.7 per 100,000 population) in 2003, but then slightly decreased to 152 (10.0 per 100,000 population) in 2004 (Figure VIII-1).

Figure VIII-1: Suicide Mortality, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

There were approximately three times more suicides among males than females in Tarrant County each year. While the number of suicides in both males and females increased from 2002-2003, a slight decrease was observed for 2004 (Table VIII-1).

Table VIII-1: Suicide Mortality by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	90	13.0	128	16.8	116	16.1
Female	31	4.1	38	4.9	36	4.6

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

The number and rate of suicide were higher for Whites each year. The rate for Whites was over three times greater than the rate for Blacks and Hispanics. The suicide rate for Whites in Tarrant County peaked in 2003. The suicide rate for Blacks and Hispanics peaked in 2002 and 2004, respectively (Table VIII-2).

Table VIII-2: Suicide Mortality by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	103	10.9	141	14.4	133	14.2
Black	9	5.0	8	3.2	6	4.0
Hispanic	9	3.5	13	3.4	12	3.8

Rate per 100,000 population
Age adjustment uses 2000 standard population
Other race not included due to small numbers
Data Source: Texas Department of State Health Services, Center for Health Statistics

The suicide rate increased each year for the 15-24 year age group, 25-34 year age group, 35-44 year age group, and 45-54 year age group. No apparent trends were observed for the two oldest age groups (Table VIII-3).

Table VIII-3: Suicide Mortality by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
15-24	15	6.8	20	8.9	22	13.3
25-34	18	7.3	30	11.9	24	12.7
35-44	35	13.9	41	16.4	39	25.2
45-54	21	10.3	38	18.1	32	19.9
55-64	14	11.8	26	20.2	13	8.3
65-74	12	17.4	4	3.7	13	12.0
75+	5	8.8	6	10.3	8	8.1

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

The most common mode of death for suicides included the use of firearms, accounting for over half of all suicides each year. The second highest percentage of suicides each year was attributed to hanging (Table VIII-4).

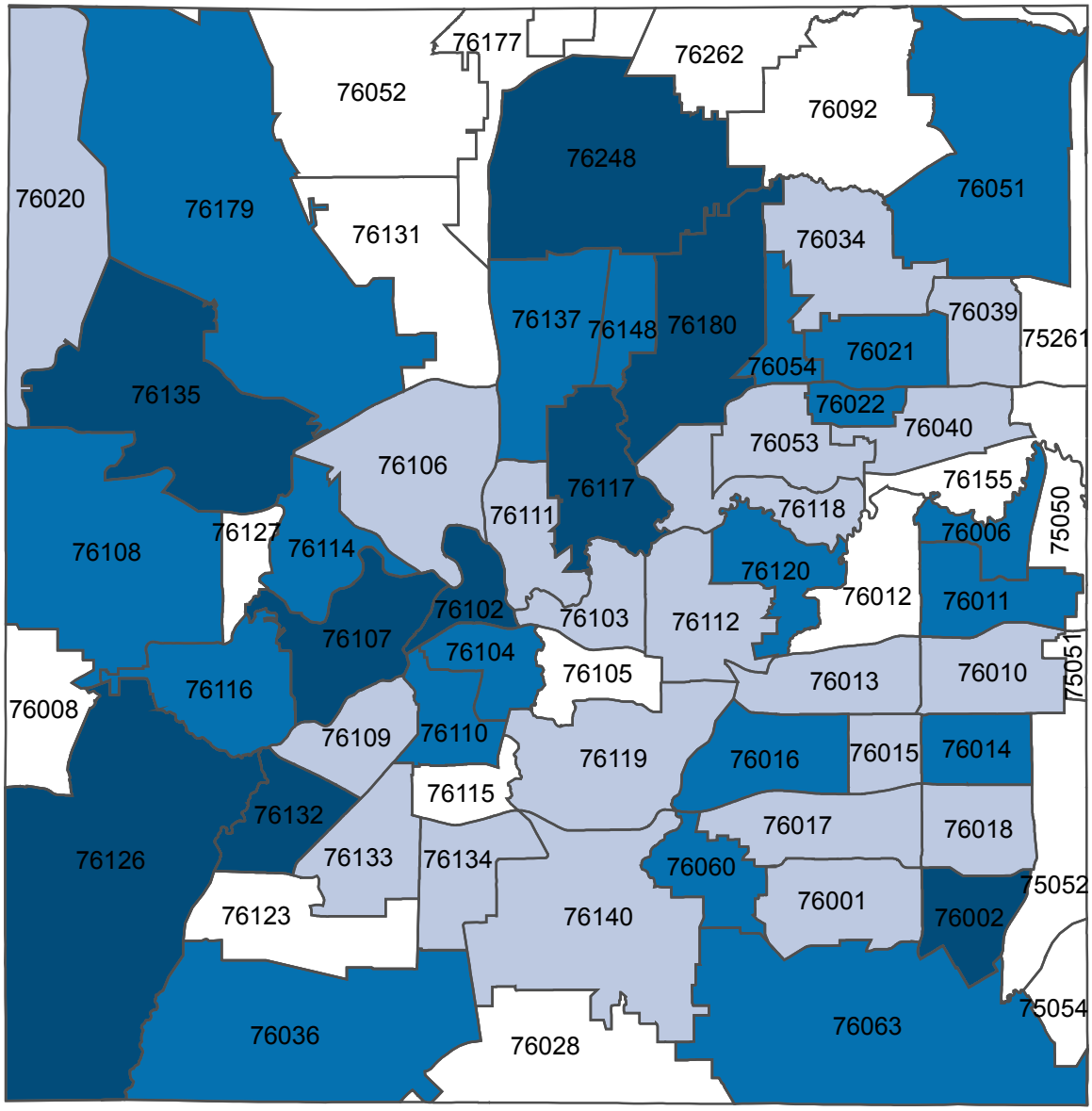
Table VIII-4: Suicide Mortality by Modes of Death

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Drugs / Poisons	22	18.2	16	9.6	16	10.5
Firearms	63	52.1	89	53.6	82	53.9
Hanging	29	24.0	36	21.7	40	26.3
Other	7	5.8	25	15.1	14	9.2

Rate per 100,000 population
Data Source: Texas Department of State Health Services, Center for Health Statistics

Figure VIII-2 on the next page shows suicide by ZIP code. The data are fairly evenly distributed across the ranges. The highest rate is 19.3 per 100,000 population.

Figure VIII-2: Geographic Distribution of Suicide



Rate per 100,000

4.51 - 10.00 | 10.01 - 15.00 | 15.01 - 19.33 | Excluded Data

1 inch equals 5.000000 miles

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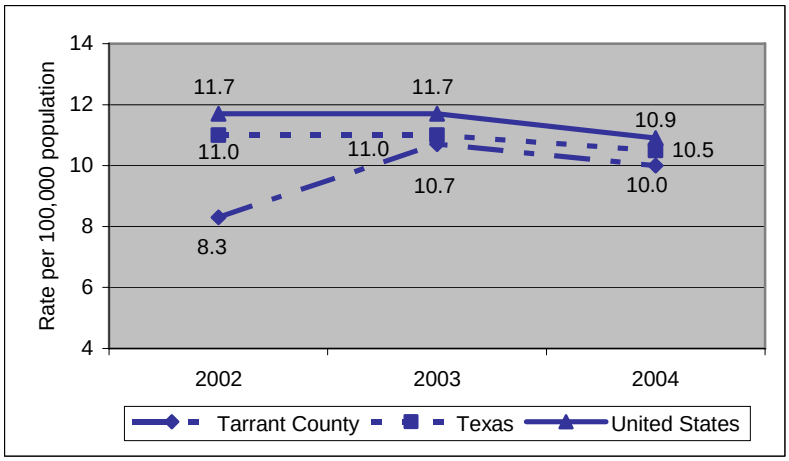
Comparison with Texas and the United States

The suicide rate in Tarrant County was lower than Texas and the United States in 2002-2004 (Figure VIII-3).

Figure VIII-3: Suicide Mortality Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics; Centers for Disease Control and Prevention

Comparison with Healthy People 2010 Objective

As of 2004, the overall suicide rate in Tarrant County did not meet the Healthy People 2010 objective. In 2003 and 2004, the suicide rate was double the Healthy People 2010 objective (Table VIII-5).

Table VIII-5: Comparison of Suicide Rate in Tarrant County with Healthy People 2010 Objective

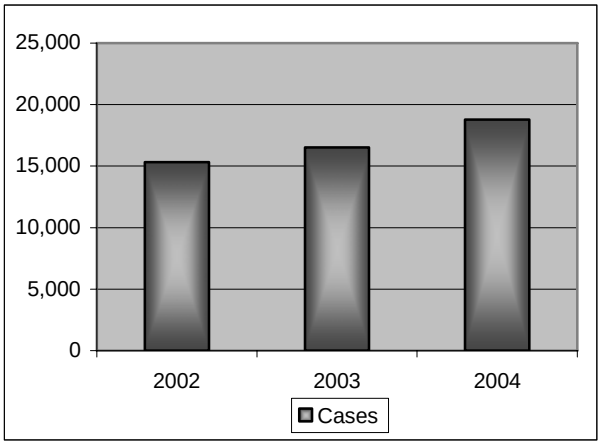
Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
18-1. Reduce suicide rate to 5 per 100,000 population. (Baseline: 11.3 per 100,000 population in 1998 age adjusted to year 2000 standard population)	8.3	10.7	10.0

Indicator VIII-2. Mental Health

Mental health is identified as one of the leading health indicators for Healthy People 2010. According to the Healthy People 2010 definition, "mental health is not only the absence of mental illness but a state of successful mental functioning, resulting in productive activities, fulfilling relationships and the ability to adapt to change and cope with adversity."

The number of clients served by mental health services of Mental Health Mental Retardation of Tarrant County (MHMRTC) steadily increased from 15,315 in 2002 to 16,520 in 2003 and 18,776 in 2004 (Figure VIII-4).

Figure VIII-4: Clients Receiving Mental Health Services, Tarrant County, 2002-2004



Data Source: Mental Health Mental Retardation of Tarrant County
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.

Adults

The number of male and female adult clients who received mental health services from MHMRTC increased each year for 2002-2004; though, the percentage of males and females remained relatively stable. A slightly higher percentage of clients were female each year (Table VIII-6).

Table VIII-6: Adult Clients in Mental Health Services by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Male	5,715	43.3	6,451	45.3	7,153	44.2
Female	6,387	48.4	6,811	47.8	7,665	47.4
Not-reported	1,099	8.3	993	7.0	1,354	8.4

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

Among adults, Whites accounted for over 63 percent of clients who received mental health services from MHMRTC each year. Blacks constituted the second highest percentage of clients (Table VIII-7).

Table VIII-7: Adult Clients in Mental Health Services by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
White	8,379	63.5	9,093	63.8	10,218	63.2
Black	3,076	23.3	3,438	24.1	4,000	24.7
Hispanic	696	5.2	755	5.3	637	3.9
Other	228	1.7	238	1.6	285	1.8
Not-reported	822	6.2	731	5.1	1,032	6.4

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

The majority of adults who received mental health services from MHMRTC in 2002-2004 were from Fort Worth (Table VIII-8).

Table VIII-8: Adult Clients in Mental Health Services by Geographic Location, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Fort Worth	8,982	68.1	9,341	65.1	11,907	73.6
Arlington	2,138	16.2	2,296	16.0	2,010	12.4
Northeast Tarrant County	1,500	11.4	1674	11.7	1,440	8.9
Other	575	4.4	1039	7.2	812	5.0

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Unknown cases are excluded.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

Children and Adolescents

Children and Adolescents represented 14 percent of clients who received mental health services from MHMRTC in 2002-2004. Approximately 60 percent of all children and adolescents who received services were male (Table VIII-9).

Table VIII-9: Children and Adolescent Clients in Mental Health Services by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Male	1,254	59.3	1,391	61.4	1,570	60.3
Female	598	28.3	642	28.3	696	26.7
Not-reported	262	12.3	232	10.2	338	13.0

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

Of children and adolescents who received mental health services from MHMRTC in 2002-2004, approximately 48 percent were White and 29 percent were Black (Table VIII-10).

