Leading Causes of Death

in

Tarrant County

2004

Tarrant County Public Health

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ABSTRACT

Objectives – This report presents data on the ten leading causes of death in Tarrant County by gender, race/ethnicity and geographic distribution at the sub-county level for the year 2004.

Methods – Data in this report are based on the information from death records that were received by Texas Department of State Health Services for the year 2004. Population values are used to calculate age-adjusted death rates and are based on the 2000 U.S. Census and the estimation program utilized by the Texas State Demographer's Office. Causes of death classified by the *International Classification of Diseases, Tenth Revision* (ICD-10) are ranked according to the number of deaths assigned to rankable causes.[1] The ten leading causes of death were then further analyzed by race/ethnicity, gender and ZIP code distribution. Because of the small sample sizes in age group categories, the ten leading causes of death were not analyzed by age group.

Results – In 2004, the leading causes of death in Tarrant County were, in rank order: Diseases of the Heart; Malignant Neoplasms (Cancer); Cerebrovascular Diseases (Stroke); Chronic Lower Respiratory Diseases; Accidents (unintentional injuries); Diabetes Mellitus; Alzheimer's Disease; Intentional Self-harm (Suicide); Influenza and Pneumonia; and Septicemia. These ten accounted for 78 percent of all deaths occurring in Tarrant County. The total numbers of deaths in Tarrant County for the year 2004 were about 9,670 and the age-adjusted death rate was calculated at 843.4 per 100,000 population. Differences in ranking were observed by both race/ethnicity and gender.

INTRODUCTION

Ranking causes of death is a widely accepted method of presenting mortality statistics. Cause-of-death ranking is a useful tool for illustrating the relative burden of cause-specific mortality.[1] This cause-of-death ranking procedure has been extended and altered over time with each succeeding revision of the *International Classification of Diseases* (ICD). It is critical to have a clear understanding of ranking, however, to use this ranking procedure. Literally, the rankings indicate the most frequently occurring causes of death among those causes appropriate to be ranked. When a category representing an aggregate of smaller categories is ranked, its component parts are not ranked.[2] The top ranking causes determine the leading causes of death. The rankings do not always denote the causes of death of greatest public health importance. Some causes of death of public health importance are not included in the ranking procedure. Although it is not perfectly suitable in all circumstances, the current framework provides a rankable list of causes of death that has wide acceptance in the general public health community.

This report presents the final 2004 data on leading causes of death in Tarrant County by age, race/ethnicity, gender and geographic distribution at the sub-county level.

DATA AND METHODS

Data

Data in this report are based on the information from death records received by the Texas Department of State Health Services for the year 2004. Cause-of-death statistics for 2004 presented in this report are classified in accordance with the ICD-10.

Procedures for Ranking Causes of Death

The procedures used for ranking causes of death in Tarrant County are consistent with the recommendations and methods adopted by National Center for Health Statistics (NCHS) for ranking causes of death. Causes of death are ranked by the total number of deaths assigned to rankable causes. The number of deaths is used as the ranking criteria because it most accurately reflects the frequency of cause-specific mortality. Technically, mortality rates could be used as the ranking criteria. Because the population denominator of the rate is constant across all the cause-of-death categories, however, they are less than ideal. Age-adjusted rates are typically expressed per 100,000 population and are often rounded to one decimal place, thus reducing the precision of the ranking criteria. This is especially problematic when ranking causes of death for small population subgroups or geographic areas, as it may be impossible to differentiate the ranks for several causes. Age-adjusted death rates should never be used to rank causes of death since the numerical value of the age-adjusted death rate depends on the population age distribution used to standardize the rate.[1]

The ICD-10, "List of 113 selected causes of death" is used to select 50 rankable causes from which the present ten leading causes of death were derived. The overall mortality and leading causes of death were analyzed by age, gender, race/ethnicity and by geographic distribution at the ZIP code level. GIS was used in mapping the rates at the ZIP code level.

RESULTS

Overall Mortality Summary

Before presenting the leading causes of death in Tarrant County, it is useful to examine the overall mortality rates by gender, race/ethnicity, age and geographic distribution. The overall number of deaths, age-adjusted rates by gender, race/ethnicity as well as by age groups for Tarrant County in 2004 is presented in Table 1. The total number of deaths in males and females are approximately equal. The overall age-adjusted death rate however, is higher in males than in females (Table 1). When analyzed by race/ethnicity, Whites had the highest number of deaths followed by Blacks, Hispanics and Others. When age-adjusted rates are considered however, Blacks have the highest rates followed by Whites, Hispanics and Others (Table 1). This could be due to the fact that Whites are greater in number and probably older than the Black population. In accordance with the historic trends in death rates, the highest age specific death rates were seen in the oldest age group (75+ years). The death rates for age group less than 1 year were higher than the rates for age groups 1-4, 5-14, 15-24, 25-34, 35-44 and 45-54 years (Table 1).

The ten leading causes of death in Tarrant County for 2004 are summarized in Table 2.

In 2004, the ten leading causes of death accounted for about 78 percent of all deaths occurring in Tarrant County. The top two causes, diseases of the

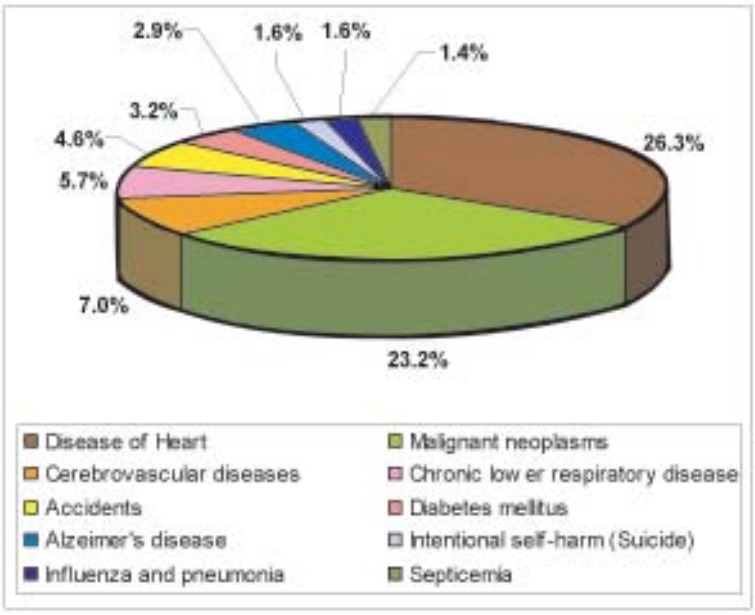


Figure 1: Percentages of Ten Leading Causes of Death, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

heart (heart diseases) and malignant neoplasms (cancer), accounted for about one-half of all deaths in 2004 (Figure 1). Cerebrovascular diseases (stroke) ranked third, followed by chronic lower respiratory diseases and accidents (unintentional injuries), which ranked fourth and fifth, respectively. Rounding out the top ten are Diabetes mellitus (sixth), Alzheimer's disease (seventh), suicide (eighth), influenza and pneumonia (ninth) and septicemia (tenth) (Table 2).

Gender Differences

Table 3 shows variation across gender groups in the ten leading causes of death in Tarrant County in 2004. The top two causes for males and females, diseases of the heart and malignant neoplasms, are the same. Accidents ranked third in males and seventh in females. Cerebrovascular diseases and chronic lower respiratory diseases ranked fourth and fifth in males but ranked third and fourth in females. Diabetes mellitus ranked sixth in both males and females. Alzheimer's diseases and influenza and pneumonia are ranked ninth and tenth in males whereas they are ranked fifth and eighth in females. Intentional self-harm (suicide) and chronic liver diseases and cirrhosis ranked seventh and eighth in males but failed to be ranked in the ten leading causes of death in females. Similarly, septicemia and nephritis, nephritic syndrome and nephrosis ranked ninth and tenth in females but failed to be ranked in the ten leading causes of death in males. As mentioned earlier, this could be partly due to the small sizes of population subgroups.

Racial and Ethnic Differences

Table 4 contrasts leading causes of death by racial ethnic groups in Tarrant County for the year 2004. The four racial ethnic groups (Whites, Blacks, Hispanics and Others) share six of the leading causes. The top leading causes of death, diseases of the heart and malignant neoplasms rank first and second in Whites and Blacks and second and first in Hispanics and Others. Cerebrovascular diseases ranked

third in Whites, Blacks and Others, but ranked fourth in Hispanics. Chronic lower respiratory diseases ranked fourth in Whites, sixth in Blacks and eighth in Hispanics and Others. Accidents ranked fifth in Whites, third in Hispanics and fourth in Blacks and Others. Diabetes mellitus is ranked seventh in Whites, fifth in Blacks and sixth in Hispanics and Others.

Alzheimer's disease is ranked sixth in Whites and eighth in Blacks, but is not ranked in the top ten leading causes of death in Hispanics and Others. Influenza and pneumonia ranked ninth in Whites and eighth in Others, but failed to be ranked in the ten leading causes of death in Blacks and Hispanics. Septicemia ranked tenth in Whites and Hispanics, fourth in Others, but ranked twelfth in Blacks. Assault ranked tenth in Blacks, seventh in Hispanics and Others, but eighteenth in Whites. Certain conditions originating in the perinatal period ranked fifth in Hispanics, seventh in Others and ninth in Blacks, but ranks seventeenth in Whites. Nephritis, nephrotic syndrome and nephrosis ranked sixth in Others and ninth in Hispanics, but failed to rank in the ten leading causes in Whites and Blacks.

It should be noted that in Hispanics, assault and chronic liver diseases and cirrhosis tied at seventh position and intentional self-harm and nephritis, nephritic syndrome and nephrosis tied at ninth position. In Others, Diabetes mellitus, septicemia and nephritis, nephritic syndrome and nephrosis are tied at sixth position and assault and certain conditions originating in the perinatal period are tied at the seventh position. Similarly, aortic dissection, influenza and pneumonia and chronic lower respiratory diseases are tied at eighth position and suicide, human immunodeficiency virus disease and congenital malformations and deformations tied at ninth position in Others. This problem is commonly encountered when ranking causes of death for small population subgroups.

