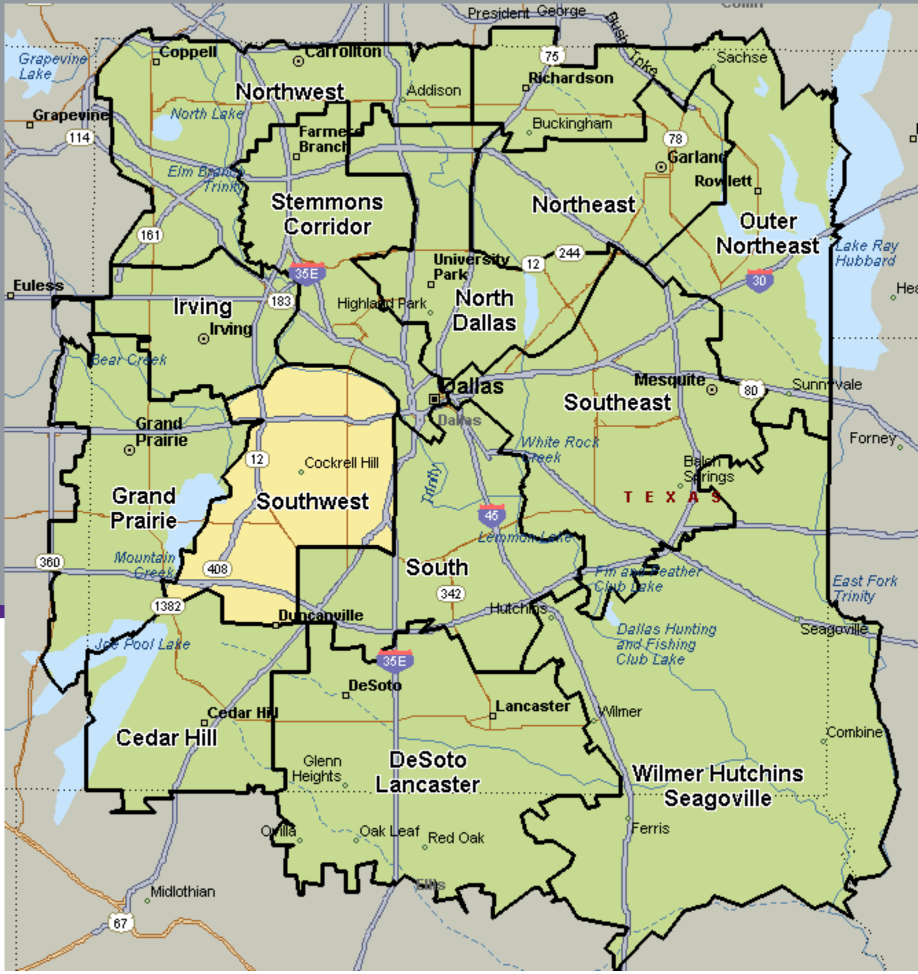
Community Health Assessment

Southwest Dallas Service Area


President George Bush Tpke
Coppell
Carrollton
Grapevine Lake
Grapevine
Northwest
North Lake
Addison
75
Richardson
Sachse
Farmers Branch
Buckingham
114
78
Garland
Rowlett
Elm Branch Trinity
Stemmons Corridor
Northeast
Outer Northeast
161
University Park
12
244
Lake Ray Hubbard
35E
30
Euless
Irving
183
Highland Park
North Dallas
Irving
Bear Creek
Dallas
Mesquite
80
Sunnyvale
Southeast
Dallas
Grand Prairie
12
Cockrell Hill
White Rock Creek
Forney
Balch Springs
Grand Prairie
Southwest
Trinity
TEXAS
45
Lemmon Lake
360
Mountain Creek
408
South
Fin and Feather Club Lake
East Fork Trinity
342
1382
Hutchins
Duncanville
Seagoville
Joe Pool Lake
35E
Dallas Hunting and Fishing Club Lake
DeSoto
Lancaster
Wilmer
Cedar Hill
Combine
Cedar Hill
Glenn Heights
DeSoto Lancaster
Wilmer Hutchins Seagoville
Ovilla
Oak Leaf
Red Oak
Ferris
Midlothian
67

Parkland

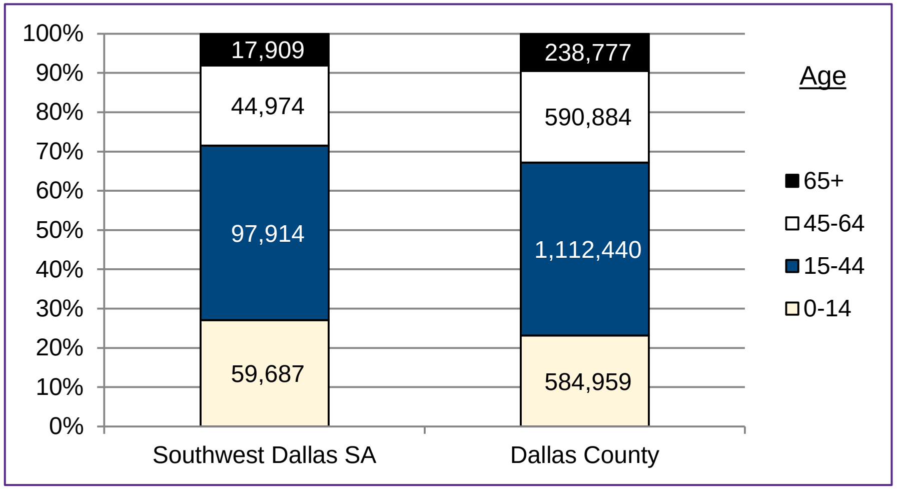
Organizational Model For the Community Health Dashboard

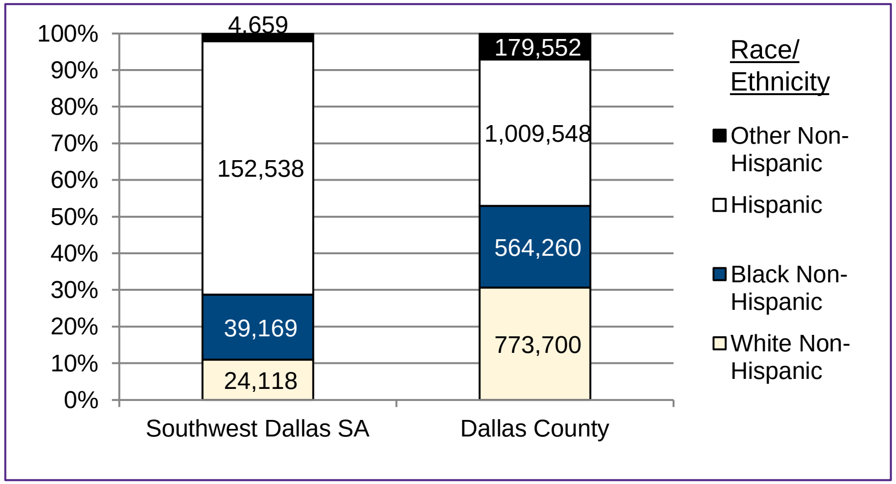
- Health Outcomes
  - Mortality
  - Years of Potential Life Lost
  - Infant Mortality
  - Very Low Birth Weight Births
  - Morbidity
- Health Factors
  - Health Risk Behaviors
    - Violence and Injury Prevention
      - Injury Mortality
      - ED Visits for Injuries
    - High Risk Sexual Behavior
      - HIV/STD Rates
      - Teen Birth Rate
    - Alcohol Use
      - Liquor Store Density
  - Access to Clinical Care
    - Percent Uninsured
    - Physician-to-Population Ratio
    - Emergency Department Use
  - Quality of Clinical Care
    - Prevention Quality Indicators

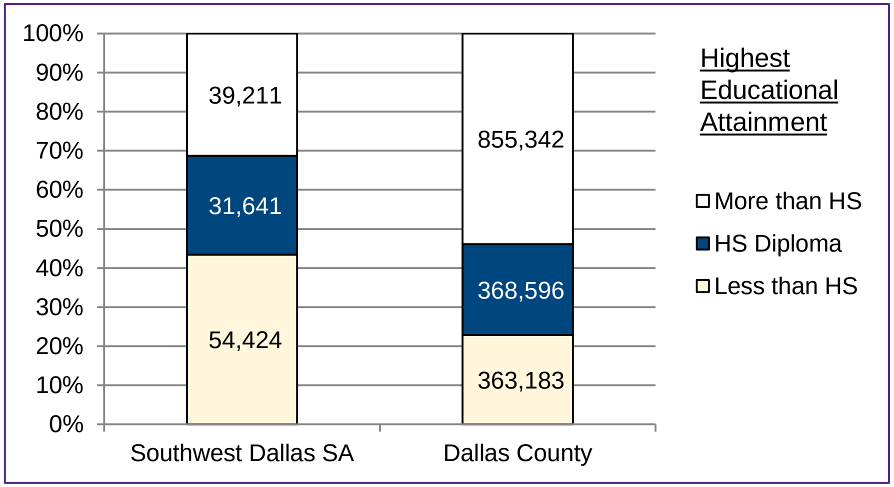
Demographic Profile

Southwest Dallas Service Area

- **The population of the Southwest Dallas Service Area is somewhat younger than the county population.**
- **The Service Area population has the highest percentage of Hispanics (69.2%) of any of the 13 service areas.**
- **Southwest Dallas also has the lowest educational attainment level of the service areas, with 43.4% of the adult population with less than a high school education.**







Source: Nielson/Claritas Pop-Facts mid-2013 version

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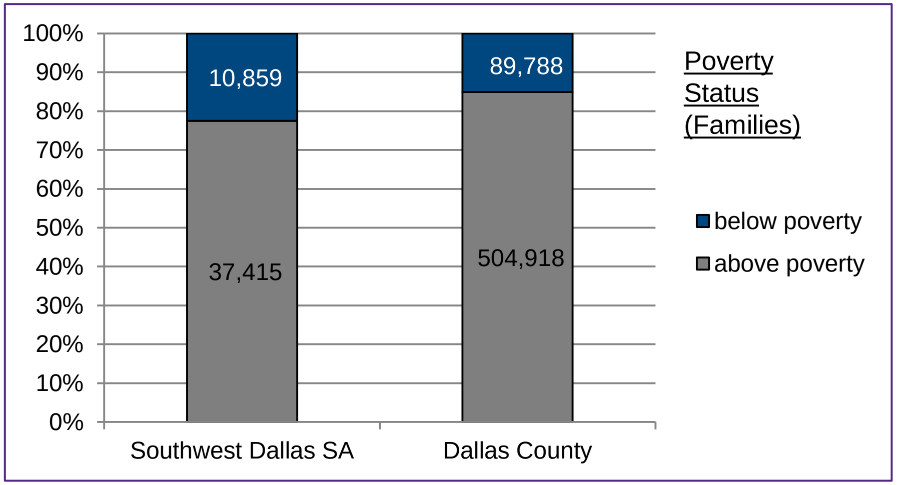
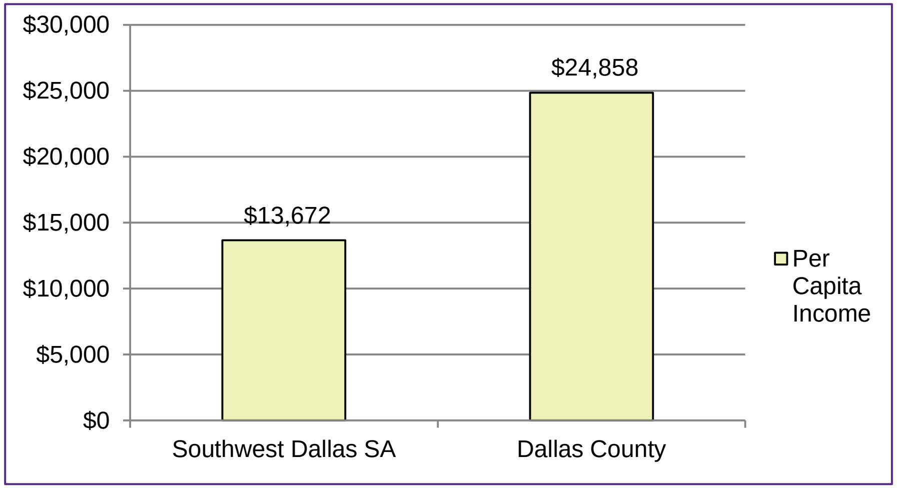
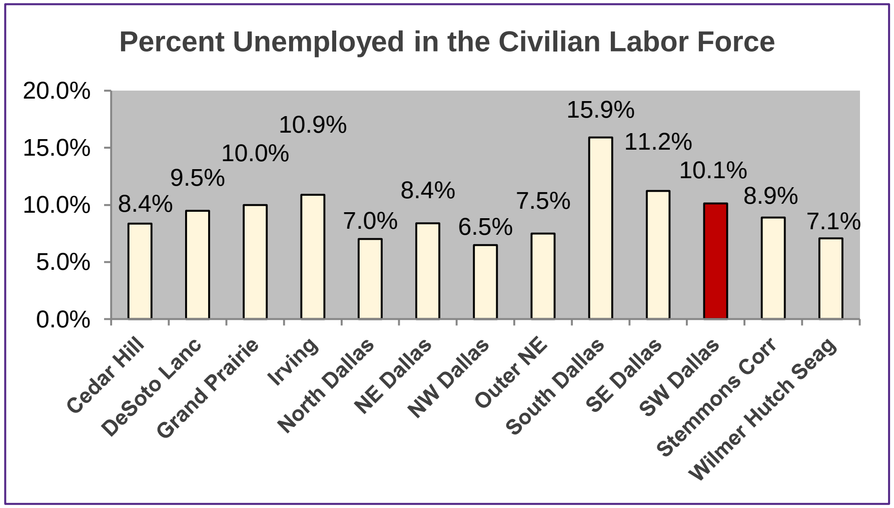
Demographic Profile

Southwest Dallas Service Area

- **The population of the Southwest Dallas Service Area has a large percentage of households in poverty compared with the Dallas County percentage (22.5%), the second highest poverty rate of the 13 Dallas County service areas.**
- **The Service Area's per capita income was the second lowest of the service areas.**
- **The percent unemployed for this Service Area the 2nd worst among the 13 Service Areas**



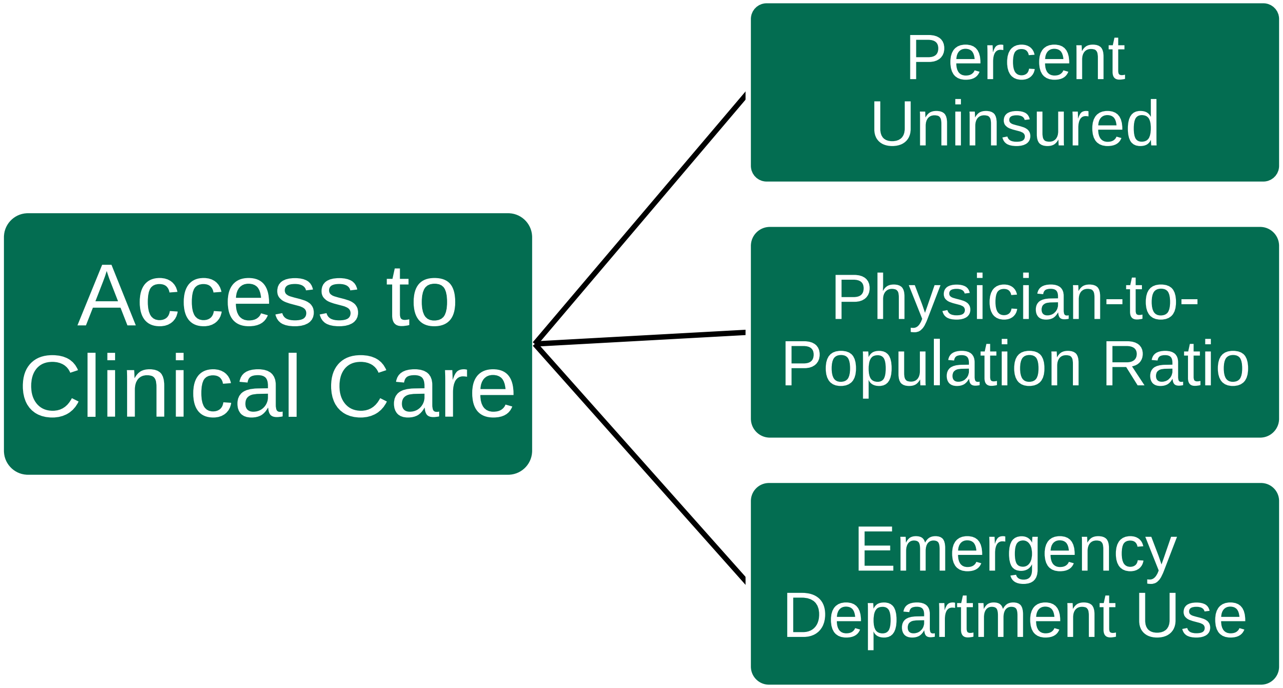




Source: Nielson/Claritas Pop-Facts mid-2013 version

Parkland

Access to care



Access to Clinical Care

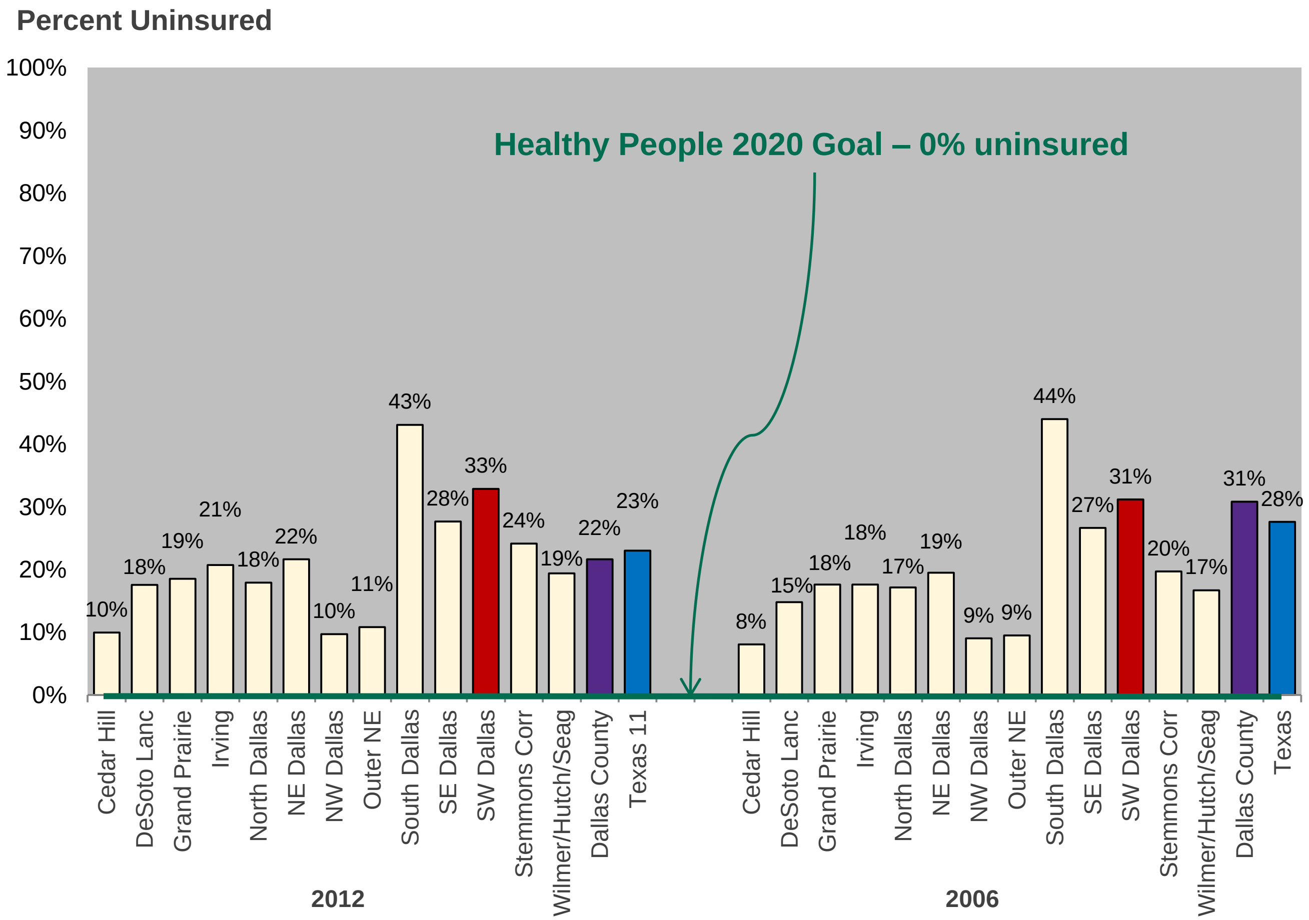
Percent Uninsured

Physician-to-Population Ratio

Emergency Department Use

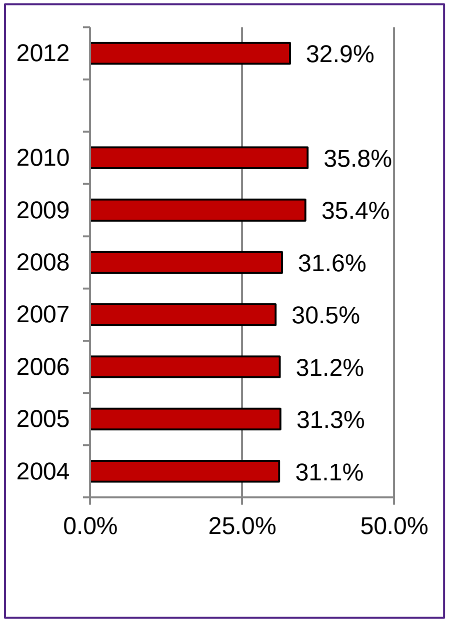
Access to Healthcare: Percent Without Healthcare Insurance