Table VIII-10: Children and Adolescent Clients in Mental Health Services by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
White	1,008	47.7	1,096	48.4	1,258	48.3
Black	611	28.9	668	29.5	756	29.0
Hispanic	256	12.1	268	11.8	177	6.8
Other	24	1.2	30	1.4	118	4.5
Not-reported	215	10.2	203	9.0	295	11.3

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

The highest percent of children and adolescents who received mental health services from MHMRTC in 2002-2004 were from Fort Worth (Table VIII-11).

Table VIII-11: Children and Adolescent Clients in Mental Health Services by Geographic Location, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Fort Worth	1,360	64.3	1,474	65.1	1,678	64.4
Arlington	437	20.7	428	18.9	460	17.7
Northeast Tarrant County	235	11.1	250	11.0	321	12.3
Other	84	4.0	112	4.9	145	5.6

Approximately 0.2 percent of clients could not be classified as adult or child/adolescent due to missing age, and are therefore not included in this table.
Unknown cases are excluded.
Data will vary from previous M.A.P. report, because current data do not include individuals treated for substance abuse, unless a mental illness was treated simultaneously.
Data Source: Mental Health Mental Retardation of Tarrant County

Comparison with Healthy People 2010 Objective

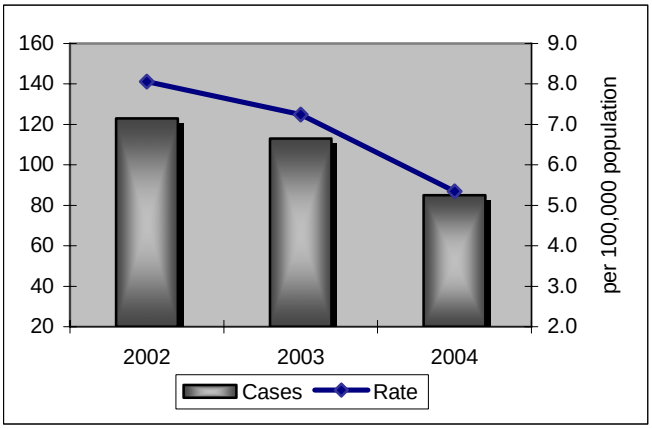
Healthy People 2010 Chapter 18 is dedicated to mental health issues. Objectives 18-6 through 18-11 are designed to encourage an increase in mental health services and treatment. These are developmental objectives that do not have specific stated goals. Consequently, the data for Tarrant County are not comparable to any specific Healthy People 2010 objective.

Indicator VIII-3. Substance Abuse

Substance Abuse Deaths - Alcohol

The number of direct alcohol related deaths in Tarrant County decreased each year from 123 (8.1 per 100,000 population) in 2002 to 113 (7.2 per 100,000 population) in 2003 and 85 (5.3 per 100,000 population) in 2004 (Figure VIII-5).

Figure VIII-5: Direct Alcohol Related Deaths, Tarrant County, 2002-2004



Crude death rate per 100,000 population
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

For 2002-2004, the direct alcohol related deaths and crude mortality rate was over four times higher among males than females. The number of direct alcohol related deaths decreased each year for both males and females (Table VIII-12).

Table VIII-12: Direct Alcohol Related Deaths by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	101	13.3	92	11.9	69	8.7
Female	22	2.9	21	2.7	16	2.0

Crude death rate per 100,000 population
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

The highest crude mortality rate for direct alcohol related deaths was observed among Whites, while the lowest was observed among Hispanics each year (Table VIII-13).

Table VIII-13: Direct Alcohol Related Deaths by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	90	9.8	83	9.0	61	6.6
Black	15	7.4	13	6.3	9	4.2
Hispanic	18	5.5	16	4.5	13	3.5

Crude death rate per 100,000 population
Other race not included due to small numbers
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

The lowest number of direct alcohol related deaths and crude mortality rate were identified in the 34 years and younger age group each year. The highest rate was identified in the 45-54 year age group for 2002, 55-64 year age group for 2003, and 65 years and over age group for 2004. The number of deaths decreased each year for the 45-54 year age group (Table VIII-14).

Table VIII-14: Direct Alcohol Related Deaths by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-34	5	0.6	2	@	3	@
35-44	18	7.1	14	5.6	15	6.0
45-54	47	23.1	36	17.2	26	12.0
55-64	25	21.0	31	24.1	20	14.7
65+	28	22.2	30	23.4	21	16.1

Crude death rate per 100,000 population
@ Numerator too small for rate calculation
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

Substance Abuse Deaths - Drugs

The number of direct drug related deaths in Tarrant County increased from 142 (9.3 per 100,000 population) in 2002 to 166 (10.6 per 100,000 population) in 2003. The number of deaths then decreased to 147 (9.2 per 100,000 population) in 2004 (Figure VIII-6).

Figure VIII-6: Direct Drug Related Deaths, Tarrant County, 2002-2004

Crude death rate per 100,000 population
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

For 2002-2004, the direct drug related deaths and crude mortality rate were higher for males than females. The crude mortality rate was approximately one and a half times higher among males in 2002 and almost two times higher among males in 2003 and 2004 (Table VIII-15).

Table VIII-15: Direct Drug Related Deaths by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	84	11.1	107	13.8	95	12.0
Female	58	7.5	59	7.5	52	6.5

Crude death rate per 100,000 population
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

The highest number of direct drug related deaths occurred among Whites each year, while the highest crude mortality rate occurred among Blacks each year. For both Whites and Blacks, the highest number of deaths and crude mortality rate were observed in 2003. The lowest number of deaths and crude mortality rate were observed for Hispanics each year (Table VIII-16).

Table VIII-16: Direct Drug Related Deaths by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	93	10.1	113	12.3	99	10.8
Black	34	16.9	42	20.2	32	15.0
Hispanic	15	4.6	11	3.1	15	4.0

Crude death rate per 100,000 population
Other race not included due to small numbers
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

The highest number of direct drug related deaths and crude mortality rate were observed for the 35-44 year age group for 2002-2004. The number of deaths more than doubled in the 55-64 year age group from 2003-2004 (Table VIII-17).

Table VIII-17: Direct Drug Related Deaths by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
0-34	38	4.6	38	4.5	47	5.5
35-44	60	23.8	67	26.7	49	19.5
45-54	36	17.7	54	25.7	34	15.7
55-64	8	6.7	7	5.5	17	12.5
65+	0	-	0	-	0	-

Crude death rate per 100,000 population
Data Source: Texas Department of State Health Services, Mental Health and Substance Abuse Services

The following table provides data on blood alcohol levels for victims of accidental deaths in Tarrant County for 2004, as reported by the Tarrant County Medical Examiner's Office. According to Texas Penal Code § 49.01, a person is considered to be legally intoxicated with a blood alcohol level greater than 0.08. Of accidental deaths with a detectable blood alcohol level, 68 percent had a blood alcohol level 0.06 or above. Approximately 81 percent of accidental deaths with a detectable blood alcohol level occurred in 11-50 year age groups. Accidental deaths with no detectable blood alcohol level are not included in Table VIII-18.

Table VIII-18: Accidental Deaths by Age and Blood Alcohol, Tarrant County, 2004

	0.01 - 0.05	0.06 - 0.10	0.11 - 0.15	0.16 - 0.20	0.21 - 0.25	0.26 - 0.30	> 0.30
0-10	0	0	0	0	0	0	0
11-20	8	3	4	4	2	0	0
21-30	13	2	3	1	2	1	0
31-40	9	8	2	1	1	1	0
41-50	3	5	0	4	3	3	0
51-60	0	3	2	2	0	1	0
61-70	0	0	1	2	1	1	0
71-80	0	0	2	1	1	1	0
81+	0	0	0	1	0	0	0

Data Source: Tarrant County Medical Examiner's Office

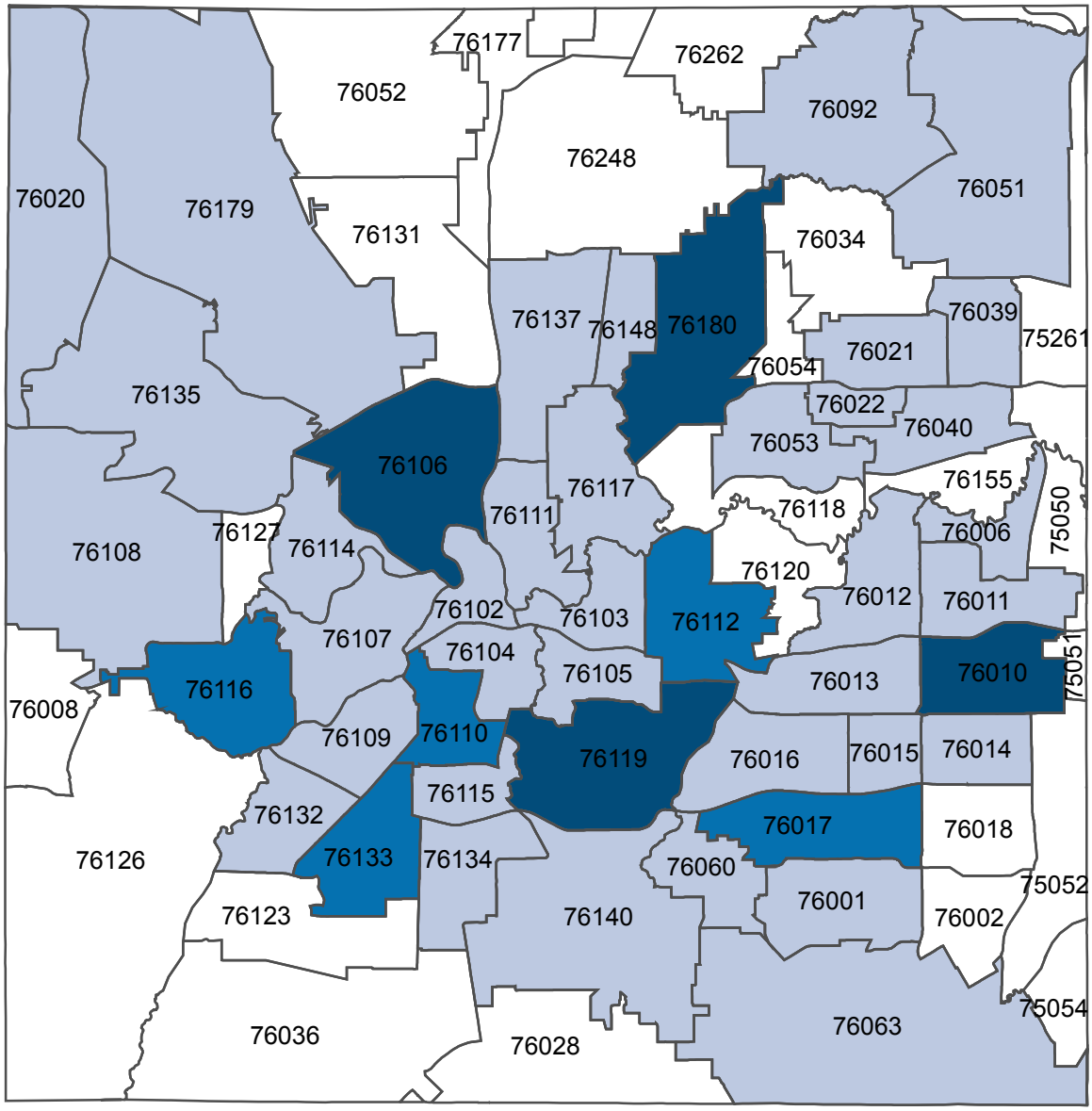
The following table provides data on toxicology results for victims of accidental deaths in Tarrant County for 2004, as reported by the Tarrant County Medical Examiner's Office. Toxicology tests performed by the Medical Examiner's Office on accidental death victims include ABN, cannabinoid such as marijuana, opiates (heroin or morphine), and BZD (benzodiazepine). ABN is a general test that stands for acid, base, and neutral media of extractions for various drugs. It is always positive when any illegal drug is present in the blood of victims tested. A follow-up test is then done to identify which specific drug is involved. In some situations, the specific drug may not be identifiable. Opiates were the most frequently detected in accidental deaths. The majority of positive toxicology tests occurred in the 31-50 year age groups, accounting for 67 percent of accidental deaths with a positive toxicology result (Table VIII-19).