Table 1:

Deaths, Percentage of Total Deaths, And Age-Adjusted Mortality Rates in Selected Age Groups, by Race and Sex: Tarrant County, 2004

	Deaths (n)	Percent	Age-Adjusted Rate
Total	9670	100	843.4
		Gender	
Males	4840	50.1	972.4
Females	4830	49.9	739.4
		Race/Ethnicity	
Whites	7442	77	850.1
Blacks	1330	13.8	1081.3
Hispanics	740	7.7	629.8
Others	158	1.6	385.1
		Age-Group	
Unknown	1	0	.....
> 1 year	177	1.8	651.4
1-4 years	35	0.4	33.8
5-14 years	41	0.4	17.0
14-24 Years	181	1.9	79.0
25-34 years	208	2.2	81.2
35-44 Years	443	4.6	176.3
45-54 Years	871	9	403.1
55-64 Years	1246	12.9	918.7
65-74 Years	1708	17.7	2405.4
75 years and older	4759	49.2	8055.3

Rates are age adjusted using 2000 standard population
Rates are per 100,000 population
Data source: Texas Department of State Health Services: Center for Vital Statistics

Table 2:

Deaths, Percentage of Total Deaths, and Age-Adjusted Mortality Rates for the Ten Leading Causes of Death: Tarrant County, 2004

Cause of Death	ICD-10 Code[1]	Rank[2]	Deaths (n)	Percent	Age Adjusted Rate[3,4]
All Causes	.....	.....	9670	100	843.4
Diseases of the heart	I00-I09, I11, I13, I20-I51	1	2544	26.3	231.2
Malignant neoplasms	C00-C97	2	2245	23.2	193
Cerebrovascular diseases	I60-I69	3	677	7	64
Chronic lower respiratory disease	J40-J47	4	552	5.7	51.5
Accidents	V01-X59, Y85-Y86	5	446	4.6	30.2
Diabetes mellitus	E10-E14	6	314	3.2	27.3
Alzeimer's disease	G30	7	281	2.9	28.3
Intentional self-harm (Suicide)	X60-X84, Y87.0	8	152	1.6	10
Influenza and pneumonia	J10-J18	9	150	1.6	13.9
Septicemia	A40-A41	10	139	1.4	12.2

….. Category not applicable

[1] International Classification of Diseases, Tenth revision

[2] Rank based on number of deaths

[3] Rounded up to 1 decimal place

[4] Rates are age adjusted using 2000 standard population

Rates are per 100,000 population

Data source: Texas Department of State Health Services: Center for Vital Statistics

Table 3:

Deaths, Percentage of Total Deaths, Age-Adjusted Mortality Rates for the Ten Leading Causes of Death by Gender: Tarrant County, 2004

Cause of Death	ICD-10 Code[1]	Males				Females			
		Rank[2]	Deaths (n)	Percent[3]	Age Adjusted Rate[3,4]	Rank[2]	Deaths (n)	Percent[3]	Age Adjusted Rate[3,4]
All causes		…..	4840	100	972.4	…..	4830	100	739.4
Diseases of heart	I00-I09, I11, I13, I20-I51	1	1276	26.4	270.9	1	1268	26.3	198.8
Malignant Neoplasm	C00-C97	2	1186	24.5	239.3	2	1059	21.9	160.1
Cerebrovascular diseases	I60-I69	4	272	5.6	62.9	3	405	8.4	64
Chronic lower resiratory diseases	J40-J47	5	257	5.3	59.4	4	295	6.1	46.6
Accidents	V01-X59, Y85-Y86	3	295	6.1	39.8	7	151	3.1	20.4
Diabetes mellitus	E10-E14	6	150	3.1	30.4	6	164	3.4	25.1
Alzeimer's disease	G30	9	85	1.8	76.3	5	196	4.1	31.5
Intentional self-harm (suicide)	X60-X84, Y87.0	7	116	2.4	16.1	12	36	0.7	4.6
Influenza and pneumonia	J10-J18	10	72	1.5	17	8	78	1.6	12
Septicemia	A40-A41	12	63	1.3	13.5	9	76	1.6	11.5
Chronic liver disease and cirrhosis	K70, K73-K74	8	86	1.8	13.3	11	46	1	6.6
Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	11	65	1.3	14.9	10	58	1.2	8.9

….. Category not applicable

[1] International Classification of Diseases, Tenth revision

[2] Rank based on number of deaths

[3] Rounded up to 1 decimal place

[4] Rates are age adjusted using 2000 standard population

Rates are per 100,000 population

Data source: Texas Department of State Health Services: Center for Vital Statistics

Table 4:

Deaths, Percentage of Total Deaths, Age-Adjusted Mortality Rates for the Ten Leading Causes of Death by Race/Ethnicity: Tarrant County, 2004

Cause of Death	ICD-10 Code[1]	Whites				Blacks				Hispanics				Others			
		Rank[2]	Deaths (n)	Percentage of total deaths[3]	Rate[3,4]	Rank[2]	Deaths (n)	Percentage of total deaths[3]	Rate[3,4]	Rank[2]	Deaths (n)	Percentage of total deaths[3]	Rate[3,4]	Rank[2]	Deaths (n)	Percentage of total deaths[3]	Rate[3,4]
All cause		.....	7442	100	850.1	.....	1330	100	1081.3	.....	740	100	629.8	.....	158	100	385.1
Diseases of heart	I00-I09, I11, I13, I20-I51	1	2035	27.3	234.7	1	342	25.7	296.6	2	132	17.8	153.8	2	35	22.2	99.8
Malignant Neoplasm	C00-C97	2	1732	23.3	193.5	2	298	22.4	255	1	172	23.2	169.5	1	43	27.2	103.8
Cerebrovascular diseases	I60-I69	3	527	7.1	62.1	3	95	7.1	81.7	4	40	5.4	51.7	3	15	9.5	27.3
Chronic lower respiratory diseases	J40-J47	4	493	6.6	57.5	6	39	2.9	36.6	8	18	2.4	19.9	8	2	1.3	4.3
Accidents	V01-X59, Y85-Y86	5	279	3.7	30.6	4	68	5.1	34.8	3	89	12	30.3	4	10	6.3	18.5
Diabetes mellitus	E10-E14	7	218	2.9	24.5	5	57	4.3	51.6	6	35	4.7	36.5	6	4	2.5	9.8
Alzeimer's disease	G30	6	244	3.3	29.3	8	32	2.4	37.6	13	5	0.7	9.4		0	0	0
Intentional self-harm	X60-X84, Y87.0	8	133	1.8	14.2	16	6	0.5	4	9	12	1.6	3.8	9	1	0.6	1.1
Influenza and pneumonia	J10-J18	9	122	1.6	8.3	14	16	1.2	13.6	11	10	1.4	12.4	8	2	1.3	6
Septicemia	A40-A41	10	108	1.4	12.1	12	18	1.4	13.9	10	11	1.5	11	8	4	2.5	12.2
Chronic liver disease and cirrhosis	K70, K73-K74	11	92	1.2	9.5	13	17	1.3	12.4	7	19	2.6	15.2	8	4	2.5	4.9
Nephritis, nephrotic syndrome and nephrosis	N00-N07, N17-N19, N25-N27	12	82	1.1	9.5	11	23	1.7	20.8	9	12	1.6	13.5	5	6	3.8	15.1
Certain conditions originating in perinatal period	P00-P96	21	17	0.2	1.9	9	29	2.2	10.3	5	39	5.3	5.5	7	3	1.9	2.8
Assault (homicide)	X85-Y09, Y87.1	18	31	0.4	3.3	10	28	2.1	13.6	7	19	2.6	4.5	7	3	1.9	2.9
Human immunodeficiency virus (HIV) disease	B20-B24	20	27	0.4	2.7	7	35	2.6	17	12	9	1.2	3.3	9	1	0.6	1.1
Congenital malformations, deformations and chromosomal	Q00-Q99	17	33	0.4	3.7	15	12	0.9	4.5	10	11	1.5	1.5	9	1	0.6	4.9
Aortic aneurysm and dissection	I71	15	44	0.6	5	19	4	0.3	2.9	14	2	0.3	0.6	8	2	1.3	9.9

….. Category not applicable

[1] International Classification of Diseases, Tenth revision

[2] Rank based on number of deaths

[3] Rounded up to 1 decimal place

[4] Rates are age adjusted using 2000 standard population

Rates are per 100,000 population

Data source: Texas Department of State Health Services: Center for Vital Statistics

TOP TEN LEADING CAUSES OF DEATH IN TARRANT COUNTY, 2004

This section focuses on gender and racial/ethnic differences in each of the top ten leading causes of death. Maps showing ZIP code distributions of death rates for each disease can be found at the back of this publication.

Diseases of the Heart

Heart disease is the leading cause of death in both males and females. Almost equal numbers of deaths are observed in both the genders. The age-adjusted death rate, however, is higher in males than in females (Figure 2).

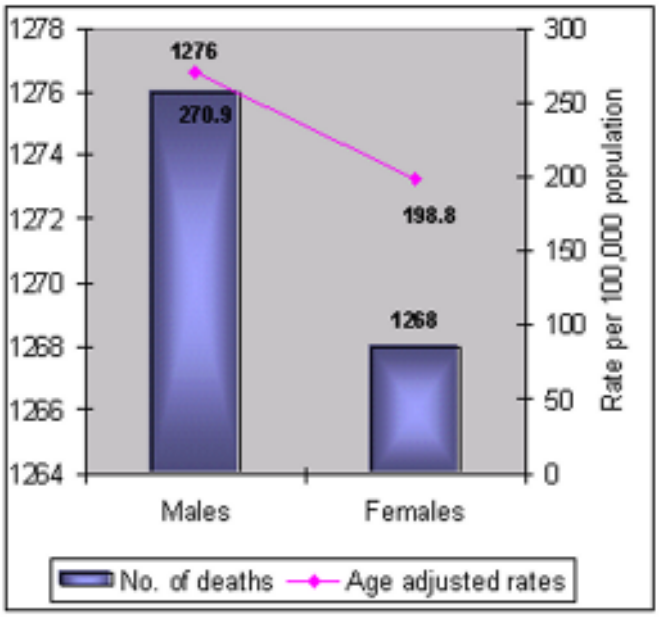


Figure 2: Deaths and Age-Adjusted Death Rates of Heart Diseases by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Diseases of the heart are the leading cause of death in Whites and Blacks, but ranked second in Hispanics and Others. Although the number of deaths is higher in Whites, the age-adjusted death rates are higher in Blacks. As mentioned before, this could be because the White population constitutes the largest racial ethnic group in Tarrant County. The total number of deaths due to heart diseases is highest in Whites, followed by Blacks, Hispanics and Others. Again, although the number of deaths is higher in Whites, the age-adjusted death rates are higher in Blacks (Figure 3). This could be due to the fact that Whites are greater in number and probably older than the Black population.

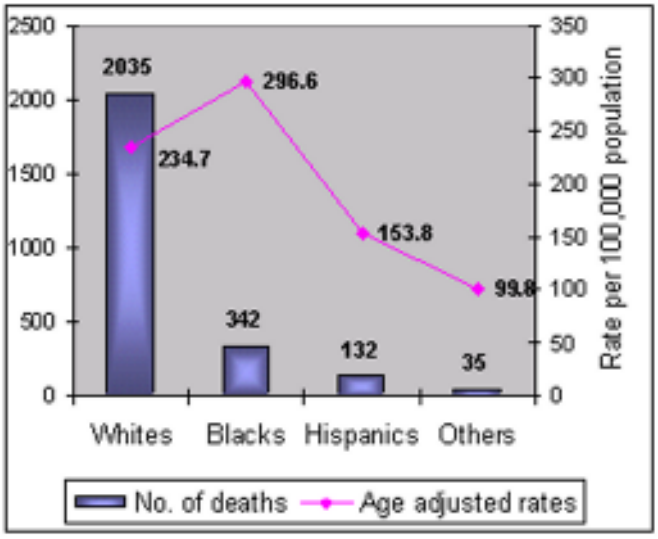


Figure 3: Deaths and Age-Adjusted Death Rates of Heart Diseases by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Malignant Neoplasms

Malignant neoplasms occupy second rank in the leading causes of death in both males and females. Equal numbers of deaths are observed in both genders. Higher age-adjusted death rates, however, are observed in males when compared to females (Figure 4).

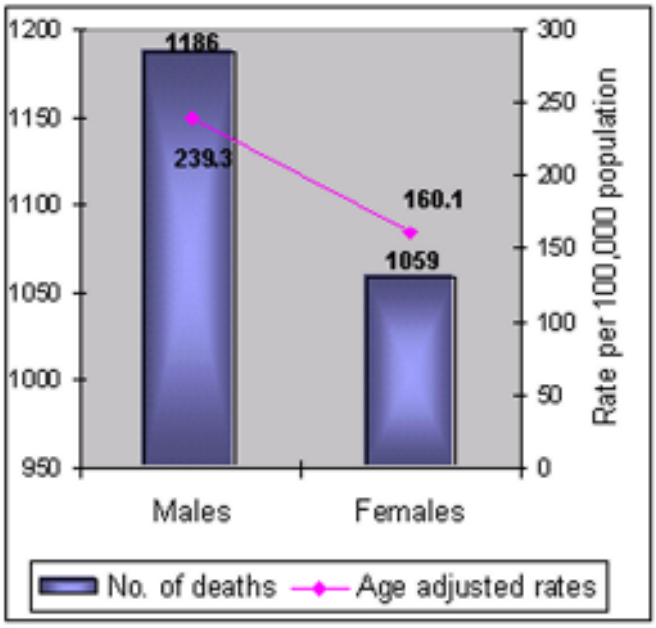


Figure 4: Deaths and Age-Adjusted Death Rates of Malignant Neoplasms by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Although the numbers of deaths due to malignant neoplasms in Hispanics and Others are less than in Whites and Blacks, it ranks first in Hispanics and Others. It occupies second rank in Whites and Blacks. When age-adjusted death rates are considered, Blacks have higher death rates when compared to all other racial/ethnic groups (Figure 5).