Southwest Dallas Service Area



Healthy People 2020 Goal – 0% uninsured

Percent Without Health Insurance, Southwest Dallas Service Area

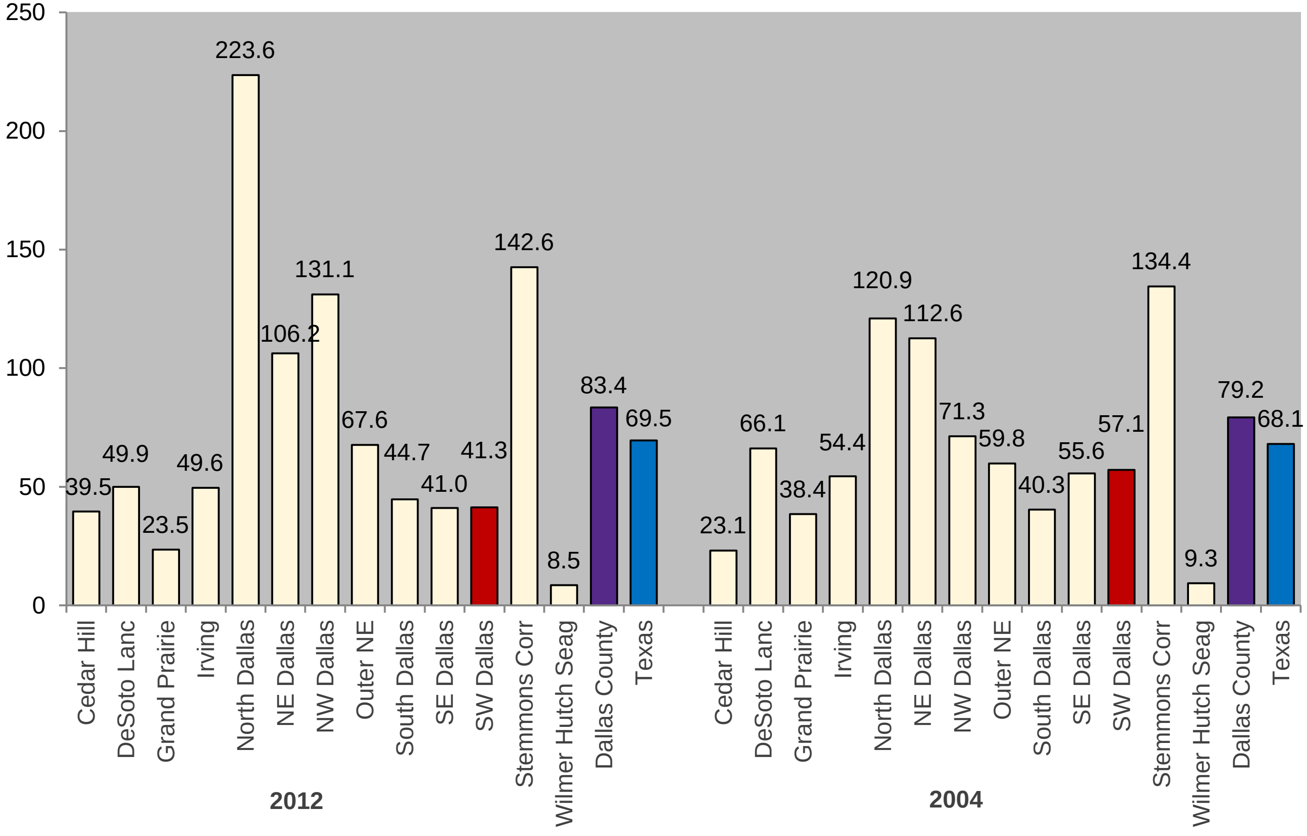


Source: 2012 Truven Analytics, Inc. Denominator population data from Claritas, Inc.; Texas rate from US Census Bureau's American Community Survey 2011; 2006 Solucient, Inc.

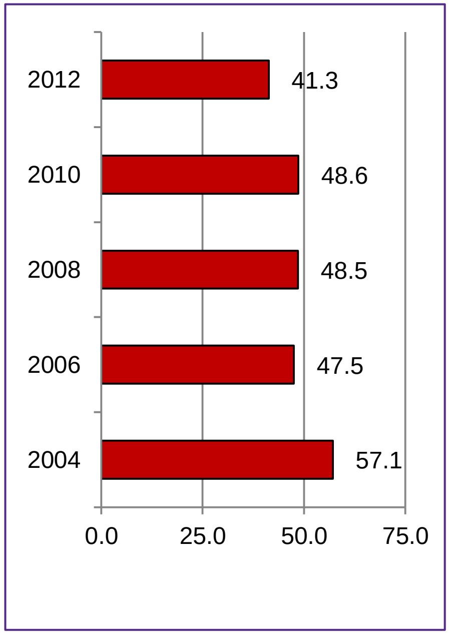
Access to Healthcare: Primary Care Physician-to-Population Ratio

Southwest Dallas Service Area

Primary Care Physicians per 100,000



Primary Care Physician-to-Population Ratio, per 100,000, Southwest Dallas Service Area

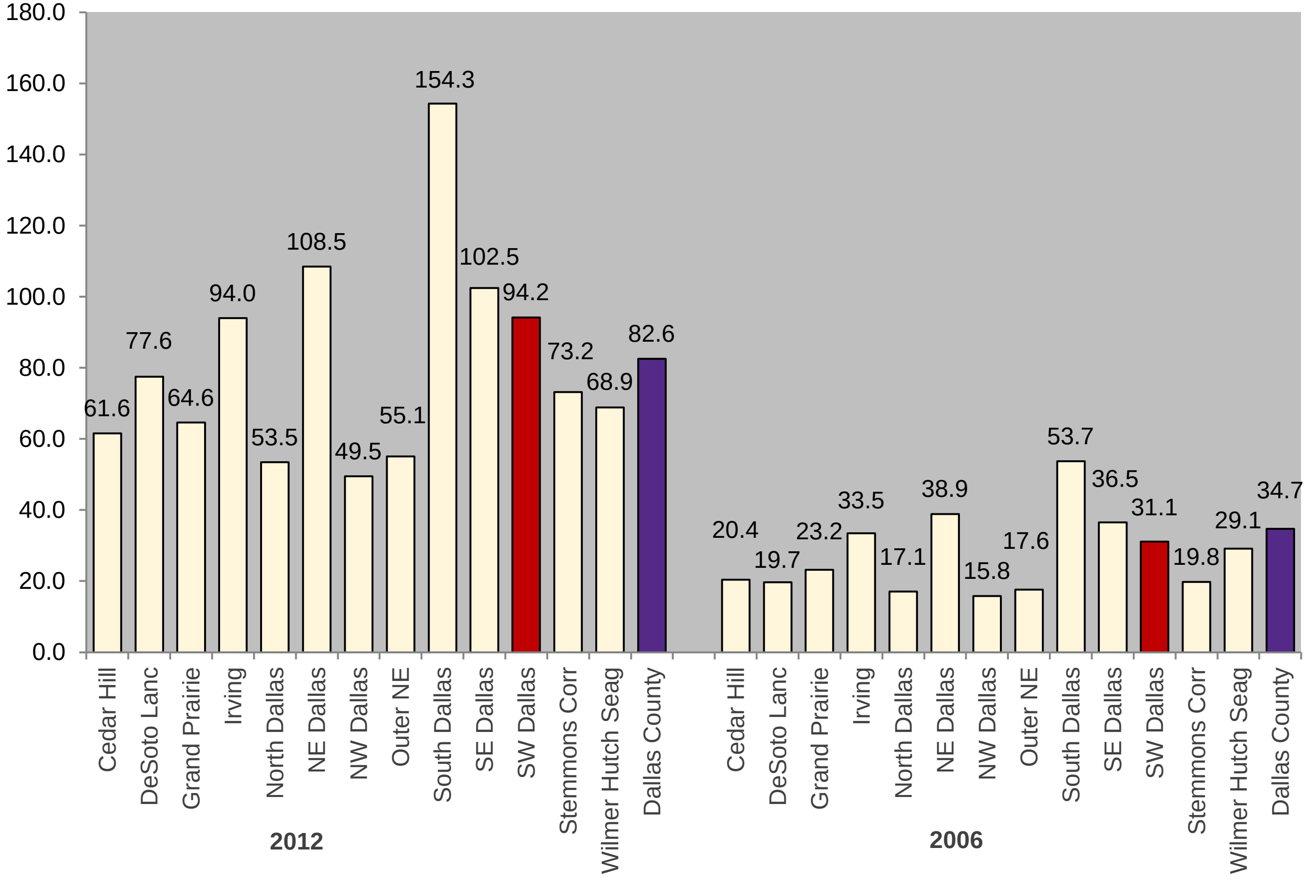


Source: Texas Medical Association Physician Practice Address files; denominator population data from Claritas, Inc., except 2010 from Nielson/Claritas, Inc. Pop Facts. Mid 2010 version.
County and State source is Texas Bureau of Primary Care.

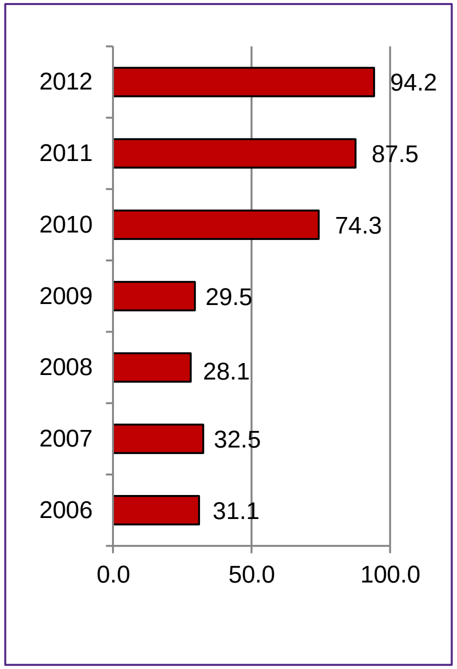
Access to Healthcare: Non-Emergent ED Utilization

Southwest Dallas Service Area

Non-Emergent ED Visits, per 1,000 Population



Rate of Non-Emergent ED Visits, per 1,000, Southwest Dallas Service Area



Source: DFWHC, Outpatient Data System; NYU Algorithm for determining appropriate Emergency Dept. Use; denominator population data from Claritas, Inc.

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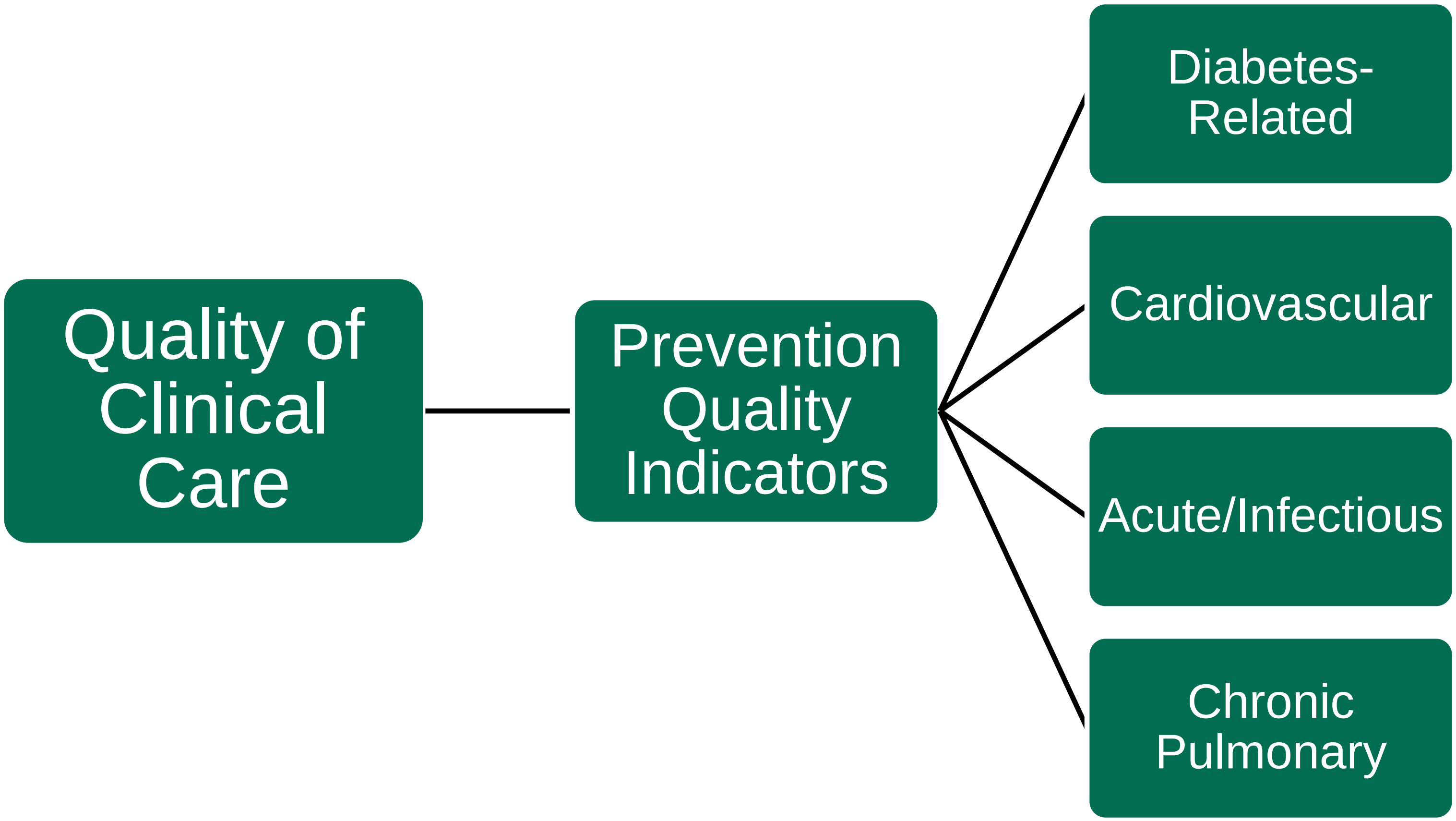
Access to Care

🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

		Southwest Dallas Compared to Healthy People 2020 Goal	Southwest Dallas Compared to Benchmark Counties* (Quartiles)	Southwest Dallas Compared to Past Years' Data (CI)
Access to Clinical Care	Percent Uninsured	🔴	🔴	🔴
	Physician-to-Population Ratio	N/A	🟡	🟡
	Emergency Department Use	N/A	🟡	🔴

*Benchmark Counties are: Maricopa, Los Angeles, Cook, Miami-Dade, Bexar, Harris and Tarrant

Quality of care



Quality of Clinical Care

Prevention Quality Indicators

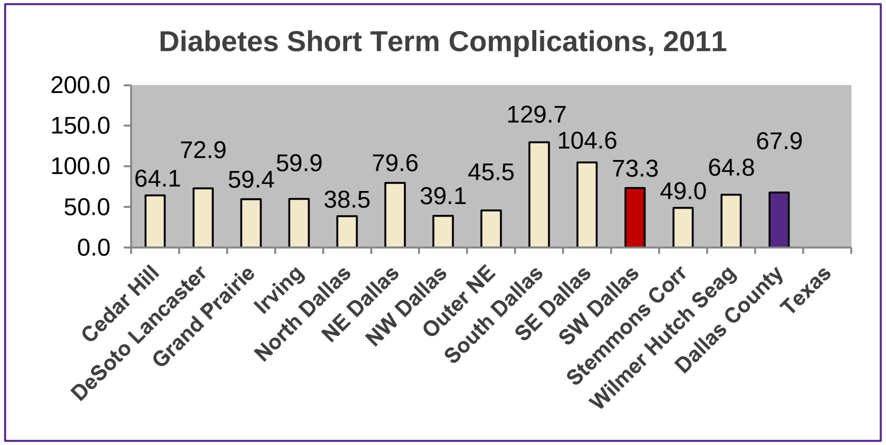
- Diabetes-Related
- Cardiovascular
- Acute/Infectious
- Chronic Pulmonary

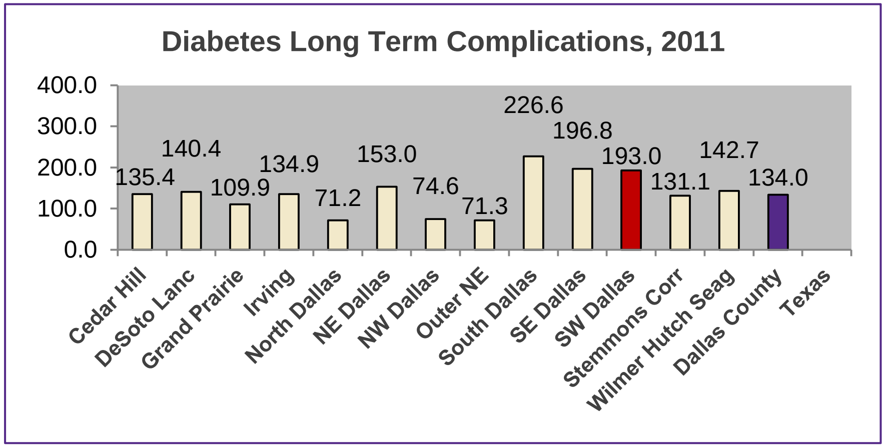
Parkland

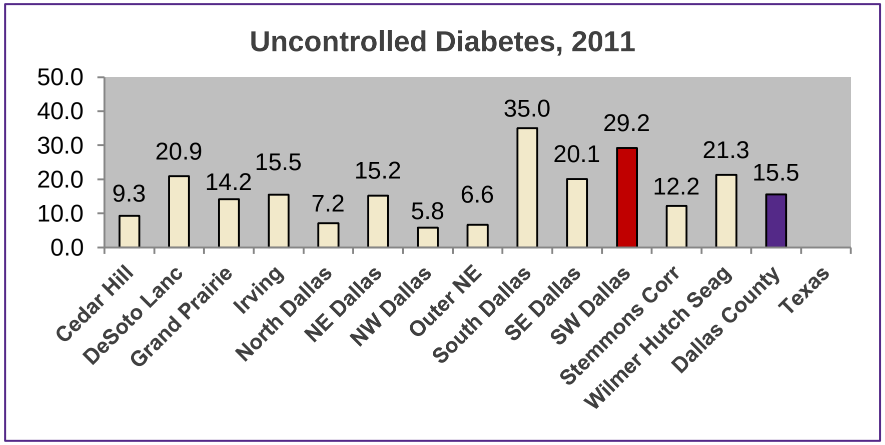
Healthcare Quality: Rate of Preventable Hospitalizations, 2011

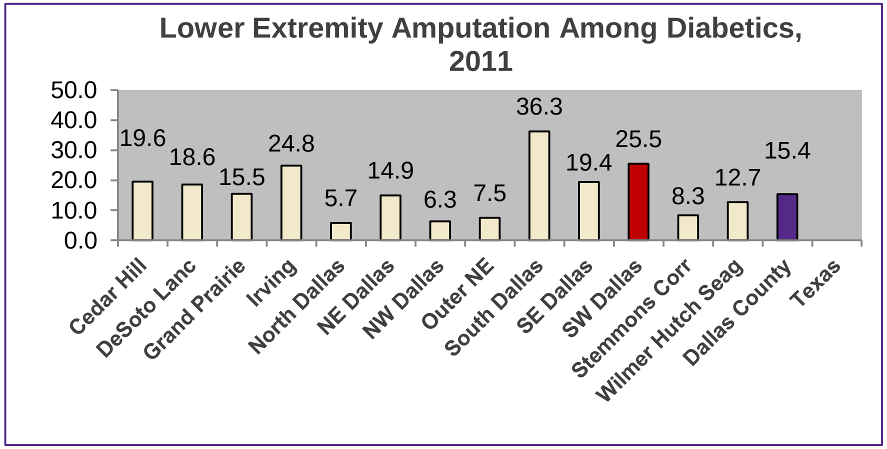
Diabetes-Related Hospitalizations

Southwest Dallas Service Area


Diabetes Short Term Complications, 2011

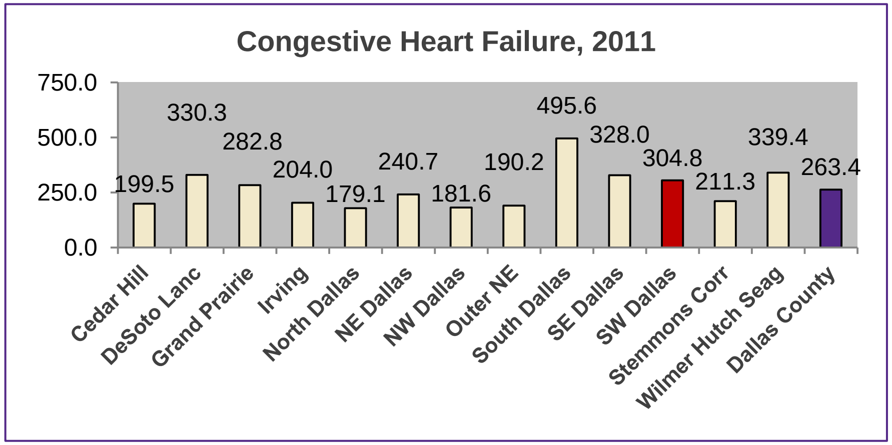

Diabetes Long Term Complications, 2011

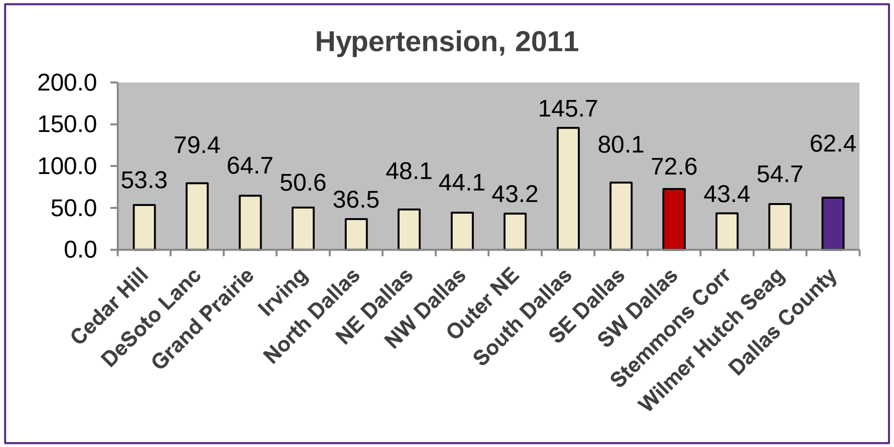

Uncontrolled Diabetes, 2011

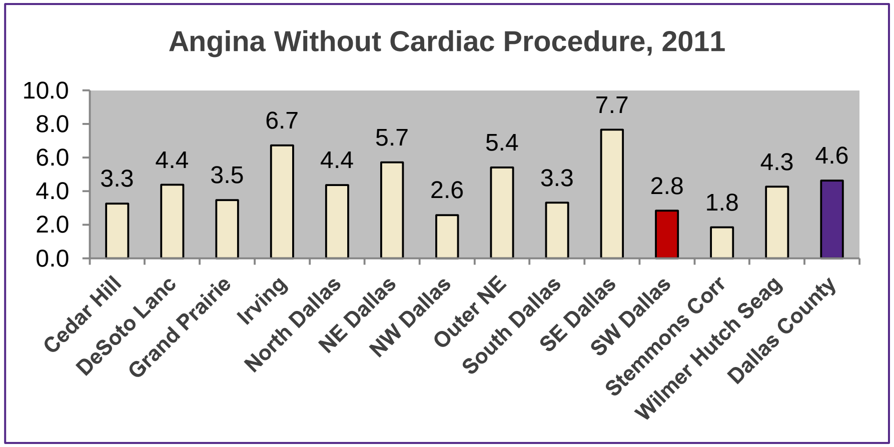

Lower Extremity Amputation Among Diabetics, 2011

Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey

Healthcare Quality: Rate of Preventable Hospitalizations, 2011
Cardiovascular Disease Hospitalizations
Southwest Dallas Service Area