Table VIII-19: Accidental Deaths by Age and Toxicology, Tarrant County, 2004

	ABN	Cocaine	Cannabinoid	Opiates	BZD
0-10	1	0	0	0	0
11-20	3	1	4	0	2
21-30	27	6	6	7	6
31-40	55	20	20	18	16
41-50	38	6	11	27	19
51-60	10	1	3	10	0
61-70	1	8	4	1	3
71-80	2	7	0	0	0
81+	0	0	0	0	0

Data Source: Tarrant County Medical Examiner's Office

Figure VIII-7: Geographic Distribution of Substance Abuse Related Deaths



Rate per 100,000

0.31 - 5.00 | 5.01 - 10.09 | 10.10 - 11.38 | Excluded Data

1 inch equals 5 miles

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THIS MAP WAS PREPARED BY TARRANT COUNTY PUBLIC HEALTH FOR ITS USE, AND MAY BE REVISED AT ANY TIME WITHOUT NOTIFICATION TO ANY USER.

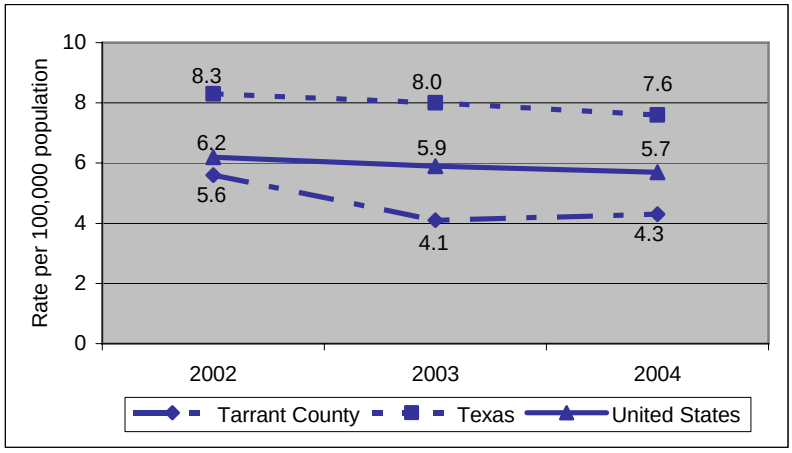
TARRANT COUNTY PUBLIC HEALTH DOES NOT GUARANTEE THE CORRECTNESS OR ACCURACY OF ANY FEATURES ON THIS MAP. TARRANT COUNTY ASSUMES NO RESPONSIBILITY IN CONNECTION THEREWITH.

Figure VIII-7 on the preceding page shows the distribution by ZIP code of substance abuse deaths. The highest rate was 11.4 per 100,000 population. The ZIP codes in the highest range are 76106, 76180, 76010, and 76119.

Comparison with Texas and the United States

An alcohol-related motor vehicle fatality includes any fatal motor vehicle accident in which the driver or a pedestrian had a measurable blood alcohol content. The rate of alcohol-related motor vehicle deaths in Tarrant County was lower than Texas and the United States in 2002-2004. There were no comparable measures for alcohol or drug related deaths for a Tarrant County, Texas, and United States comparison since the rates are calculated differently on the local and national level (Table VIII-20).

Table VIII-20: Alcohol Related Motor Vehicle Deaths in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population; crude death rate provided
Data Source: United States Department of Transportation, National Highway Traffic Safety Administration

Comparison with Healthy People 2010 Objective

The rate of alcohol related motor vehicle fatalities in Tarrant County did not meet the Healthy People 2010 objective in 2002-2004; however, the rate in Tarrant County was only slightly higher in 2003 and 2004 (Table VIII-21).

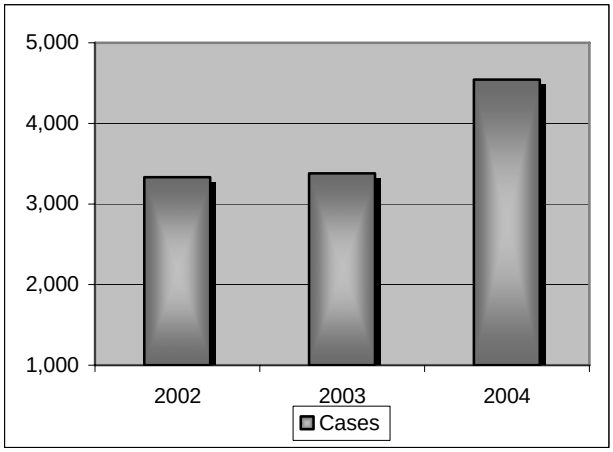
Table VIII-21: Comparison of Alcohol-Related Motor Vehicle Fatality Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	**2003**	**2004**
26-1 Reduce deaths caused by alcohol-related motor vehicle crashed to 4 per 100,000 population. (Baseline: 5.9 per 100,000 in 1998)	5.6	4.1	4.3

Substance Abuse Treatment

The number of Tarrant County residents receiving DSHS funded substance abuse treatment services slightly increased from 3,334 cases in 2002 to 3,382 cases in 2003, then increased by approximately 34 percent to 4,545 cases in 2004 (Figure VIII-8).

Figure VIII-8: Substance Abuse Treatment, Tarrant County, 2002-2004



Data Source: Texas Department of State Health Services BHIPS Data, Community Mental Health and Substance Abuse Services

More males than females received DSHS funded substance abuse treatment services in all three years. The ratio of males to females receiving treatment remained steady (Table VIII-22).

Table VIII-22: Substance Abuse Treatment by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Male	1,885	56.5	1,889	55.9	2,536	55.8
Female	1,449	43.5	1,493	44.1	2,009	44.2

Data Source: Texas Department of State Health Services, BHIPS Data, Community Mental Health and Substance Abuse Services

For 2002-2004, more than half of those who received DSHS funded substance abuse treatment services were White. Blacks represented the second highest percent of racial/ethnic group to receive substance abuse treatment (Table VIII-23).

Table VIII-23: Substance Abuse Treatment by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
White	1,858	55.7	2,027	59.9	2,672	58.8
Black	969	29.1	873	25.8	1,110	24.4
Hispanic	465	13.9	401	11.9	661	14.5
Other	42	1.3	81	2.4	102	2.2

Data Source: Texas Department of State Health Services, BHIPS Data, Community Mental Health and Substance Abuse Services

The number of Tarrant County residents who received DSHS funded substance abuse treatment services decreased in the 10-19 year age group, but increased in the 20-29 year age group in 2002-2004. Approximately 60 percent of those who received substance abuse treatment were 30 years or older (Table VIII-24).

Table VIII-24: Substance Abuse and Treatment by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Percent	Cases	Percent	Cases	Percent
10-19	559	16.8	478	14.1	618	13.6
20-29	738	22.1	806	23.8	1,202	26.4
30-39	1,014	30.4	1,060	31.3	1,397	30.7
40+	1,022	30.7	1,038	30.7	1,328	29.2

Data Source: Texas Department of State Health Services, BHIPS Data, Community Mental Health and Substance Abuse Services

Alcohol, heroin, and crack were the top three substances for which Tarrant County residents received DSHS funded substance abuse treatment services, accounting for approximately 60 percent of services received each year (Table VIII-25).

Table VIII-25: Substance Abuse and Treatment by Substance, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Alcohol	777	23.3	847	25.0	1,123	24.7
Amphetamines / Methamphetamines	330	9.9	416	12.3	672	14.8
Cocaine (powder)	194	5.8	196	5.8	248	5.5
Crack	652	19.6	596	17.6	747	16.4
Heroin	666	20.0	580	17.1	778	17.1
Marijuana	515	15.4	528	15.6	628	13.8
Other Opiates	126	3.8	138	4.1	232	5.1
Other Substances	74	2.2	81	2.4	117	2.6

Other Substances include Barbiturates, Hallucinogens, Inhalants, Tranquilizers, Ecstacy, Ephedrine, GHB, Katamine, Klonopin, Non-Rx Methadone, Over-the-Counter Drugs, and Other Sedatives
Data source: Texas Department of State Health Services, BHIPS Data, Community Mental Health and Substance Abuse Services

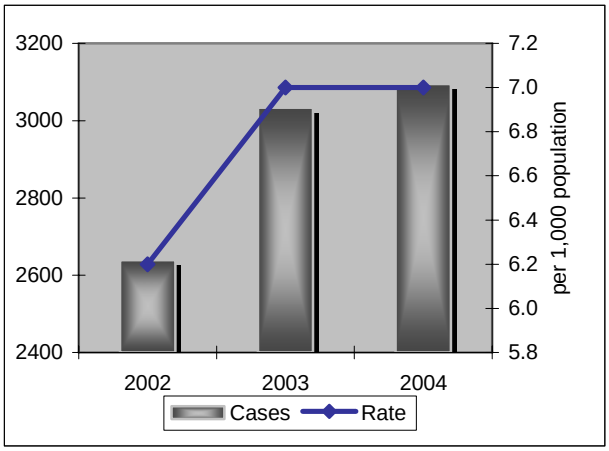
Comparison with Healthy People 2010 Objective

There are no corresponding objectives for substance abuse treatment in Healthy People 2010; however, there are several developmental objectives.

Indicator VIII-4. Child Abuse and Neglect

The number of confirmed child abuse and neglect cases reported to the Texas Department of Protective and Regulatory Services for Tarrant County increased from 2,639 (6.2 per 1,000 population) in 2002 to 3,034 (7.0 per 1,000 population) in 2003 and 3,095 (7.0 per 1,000 population) in 2004 (Figure VIII-9).

Figure VIII-9: Child Abuse and Neglect, Tarrant County, 2002-2004



Rate per 1,000 population
Data Source: Texas Department of Protective and Regulatory Services

In Tarrant County, females had a higher rate of child abuse and neglect each year. The rate increased for both males and females from 2002 to 2003. For 2003 to 2004, the rate slightly decreased for males, but slightly increased for females (Table VIII-26).

Table VIII-26: Child Abuse and Neglect Rate by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	1,255	5.8	1,442	6.5	1,450	6.4
Female	1,370	6.6	1,581	7.4	1,642	7.5

Rate per 1,000 population
Data Source: Texas Department of Protective and Regulatory Services

The rate of confirmed child abuse and neglect cases was two to three times higher for Blacks than other racial/ethnic groups each year. Others experienced the lowest rate of child abuse and neglect in 2002 and 2003, while Hispanics experienced the lowest rate in 2004 (Table VIII-27).

Table VIII-27: Child Abuse and Neglect Rate by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	1,153	5.3	1,278	5.9	1,340	6.2
Black	800	11.9	960	14.0	919	13.1
Hispanic	595	5.0	697	5.4	712	5.2
Other	91	4.5	99	4.6	124	5.5

Rate per 1,000 population
Data Source: Texas Department of Protective and Regulatory Services

The rate of confirmed child abuse and neglect cases was highest in the less than one year group for all three years, demonstrating a more than two times higher rate than any other age group. The second highest rate was observed in the 4-6 year group for all three years. Overall, however, the rate of confirmed child abuse and neglect cases decreased as age group increased (Table VIII-28).