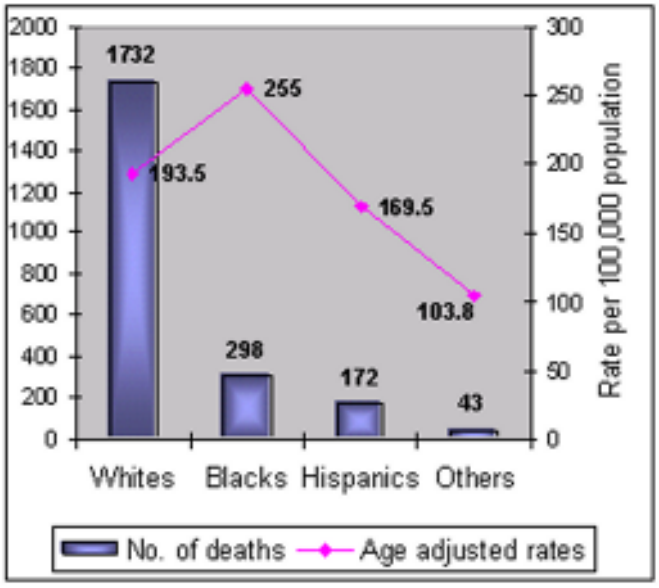


Figure 5: Deaths and Age-Adjusted Death Rates of Malignant Neoplasms by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Cerebrovascular Diseases

Cerebrovascular diseases rank third in females and fourth in males. Females have more deaths due to cerebrovascular diseases than males. Similarly, females have higher age-adjusted rates than males (Figure 6).

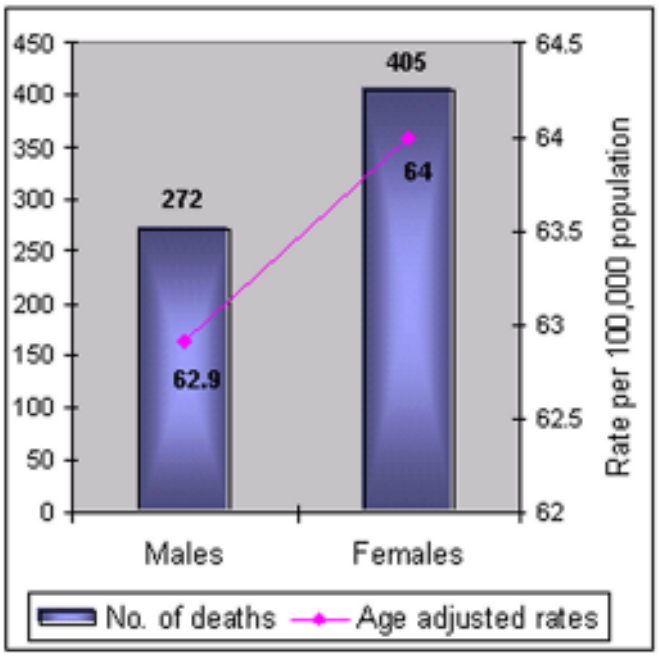


Figure 6: Deaths and Age-Adjusted Death Rates of Cerebrovascular Diseases by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Cerebrovascular diseases rank third in Whites, Blacks and Others, but rank fourth in Hispanics. Although greater numbers of deaths are observed in Whites than other racial/ethnic groups, a higher age-adjusted death rate is observed in Blacks, followed by Whites, Hispanics and Others (Figure 7).

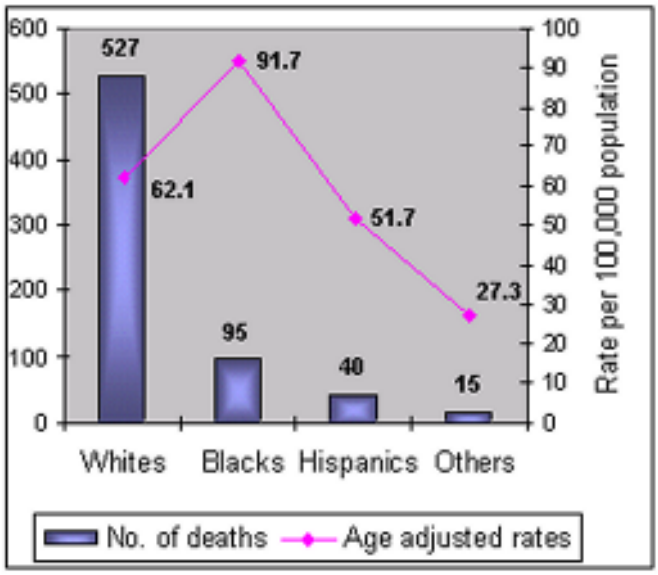


Figure 7: Deaths and Age-Adjusted Death Rates of Cerebrovascular Diseases by Race/ Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Chronic Lower Respiratory Diseases

When stratified by gender, chronic lower respiratory diseases occupy fourth rank in females and fifth in males. Although females have a higher number of deaths due to chronic lower respiratory diseases than males, age-adjusted death rates are higher in males (Figure 8).

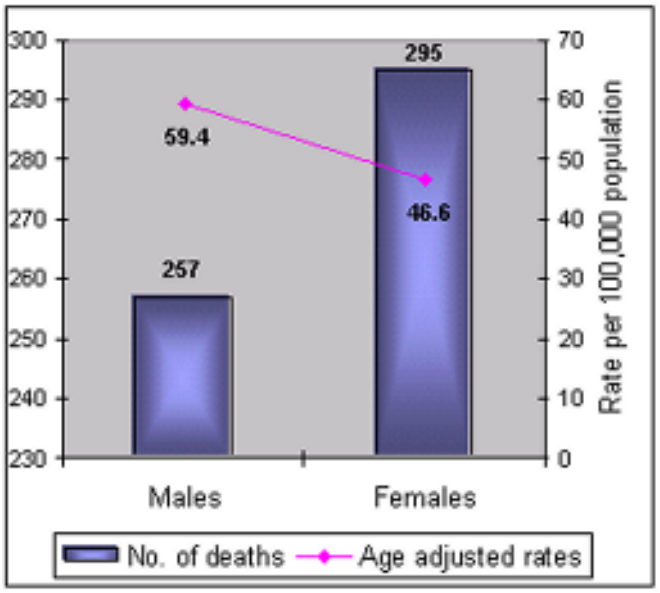


Figure 8: Deaths and Age-Adjusted Death Rates of Chronic Lower Respiratory Diseases by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Chronic lower respiratory diseases rank fourth in Whites, sixth in Blacks and eighth in Hispanics and Others. The numbers of deaths are highest in Whites, followed by Blacks, Hispanics and Others. Age-adjusted death rates also follow the same order (Figure 9).

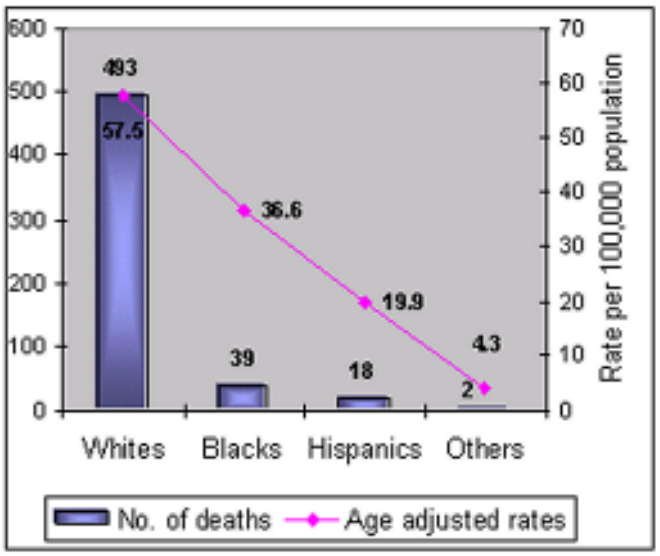


Figure 9: Deaths and Age-Adjusted Death Rates of Chronic Lower Respiratory Diseases by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Accidents

Accidents rank third in males and seventh in females. The total number of deaths is higher in males when compared to females. Similarly the age-adjusted death rates are higher in males than in females (Figure 10).

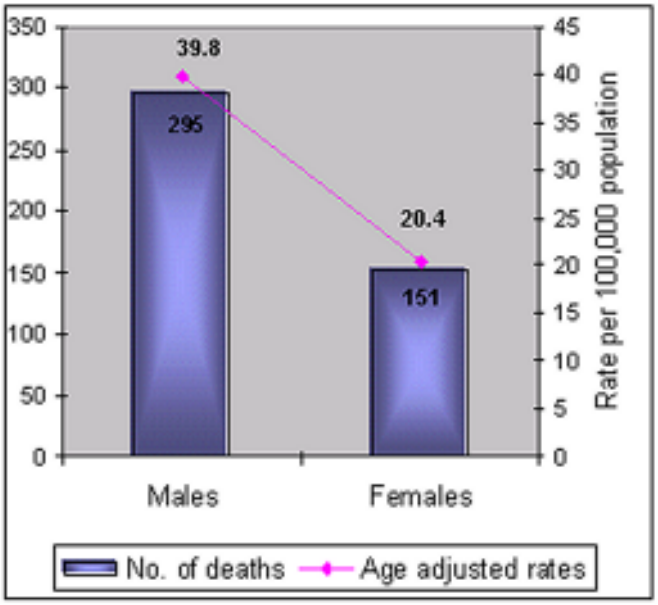


Figure 10: Deaths and Age-Adjusted Death Rates of Accidents by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Accidents rank fifth in Whites, third in Hispanics and fourth in Blacks and Others. As in many other top leading causes, although the numbers of deaths are greater in Whites than other racial/ ethnic groups, the age-adjusted death rates are higher in Blacks when compared to other racial/ethnic groups (Figure 11).

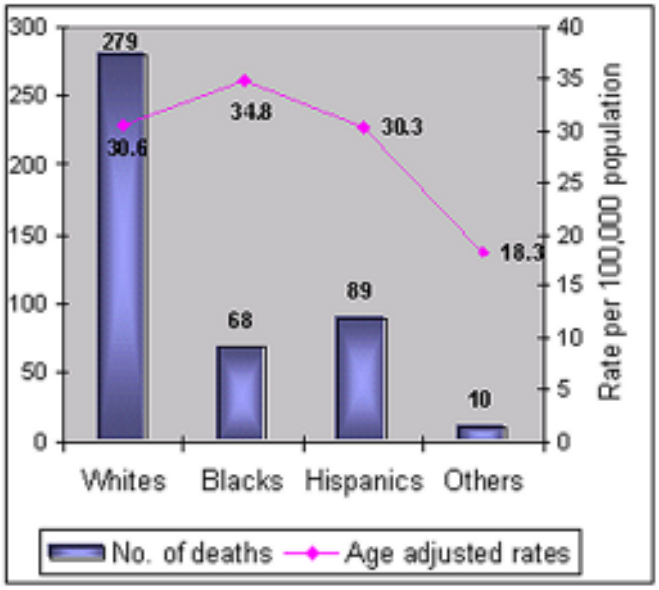


Figure 11: Deaths and Age-Adjusted Death Rates of Accidents by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Diabetes Mellitus

Diabetes mellitus ranks sixth in both males and females. The number of deaths is higher in females than in males. The age-adjusted death rate however, is higher in males than in females (Figure 12).