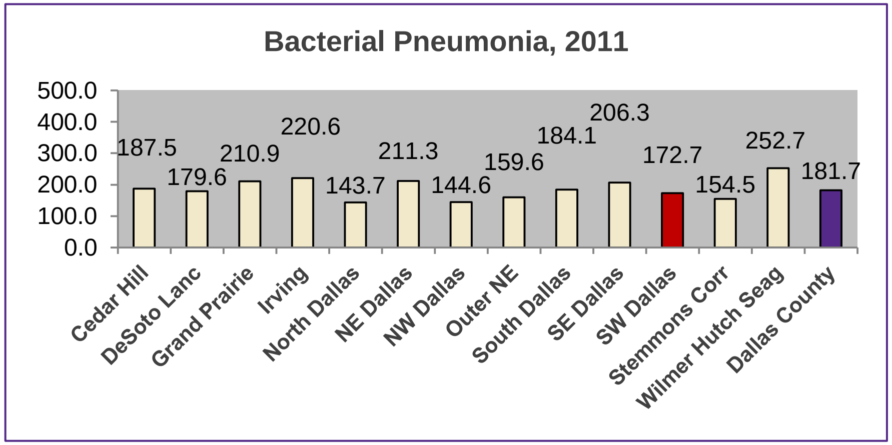


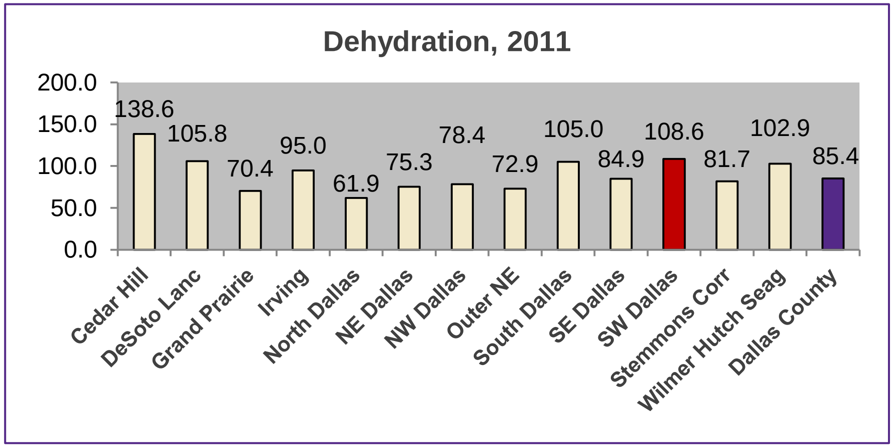
Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey

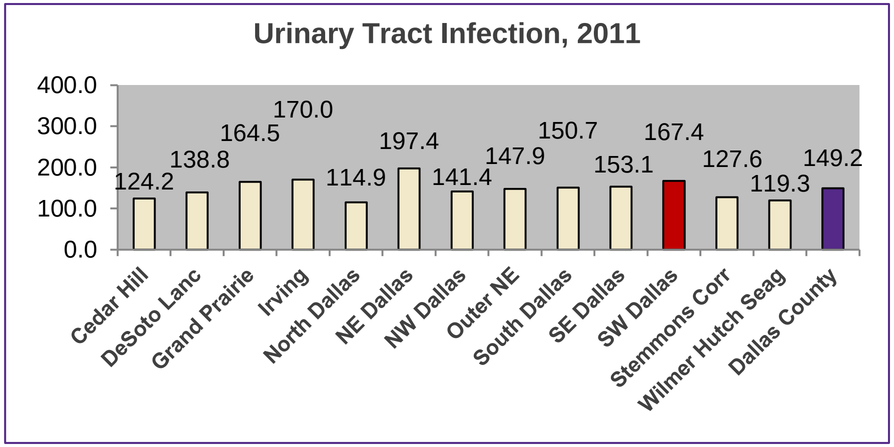
Healthcare Quality: Rate of Preventable Hospitalizations, 2011

Acute/Infectious Disease Hospitalizations

Southwest Dallas Service Area


Bacterial Pneumonia, 2011


Dehydration, 2011

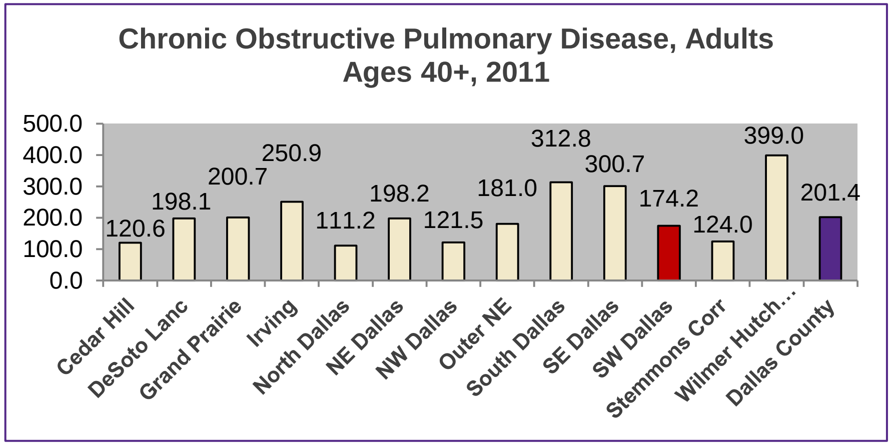

Urinary Tract Infection, 2011

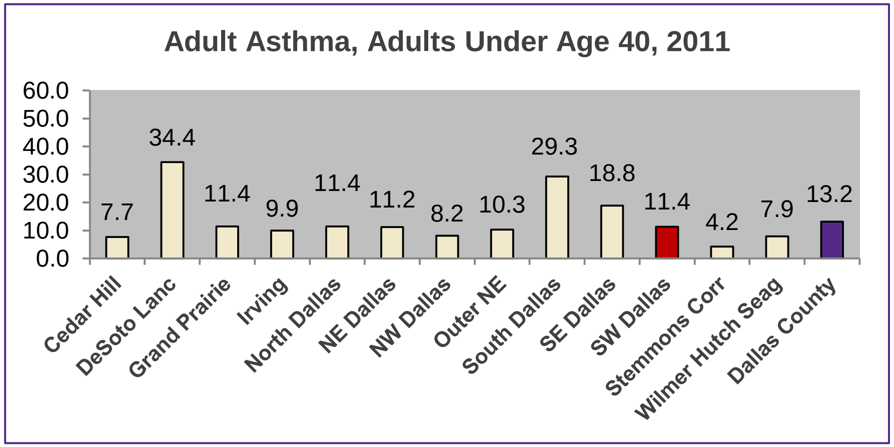
Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey

Healthcare Quality: Rate of Preventable Hospitalizations, 2011

Chronic Pulmonary Disease Hospitalizations

Southwest Dallas Service Area





Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey

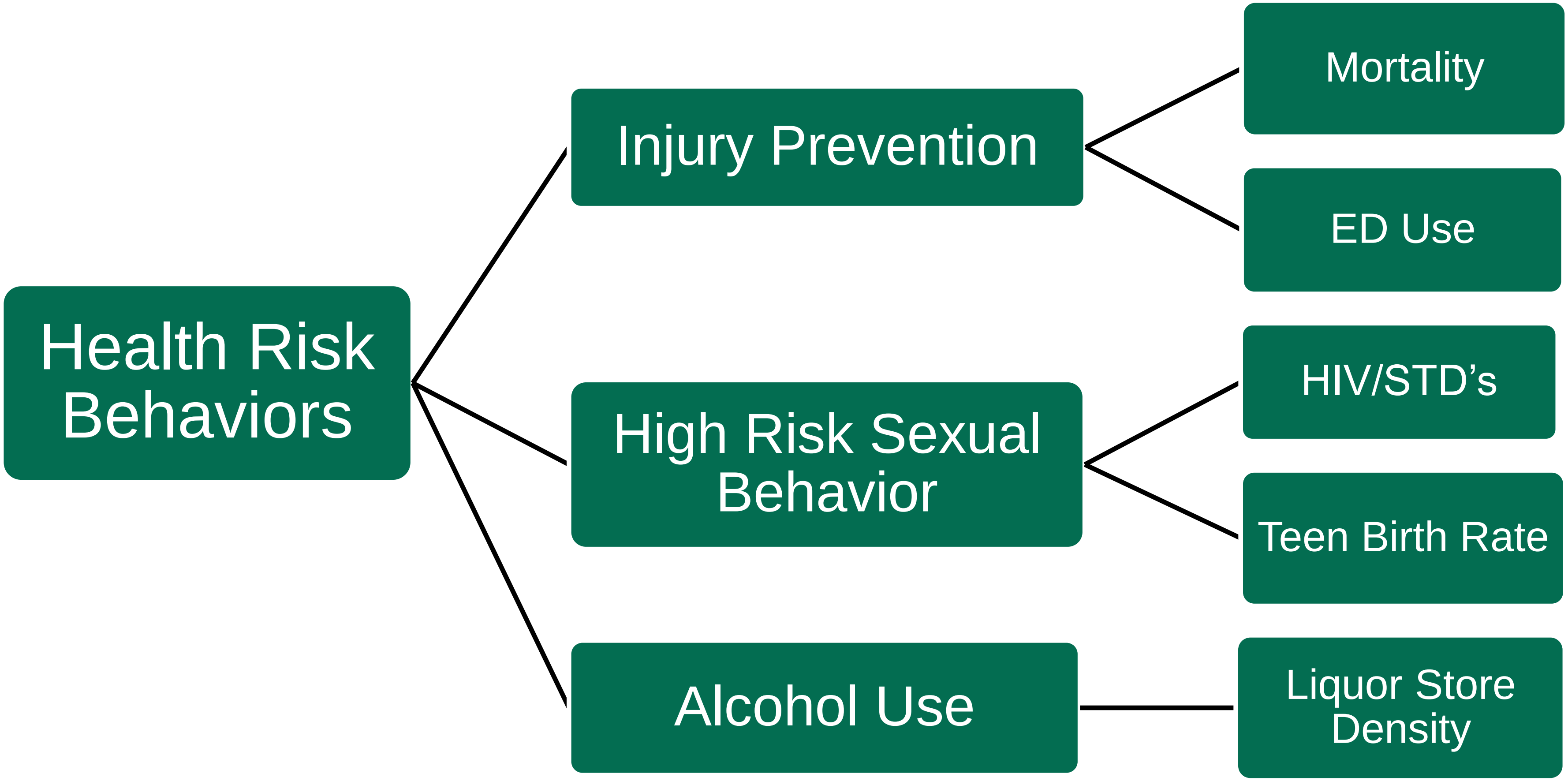
Healthcare Quality

🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

Quality of Clinical Care – **Prevention Quality Indicators**

	Southwest Dallas Compared to 12 Other Service Areas (Quartiles)	Southwest Dallas Compared to Past Years' Data (Percent Change vs. 2010)
Diabetes ST Comp	🟡	🟢
Diabetes LT Comp	🔴	🟢
Uncontrolled Diabetes	🔴	🔴
Lower Extremity Amputations Among Diabetics	🔴	🟢
Congestive Heart Failure	🟡	🟢
Hypertension	🟡	🟢
Angina Without Cardiac Procedure	🟢	🟢
Bacterial Pneumonia	🟢	🟢
Dehydration	🔴	🟢
Urinary Tract Infection	🔴	🟢
Chronic Obstructive Pulmonary Disease	🟢	🟢
Adult Asthma	🟡	🟢

Health Risk Behaviors



Health Risk Behaviors

Injury Prevention

Mortality

ED Use

High Risk Sexual Behavior

HIV/STD’s

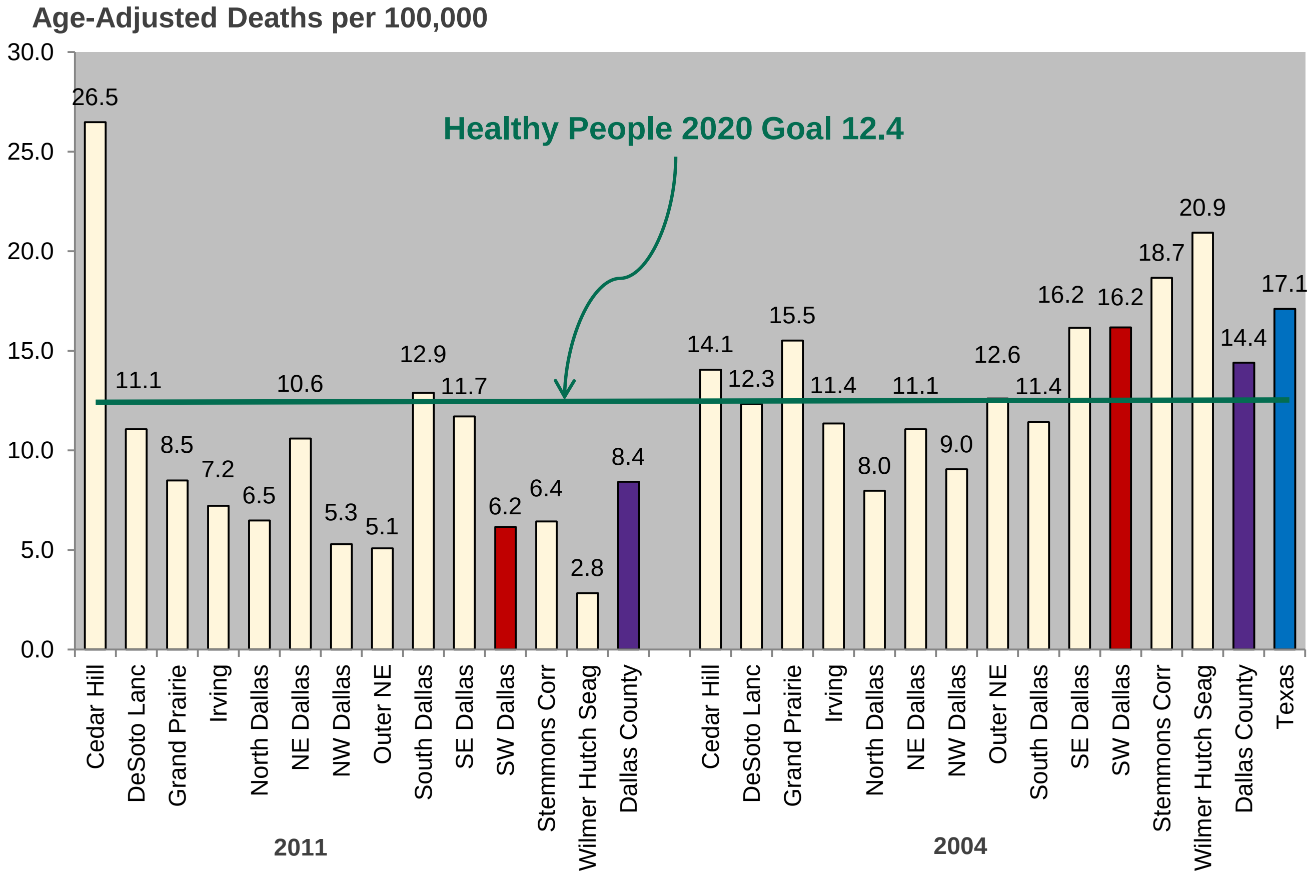
Teen Birth Rate

Alcohol Use

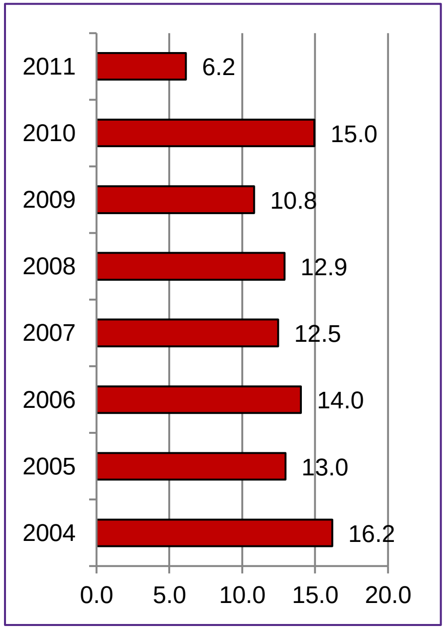
Liquor Store Density

Risk Factors: Auto Accident Mortality Rates

Southwest Dallas Service Area



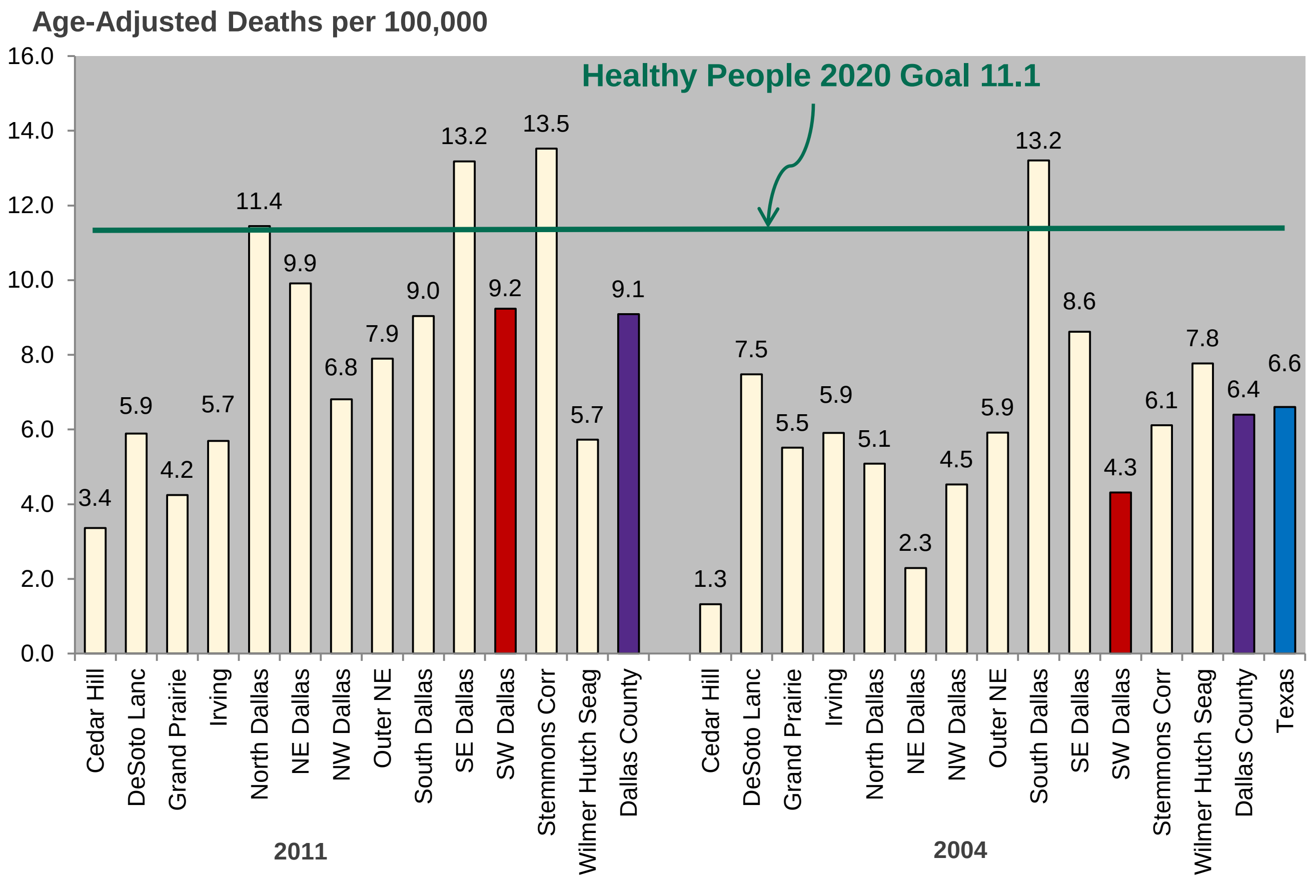
Auto Accident Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