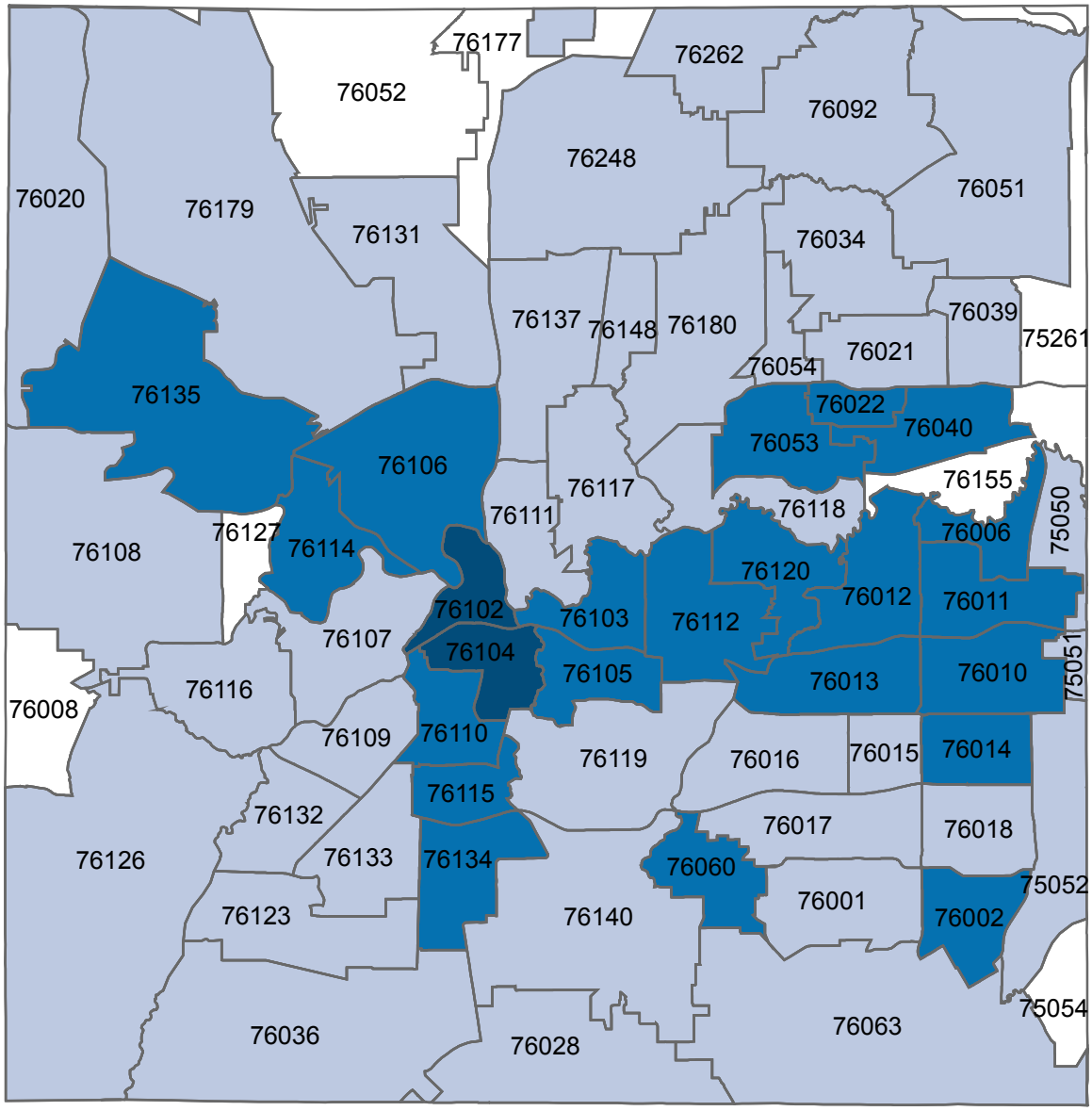
Table VIII-28: Child Abuse and Neglect Rate by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
<1	410	16.2	471	17.6	520	19.1
1-3	484	6.6	640	8.4	655	8.3
4-6	521	7.4	636	9.0	609	8.4
7-9	450	6.4	496	7.0	482	6.8
10-12	474	4.9	471	4.9	490	5.0
13-17	292	3.2	309	3.3	329	3.4

Rate per 1,000 population
Data Source: Texas Department of Protective and Regulatory Services

Figure VIII-10 on the following page shows the geographic distribution of confirmed child abuse and neglect by ZIP code. 76102 and 76104 had the highest rates of confirmed abuse and neglect for the years 2002-2004. The lowest rates were generally in the northern and southern parts of the county.

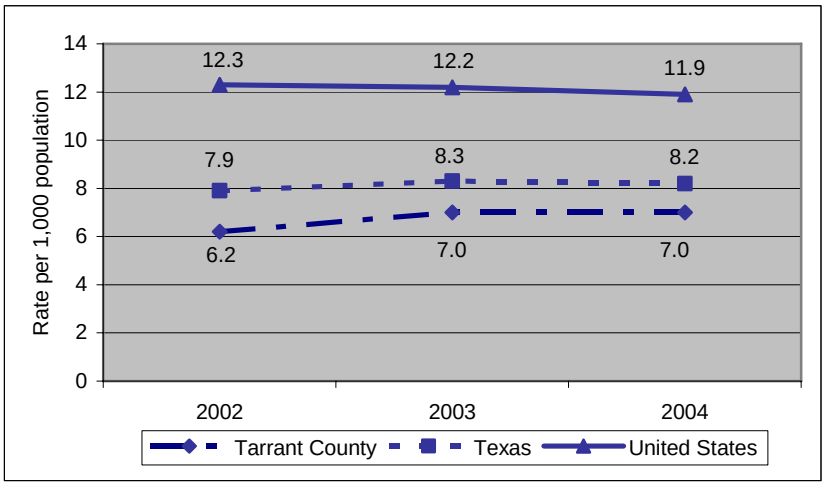
Figure VIII-10: Geographic Distribution of Confirmed Child Abuse and Neglect



Comparison with Texas and the United States

The rate of child abuse and neglect in Tarrant County was lower than that of Texas and the United States in 2002-2004 (Figure VIII-11).

Figure VIII-11: Child Abuse and Neglect Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 1,000 population
Data Source: Texas Department of Protective and Regulatory Services

Comparison with Healthy People 2010 Objective

The confirmed child abuse and neglect rate in Tarrant County met the Healthy People 2010 Objective for child maltreatment for 2002-2004. Child maltreatment is equivalent to child abuse and neglect (Table VIII-30).

Table VIII-30: Comparison of Child Abuse and Neglect Rate in Tarrant County with Healthy People 2010 Objective

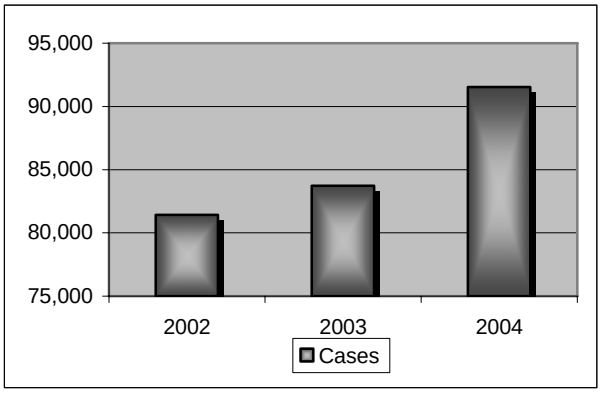
Healthy People 2010 Objective	Tarrant County		
	2002	**2003**	**2004**
15-33a. Reduce child maltreatment to 10.3 per 1,000 population of children under 18 years of age (20% improvement). (Baseline: 12.9 per 1,000 population in 1998).	6.2	7.0	7.0

Indicator VIII-5. Crime Arrests

Adults

The number of arrests among persons 18 years of age and older increased each year from 2002-2004, with a total increase of over 10,000 arrests. In 2002 there were 81,419 arrests among adults in Tarrant County. There were 83,714 arrests in 2003 and 91,539 arrests in 2004 (Figure VIII-12).

Figure VIII-12: Adult Crime Arrests, Tarrant County, 2002-2004



Data Source: Texas Department of Public Safety

Each year, males accounted for at least 75 percent of all adult arrests in Tarrant County. The actual number of arrests increased each year for both males and females (Table VIII-31).

Table VIII-31: Adult Crime Arrests by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Male	62,351	76.6	63,844	76.3	69,198	75.6
Female	19,068	23.4	19,870	23.7	22,341	24.4

Data Source: Texas Department of Public Safety

The highest percentage of adult arrests in Tarrant County occurred among Whites, accounting for approximately 70 percent of all arrests. Others accounted for only approximately 1 percent of all adult arrests (Table VIII-32).

Table VIII-32: Adult Crime Arrests by Race, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
White	58,558	71.9	58,631	70.0	63,615	69.5
Black	22,110	27.2	24,242	29.0	27,018	29.5
Other	751	0.9	841	1.0	906	1.0

Data Source: Texas Department of Public Safety

Approximately 20 percent of all adult arrests in Tarrant County for 2002-2004 occurred among Hispanics. Non-Hispanics accounted for approximately 80 percent of all adult arrests (Table VIII-33).

Table VIII-33: Adult Crime Arrests by Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Hispanic	16,973	20.8	17,669	21.1	19,146	20.9
Non-Hispanic	64,446	79.2	66,045	78.9	72,393	79.1

Data Source: Texas Department of Public Safety

Each year, the highest percent of adult arrests in Tarrant County was observed for the 18-24 year age group, while the lowest was observed for the 65 year and older age group. The second highest percentage occurred in the 25-34 year age group. There was a steady decline in the number of arrests with age each year (Table VIII-34).

Table VIII-34: Adult Crime Arrests by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Percent	Cases	Percent	Cases	Percent
18-24	29,618	36.4	30,104	36.0	30,869	33.7
25-34	23,170	28.5	23,472	28.0	25,488	27.8
35-44	18,549	22.8	18,961	22.6	20,866	22.8
45-54	8,011	9.8	8,847	10.6	11,289	12.3
55-64	1,642	2.0	1,818	2.2	2,371	2.6
65+	429	0.5	512	0.6	656	0.7

Data Source: Texas Department of Public Safety

The highest number of adult arrests in Tarrant County was alcohol related each year. A steady increase in the number of alcohol and drug related arrests was observed. Crimes committed against another person accounted for the second highest number of arrests for 2002 and 2003 (Table VIII-35).

Table VIII-35: Adult Crime Arrests by Offense, Tarrant County, 2002-2004

	2002		2003		2004	
	Male	Female	Male	Female	Male	Female
Crime Against Person						
Murder and non-negligent manslaughter	59	9	55	9	55	10
Manslaughter by negligence	5	1	0	0	8	0
Forcible rape	218	2	242	0	214	2
Robbery	446	76	418	70	400	75
Aggravated assault	945	242	1,260	391	1,760	584
Other assaults	8,447	2,535	6,441	1,976	6,086	1,821
Crime Against Property						
Burglary - breaking or entering	885	91	854	94	908	141
Larceny	4,588	2,623	4,378	2,453	4,801	2,905
Motor vehicle theft	681	149	571	144	639	149
Arson	19	7	21	11	43	7
Forgery and counterfeiting	531	368	488	390	673	500
Fraud and embezzlement	454	306	289	217	379	318
Stolen property: buying, selling, receiving	16	10	23	5	47	19
Vandalism	592	116	456	115	550	149
Domestic Violence						
Crimes against family and children	113	47	115	64	128	45
Narcotics (Drug-Related Arrest)						
Sale/manufacturing	359	61	403	90	568	200
Possession	3,425	821	3,813	934	4,754	1,375
Alcohol-Related Arrest						
Driving under the influence of alcohol	6,062	1,131	5,337	1,078	5,069	1,117
Liquor laws	3,811	858	2,437	508	2,464	515
Drunkenness	7,559	1,217	9,974	1,702	11,559	1,913
Miscellaneous Offenses						
Weapons: carrying, possession	642	40	623	69	861	71
Prostitution and commercialized vice	450	1,941	369	1,380	312	1,374
Sex offenses (other)	172	21	212	51	289	40
Disorderly conduct	2,858	680	2,908	915	2,935	909
Vagrancy	1,535	117	660	69	1,667	142
All gambling	69	6	68	15	41	5
Other offenses	17,410	5,593	21,429	7,120	21,988	7,955
Total	62,351	19,068	63,844	19,870	69,198	22,341

Data Source: Texas Department of Public Safety

Youth

The number of arrests among persons 17 years of age and younger decreased each year from 2002-2004, with a total decrease of approximately 900 arrests. In 2002 there were 20,964 arrests among youth in Tarrant County. There were 20,563 arrests in 2003 and 20,073 arrests in 2004 (Figure VIII-13).

Figure VIII-13: Youth Crime Arrests, Tarrant County, 2002-2004

Data Source: Texas Department of Public Safety

More youth males than females were arrested in Tarrant County in 2002-2004. Almost 70 percent of all arrests for persons 17 years of age and younger occurred among males (Table VIII-36).

Table VIII-36: Youth Crime Arrests by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
Male	14,482	69.1	14,246	69.3	13,699	68.2
Female	6,482	30.9	6,317	30.7	6,374	31.8

Data Source: Texas Department of Public Safety

The highest percentage of arrests in Tarrant County for persons 17 years of age and younger occurred among Whites, accounting for approximately 70 percent of all arrests. Others accounted for approximately 1 percent of all youth arrests (Table VIII-37).