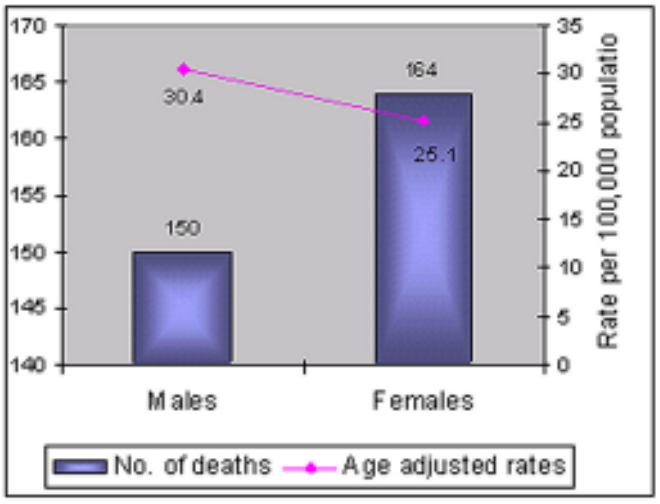


Figure 12: Deaths and Age-Adjusted Death Rates of Diabetes Mellitus by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

When observed across racial ethnic groups, diabetes mellitus ranks seventh in Whites, fifth in Blacks and sixth in Hispanics and Others. The numbers of deaths are higher in Whites followed by Blacks, Hispanics and Others. The age-adjusted rate, however, is higher in Blacks followed by Hispanics, Whites and Others (Figure 13).

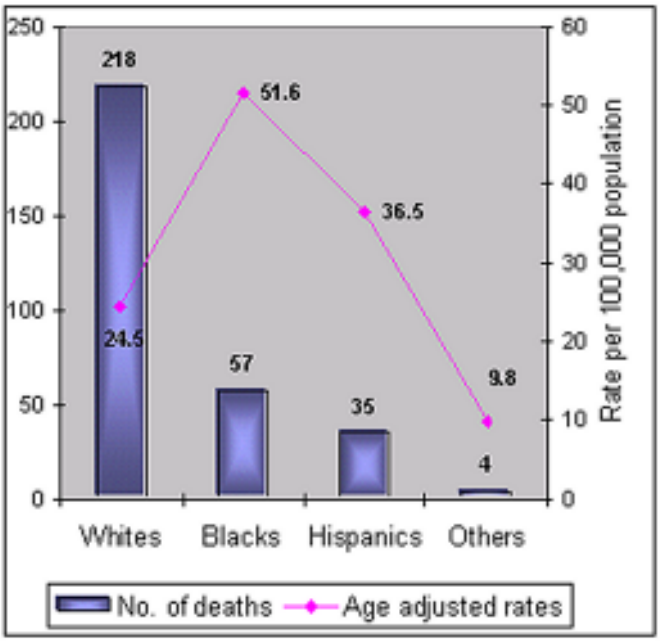


Figure 13: Deaths and Age-Adjusted Death Rates of Diabetes Mellitus by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Alzheimer's Disease

Alzheimer's disease ranks fifth in females and ninth in males. Although the numbers of deaths are higher in females, the age-adjusted rate is higher in males than in females (Figure 14).

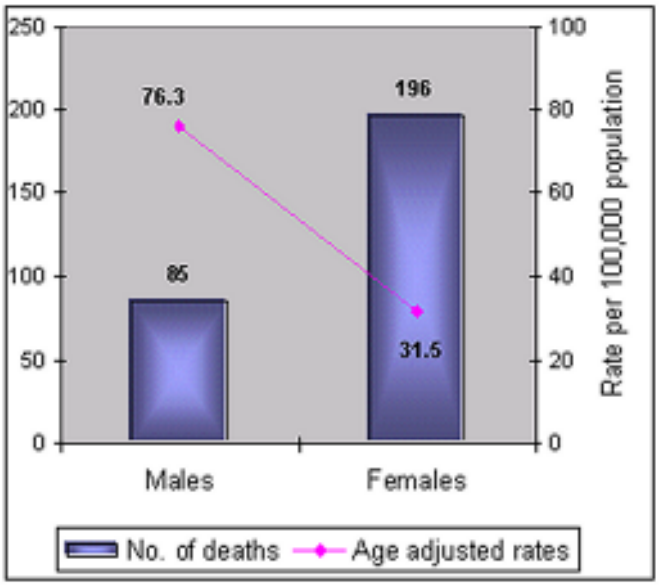


Figure 14: Deaths and Age-Adjusted Death Rates of Alzheimer's Disease by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Alzheimer's disease ranks sixth in Whites and eighth in Blacks, but was not ranked in the top ten leading causes of death in Hispanics and Others. The numbers of deaths are higher in Whites when compared to other racial ethnic groups. The age-adjusted rate, however, is higher in Blacks followed by Whites, Hispanics and Others (Figure 15).

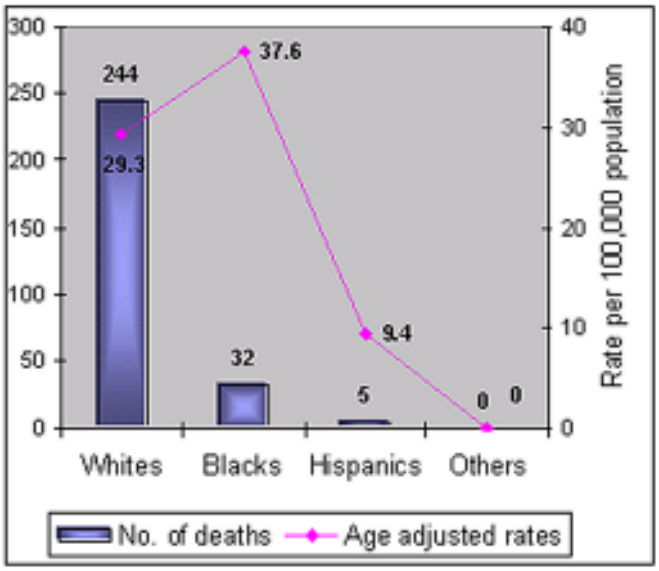


Figure 15: Deaths and Age-Adjusted Death Rates of Alzheimer's Disease by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Intentional Self-Harm (Suicide)

Intentional self-harm (suicide) ranked seventh in males and twelfth in females. Both the number of deaths and age-adjusted rates are higher in males than in females (Figure 16).

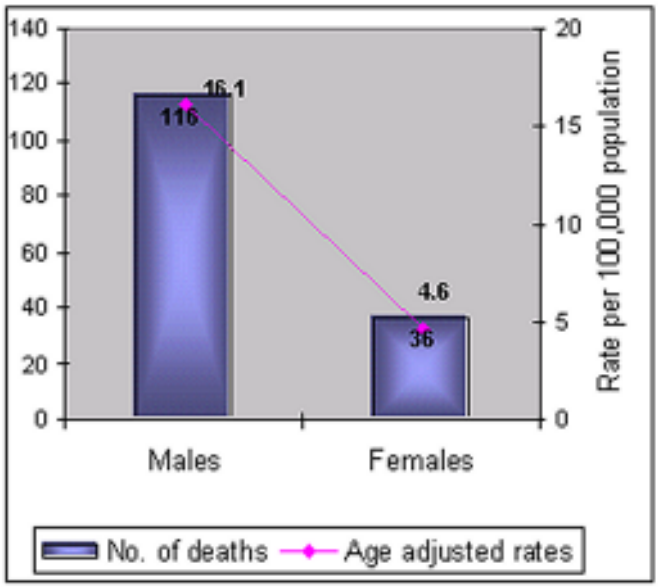


Figure 16: Deaths and Age-Adjusted Death Rates of Suicide by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Suicide occupies the eighth rank in Whites, ninth in Hispanics and Others and sixteenth in Blacks. The total number of deaths due to suicide and their age-adjusted rates are very high in Whites when compared to all other racial ethnic groups (Figure 17).

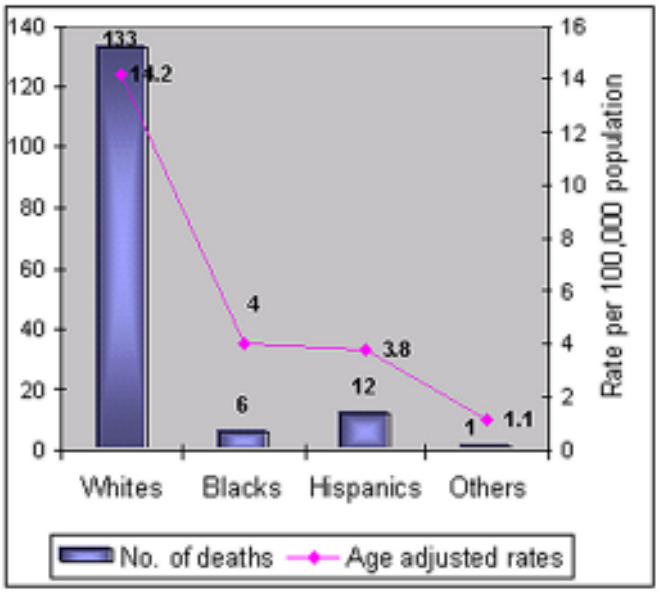


Figure 17: Deaths and Age-Adjusted Death Rates of Suicide by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Influenza and Pneumonia

Influenza and pneumonia rank eighth in females and tenth in males. Although the numbers of deaths are greater in females than in males, the age-adjusted rate is higher in males (Figure 18).

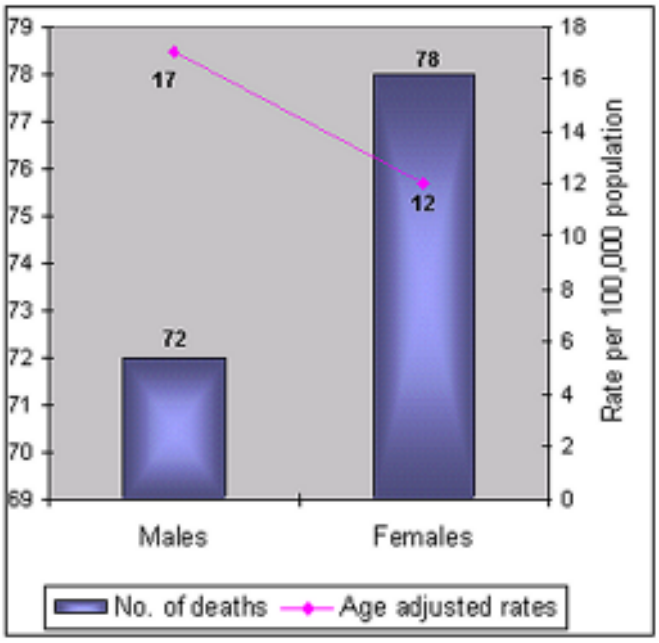


Figure 18: Deaths and Age-Adjusted Death Rates of Influenza and Pneumonia by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Influenza and pneumonia ranked ninth in Whites and eighth in Others, but failed to be ranked in the ten leading causes of death in Blacks and Hispanics. The number of deaths is highest in Whites, followed by Blacks, Hispanics and Others. The age-adjusted rate however, was highest in Blacks.