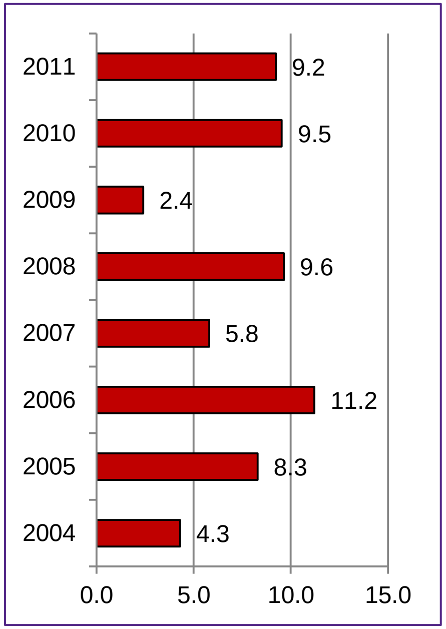
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Accidental Poisoning Mortality Rates

Southwest Dallas Service Area



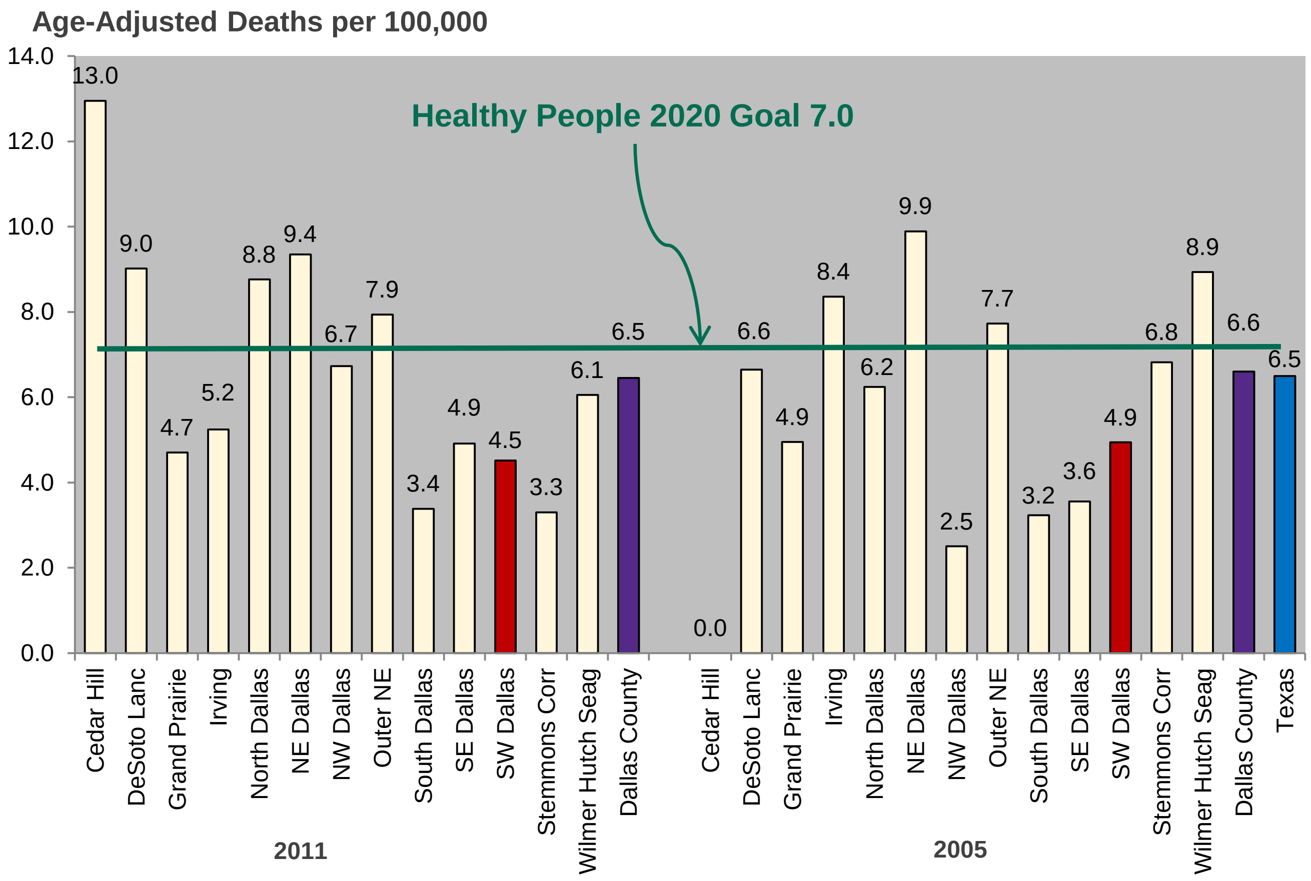
Accidental Poisoning Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



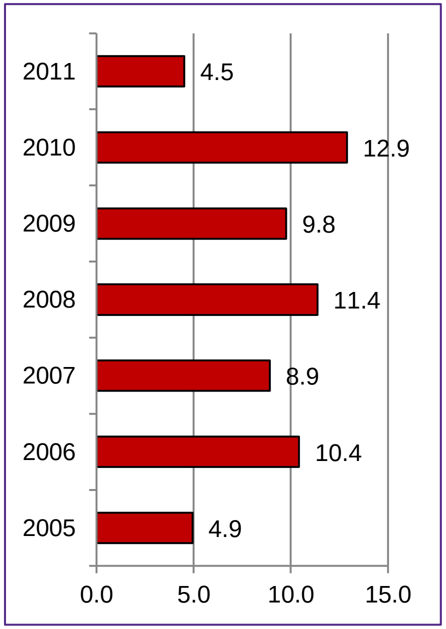
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Accidental Falls Mortality Rates

Southwest Dallas Service Area



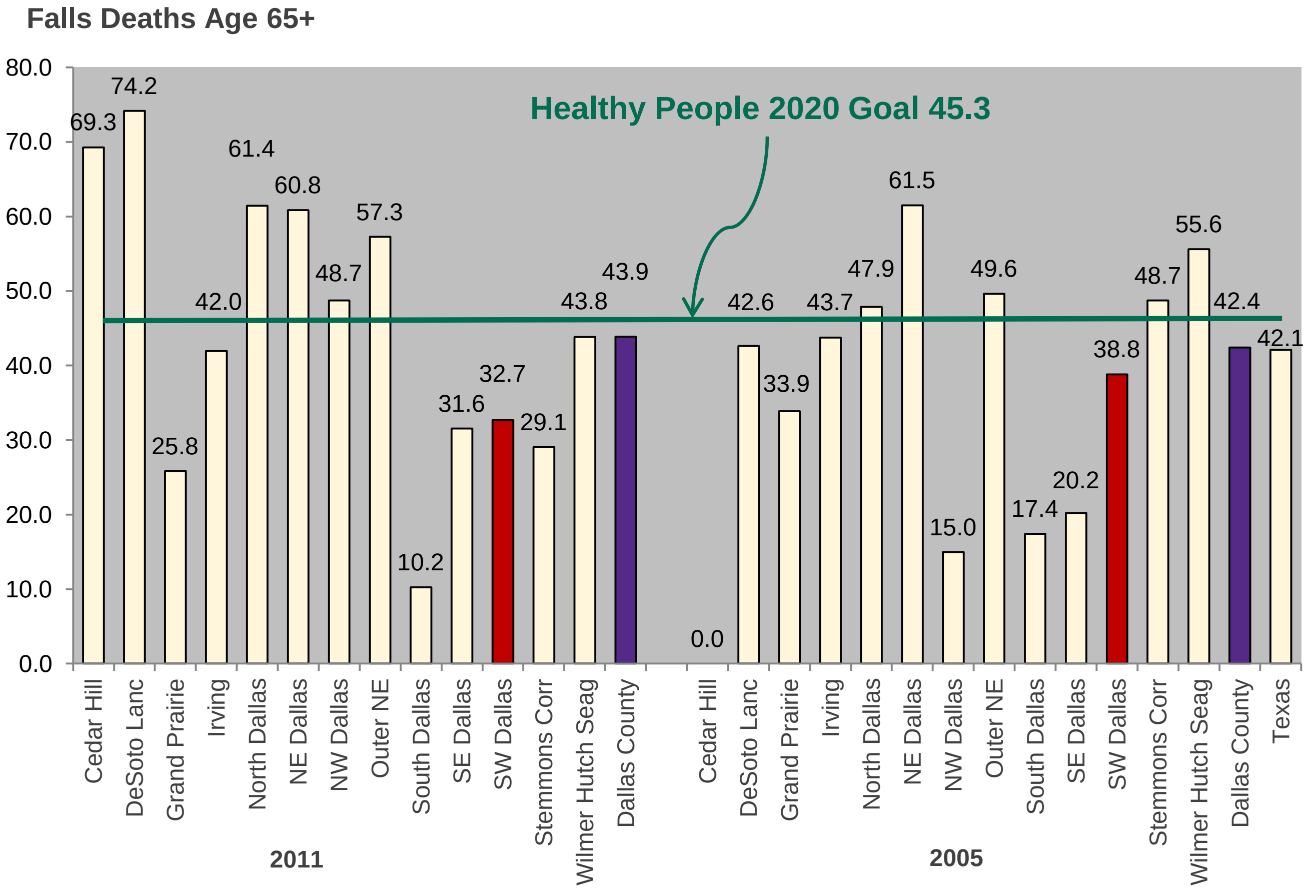
Accidental Falls Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area

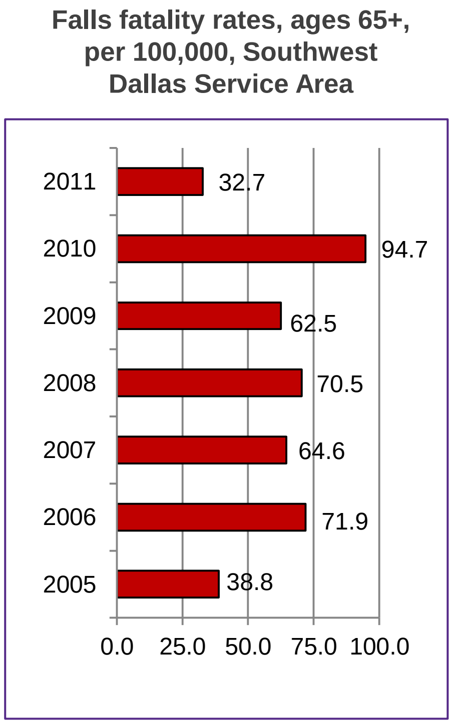


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Falls Death Rates Among Seniors

Southwest Dallas Service Area

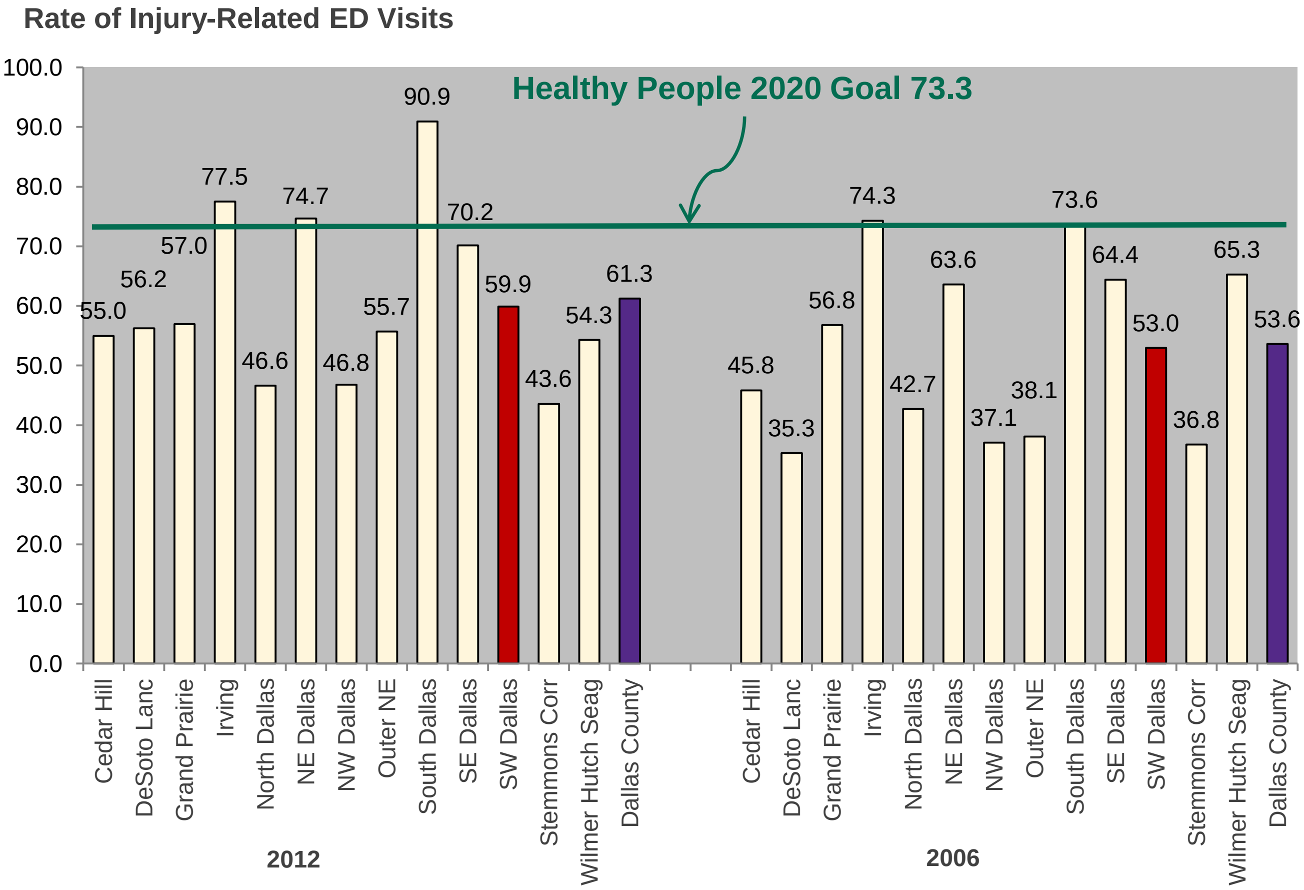




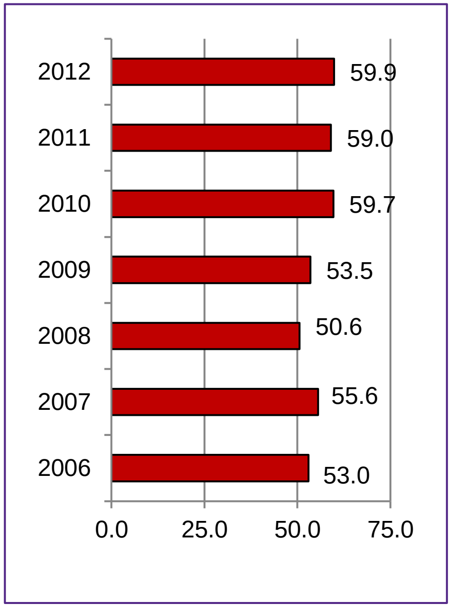
Source: Texas Department of State Health Services, Bureau of Vital Statistics, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death File 2005-2006. CDC WONDER On-line Database, compiled from Multiple Cause of Death File 2005-2006 Series 20 No. 2L, 2009. Accessed at http://wonder.cdc.gov/mcd-icd10.html on Mar 25, 2010 2:52:15 PM; 2005 Texas data from http://soupfin.tdh.state.tx.us/

Risk Factors: Rate of Injury-Related ED Visits

Southwest Dallas Service Area



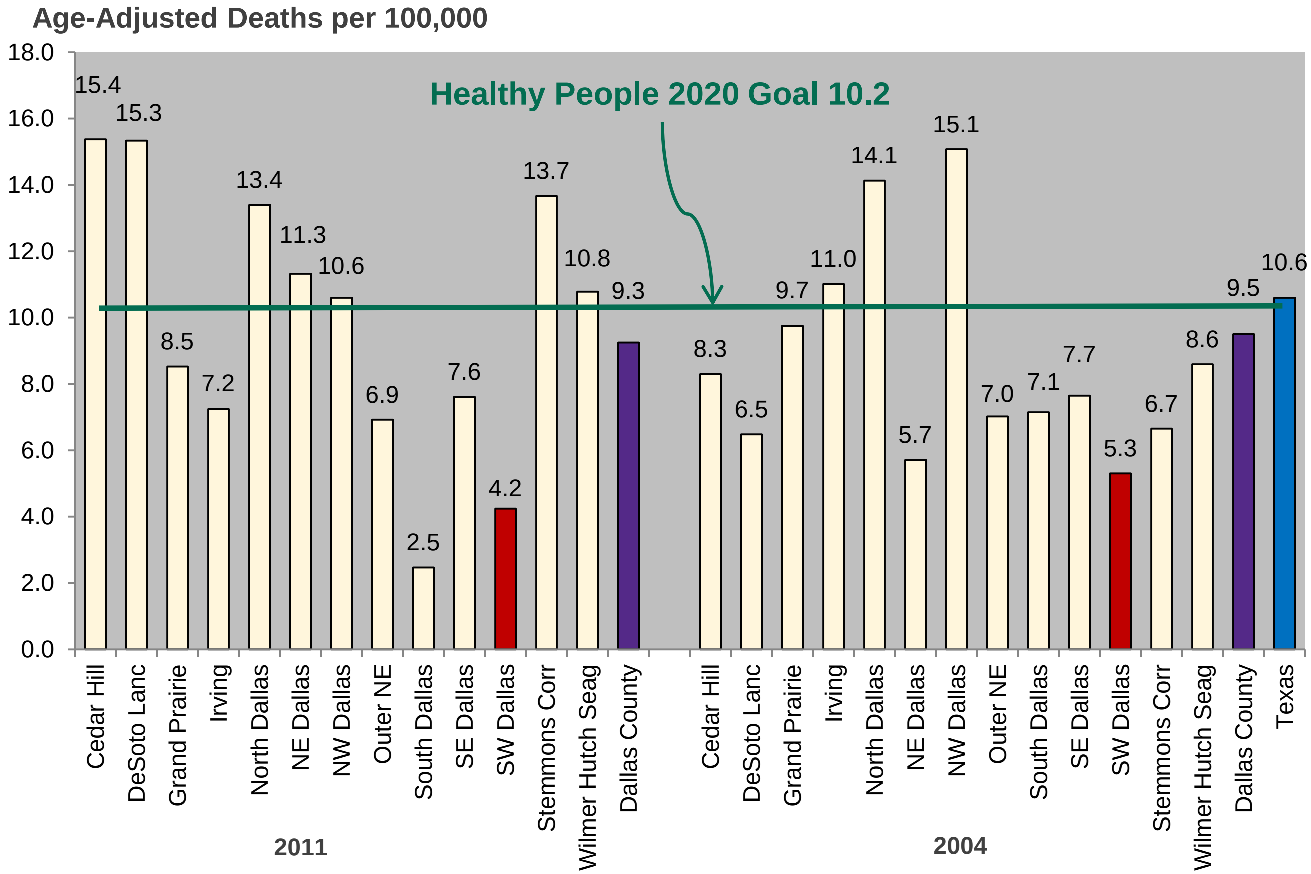
Rate of Injury-Related ED Visits, per 1,000, Southwest Dallas Service Area



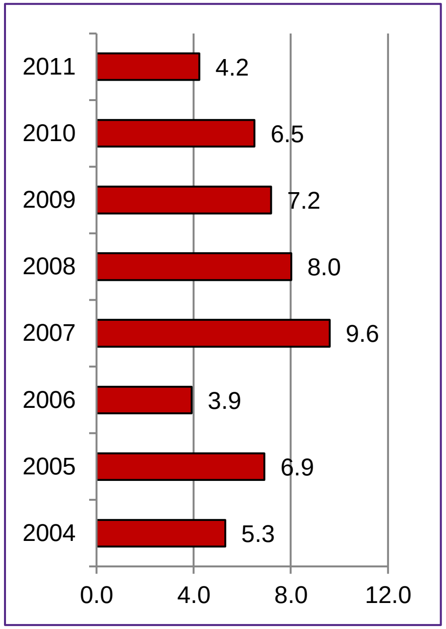
Source: Dallas Fort Worth Hospital Council, COGNOS application, unpublished data; denominator population data from Claritas, Inc.