Table VIII-37: Youth Crime Arrests by Race, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Percent	Cases	Percent	Cases	Percent
White	14,435	68.9	13,728	66.8	13,380	66.7
Black	6,254	29.8	6,582	32.0	6,438	32.1
Other	275	1.3	253	1.2	255	1.3

Data Source: Texas Department of Public Safety

More than 25 percent of all youth arrests in Tarrant County for 2002-2004 occurred among Hispanics. Non-Hispanics accounted for over 70 percent of all youth arrests (Table VIII-38).

Table VIII-38: Youth Crime Arrests by Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Case	Percent	Case	Percent	Case	Percent
Hispanic	5,765	27.5	5,930	28.8	5,775	28.8
Non-Hispanic	15,199	72.5	14,633	71.2	14,298	71.2

Data Source: Texas Department of Public Safety

For 2002-2004, the number of arrests among persons 17 years of age and younger was higher in the 15-17 year age group as compared to the 10-14 year age group. Over 60 percent of all youth arrests occurred in the 15-17 year age group (Table VIII-39).

Table VIII-39: Youth Crime Arrests by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Case	Percent	Case	Percent	Case	Percent
10-14	7,158	34.1	7,578	36.9	7,600	37.9
15-17	13,806	65.9	12,985	63.1	12,473	62.1

Data Source: Texas Department of Public Safety

For 2002-2004, the highest number of arrests in Tarrant County among persons 17 years of age and younger was related to crime against property. Crime against another person accounted for the second highest number of arrests among youth for each year (Table VIII-40).

Table VIII-40: Youth Crime Arrests by Offense, Tarrant County, 2002-2004

Classification of Offenses	2002		2003		2004	
	Male	Female	Male	Female	Male	Female
Crime Against Person						
Murder and non-negligent manslaughter	7	1	7	1	9	0
Manslaughter by negligence	0	0	0	0	0	0
Forcible rape	34	1	31	1	33	0
Robbery	115	17	107	19	104	23
Aggravated assault	199	64	216	88	291	113
Other assaults	2,445	1,310	2,226	1,369	2,421	1,223
Crime Against Property						
Burglary - breaking or entering	403	43	406	34	352	42
Larceny	1,974	1,738	1,696	1,393	1,731	1,601
Motor vehicle theft	192	30	154	19	126	23
Arson	11	5	23	3	20	4
Forgery and counterfeiting	28	7	11	10	34	2
Fraud and embezzlement	21	11	13	8	22	14
Stolen property: buying, selling, receiving	3	0	4	0	1	2
Vandalism	674	110	537	127	456	115
Domestic Violence						
Crimes against family and children	4	0	3	1	1	2
Narcotics (Drug-Related Arrest)						
Sale/manufacturing	41	7	29	16	36	14
Possession	810	149	824	148	860	213
Alcohol-Related Arrest						
Driving under the influence of alcohol	134	27	140	22	90	23
Liquor laws	596	187	489	162	444	166
Drunkenness	311	60	359	60	344	52
Miscellaneous Offenses						
Weapons: carrying, possession	145	18	137	14	141	11
Prostitution and commercialized vice	17	2	3	5	1	8
Sex offenses (other)	75	11	110	11	115	17
Disorderly conduct	829	350	964	486	982	554
Curfew and loitering law violations	946	441	981	382	1,036	396
Vagrancy and runaway	417	577	399	485	389	485
All gambling	10	4	14	0	14	3
Other offenses	4,041	1,312	4,363	1,453	3,646	1,268
Total	14,482	6,482	14,246	6,317	13,699	6,374

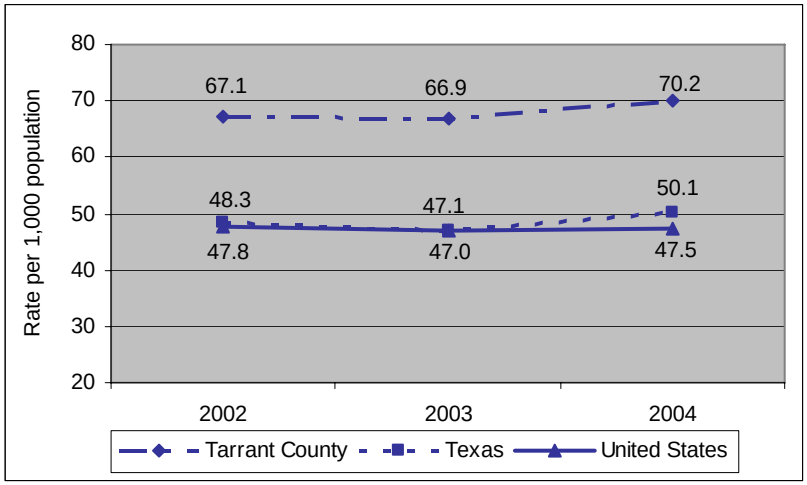
Data Source: Texas Department of Public Safety

The geographic distribution of crime arrests data is not available.

Comparison with Texas and the United States

The crime arrest rate in Tarrant County was almost one and a half times higher than Texas and the United States for 2002-2004. The rate for Tarrant County slightly increased from 2003-2004 (Figure VIII-14).

Figure VIII-14: Crime Arrest Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 1,000 population
Data Source: Texas Department of Public Safety; Federal Bureau of Investigation Uniform Crime Reports

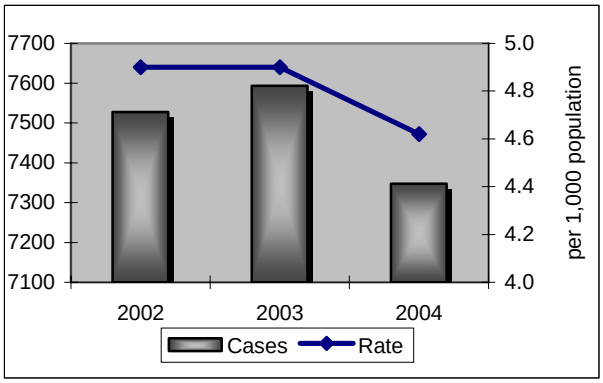
Comparison with Healthy People 2010 Objective

There are no corresponding objectives for crime arrests in Healthy People 2010.

Indicator VIII-6. Divorce

The number of divorces in Tarrant County remained fairly stable from 7,527 (4.9 per 1,000 population) in 2002 to 7,593 (4.9 per 1,000 population) in 2003, but then slightly decreased to 7,347 (4.6 per 1,000 population) in 2004 (Figure VIII-15).

Figure VIII-15: Divorce, Tarrant County, 2002-2004



Rate per 1,000 population
Data Source: Texas Department of State Health Services, Texas Vital Statistics

In 2002, the highest number of divorces occurred among 30-49 year olds for males (64.4 percent). The highest number of divorces occurred among 20-39 year olds for females (62.7 percent); however, the number of divorces among 40-49 year olds was almost equivalent to the 20-29 year olds (Table VIII-41).

Table VIII-41: Divorce by Couple's Age, Tarrant County, 2002

Husband's Age	Wife's Age											
	≤ 19		20-29		30-39		40-49		50-59		60+	
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent
≤ 19	2	0.0	4	0.1	0	0.0	0	0.0	0	0.0	0	0.0
20-29	49	0.7	1,113	16.3	182	2.7	16	0.2	3	0.0	0	0.0
30-39	2	0.0	574	8.4	1,616	23.6	244	3.6	31	0.5	3	0.0
40-49	0	0.0	71	1.0	634	9.3	1,096	16.0	130	1.9	3	0.0
50-59	0	0.0	4	0.1	77	1.1	359	5.3	333	4.9	30	0.4
60+	0	0.0	1	0.0	8	0.1	44	0.6	92	1.3	117	1.7

Percent of total divorces
Divorce cases reported without age were excluded from table
Data Source: Texas Department of State Health Services, Texas Vital Statistics

In 2003, the highest number of divorces occurred among 30-49 year olds for males (65.9 percent) and females (63.3 percent) (Table VIII-42).

Table VIII-42: Divorce by Couple's Age, Tarrant County, 2003

Husband's Age	Wife's Age ≤ 19 Cases	≤ 19 Percent	20-29 Cases	20-29 Percent	30-39 Cases	30-39 Percent	40-49 Cases	40-49 Percent	50-59 Cases	50-59 Percent	60+ Cases	60+ Percent
≤ 19	4	0.1	3	0.0	1	0.0	1	0.0	0	0.0	0	0.0
20-29	25	0.4	1,046	15.2	148	2.1	10	0.1	4	0.1	0	0.0
30-39	0	0.0	609	8.8	1,577	22.9	273	4.0	29	0.4	2	0.0
40-49	0	0.0	60	0.9	664	9.6	1,186	17.2	128	1.9	10	0.1
50-59	0	0.0	6	0.1	77	1.1	367	5.3	368	5.3	30	0.4
60+	0	0.0	2	0.0	11	0.2	42	0.6	102	1.5	101	1.5

Percent of total divorces
Divorce cases reported without age were excluded from table
Data Source: Texas Department of State Health Services, Texas Vital Statistics

In 2004, the highest number of divorces occurred among 30-49 year olds for males (64.3 percent) and females (62.4 percent) (Table VIII-43).

Table VIII-43: Divorce by Couple's Age, Tarrant County, 2004

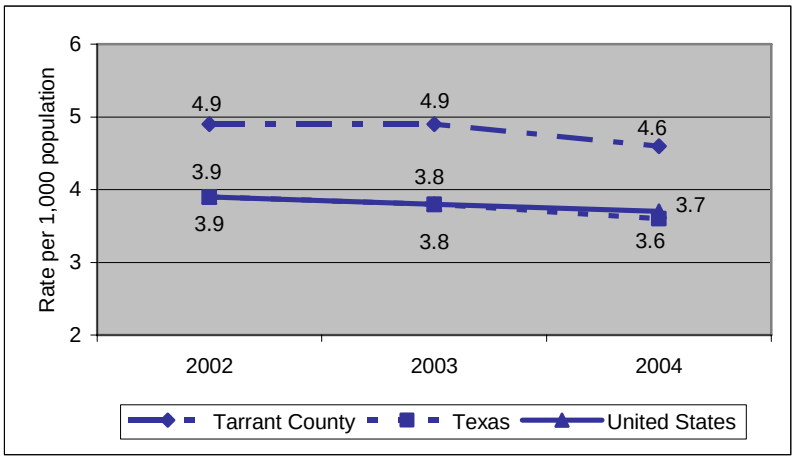
Husband's Age	Wife's Age ≤ 19 Cases	≤ 19 Percent	20-29 Cases	20-29 Percent	30-39 Cases	30-39 Percent	40-49 Cases	40-49 Percent	50-59 Cases	50-59 Percent	60+ Cases	60+ Percent
≤ 19	5	0.1	6	0.1	1	0.0	0	0.0	0	0.0	0	0.0
20-29	30	0.5	1,035	15.8	129	2.0	18	0.3	1	0.0	0	0.0
30-39	2	0.0	547	8.3	1,450	22.1	250	3.8	15	0.2	2	0.0
40-49	0	0.0	50	0.8	608	9.3	1,117	17.0	159	2.4	13	0.2
50-59	0	0.0	6	0.1	90	1.4	382	5.8	356	5.4	31	0.5
60+	0	0.0	1	0.0	7	0.1	38	0.6	104	1.6	100	1.5

Percent of total divorces
Divorce cases reported without age were excluded from table
Data Source: Texas Department of State Health Services, Texas Vital Statistics

Comparison with Texas and the United States

The divorce rate in Tarrant County was higher than Texas and the United States for 2002-2004. The Tarrant County rate remained unchanged from 2002-2003, then slightly decreased in 2004 (Figure VIII-16).