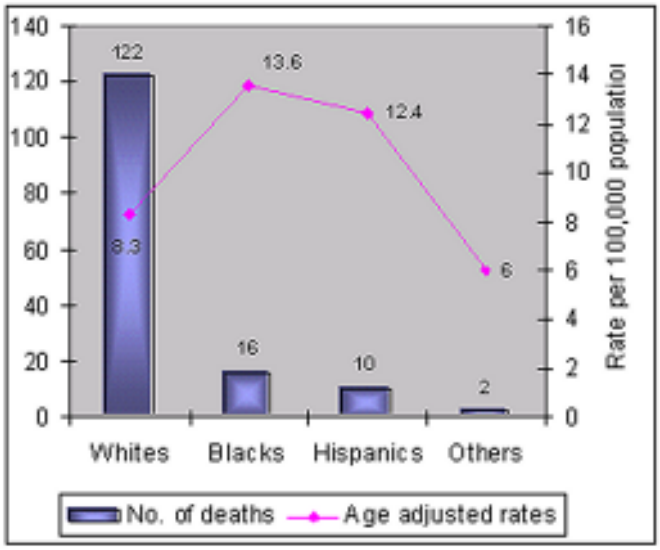


Figure 19: Deaths and Age-Adjusted Death Rates of Influenza and Pneumonia by Race/ Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Septicemia

Septicemia ranks twelfth in males and ninth in females. Although the number of deaths is higher in females, the age-adjusted rate is higher in males than in females (Figure 20).

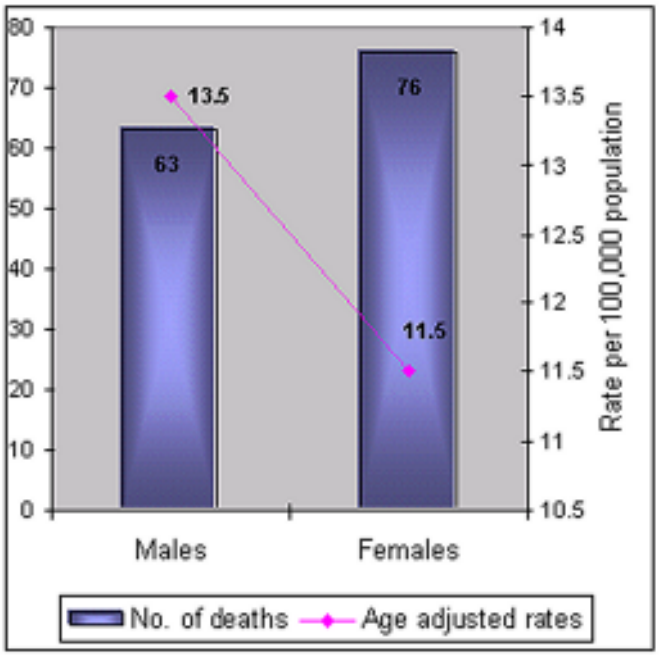


Figure 20: Deaths and Age-Adjusted Death Rates of Septicemia by Gender, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

Septicemia ranked tenth in Whites and Hispanics, fourth in Others, but ranked twelfth in Blacks. The number of deaths is highest in Whites, followed by Blacks, Hispanics and Others. Similarly, the age-adjusted rate is higher in Whites, followed by Blacks, Others and Hispanics (Figure 21).

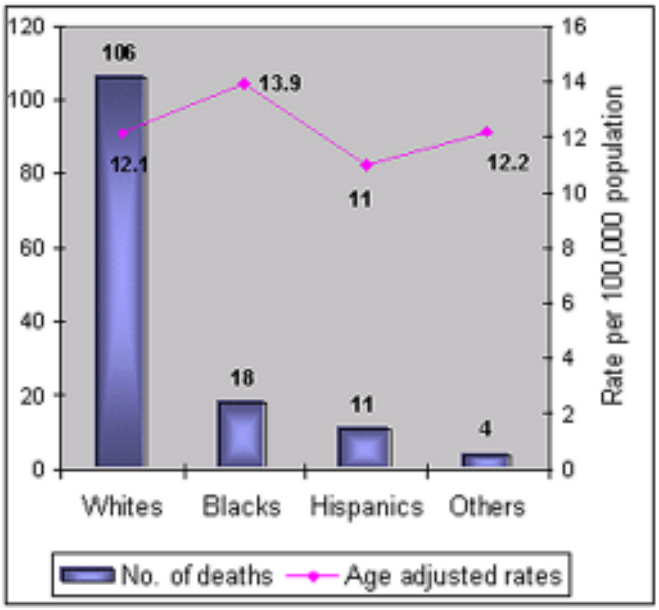


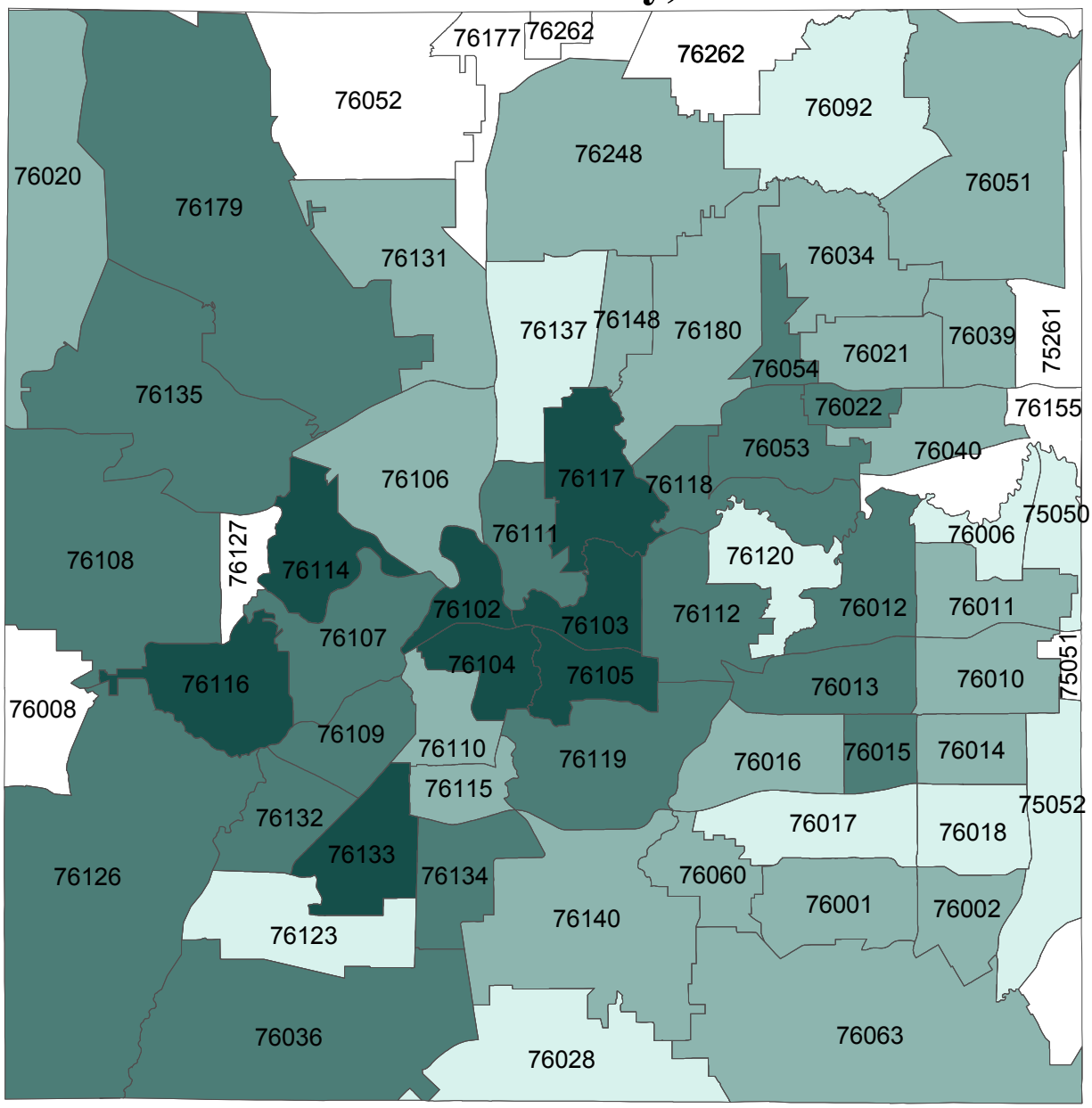
Figure 21: Deaths and Age-Adjusted Death Rates of Septicemia by Race/Ethnicity, Tarrant County, 2004

Data source: Texas Department of State Health Services - Center for Vital Statistics

DISCUSSION[1]

This report presents the leading causes of death in Tarrant County by age, racial/ethnic groups, gender and ZIP code distribution. Ranking causes of death is, to a certain extent, an arbitrary procedure. When comparing rankings across groups or over time, one should be mindful of the age distribution of the populations being compared. Leading causes of death for populations with younger age distributions will tend to show higher rankings for causes of death that are prevalent among the young, such as homicide, unintentional injuries and HIV infection. Leading causes of death for older populations will tend to show higher rankings for causes that are more prevalent among the elderly, such as Alzheimer's disease, heart diseases, cancer and cerebrovascular diseases. Hence, age-adjusted death rates should be taken into consideration when comparing causes of death between populations. Consideration should also be given to the effects of random variation on cause-of-death rankings. When the number of events is small (perhaps less than 100 deaths), estimates of mortality rates are subject to random fluctuations. Also when comparing rankings based on small numbers of deaths among groups or over time, it is important to be aware that differences in relative rankings may be attributable to random variability or, as seen in this report, there may be more than one cause of death at the same ranking.

Death Rates of Heart Disease
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 10.57 - 84.23
- 84.24 - 168.47
- 168.48 - 252.70
- 252.71 - 336.93

* ZIP Codes with 3 or less cases have been suppressed.

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1 inch equals 4.75 miles

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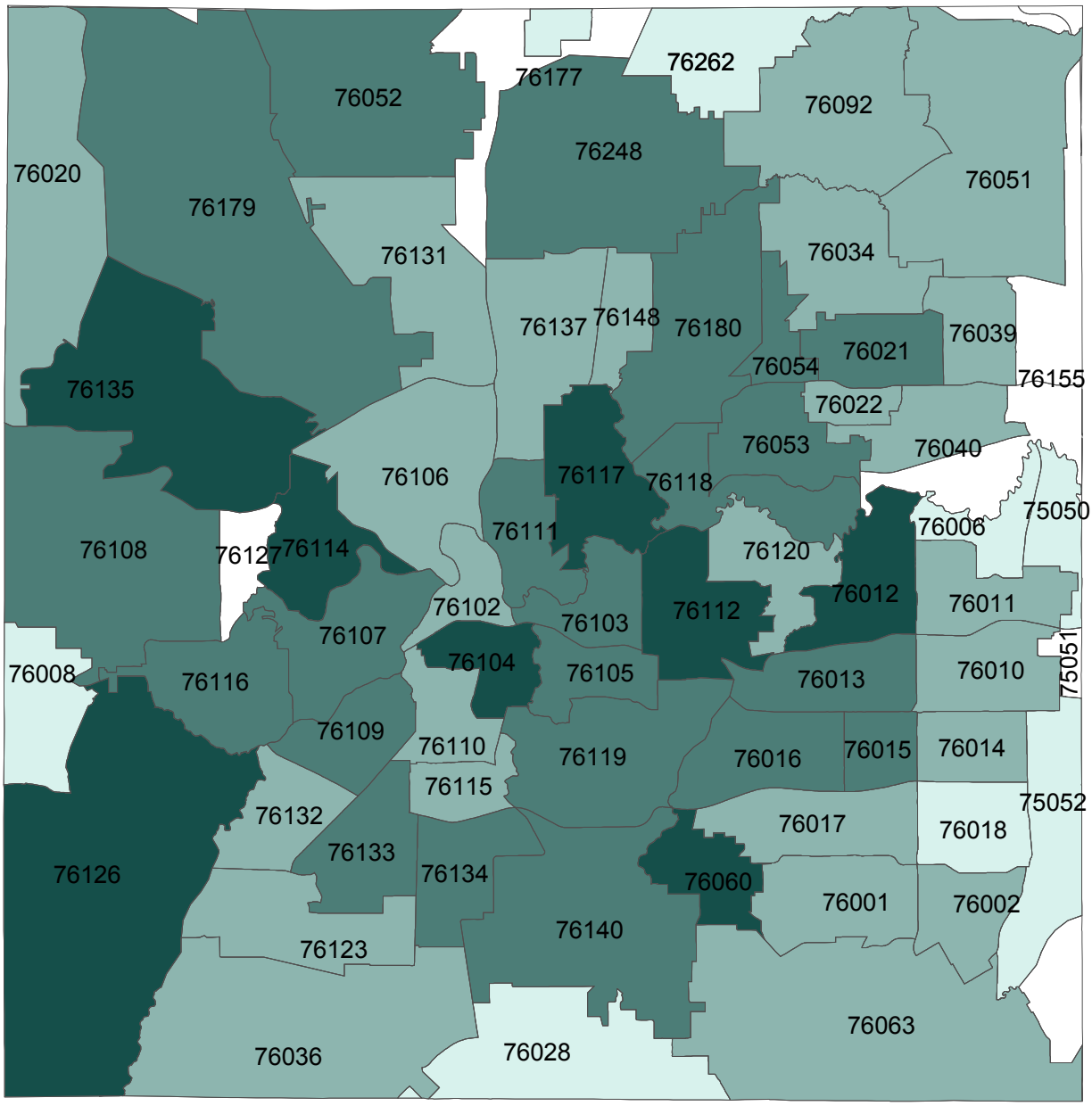
Public Health