Risk Factors: Suicide Mortality Rates

Southwest Dallas Service Area



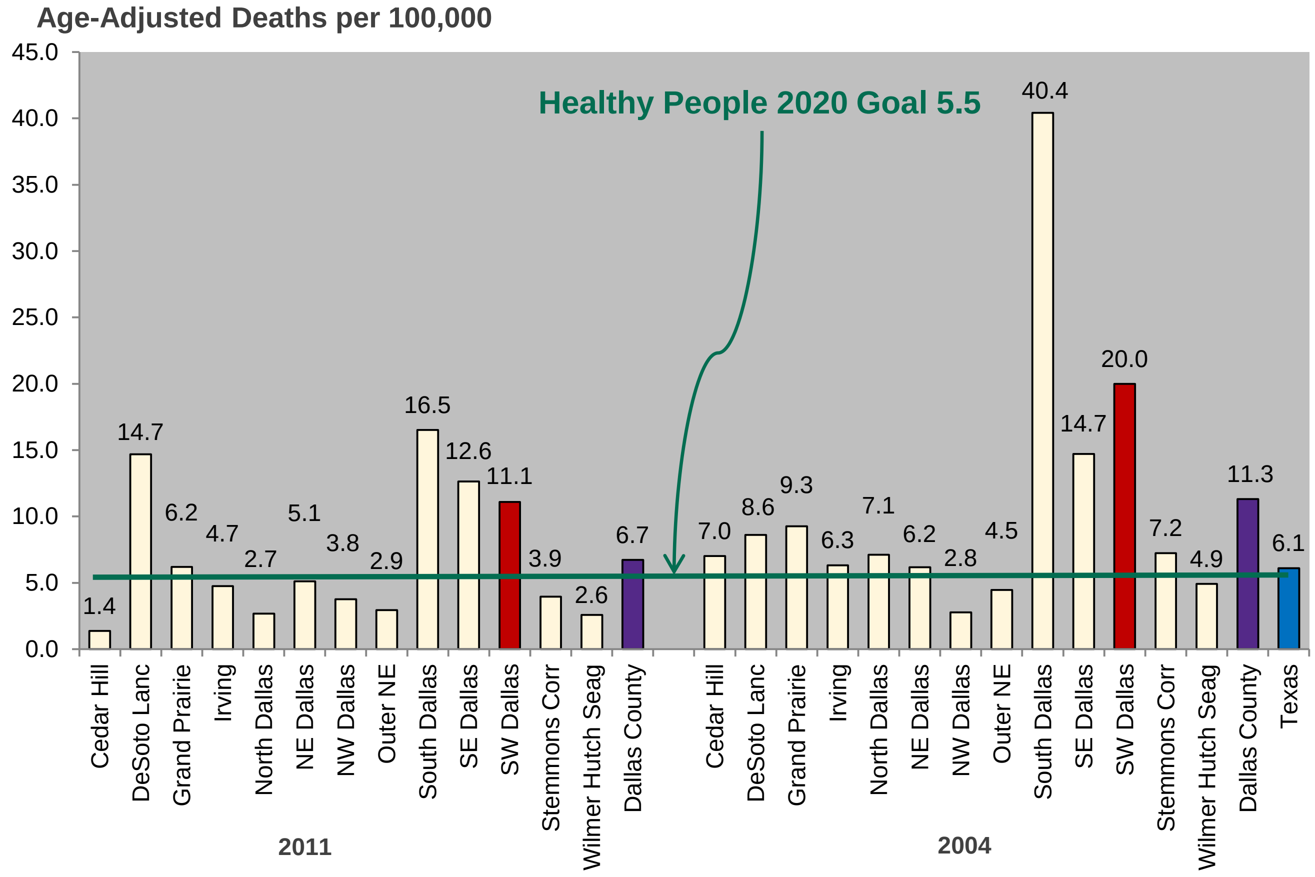
Suicide Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



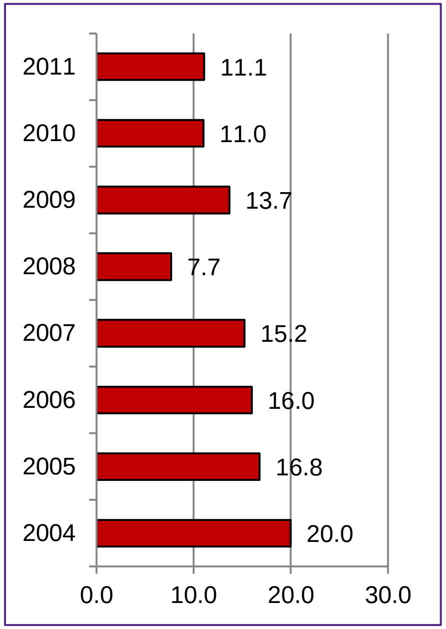
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Homicide Mortality Rates

Southwest Dallas Service Area



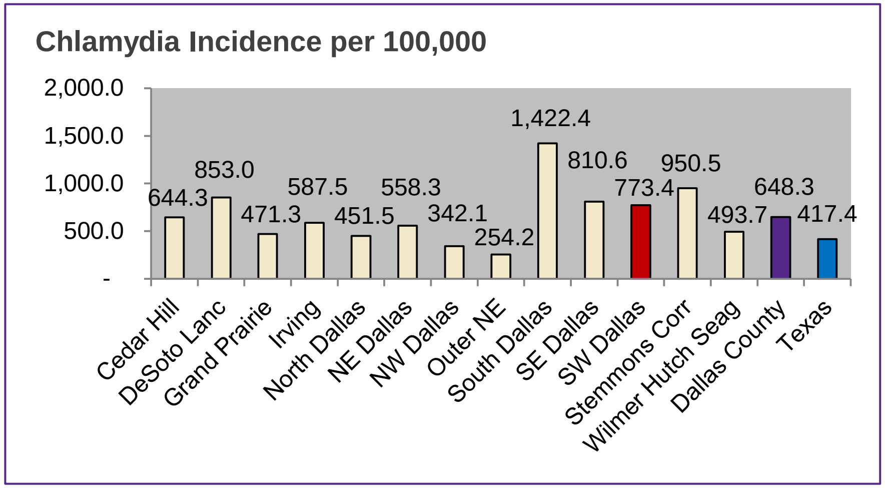
Homicide Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area

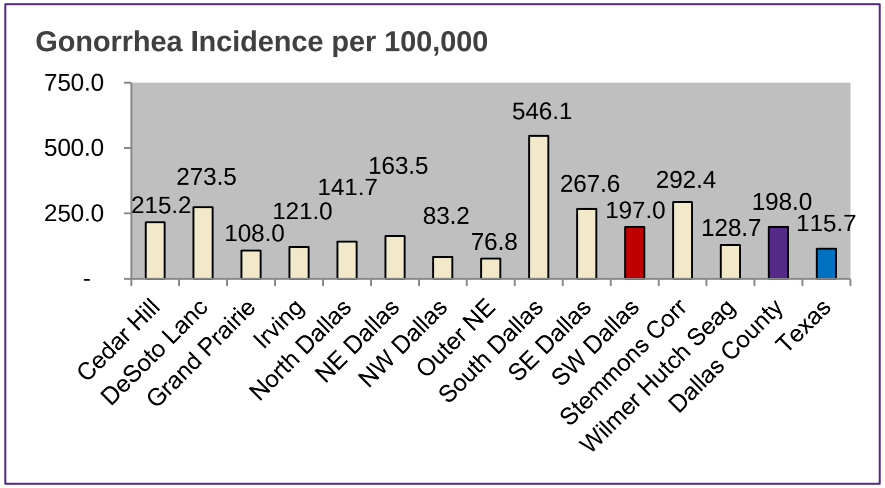


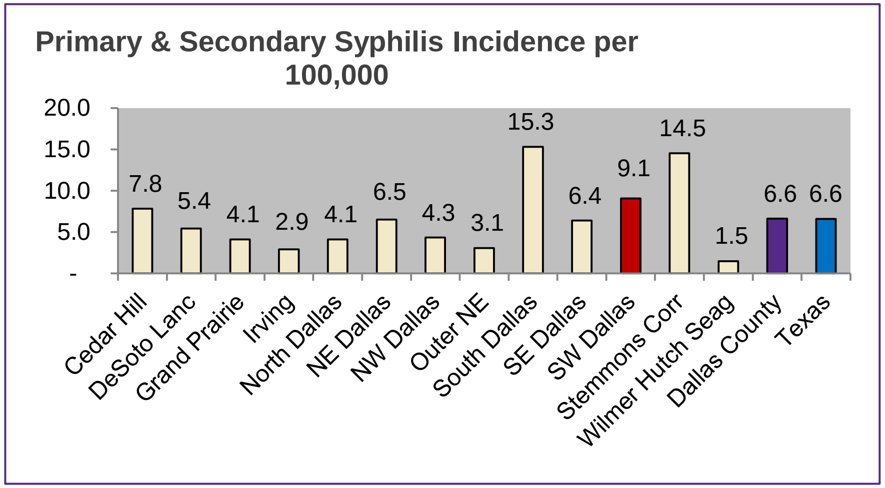
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

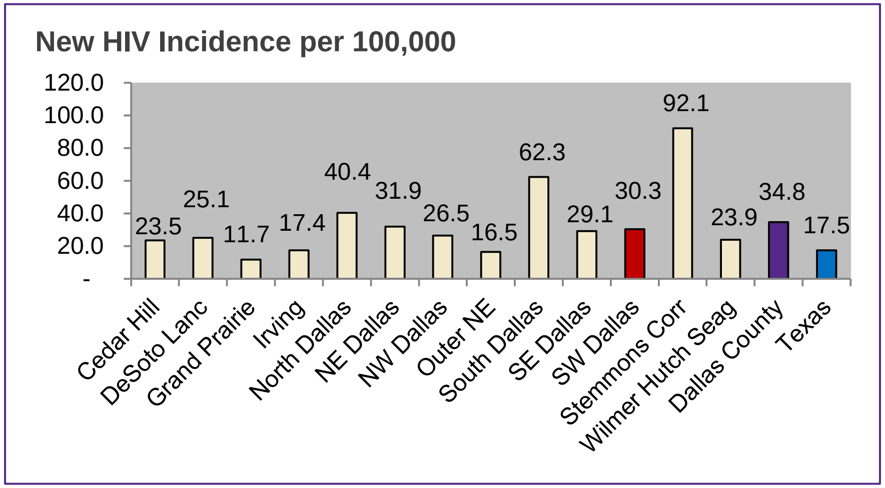
Risk Factors: High Risk Sexual Behavior, Sexually Transmitted Disease Incidence Rates, 2011

Southwest Dallas Service Area


Chlamydia Incidence per 100,000


Gonorrhea Incidence per 100,000

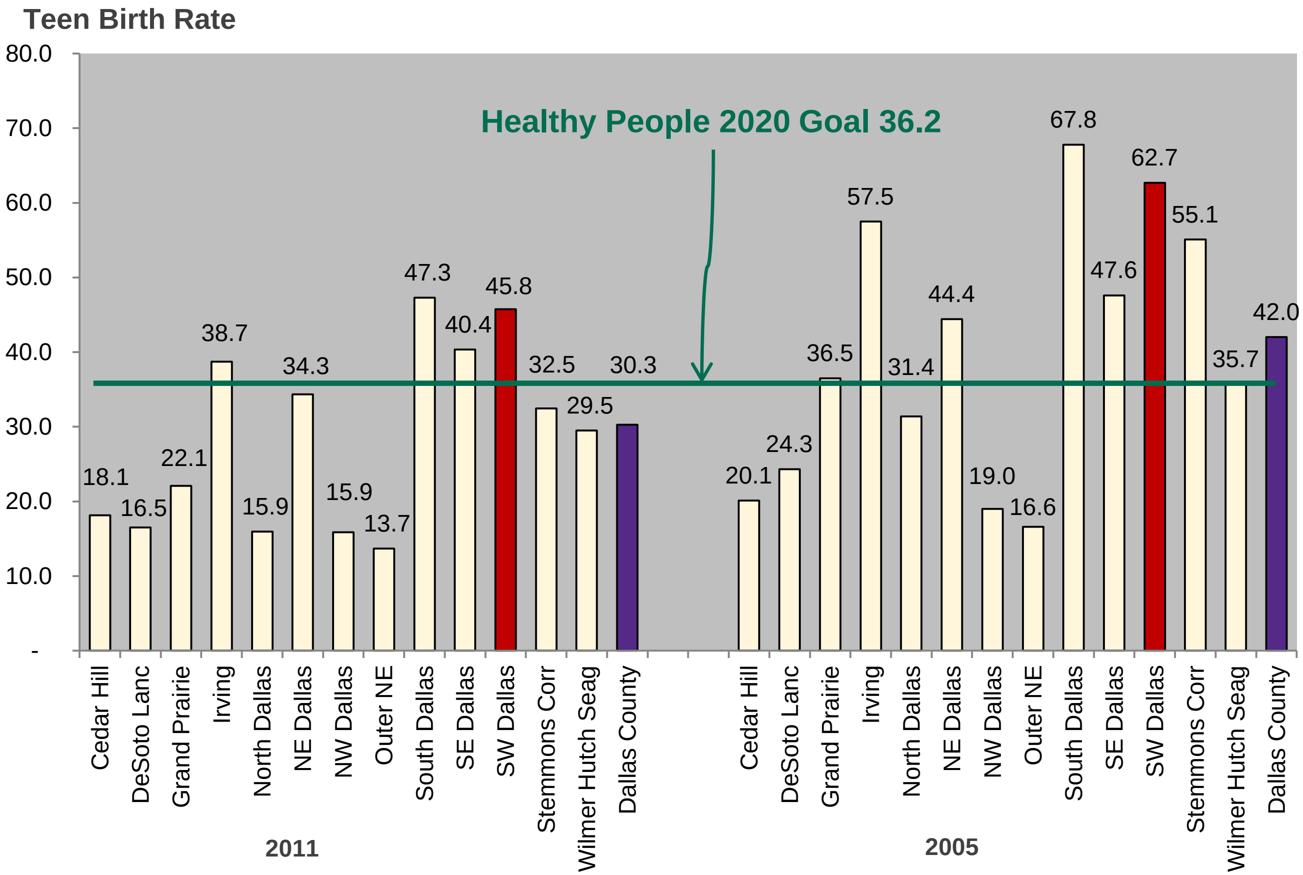

Primary & Secondary Syphilis Incidence per 100,000

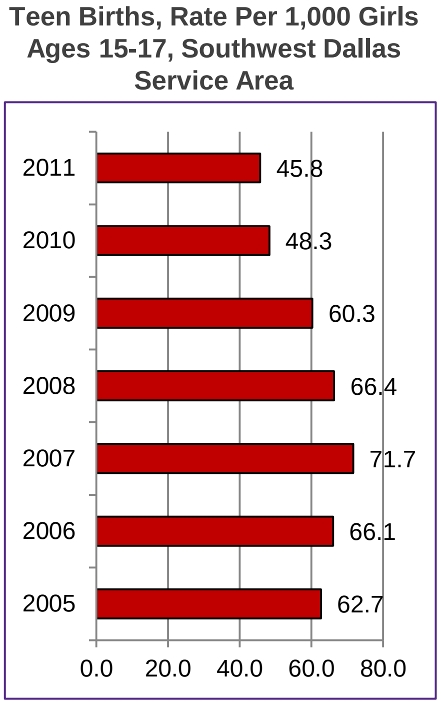

New HIV Incidence per 100,000

Source: Texas Department of State Health Services, Bureau of STD/HIV, unpublished data; Denominator population data from Claritas, Inc.; Dallas County and Texas Rates are from http://www.dshs.state.tx.us/hivstd/reports/STD2011.pdf and http://www.dshs.state.tx.us/hivstd/reports/HIV2011.pdf

Risk Factors: High Risk Sexual Behavior, Teen Birth Rates

Southwest Dallas Service Area

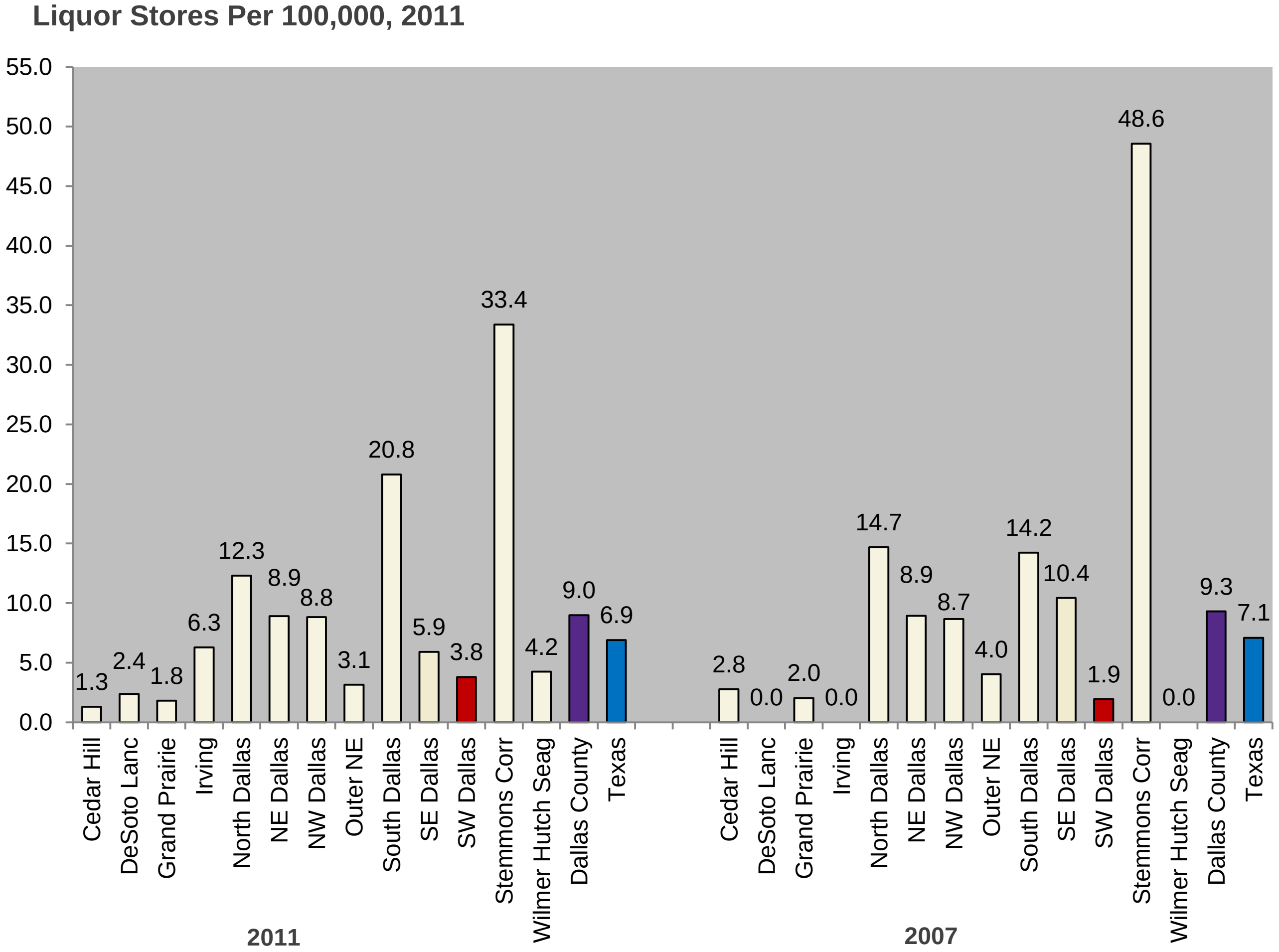


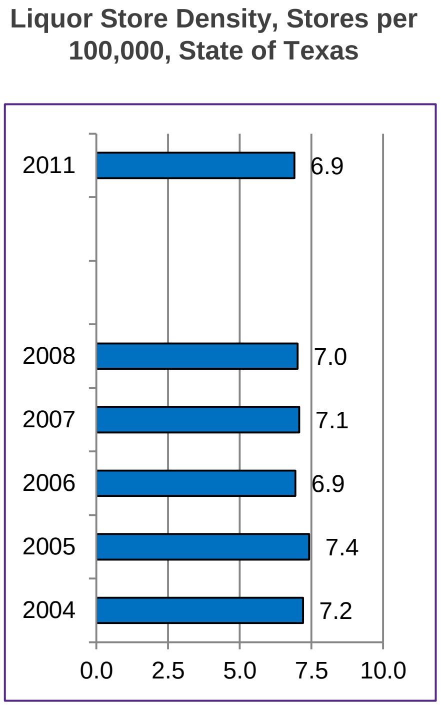


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Liquor Store Density, 2011

Southwest Dallas Service Area





Source: US Census Bureau, 2011 County Business Patterns; denominator population data from US Census Bureau; 2007 from US Census Bureau, 2007 Economic Census; denominator population data from Claritas, Inc.; Dallas County and State of Texas data from US Census Bureau, NIACS annual business estimates

Health Risk Behaviors

🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

Health Risk Behaviors — **Injury Prevention**

	Southwest Dallas Compared to Healthy People 2020 Goal	Southwest Dallas Compared to Benchmark Counties* (Quartiles)	Southwest Dallas Compared to Past Years' Data (CI)
Motor Vehicle Crash Death Rate	🟢	🟢	🟢
Accidental Poisoning Death Rate	🔴	🟢	🟡
Accidental Falls Death Rate	🟢	🟢	🟢
Senior Falls Death Rate	🔴	🟢	🟢
Suicide Death Rate	🟢	🟢	🟡
Homicide Death Rate	🔴	🟡	🟡
Emergency Department Injury Visits	🟢	🟡	🔴

*Benchmark Counties are: Maricopa, Los Angeles, Cook, Miami-Dade, Bexar, Harris and Tarrant

Health Risk Behaviors

🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

*Benchmark Counties are: Maricopa, Los Angeles, Cook, Miami-Dade, Bexar, Harris and Tarrant

Health Risk Behaviors

		Southwest Dallas Compared to Healthy People 2020 Goal	Southwest Dallas Compared to Benchmark Counties* (Quartiles)	Southwest Dallas Compared to Past Years' Data (CI)
High Risk Sexual Behavior	Teen Birth Rate	🔴	🔴	🟢
	Chlamydia Incidence Rate	N/A	🟡	🔴
	Gonorrhea Incidence Rate	N/A	🟡	🟢
	Syphilis Incidence Rate	N/A	🔴	🟡
	HIV Incidence Rate	N/A	🟡	🟡
Alcohol Use	Liquor Store Density	N/A	🟢	N/A