Figure VIII-16: Divorce Rates in Tarrant County, Texas, and the United States, 2002-2004



Rate per 1,000 population
Data Source: Texas Department of State Health Services, Texas Vital Statistics; CDC National Vital Statistics Reports

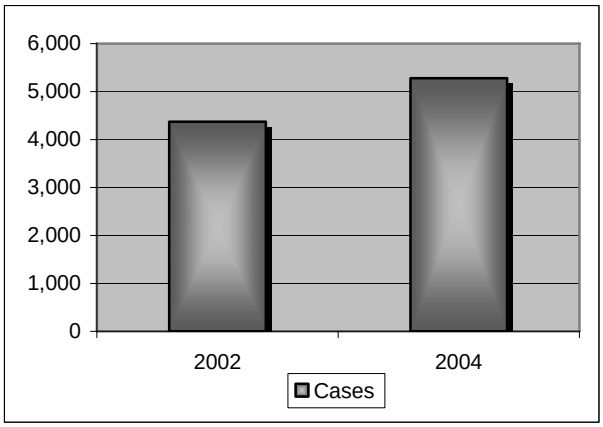
Comparison with Healthy People 2010 Objective

There are no corresponding objectives for divorce rates in Healthy People 2010.

Indicator VIII-7. Homelessness

In Tarrant County, there was an estimated 4,375 homeless persons in 2002 and 5,278 homeless persons in 2004. The population estimates were collected from the Tarrant County Homeless Survey prepared by the Tarrant County Development Division in cooperation with the Tarrant County Homeless Coalition. Cases are based on the Department of Housing and Urban Development (HUD) definition of homelessness. This includes "persons living on the street, in shelters, in transitional housing programs specifically for homeless persons, and in permanent supportive housing programs for homeless persons with disabilities" (Figure VIII-17).

Figure VIII-17: Estimated Number of Homeless Persons, Tarrant County, 2002 and 2004



Data Source: Tarrant County Homeless Survey

From 2002 to 2004, homeless population estimates for Tarrant County increased by approximately 18% in adult males, 23 percent in adult females, and 25 percent in children. The percentage of adult males (~50 percent), adult females (~32 percent), and children (~18 percent) within the homeless population remained stable from 2002-2004 (Table VIII-44 and Table VIII-45).

Table VIII-44: Homeless Population Estimates, Tarrant County, 2002

	Sheltered		Unsheltered		Transitional		Permanent		Total
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
Adult Males	726	51	1,127	77	113	14	259	38	2,225
Adult Females	456	32	337	23	314	39	286	42	1,393
Children	242	17	0	0	379	47	136	20	757

Data Source: Tarrant County Homeless Survey

Table VIII-45: Homeless Population Estimates, Tarrant County, 2004

	Sheltered		Unsheltered		Transitional		Permanent		Total
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
Adult Males	706	48	1,366	74	218	23	276	28	2,617
Adult Females	549	38	434	23	310	33	394	40	1,715
Children	234	14	69	4	414	44	308	32	946

Data Source: Tarrant County Homeless Survey

According to the Tarrant County Homeless Survey, the 5 most common reasons for homelessness in 2004 were unemployment, being unable to afford housing, alcohol/substance abuse, domestic violence, and divorce. Table VIII-46 lists shelters in Tarrant County.

Table VIII-46: Shelters in Tarrant County

Arlington
Arlington Life Shelter
The Salvation Army
The Women's Shelter
Fort Worth
PNS Lowden-Schutts Building
PNS Safe Haven
Presbyterian Night Shelter
The Bridge
The Salvation Army - Emergency Shelter
The Salvation Army - Family Center
Union Gospel Mission
Women's Haven

Data Source: Tarrant County Homeless Survey

Comparison with Healthy People 2010 Objective

There are no corresponding objectives for homelessness in Healthy People 2010.

Injuries

Definitions and Data Sources

Intentional Injury Deaths

- Numerator – number of deaths classified as homicide
  [ICD-10 codes: X85-Y09, Y87.1: in 2002 & 2003;
  ICD-10 codes: U01-U02, X85-Y09, Y87.1: in 2004]
- Denominator – Estimated population
- Rate – per 100,000, age adjusted to the 2000 standard population
- Data Source – Texas Department of State Health Services, Center for Health Statistics

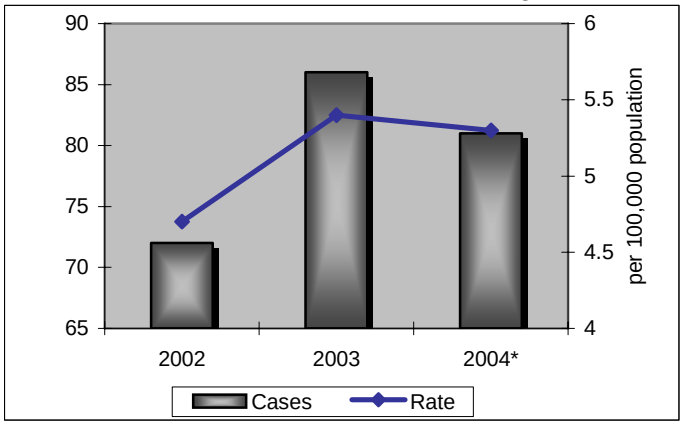
Unintentional Injury Deaths

- Numerator – number of deaths (ICD-10 codes: V01-X59, Y85-Y86)
- Includes traffic and other accidents, but not complications of medical and surgical care
- Denominator – Estimated population
- Rate – per 100,000, age adjusted to the 2000 standard population
- Data Source – Texas Department of State Health Services, Center for Health Statistics

Indicator IX-1. Intentional Injury Deaths: Homicide

The number of homicides in Tarrant County increased from 72 (4.7 per 100,000 population in 2002 to 86 (5.4 per 100,000 population) in 2003, then slightly decreased to 81 (5.3 per 100,000 population) in 2004 (Figure IX-1).

Figure IX-1: Homicides, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
* ICD- 10 codes: U01-U02, X85-Y09, Y87.1
Data Source: Texas Department of State Health Services, Center for Health Statistics

The homicide mortality rate in Tarrant County was more than two and a half times higher for males than females for 2002-2004. The rate for both males and female increased from 2002-2003, but remained constant for 2003-2004 (Table IX-1).

Table IX-1: Homicides by Gender, Tarrant County, 2002-2004

	2002		2003		2004*	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	56	6.9	63	7.7	59	7.7
Female	16	2.2	23	2.9	22	2.9

Rate per 100,000 population
Age adjustment uses 2000 standard population
* ICD -10 codes: U01-U02, X85-Y09, Y87.1
Data Source: Texas Department of State Health Services, Center for Health Statistics

The homicide mortality rate in Tarrant County was highest among Blacks for 2002-2004. The second highest rate for each year was observed for Hispanics. In 2002 and 2004, the rate for Blacks was more than three times the rate for Hispanics (Table IX-2).

Table IX-2: Homicides by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004*	
	Cases	Rate	Cases	Rate	Cases	Rate
White	25	2.7	41	4.4	31	3.3
Black	26	13.5	22	9.5	28	13.6
Hispanic	17	4.2	20	4.7	19	4.5
Other	4	@	3	@	3	@

Rate per 100,000 population
@ Numerator too small for rate calculation
Age adjustment uses 2000 standard population
* ICD -10 codes: U01-U02, X85-Y09, Y87.1
Data Source: Texas Department of State Health Services, Center for Health Statistics

The highest homicide mortality rate for Tarrant County was observed among the 15-24 year age group for 2002 and 2003. In 2004, the highest rate was observed for the 75 years and older age group. The number of homicides in the 75 years and older age group increased from less than 3 in 2003 to 10 in 2004 (Table IX-3).

Table IX-3: Homicides by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004*	
in years	Cases	Rate	Cases	Rate	Cases	Rate
15-24	14	6.4	21	9.4	20	8.7
25-34	16	6.5	20	7.9	13	5.0
35-44	13	5.1	22	8.8	14	5.6
45-54	10	4.9	9	4.3	13	6.0
55-64	7	5.9	<3	@	5	3.7
65-74	3	@	3	@	0	-
75+	3	@	<3	@	10	16.9

Rate per 100,000 population
@ Numerator too small for rate calculation
Age adjustment uses 2000 standard population
* ICD -10 codes: U01-U02, X85-Y09, Y87.1
Age groups less than 14 years are not mentioned due to small numbers
Data Source: Texas Department of State Health Services, Center for Health Statistics

The predominant mode of death for homicides in Tarrant County for 2002-2004 involved a fire arm, accounting for over 50 percent of homicides each year. The second most common mode of homicide each year involved a sharp object (Table IX-4).

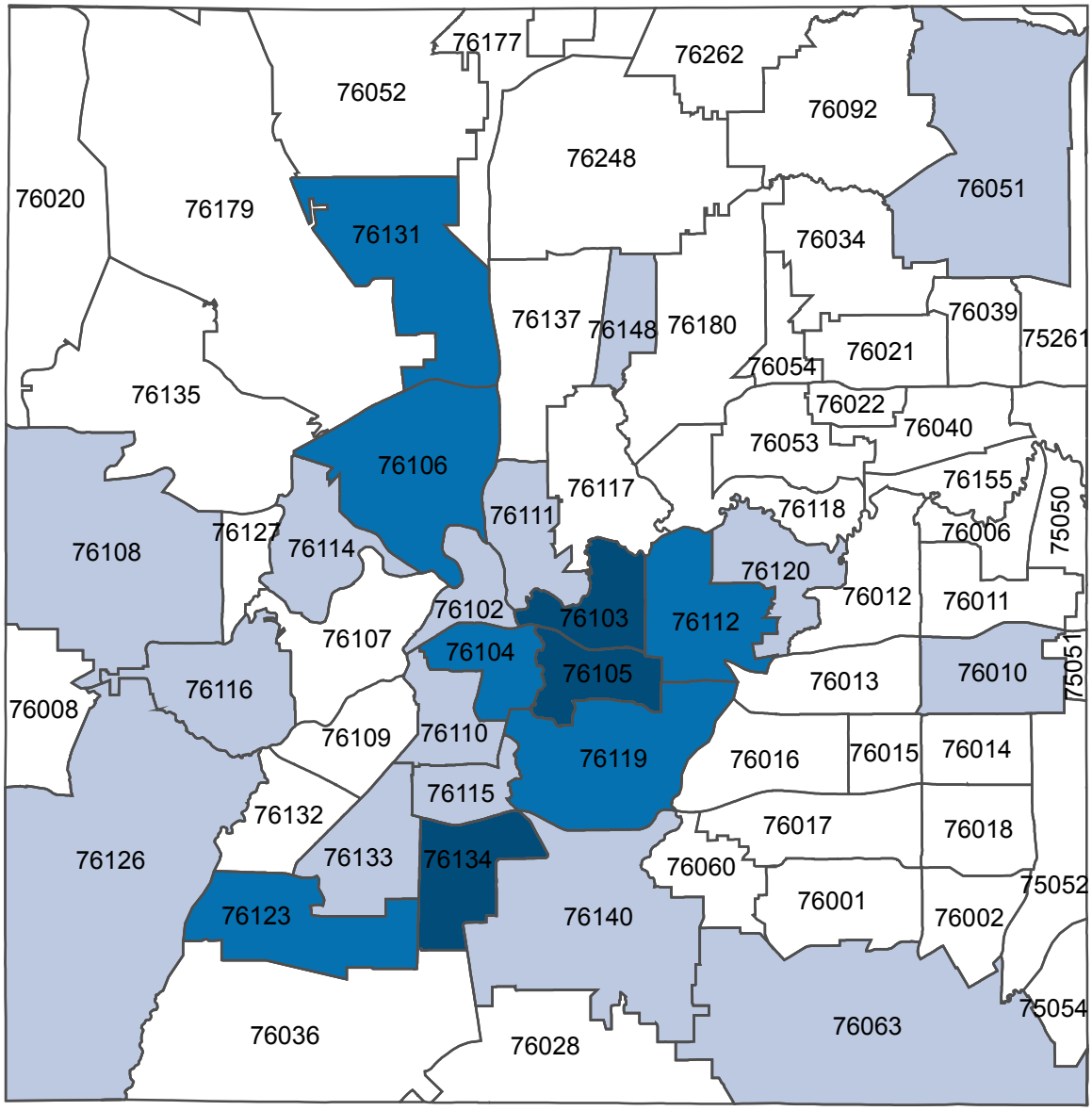
Table IX-4: Homicides by Selected Modes of Death, Tarrant County, 2002-2004

	2002		2003		2004*	
Mode of Death	**Cases**	**Rate**	**Cases**	**Rate**	**Cases**	**Rate**
Fire arm	43	2.8	55	3.4	42	2.6
Sharp object	5	0.4	12	0.8	11	0.7
Drugs, biological substance	0	-	<3	@	<3	@
Hanging, strangulation & suffocation	<5	@	3	@	5	0.4
Bodily force	<5	@	0	-	<3	@

Rate per 100,000 population
@ Numerator too small for rate calculation
Age adjustment uses 2000 standard population
* ICD -10 codes: U01-U02, X85-Y09, Y87.1
Blunt object and neglect & abandonment are not mentioned due to small numbers
Data Source: Texas Department of State Health Services, Center for Health Statistics

Figure IX-2 on the following page shows the geographic distribution of intentional injury deaths for years 2002-2004. The highest rate was 16.6 per 100,000 population. The ZIP codes with the three highest rates were 76103, 76105, and 76134. The ZIP codes with the lowest rates were 76051, 76133, and 76010.