Death Rates of Malignant Neoplasms
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 7.11 - 68.53
- 68.54 - 137.06
- 137.07 - 205.59
- 205.60 - 274.11

* ZIP Codes with 3 or less cases have been suppressed.

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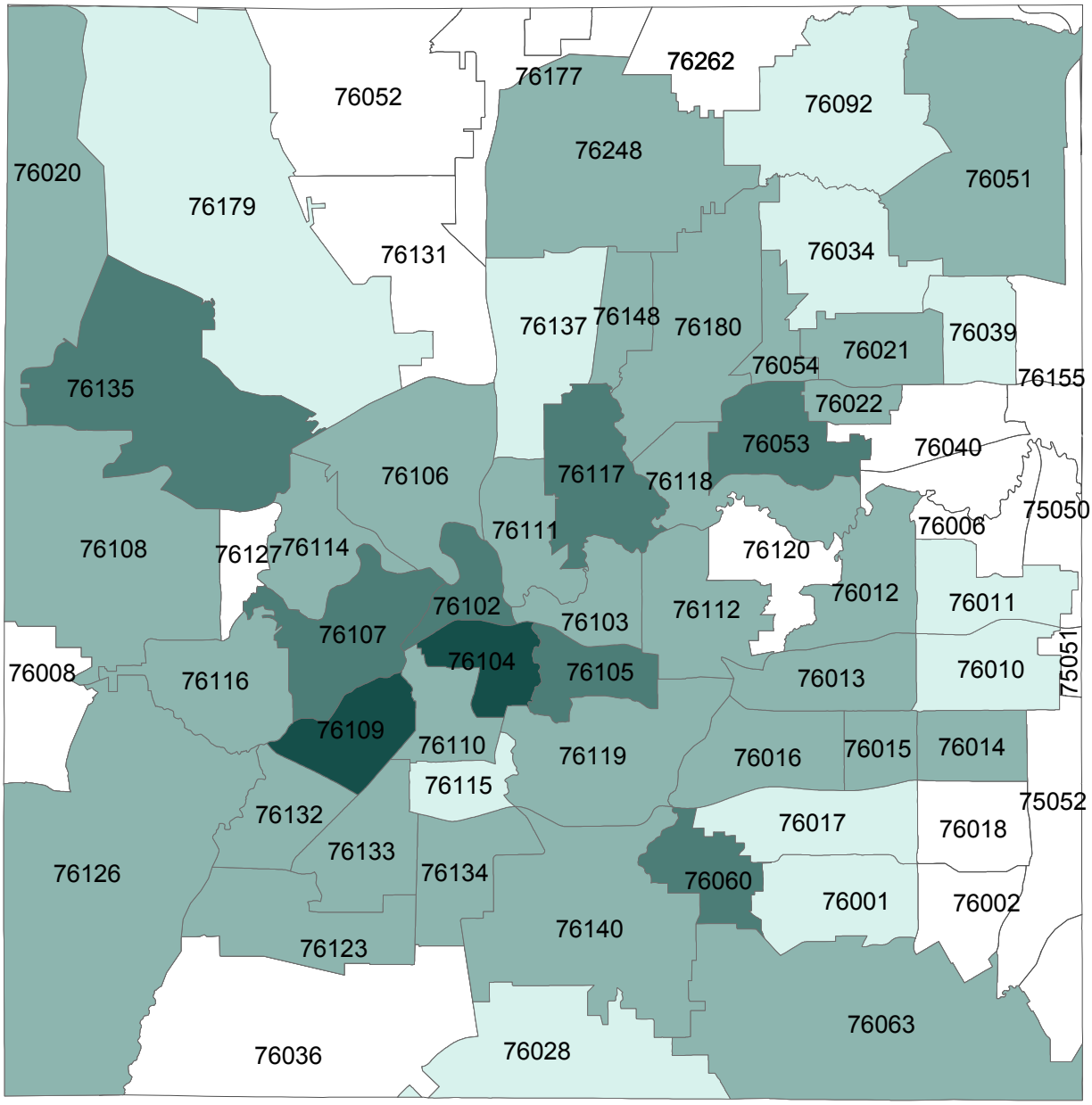
Public Health

Death Rates of Cerebrovascular Diseases
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 14.25 - 32.84
- 32.85 - 65.67
- 65.68 - 98.51
- 98.52 - 131.35

* ZIP Codes with 3 or less cases have been suppressed.

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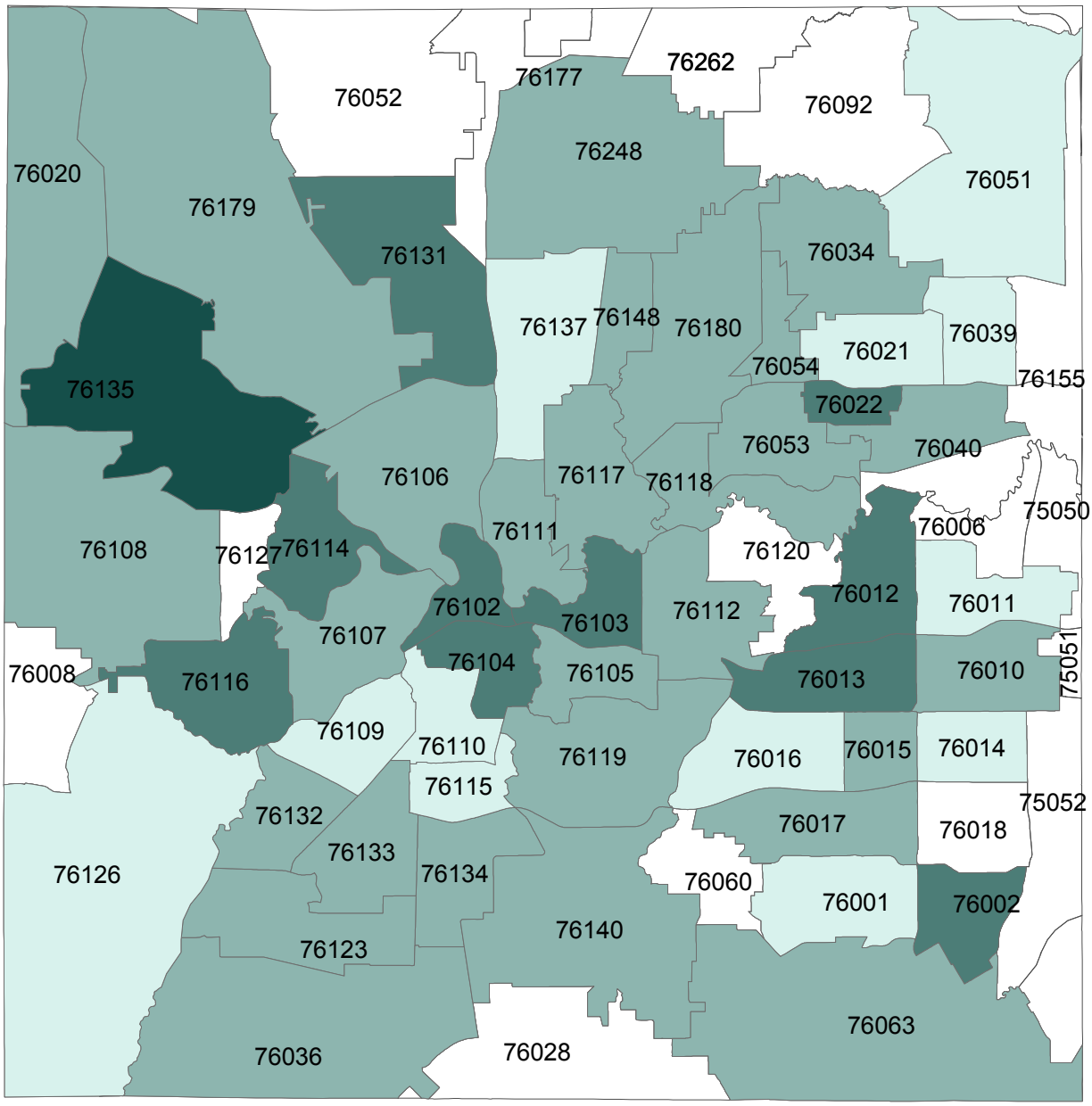
Death Rates of Chronic Lower Respiratory Disease
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 9.57 - 26.69
- 26.70 - 53.37
- 53.38 - 80.06
- 80.07 - 106.74

* ZIP Codes with 3 or less cases have been suppressed.