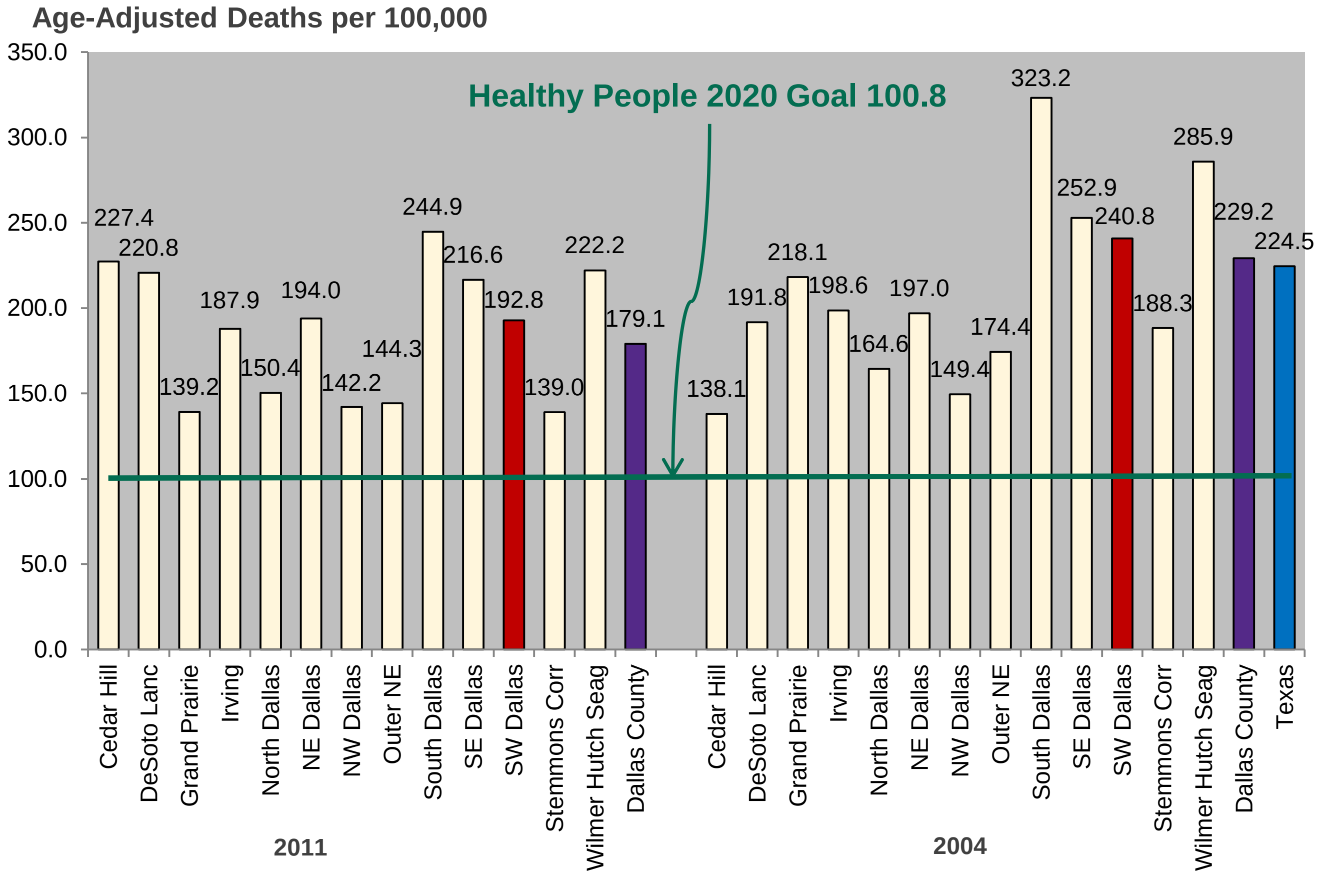
Parkland

Health Outcomes

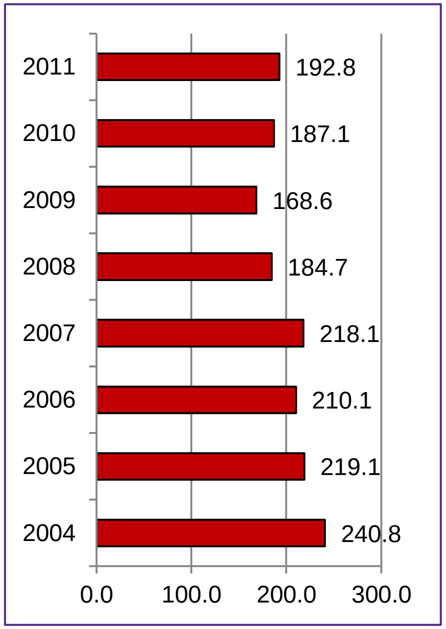
- Health Outcomes
  - Mortality
    - Heart Disease
    - Cancer
    - Cerebrovascular Disease
    - Chronic Obstructive Pulmonary Disease
    - Diabetes Mellitus
  - Infant Mortality
  - Low Birth Weight Births
  - Years of Potential Life Lost
  - Communicable Disease Morbidity
    - Aseptic Meningitis
    - Cryptosporidiosis
    - Pertussis
    - Salmonellosis

Health Outcomes: Heart Disease Mortality Rates

Southwest Dallas Service Area



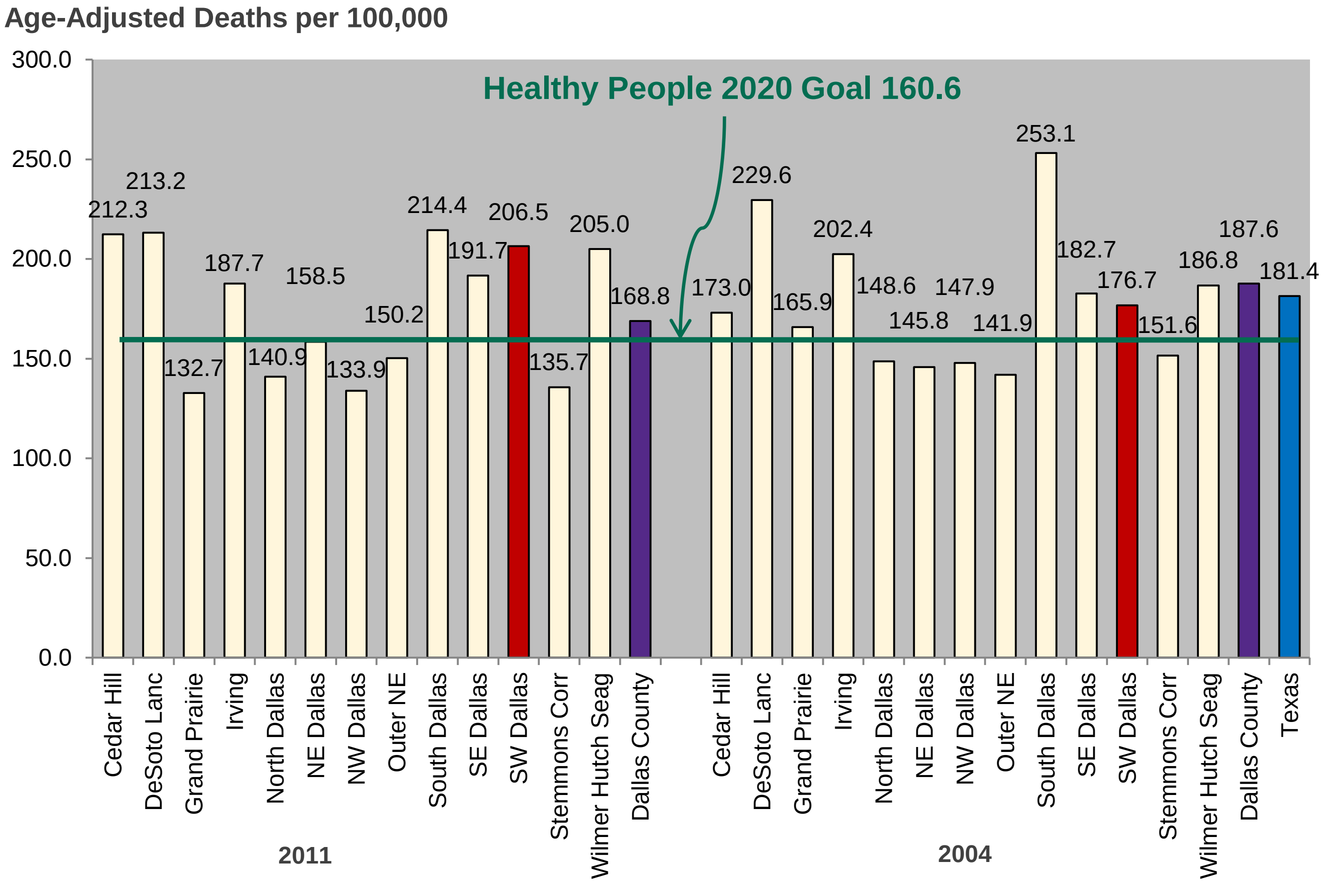
Heart Disease Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



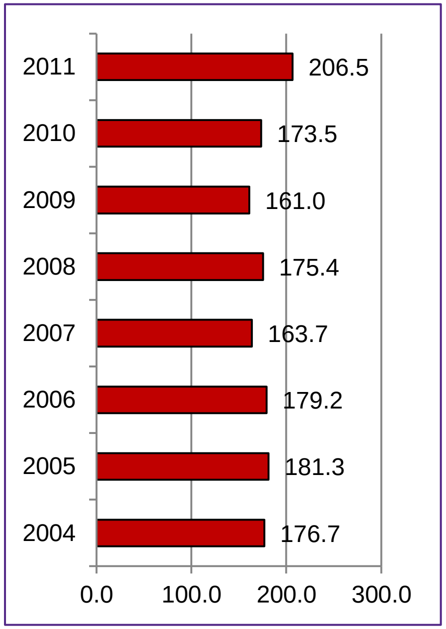
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Health Outcomes: Cancer Mortality Rates

Southwest Dallas Service Area



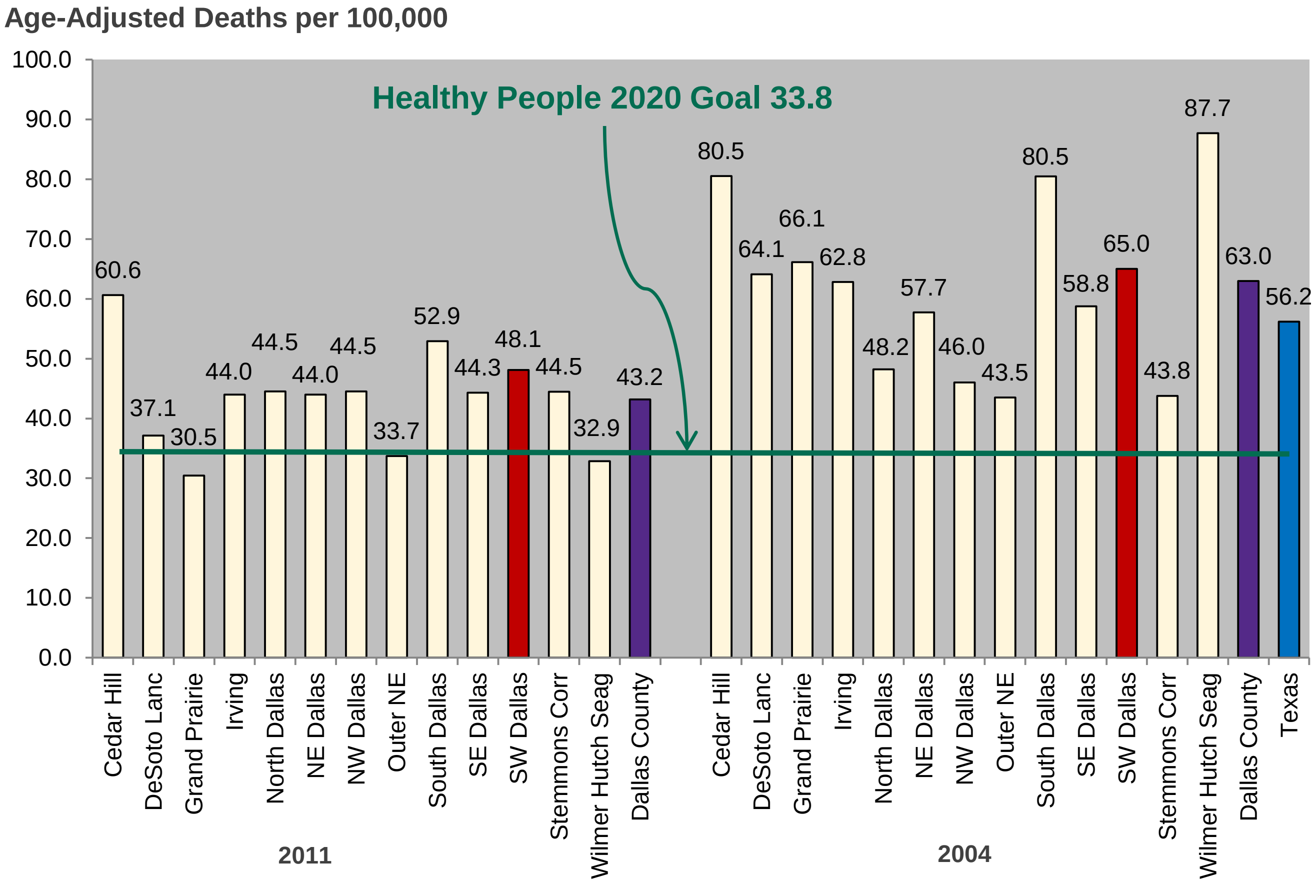
Cancer Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

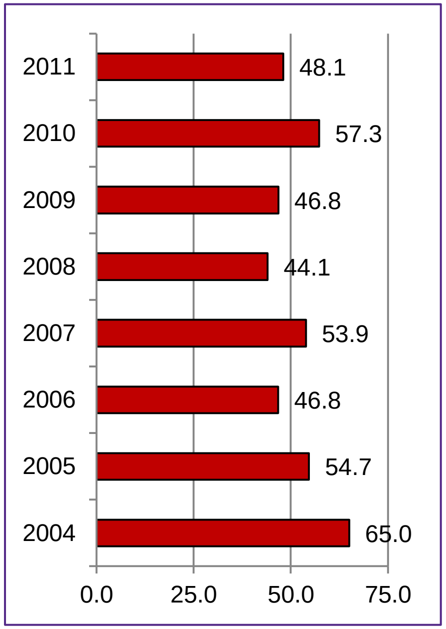
Health Outcomes: Cerebrovascular Disease Mortality Rates

Southwest Dallas Service Area



Healthy People 2020 Goal 33.8

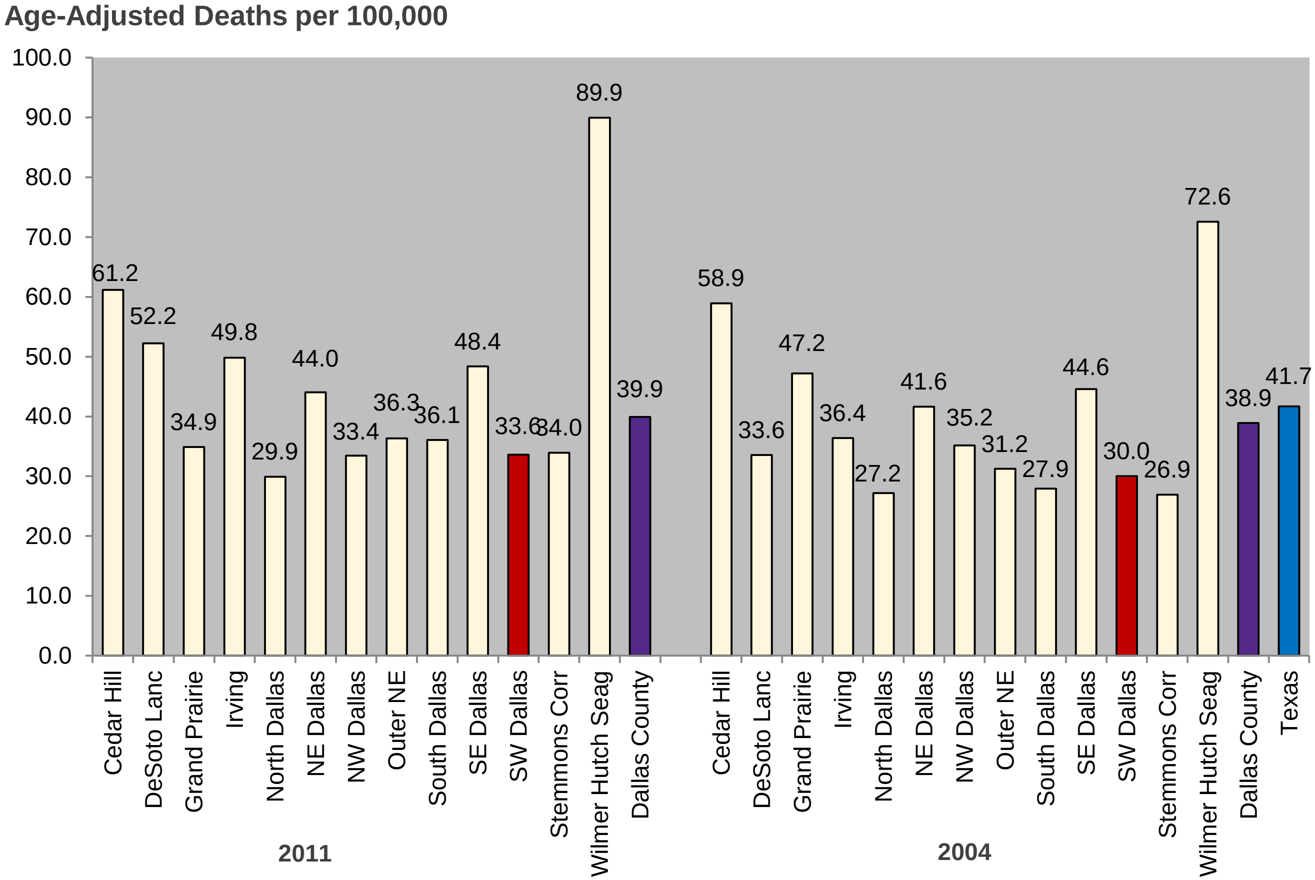
Cerebrovascular Disease Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area



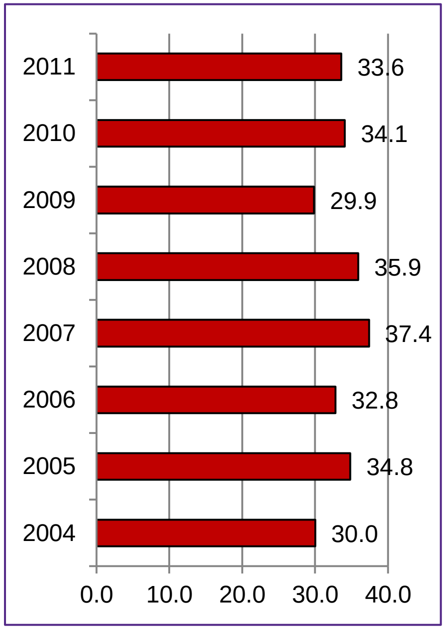
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Health Outcomes: Chronic Obstructive Pulmonary Disease Mortality Rates

Southwest Dallas Service Area



Chronic Obstructive Pulmonary Disease Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area

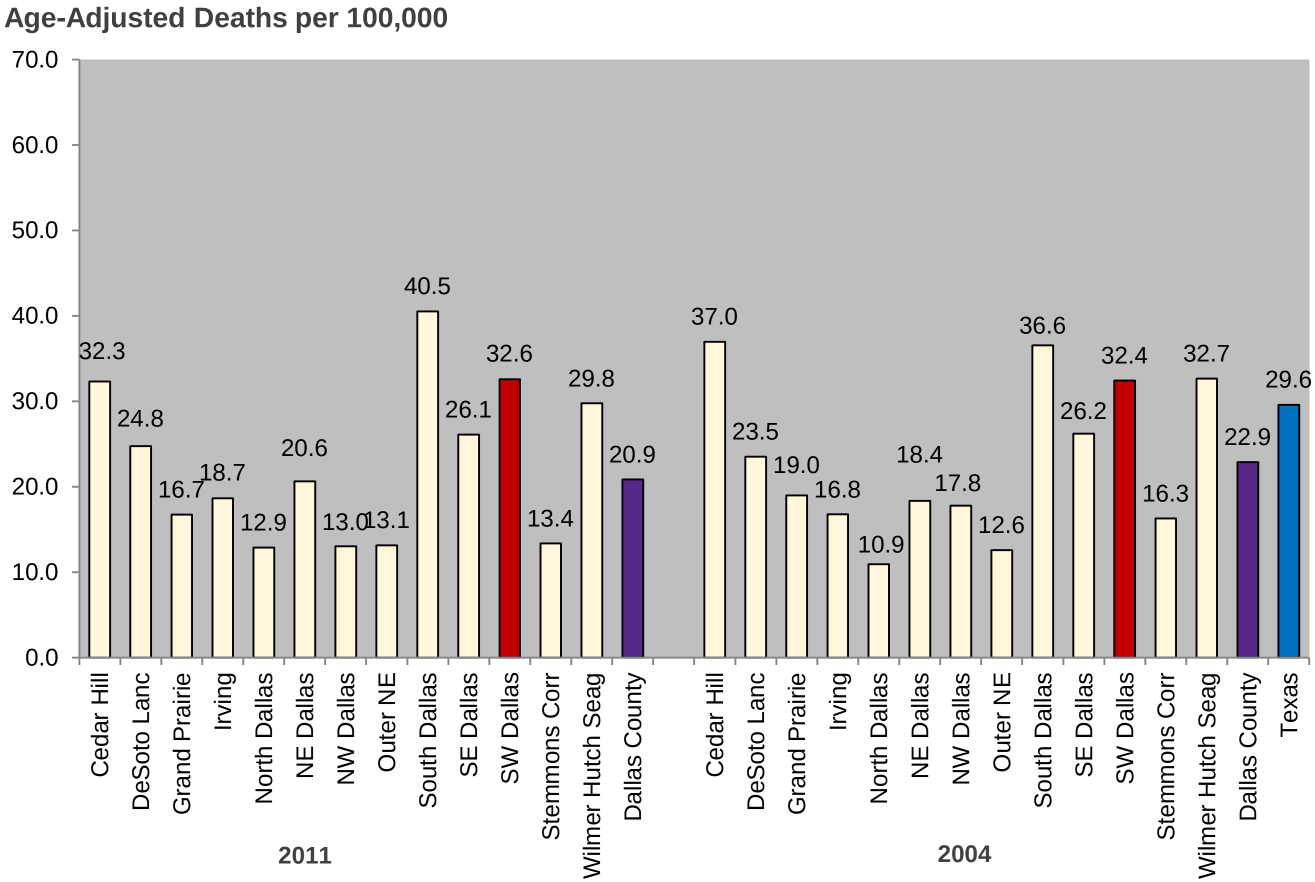


NOTE: No Healthy People 2020 goal matches this metric.