Figure IX-2: Geographic Distribution of Intentional Injury Deaths



Rate per 100,000

4.78 - 10.86 | 10.87 - 14.79 | 14.80 - 16.63 | Excluded Data

1 inch equals 5 miles

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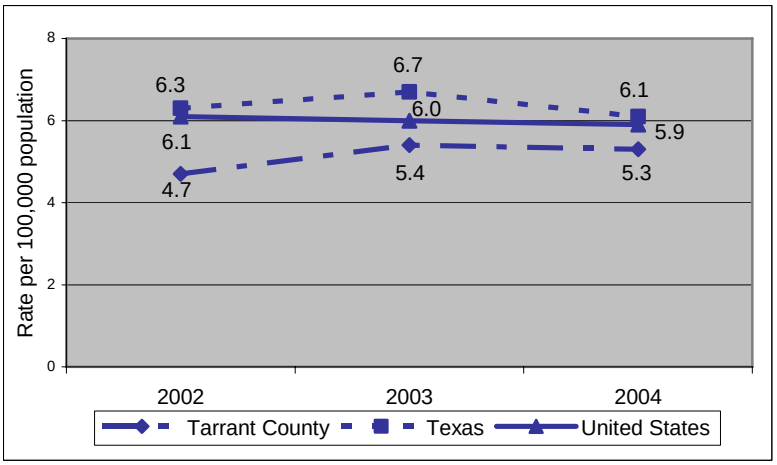
Comparison with Texas and the United States

The homicide mortality rate in Tarrant County was higher than Texas and the United States for 2002-2004 (Figure IX-3).

Figure IX-3: Homicide Rate in Tarrant County, Texas, and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics; National Vital Statistics Reports

Comparison with Healthy People 2010 Objective

From 2002-2004, the Tarrant County homicide rate was higher than the Healthy People 2010 objective of 3 per 100,000 population (Table IX-5).

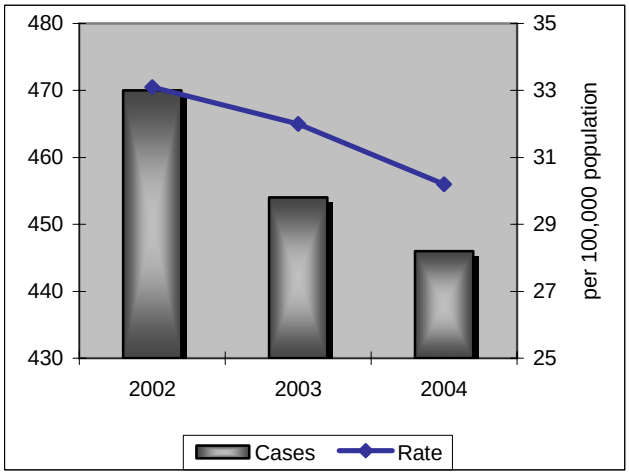
Table IX-5: Comparison of Homicide Rates in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
15-32. Reduce homicides to 3.0 per 100,000 population. (Baseline: 6.5 homicides per 100,000 in 1998 age adjusted to year 2000 standard population)	4.7	5.4	5.3

Indicator IX-2. Unintentional Injury Deaths

The number of deaths due to unintentional injury in Tarrant County declined from 470 (33.1 per 100,000 population) in 2002 to 454 (32.0 per 100,000 population) in 2003 to 446 (30.2 per 100,000 population) in 2004 (Figure IX-4).

Figure IX-4: Unintentional Injury Deaths, Tarrant County, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

The unintentional injury death rate in Tarrant County among males was more than double that among females for 2002-2003 and nearly double that among females in 2004. The rate among males steadily declined from 2002-2004; while the rate among females remained fairly stable (Table IX-6).

Table IX-6: Unintentional Injury Deaths by Gender, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Male	329	47.9	307	44.3	295	39.8
Female	141	19.6	147	20.6	151	20.5

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

The unintentional injury death rate in Tarrant County was highest for Whites in 2002-2003, but highest for Blacks in 2004. The rate among Whites remained stable for 2002-2003, but declined in 2004. The rate among Blacks steadily increased each year. The rate among Hispanics decreased from 2002-2003, but increased in 2004 (Tables IX-7).

Table IX-7: Unintentional Injury Deaths by Race/Ethnicity, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
White	323	35.3	320	35.5	279	30.6
Black	58	29.9	55	31.6	68	34.9
Hispanic	83	31.5	61	22.1	89	30.4
Other	6	0.4	18	1.1	10	18.6

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

The death rate due to unintentional injury was highest for the 75 years and older age group for 2002-2004. The second highest rate for 2002 and 2004 was observed for the 15-24 year age group. The lowest rates occurred among the 5-14 year age group (Table XI-8).

Table IX-8: Unintentional Injury Deaths by Age, Tarrant County, 2002-2004

Age Group	2002		2003		2004	
in years	Cases	Rate	Cases	Rate	Cases	Rate
1-4	8	8.3	11	10.9	13	12.6
5-14	16	6.8	12	5.0	8	3.3
15-24	100	45.6	70	31.2	94	41.0
25-34	59	23.8	66	26.2	63	24.6
35-44	88	34.9	100	39.9	85	33.8
45-54	76	37.4	65	31.0	67	31.0
55-64	27	22.7	26	20.2	32	23.6
65-74	30	43.5	30	42.9	19	26.8
75+	61	107.2	72	124.0	63	106.6

Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

Automobile accidents were the predominant mode of death for unintentional injuries in Tarrant County for 2002-2004. The second highest cause of deaths each year was poisoning (Table IX-9).

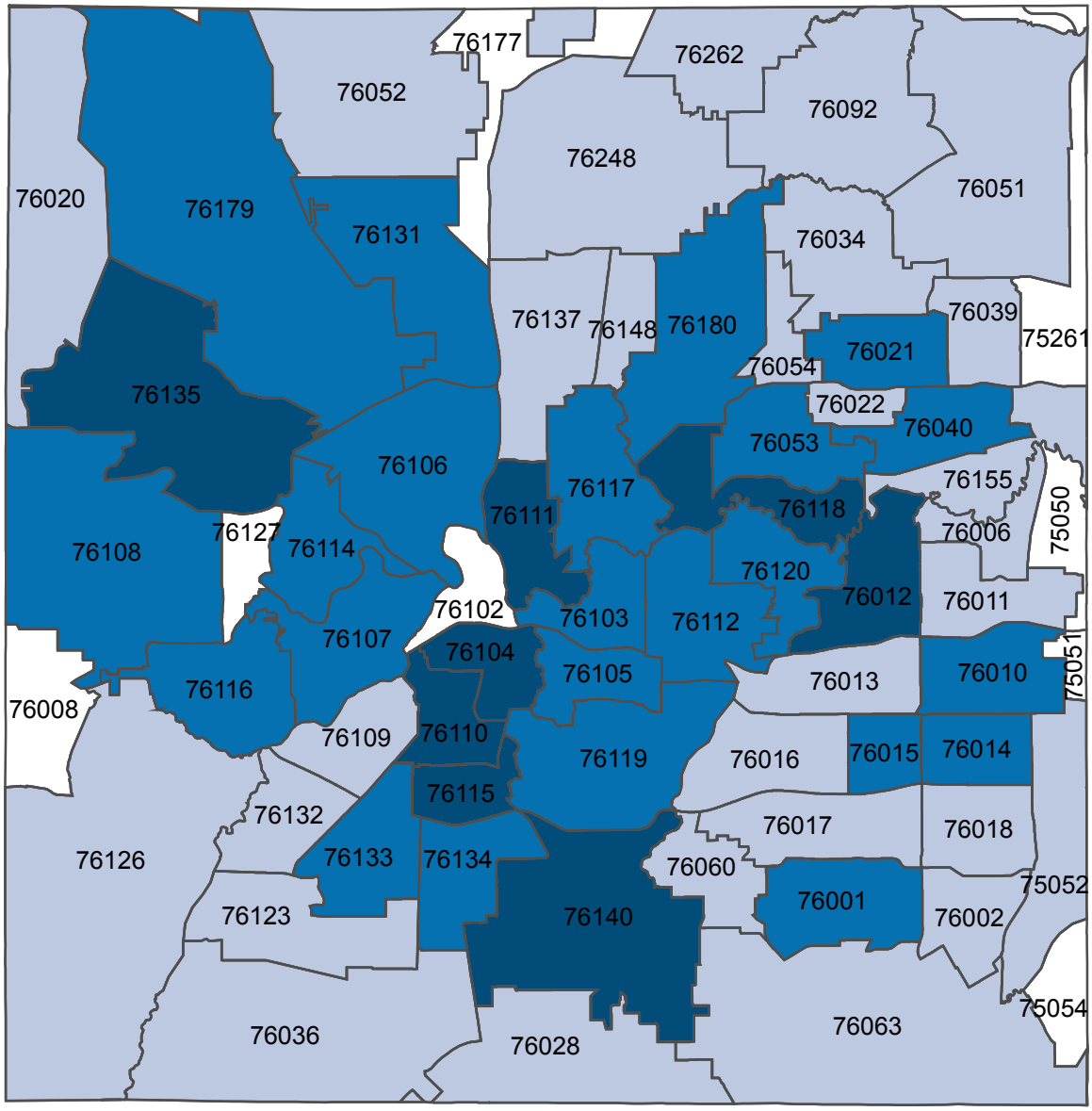
Table IX-9: Unintentional Injury by Selected Modes of Death, Tarrant County, 2002-2004

	2002		2003		2004	
	Cases	Rate	Cases	Rate	Cases	Rate
Automobile Accidents	217	14.4	181	12	188	12.1
Other Land Transport Accidents	8	0.5	7	0.5	<3	@
Fall	51	4.7	48	4.4	41	3.5
Discharge of Firearms	6	0.4	6	0.4	7	0.4
Drowning	22	1.3	18	1.1	25	1.6
Exposure to Smoke, Fire & Flames	5	0.4	8	0.6	7	0.5
Poisoning	97	6.3	117	7.5	112	6.9
Others & Unspecified	28	2.3	39	3.4	39	3.3

Rate per 100,000 population
@ Numerator too small for rate calculation
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics

Figure IX-5 on the following page shows the distribution of unintentional injury deaths by ZIP code. The data are generally evenly distributed across all ranges.

Figure IX-5: Geographic Distribution of Unintentional Injury Deaths



Rate per 100,000

4.74 - 29.35 | 29.36 - 39.87 | 39.88 - 55.34 | Excluded Data

1 inch equals 5 miles

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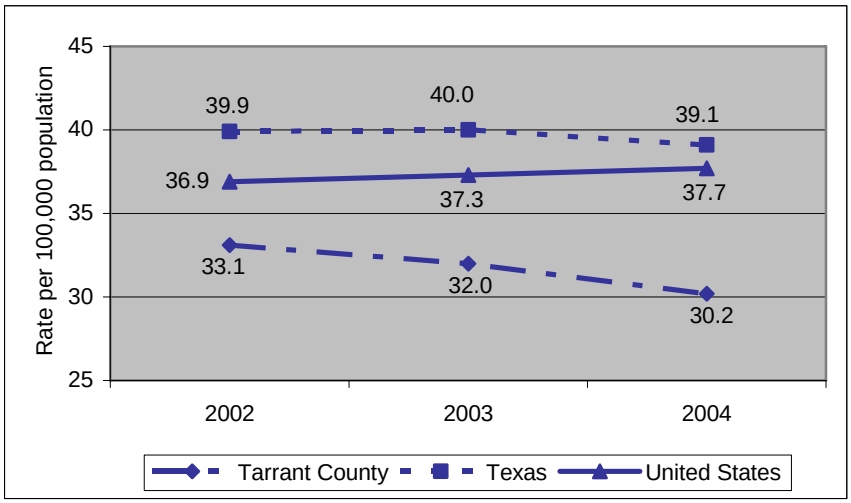
Comparison with Texas and the United States

The unintentional injury death rates in Tarrant County were found to be consistently lower than the rates in Texas and the United States for 2002-2004 (Figure IX-6).