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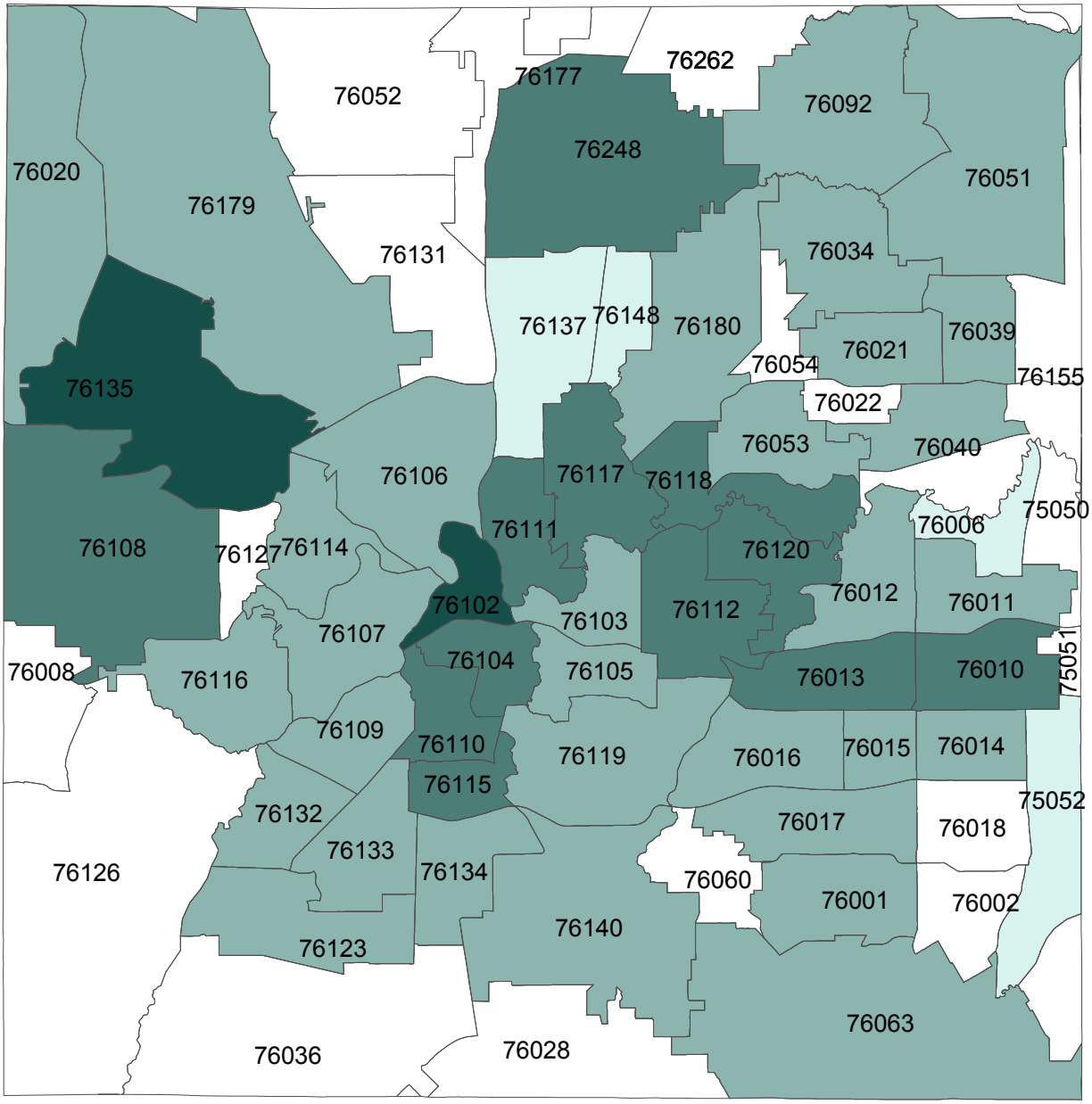
Public Health

Death Rates of Accidents
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 7.11 - 17.79
- 17.80 - 35.58
- 35.59 - 53.37
- 53.38 - 71.16

* ZIP Codes with 3 or less cases have been suppressed.

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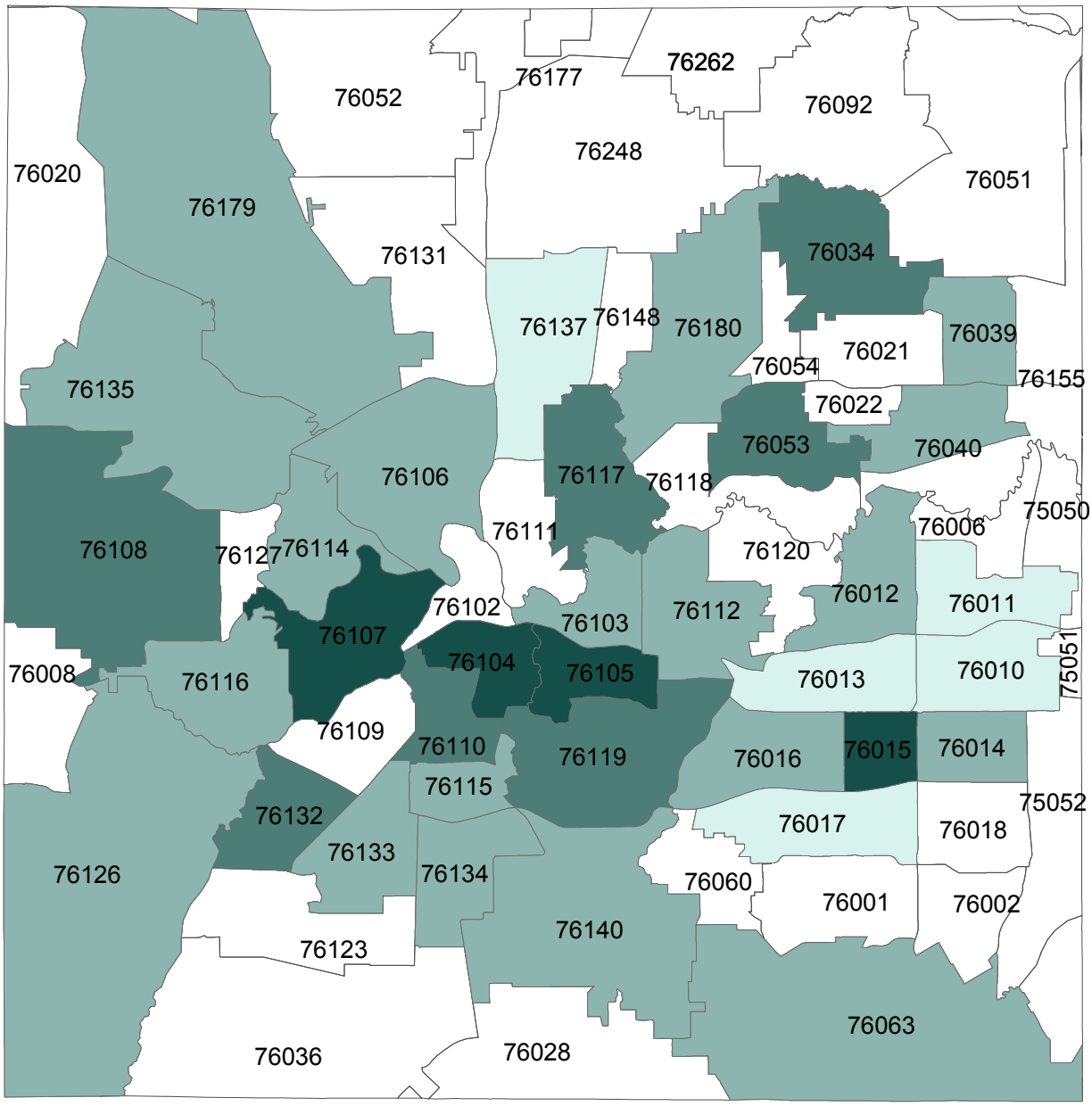
Death Rates of Diabetes Mellitus
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 9.51 - 14.01
- 14.02 - 28.01
- 28.02 - 42.02
- 42.03 - 56.03

* ZIP Codes with 3 or less cases have been suppressed.

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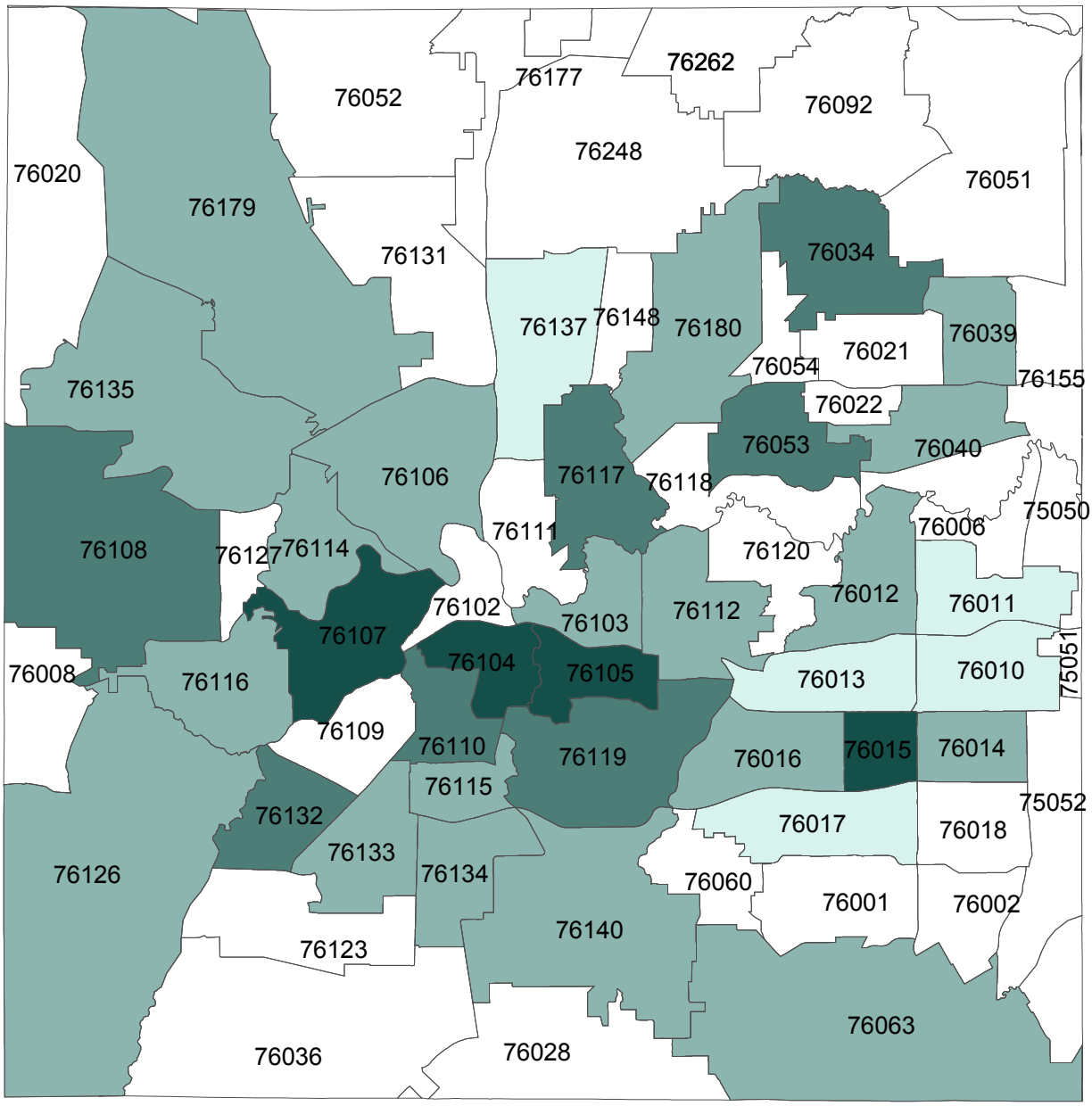
Death Rates of Alzheimer's Disease
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 9.51 - 14.01
- 14.02 - 28.01
- 28.02 - 42.02
- 42.03 - 56.03

* ZIP Codes with 3 or less cases have been suppressed.