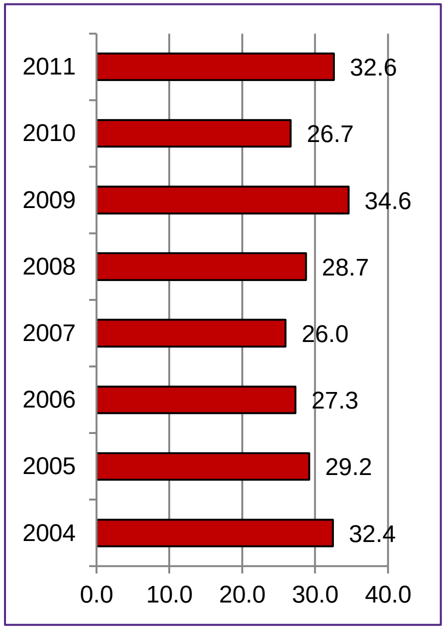
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Health Outcomes: Diabetes Mortality Rates

Southwest Dallas Service Area



Diabetes Mellitus Mortality Rate, Age-Adjusted Death Rate per 100,000, Southwest Dallas Service Area

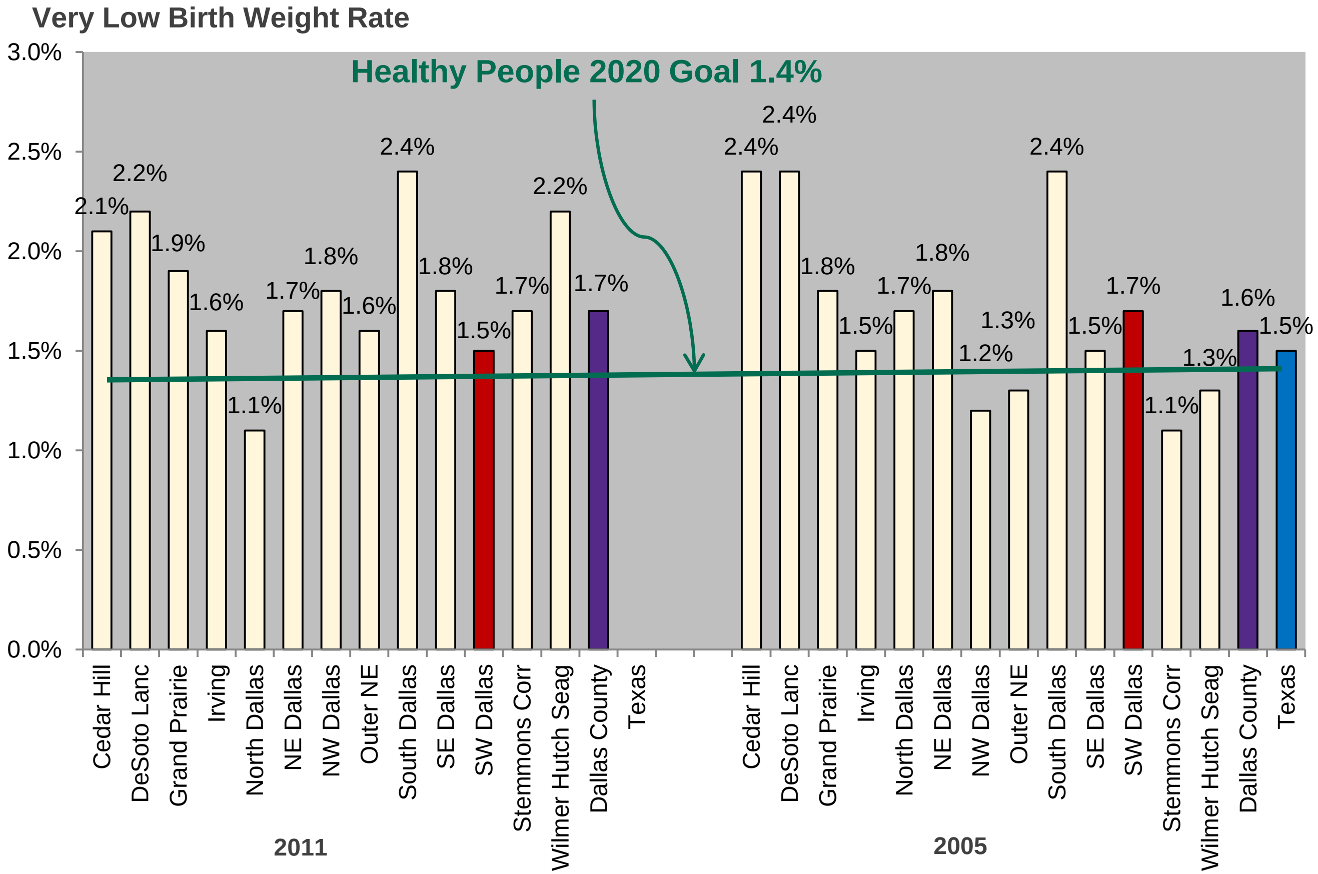


NOTE: No Healthy People 2020 goal matches this metric.

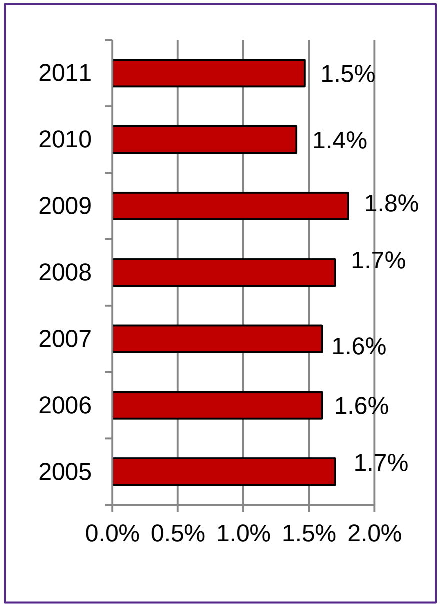
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Health Outcomes: Birth Outcomes, Rate of Very Low Birth Weight Births

Southwest Dallas Service Area



Very Low Birth Weight Rate, % of Births Below 1500 Grams at Birth, Southwest Dallas Service Area

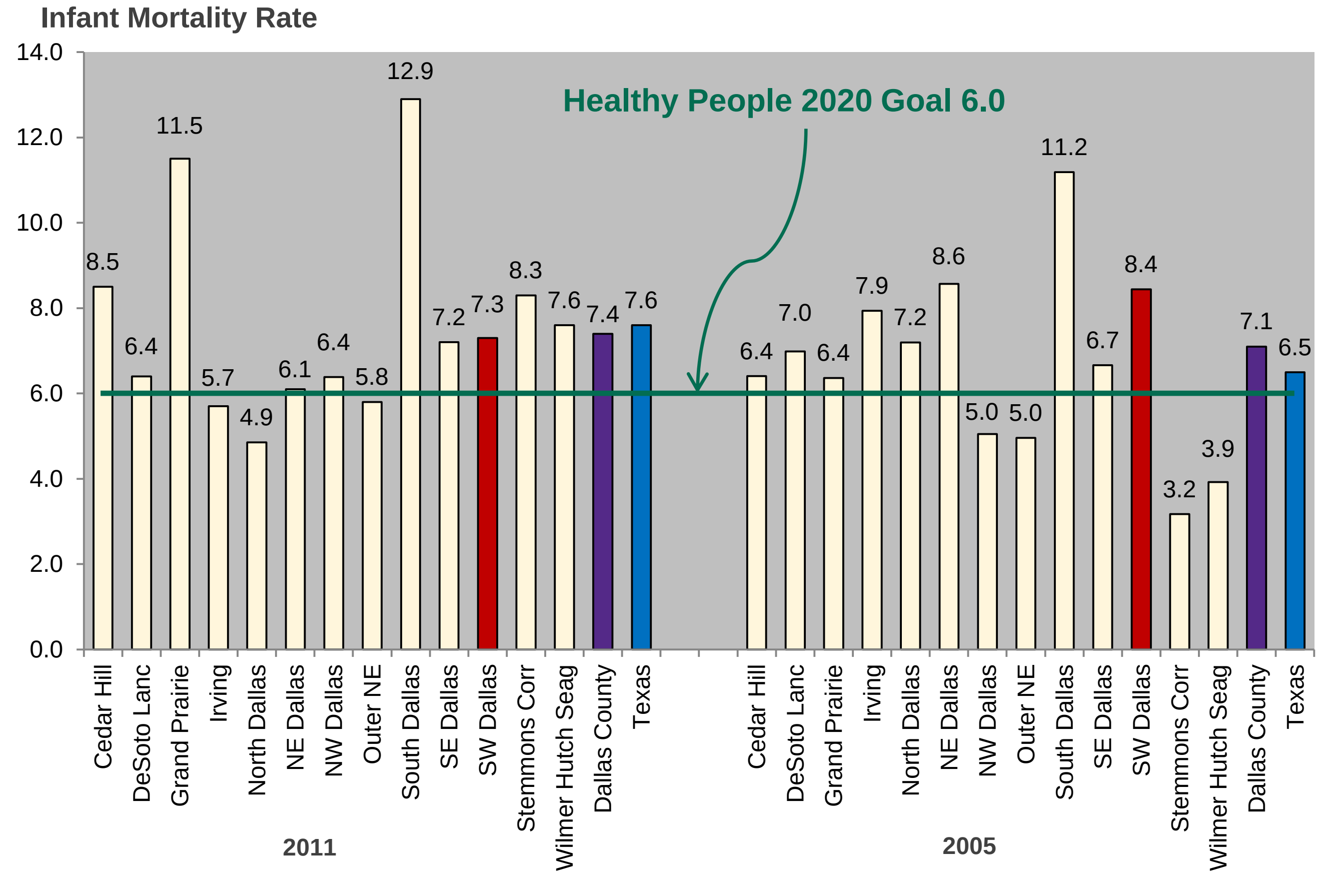


Source: Texas Department of State Health Services, Bureau of Vital Statistics

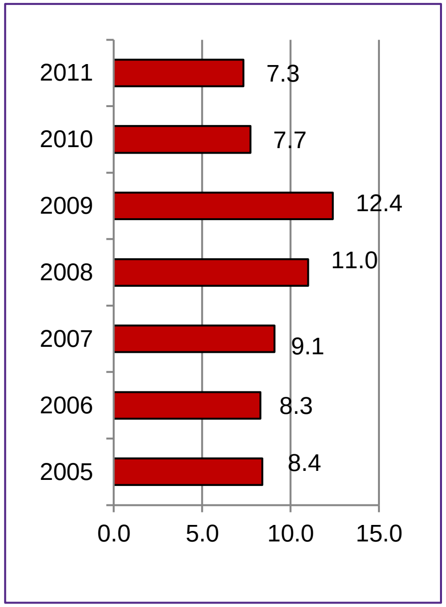
Parkland

Health Outcomes: Birth Outcomes, Infant Mortality Rate

Southwest Dallas Service Area



Infant Mortality Rate, Deaths per 1,000 Live Births, Southwest Dallas Service Area

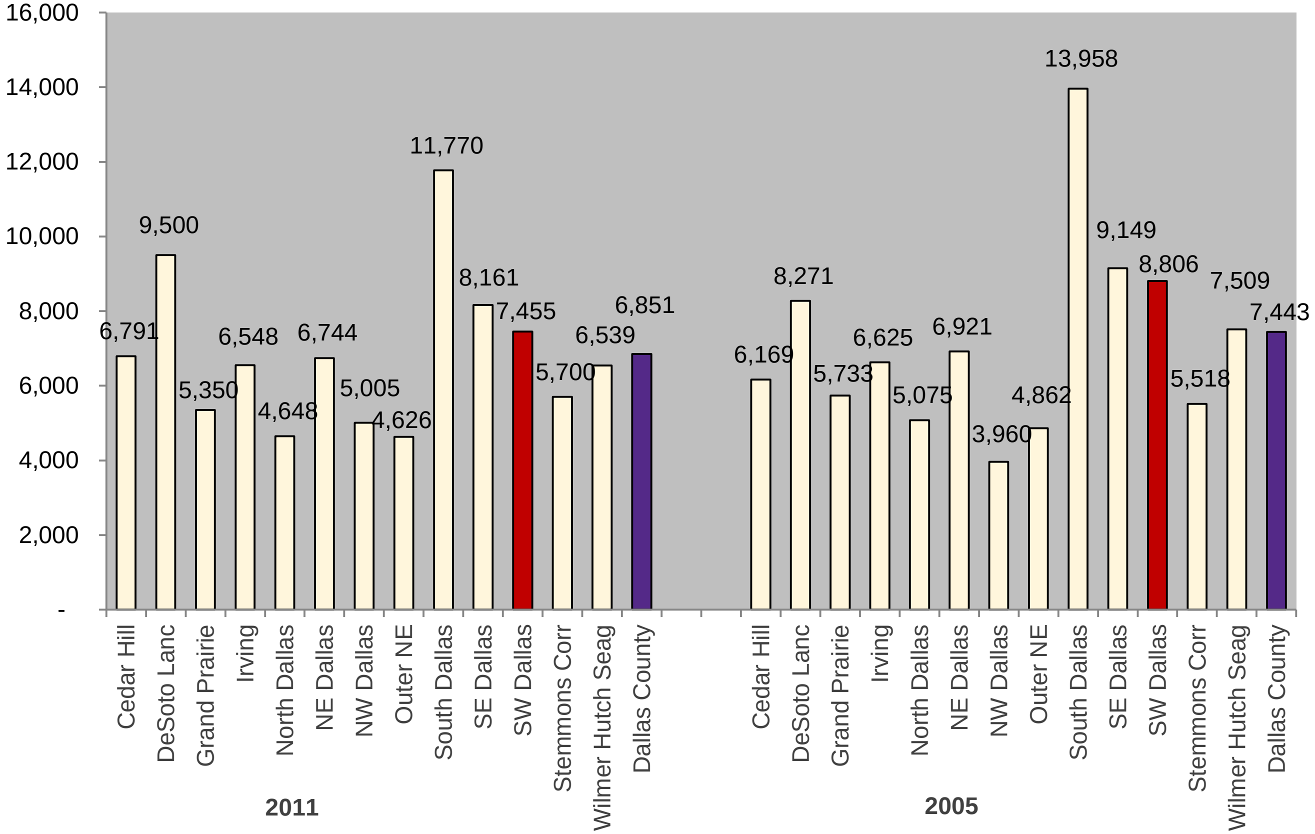


Source: Texas Department of State Health Services, Bureau of Vital Statistics

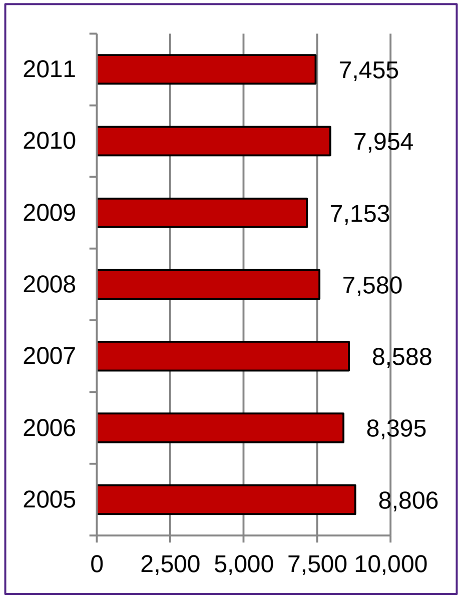
Health Outcomes: Years of Potential Life Lost, All Causes

Southwest Dallas Service Area

Years of Potential Life Lost Rate per 100,000*



Years of Potential Life Lost Rate*, per 100,000, Southwest Dallas Service Area

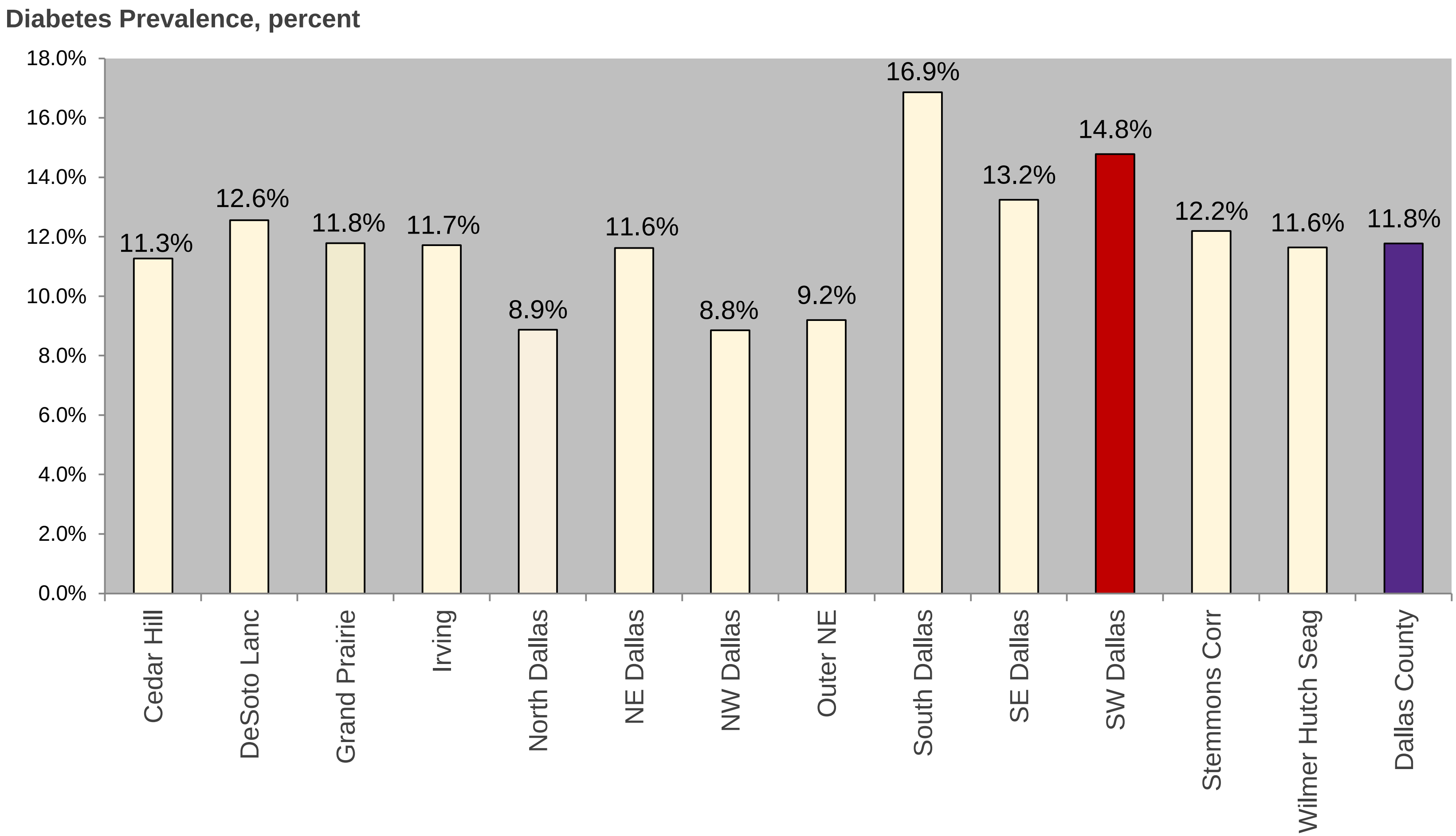


***Years of Potential Life Lost Rate is defined as the rate of deaths under age 75 per 100,000 population under age 75.**

Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Health Outcomes: Estimated Diabetes Prevalence Rates (Diagnosed and Undiagnosed)