Figure IX-6: Unintentional Injury Death Rates in Tarrant County, Texas and the United States, 2002-2004



Rate per 100,000 population
Age adjustment uses 2000 standard population
Data Source: Texas Department of State Health Services, Center for Health Statistics; National Vital Statistics Reports

Comparison with Healthy People 2010 Objective

The unintentional injury death rate in Tarrant County for 2002-2004 exceeded the Healthy People 2010 objective of 17.5 per 100,000 population (Table IX-10).

Table IX-10: Comparison of Unintentional Injury Death Rate in Tarrant County with Healthy People 2010 Objective

Healthy People 2010 Objective	Tarrant County		
	2002	2003	2004
15-13. Reduce deaths caused by unintentional injuries to 17.5 per 100,000 population. (Baseline: 35.0 deaths per 100,000 in 1998 age adjusted to year 2000 standard population)	33.1	32.0	30.2

Appendix A

Tarrant County Health Care Facilities: Hospitals

Hospitals	Address	Phone Number
Arlington Memorial	800 W Randol Mill Road Arlington, TX 76012	(817) 548-6100
Baylor Medical Center At Southwest Fort Worth	7100 Oakmont Blvd Fort Worth, TX 76132	(817) 346-5700
Baylor All Saints Medical Center At Fort Worth	1400 8th Ave Fort Worth, TX 76104	(817) 926-2544
Baylor Regional Medical Center At Grapevine	1650 W College St Grapevine, TX 76051	(817) 481-1588
Cook Children's Medical Center	801 7th Ave Fort Worth, TX 76104	(682) 885-4000
Harris Methodist Continued Care Hospital	1301 Pennsylvania Ave Fort Worth, TX 76104	(817) 878-5500
Harris Methodist Fort Worth	1301 Pennsylvania Ave Fort Worth, TX 76104	(817) 250-2000
Harris Methodist HEB	1600 Hospital Pkwy Bedford, TX 76022	(817) 685-4000
Harris Methodist Northwest	108 Denver Trl Azle, TX 76020	(817) 444-8600
Harris Methodist Southwest	6100 Harris Pwy Fort Worth, TX 76132	(817) 570-8500
Huguley Memorial Medical Center	11801 South Freeway Fort Worth, TX 76115	(817) 293-9110
John Peter Smith Hospital	1500 S Main St Fort Worth, TX 76104	(817) 921-3431
JPS Diagnostic and Surgery Hospital of Arlington	4400 New York Ave Arlington, TX 76018	(817) 852-8500
Kindred Hospital Fort Worth	815 Eighth Ave Fort Worth, TX 76104	(817) 332-4812
Kindred Hospital- Mansfield	1802 Hwy 157 N Mansfield, TX 76063	(817) 473-6101
Kindred Hospital Tarrant County	7800 Oakmont Fort Worth, TX 76132	(817) 346-0094
Kindred Hospital Tarrant County - Arlington	1000 N Cooper St Arlington, TX 76011	(817) 548-3400
Medical Center of Arlington	3301 Matlock Rd Arlington, TX 76015	(817) 467-7486
North Hills Hospital	4401 Booth Calloway Rd North Richland Hills, TX 76180	(817) 255-1940
Plaza Medical Center of Fort Worth	900 8th Ave Fort Worth, TX 76104	(817) 336-2100
USMD Hospital at Arlington	801 W I-20 Arlington, TX 76017	(817) 472-3400

Tarrant County Health Care Facilities: Local Health Services

Local Health Services	Address	Phone Number
Albert Galvan Health Clinic (Northside)	2106 N Main St FortWorth, TX 76106	(817) 625-4254
Arlington/Kathryn Wilemon	601 W Sanford Arlington, TX 76011	(817) 920-6300
Central Arlington Health Center	501 W Main St Arlington, TX 76010	(817) 852-8190
Central Family Medicine Clinic	855 Montgomery Fort Worth, TX 76107	(817) 735-2228
Cook Children's Miller Clinic	2755 Miller Ave Fort Worth, TX 76105	(817) 534-7110
Cook Children's Northeast Surgery and Urgent Care Center	6316 Precinct Line Rd Hurst, TX 76054	(817) 605-2504
Cook Children's Northside Clinic	2470 Jacksboro Hwy Fort Worth, TX 76114	(817) 625-2893
Cook Children's Urgent Care Center Fort Worth	712 7th Ave Fort Worth, TX 76104	(817) 605-6316
Eagle Ranch Family Health Center	7235 Boat Club Rd Saginaw, TX 76179	(817) 232-9877
Eastern Hills Elementary School-Based Center	5917 Shelton St Fort Worth, TX 76112	(817) 492-7838
Family Health-Health Center	1500 S Main St Fort Worth, TX 76104	(817) 927-1215
Family Medicine and Surgical Specialty Clinic Arlington	1741 E Bardin Rd Arlington, TX 76018	(817) 852-8470
Internal Medicine Clinic	855 Montgomery Fort Worth, TX 76107	(817) 735-2660
JPS Central Arlington Community Health Clinic	501 W. Main Arlington, TX 76010	(817) 852-8190
JPS Center For Cancer Care Fort Worth	601 W Terrell Ave Fort Worth, TX 76104	(817) 852-8300
JPS Diamond Hill Community Health Center	3308 Deen Rd Fort Worth, TX 76106	(817) 920-7000
JPS Family Medicine Center Alliance Area	2400 Westport Pkwy Fort Worth, TX 76177	(817) 852-8400
JPS Health Center Arlington / Kthryn Wilemon	601 West Sanford Alrington, TX 76011	(817) 920-6300
JPS Health Center For Women Arlington	979 N Cooper St Arlington, TX 76011	(817) 852-8250
JPS Health Center For Women Fort Worth	1201 S Main St Fort Worth, TX 76104	(817) 920-6500
JPS Northeast Community Health Clinic	837 Brown Trl Bedford, TX 76022	(817) 920-6400
JPS Northwest Community Health Clinic	401 Stribling Azle, TX 76020	(817) 927-4100

JPS Polytechnic Community Health clinic	1501 Mitchell Blvd Fort Worth, TX 76105	(817) 920-6600
JPS Salvation Army Community Health Clinic	1855 E Lancaster Ave Fort Worth, TX 76103	(817) 852-8380
JPS Riverside Community Health Clinic	201 S Sylvania Fort Worth, TX 76111	(817) 838-0826
JPS Urgent Care Center Main Campus	1500 S Main St Fort Worth, TX 76104	(817) 927-1451
JPS South Campus Community Health Clinic	2500 Circle Dr Fort Worth, TX 76119	(817) 920-7340
JPS Viola M Pitts/Como Health Center	4701 Bryant Irvin Rd N Fort Worth, TX 76107	(817) 920-7400
Lake Worth Obstetrics and Gynecology Clinic	6100 Jacksboro Hwy Fort Worth, TX 76135	(817) 238-9799
Lifespan Family Medicine and Pediatrics Fort Worth	1400 S Main St Fort Worth, TX 76104	(817) 335-1034
Medical Specialty Clinic Fort Worth	1400 S Main St Fort Worth, TX 76104	(817) 927-3925
North Tri-Ethnic Health Center	2950 Roosevelt Fort Worth, TX 76106	(817) 920-6190
Northside Health Center	1100 Northwest 18th St Fort Worth, TX 76106	(817) 625-1093
Obstetrics/Gynecology Clinic	855 Montgomery Fort Worth, TX 76107	(817) 735-2238
Osteopathic Manipulative Medicine Clinic	3500 Camp Bowie Blvd Fort Worth, TX 76107	(817) 735-2235
Pediatric Clinic	855 Montgomery Fort Worth, TX 76107	(817) 735-2660
Ralph Mendoza Elementary School-Based Center	1412 Denver Ave Fort Worth, TX 76106	(816) 625-6884
Seminary Family Medicine Clinic	1305 E Seminary Dr Fort Worth, TX 76115	(817) 926-2641
Smart Clinic	3600 W 7th St Fort Worth, TX 76107	(817) 377-3422
Stop Six/Walter B Barbour Health Center	3301 Stalcup Rd Fort Worth, TX 76119	(817) 920-7150
Surgery Clinic	855 Montgomery Fort Worth, TX 76107	(817) 735-2660
Veda Knox Elementary School-Based Center	2315 Stonegate St Arlington , TX 76010	(682) 867-7333
Westside Family Medicine Clinic	5944 River Oaks Blvd Fort Worth, TX 76114	(817) 731-0294

Tarrant County Public Health Facilities

Public Health Services	Address	Phone Number
Administration Offices & Southside WIC	1101 S Main St. Fort Worth, TX 76104	(817) 321-4700
Arlington Public Health Center	536 W Randol Mill Rd Arlington, TX 76011	(817) 548-3990
Bagsby-Williams Public Health Center	3212 Miller Ave Fort Worth, TX 76105	(817) 531-6738
La Gran Plaza Mall Public Health Center	4200 S Freeway Fort Worth, TX 76115	(817) 920-5752
Northeast Public Health Center	813 Brown Trail Bedford, TX 76022	(817) 285-4441
Northwest Public Health Center	3800 Adam Grubb Lake Worth, TX 76135	(817) 238-4441
Southwest Public Health Center	6551 Granbury Rd Fort Worth, TX 76133	(817) 370-4530

Tarrant County Public Health Facilities: Other WIC Locations

Other WIC Locations	Address	Phone Number
Azle	401 Stribling Azle, TX 76020	(817) 321-5400
Eastside	5241 Bridge St Fort Worth, TX 76112	(817) 321-5400
Euless	212 Martha St Euless, TX 76040	(817) 321-5400
Fiesta Plaza	245 NE 28th St Fort Worth, TX	(817) 321-5400
Haltom City	4113 Denton Hwy Haltom City, TX 76117	(817) 321-5400
Mansfield	1585 E Broad St, Suite 104 Masfield, TX 76063	(817) 321-5400
New York	1608 New York Ave Arlington, TX 76010	(817) 321-5400
Northside	101 NE 21st St Fort Worth, TX 76106	(817) 321-5400
Resource Connection	2100 Circle Dr Fort Worth, TX 76140	(817) 321-5400
West Arlington	2208 W Park Row Arlington, TX 76013	(817) 321-5400
White Settlement	1636 S Cherry Ln White Settlement, TX 76116	(817) 321-5400

Appendix B

Community Partners

Alcon Laboratories, Inc.

Baylor Medical Center

Catholic Charities

City of Arlington

City of Fort Worth Public Health Department

Healthy Tarrant County Collaboration

JPS Health Network

Medical Center of Arlington

Mental Health Association of Tarrant County

North Central Texas Council of Governments

Parkland Hospital System

Tarrant County Challenge, Inc.

Tarrant County Community Development

Tarrant County Hospital Council

Tarrant County Medical Society

Tarrant County Youth Collaboration

Texas Department of Health and Human Services

United Way of Metropolitan Tarrant County

University of North Texas Health Science Center

Appendix C

M.A.P. Data Sources

Centers for Disease Control and Prevention

Dallas Fort Worth Hospital Council

Mental Health Mental Retardation of Tarrant County

Tarrant County Behavioral Risk Factor Surveillance System

Tarrant County Challenge Inc.

Tarrant County Homeless Survey 2004

Tarrant County Medical Examiner's Office

Tarrant County Public Health

Tarrant County Sheriff's Office

Texas Commission on Alcohol and Drug Abuse

Texas Commission on Environmental Quality

Texas Department of Protective and Regulatory Services

Texas Department of Public Safety

Texas Department of State Health Services

Texas Education Agency

Texas Medicaid and Healthcare Partnership

Texas State Data Center and Office of the State Demographer

United States Census 2000

United States Department of Health and Human Services

Tarrant County Public Health
1101 S. Main Street,
Fort Worth, TX 76104
817-321-4700
http://health.tarrantcounty.com