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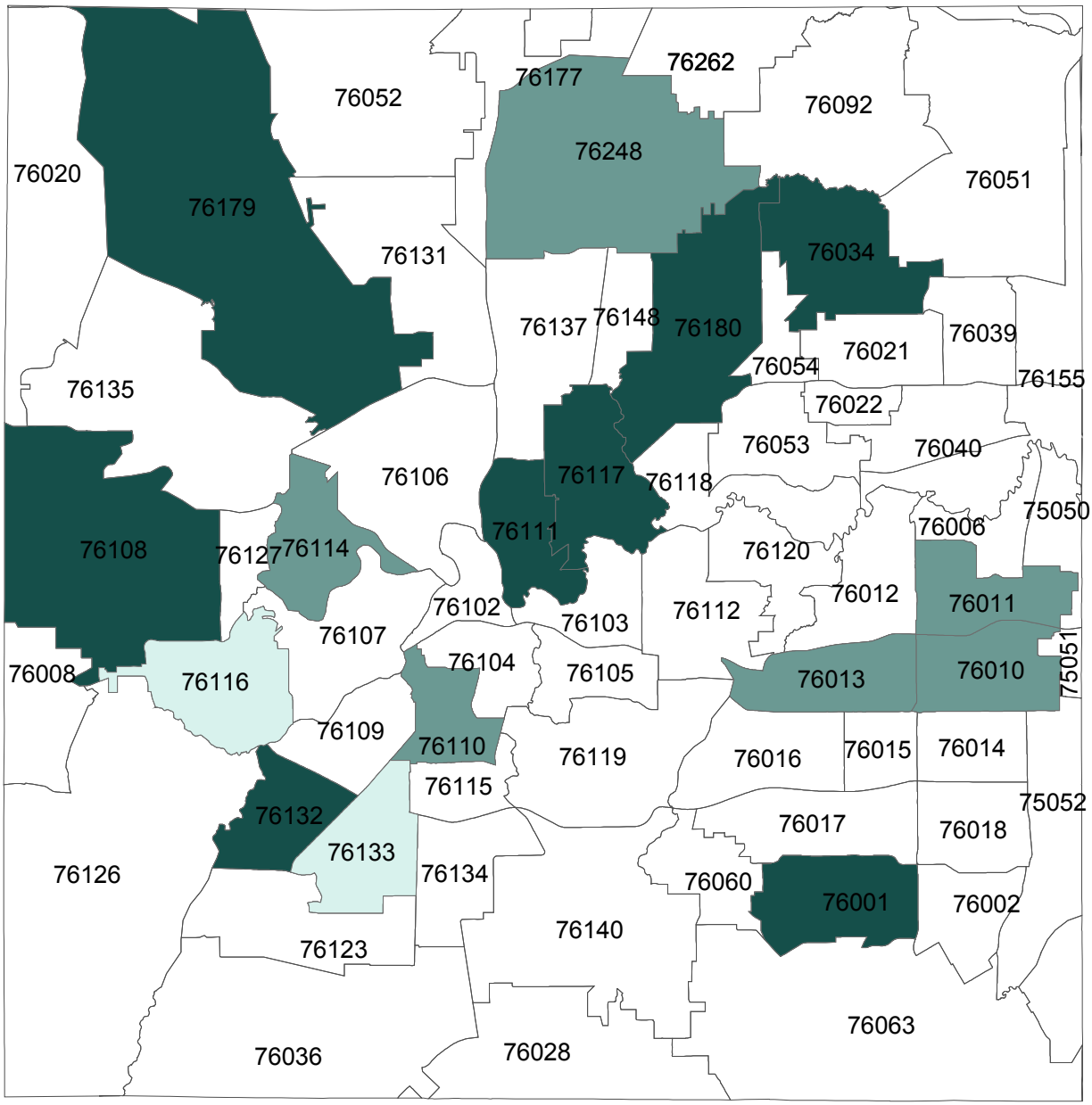
Death Rates of Intentional Self Harm (Suicide)
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 8.68 - 9.19
- 9.20 - 18.38
- 18.39 - 27.85

* ZIP Codes with 3 or less cases have been suppressed.

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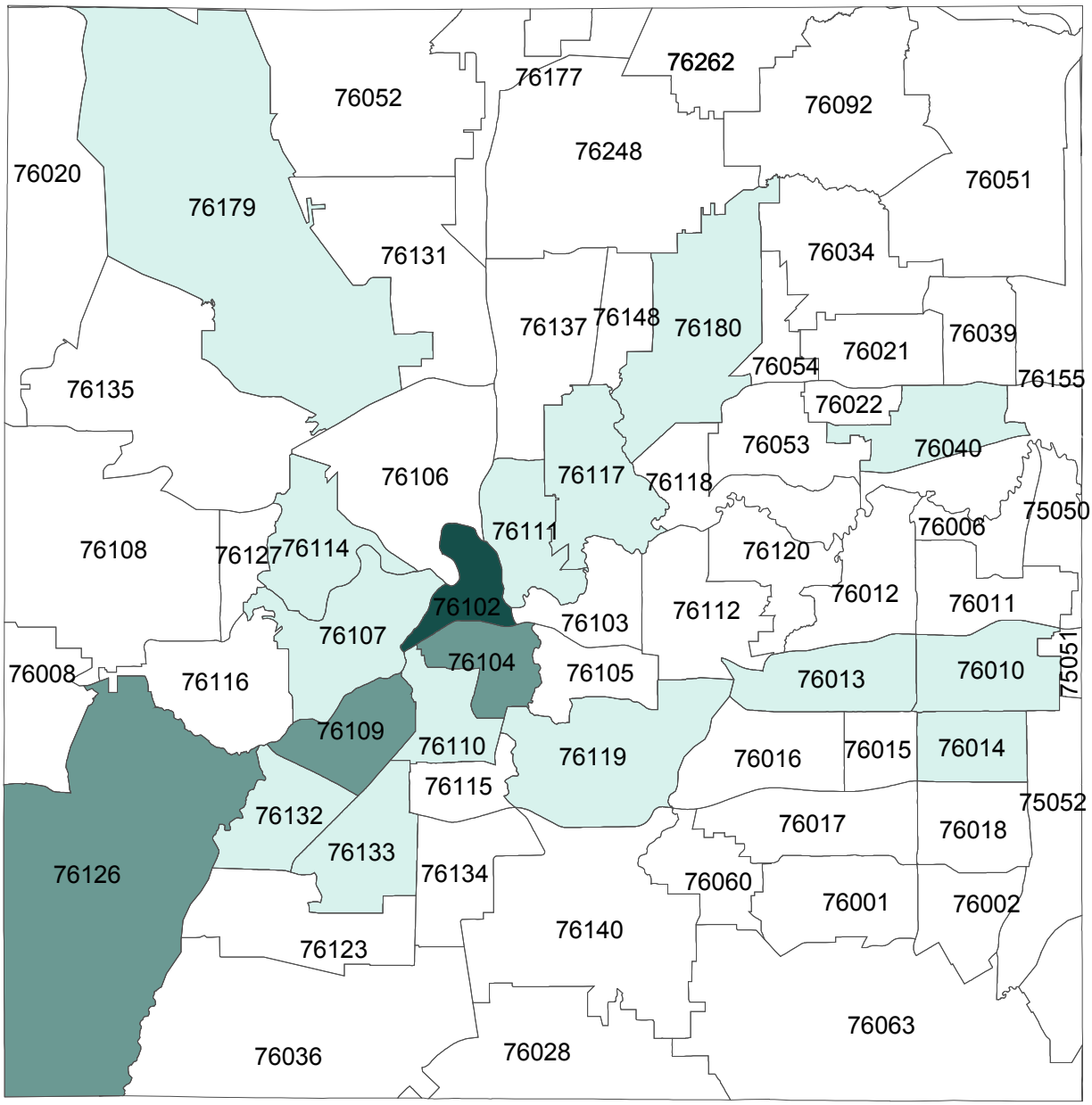
Death Rates of Influenza and Pneumonia
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 8.68 - 23.48
- 23.49 - 46.96
- 46.97 - 71.16

* ZIP Codes with 3 or less cases have been suppressed.

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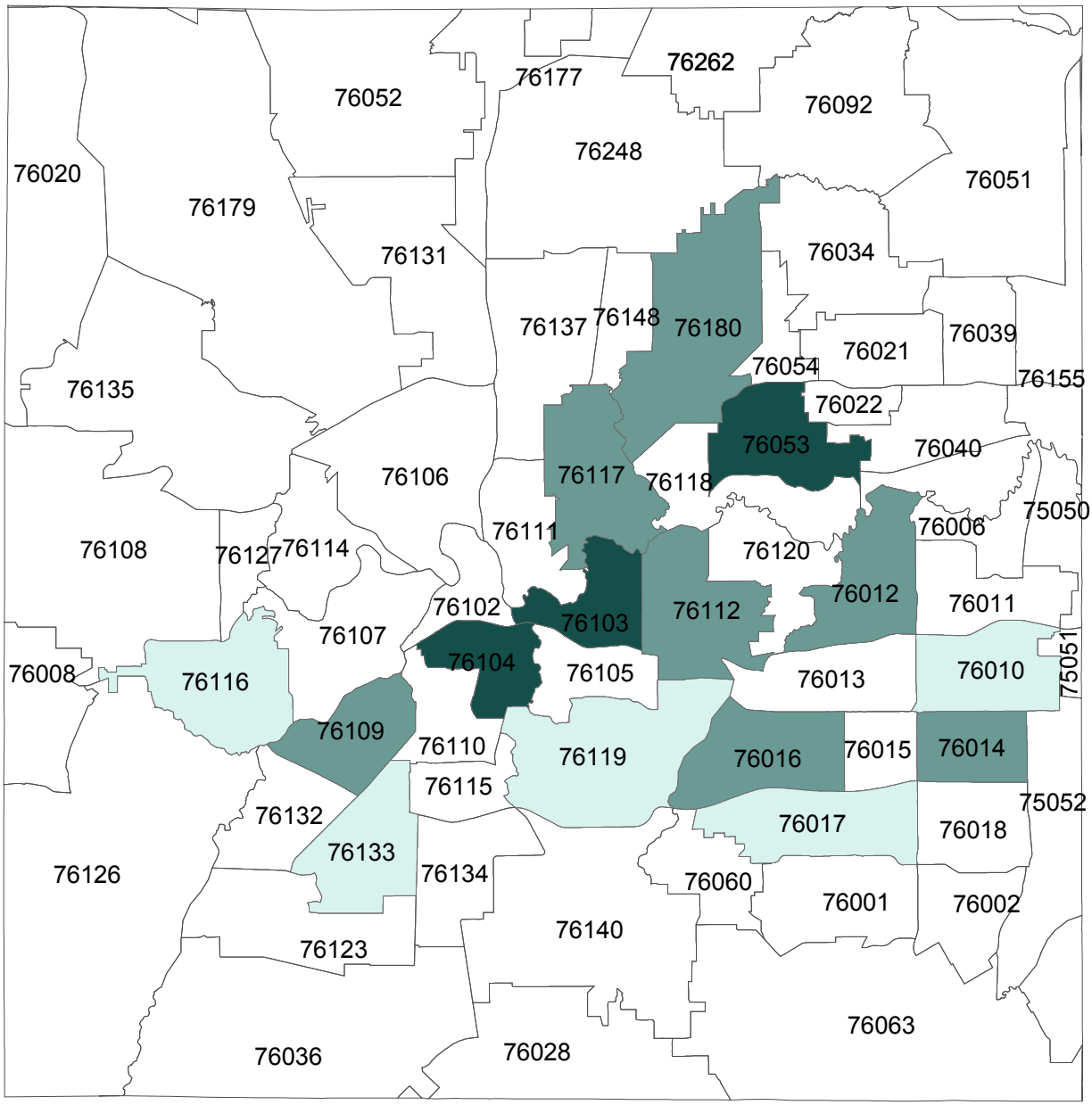
Death Rates of Septicemia
Tarrant County, 2004



Rate per 100,000

- No Cases*
- 9.30 - 11.54
- 11.55 - 23.07
- 23.08 - 34.96

* ZIP Codes with 3 or less cases have been suppressed.

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1 inch equals 4.75 miles

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REFERENCES

Text modified from Anderson RN, Smith BL. Deaths: Leading Causes for 2002. National Vital Statistics reports: vol. 53 no. 17, pg. 3-7, Hyattsville, Maryland: National Center for Health Statistics. 2005.

[1]Anderson RN, Smith BL. Deaths: Leading Causes for 2002. National Vital Statistics reports: vol. 53 no. 17, pg. 3-7, Hyattsville, Maryland: National Center for Health Statistics. 2005.

DATA SOURCES

Texas Department of State Health Services, Department of Vital Statistics

Population estimates

- U.S. Census 2000
- Texas Department of State Health Services (http://soupfin.tdh.state.tx.us/people.htm, last accessed Sept.15, 2006)

ACKNOWLEDGEMENTS

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