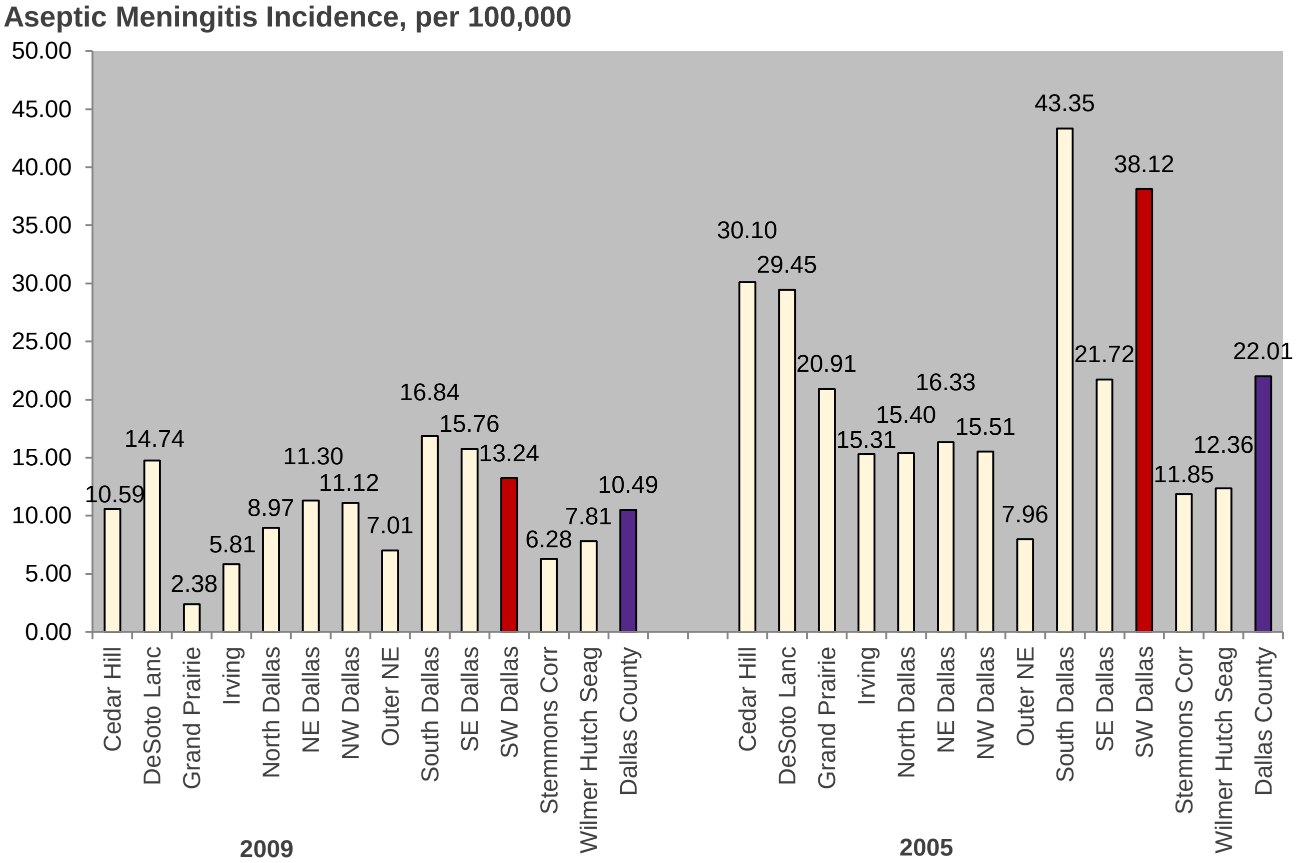
Southwest Dallas Service Area

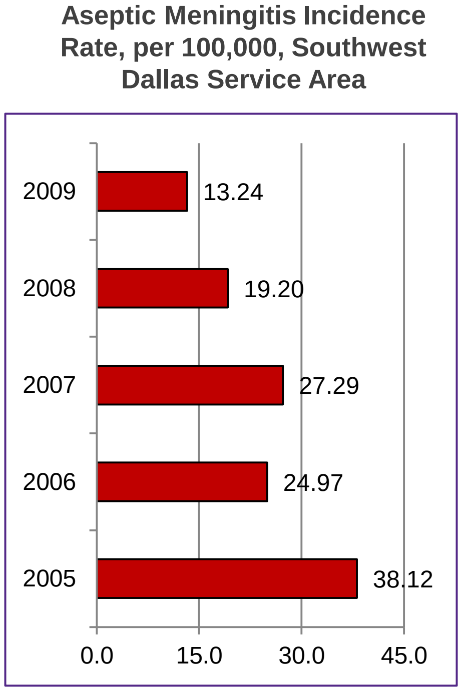


Source: US Diabetes Index, National Minority Quality Forum and Centers for Disease Control and Prevention, 2012; based on NHANES population prevalence estimates, 2010. Denominator population data 2010 from Nielson/Claritas, Inc. Pop Facts. Mid 2010 version

Health Outcomes: Reportable Communicable Disease Rates

Southwest Dallas Service Area

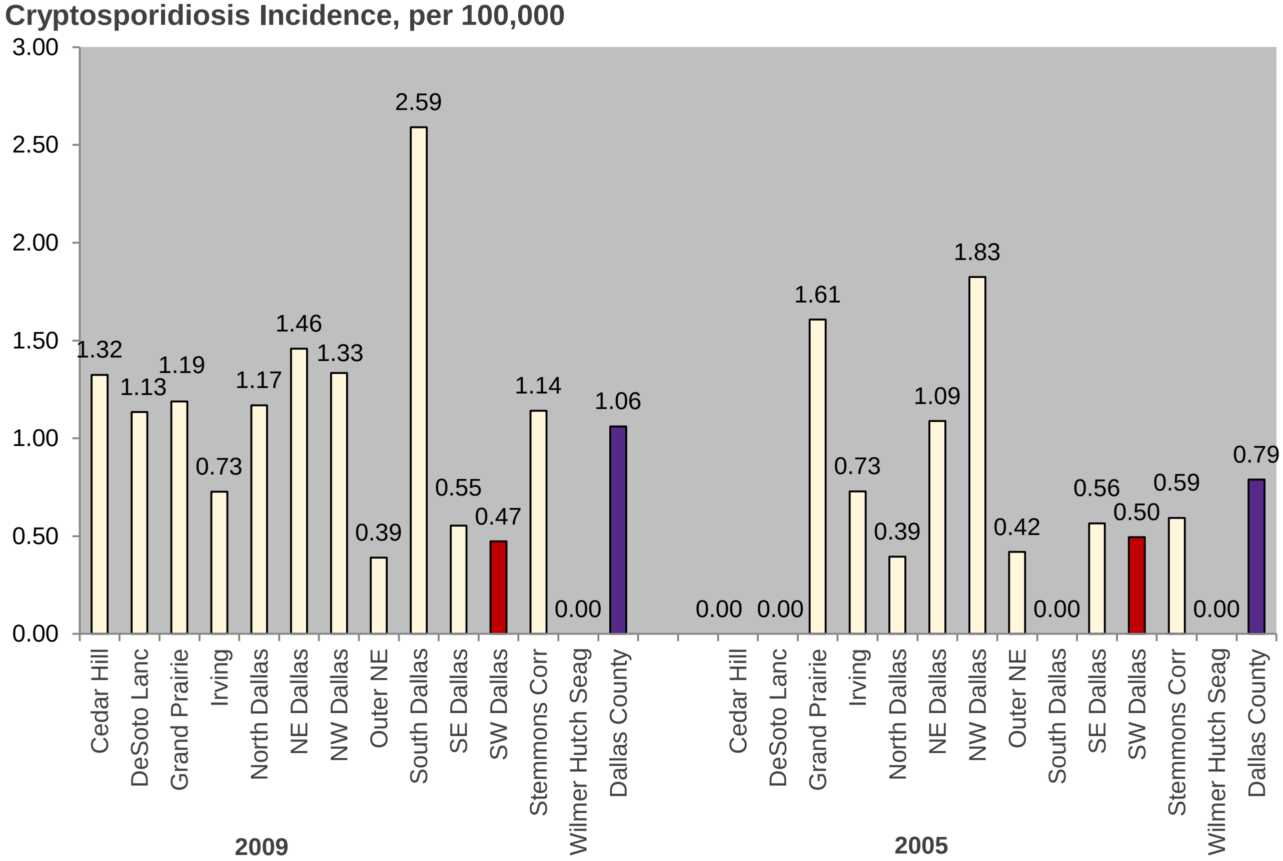


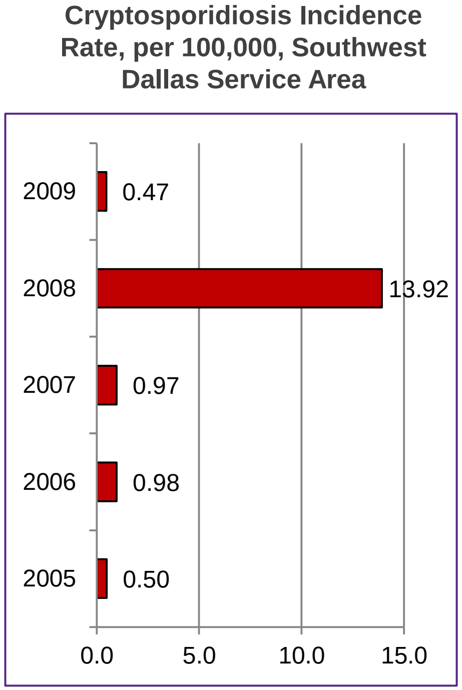


Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site: http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf; 2005 Dallas County denominator population data from American Community Survey.

Health Outcomes: Reportable Communicable Disease Rates

Southwest Dallas Service Area

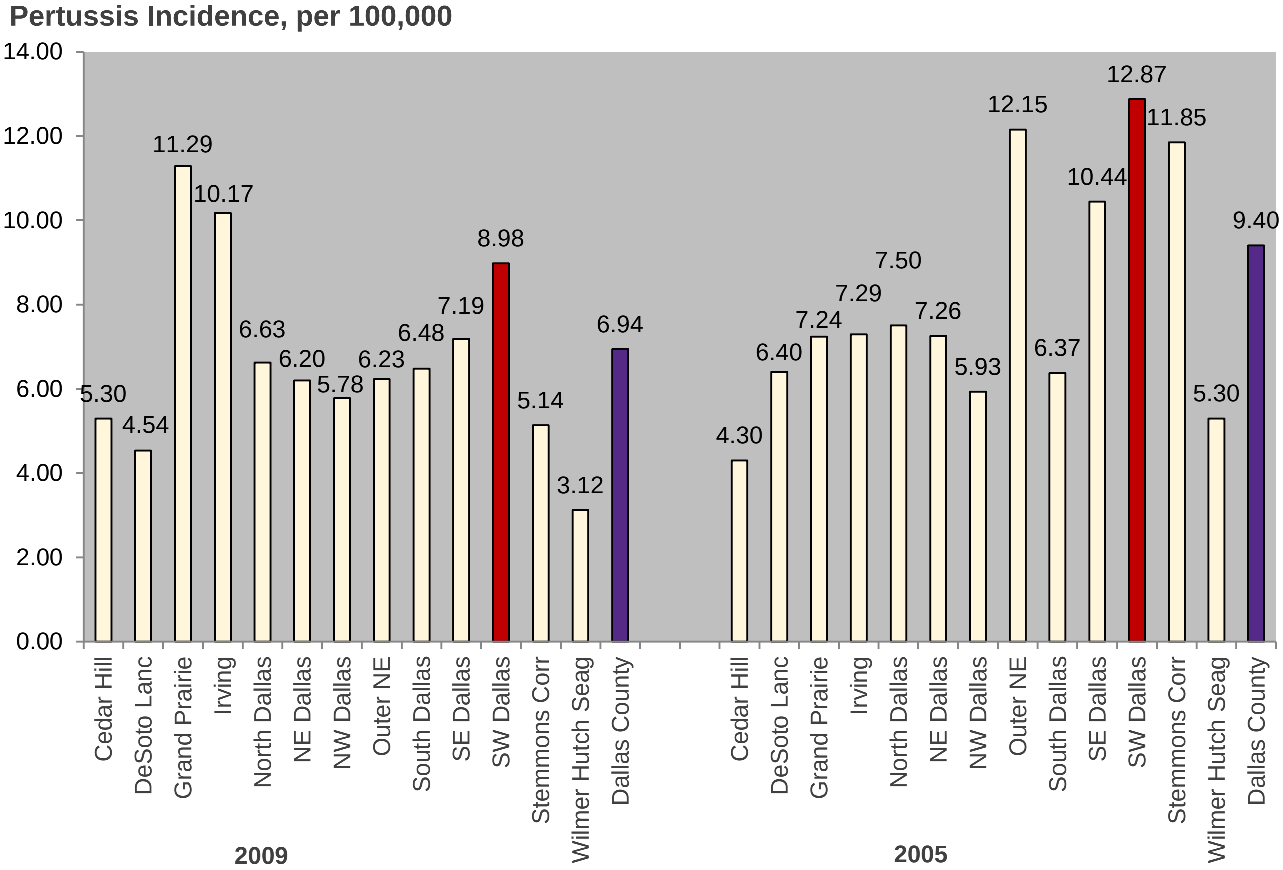


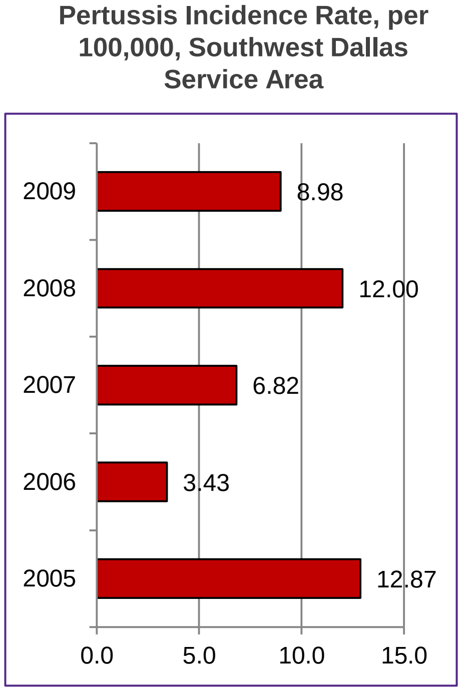


Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site: http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf; 2005 Dallas County denominator population data from American Community Survey.

Health Outcomes: Reportable Communicable Disease Rates

Southwest Dallas Service Area



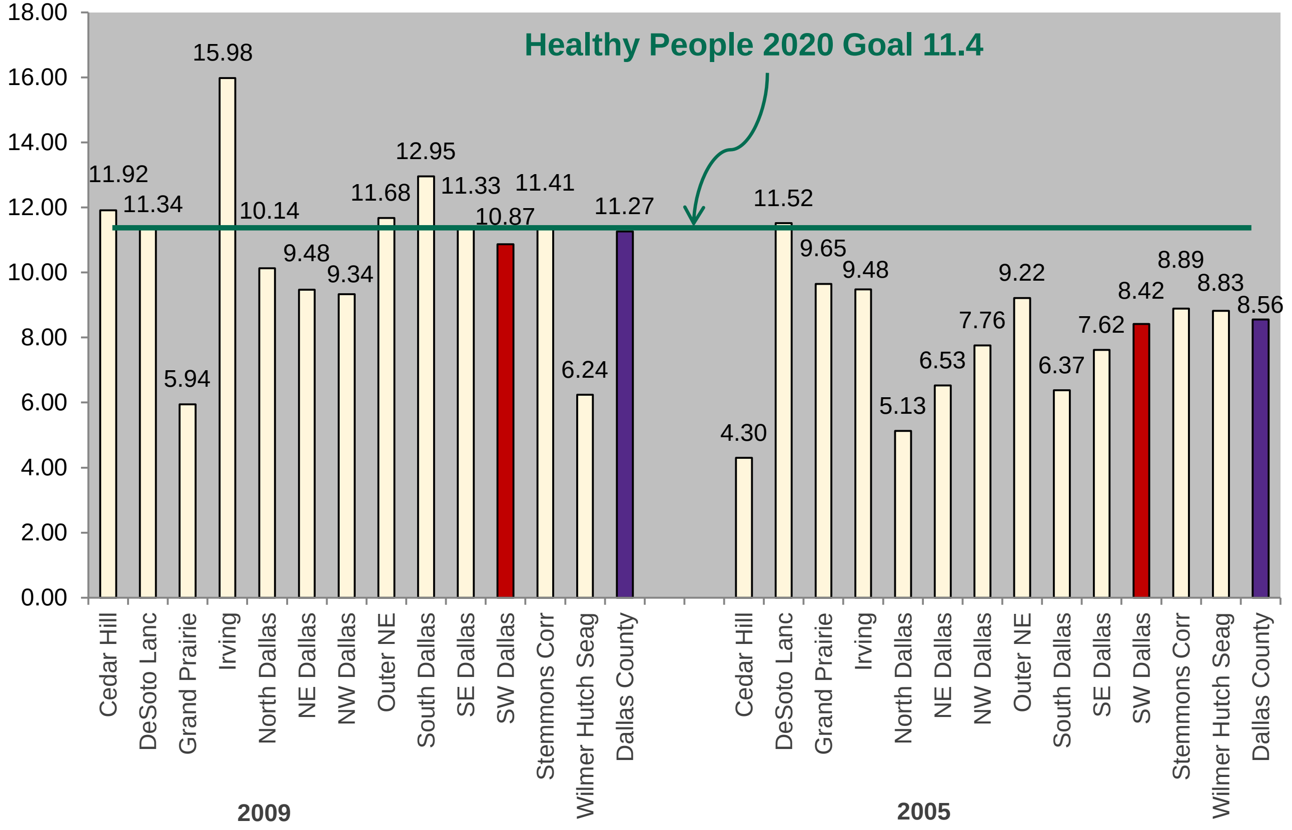


Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site: http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf; 2005 Dallas County denominator population data from American Community Survey.

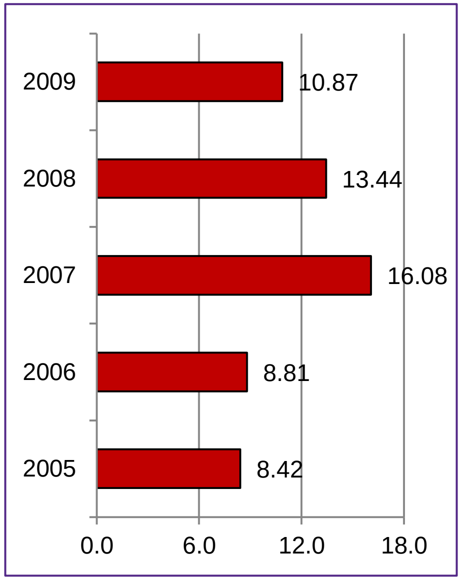
Health Outcomes: Reportable Communicable Disease Rates

Southwest Dallas Service Area

Salmonellosis Incidence, per 100,000



Salmonellosis Incidence Rate, per 100,000, Southwest Dallas Service Area



Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site: http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf; 2005 Dallas County denominator population data from American Community Survey.

Health Outcomes

🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

Health Outcomes — Mortality

	Southwest Dallas Compared to Healthy People 2020 Goal	Southwest Dallas Compared to Benchmark Counties* (Quartiles)	Southwest Dallas Compared to Past Years' Data (CI)
Heart Disease Death Rate	🔴	🟢	🟡
Cancer Death Rate	🔴	🟡	🔴
Cerebrovascular Disease Death Rate	🔴	🔴	🔴
Chronic Obstructive Pulmonary Disease Death Rate	N/A	🟢	🟡
Diabetes Death Rate	N/A	🔴	🟡

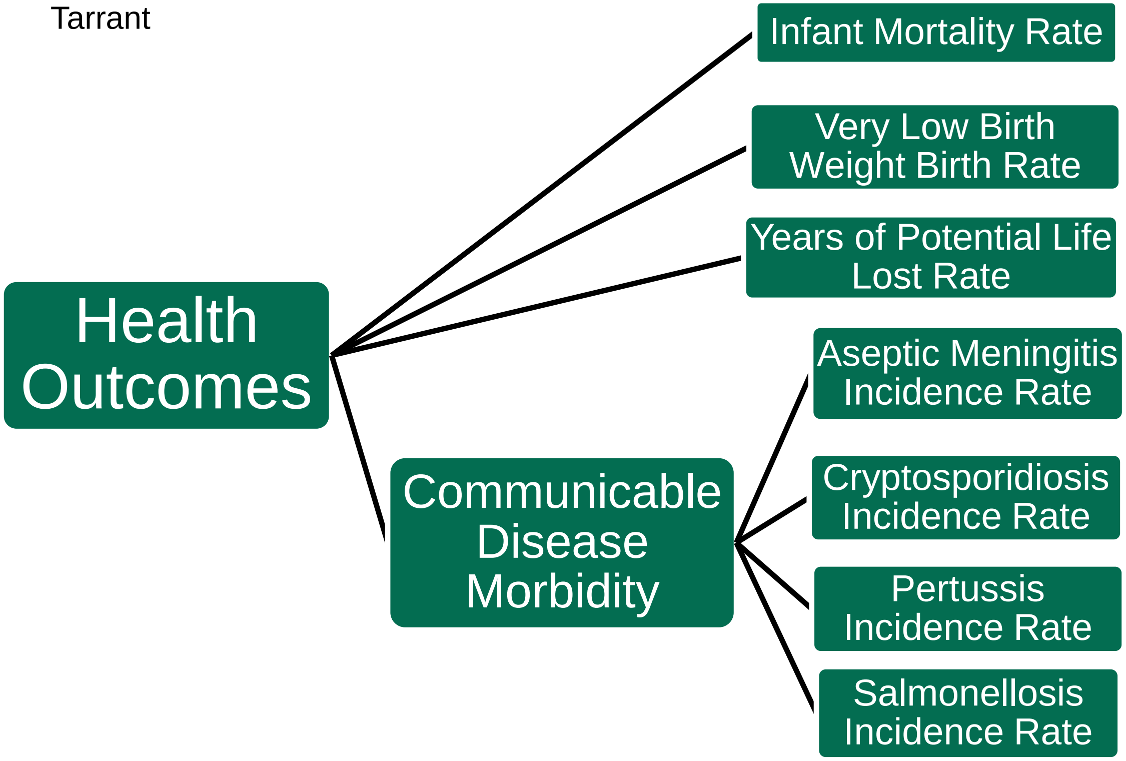
*Benchmark Counties are: Maricopa, Los Angeles, Cook, Miami-Dade, Bexar, Harris and Tarrant

Parkland

Health Outcomes

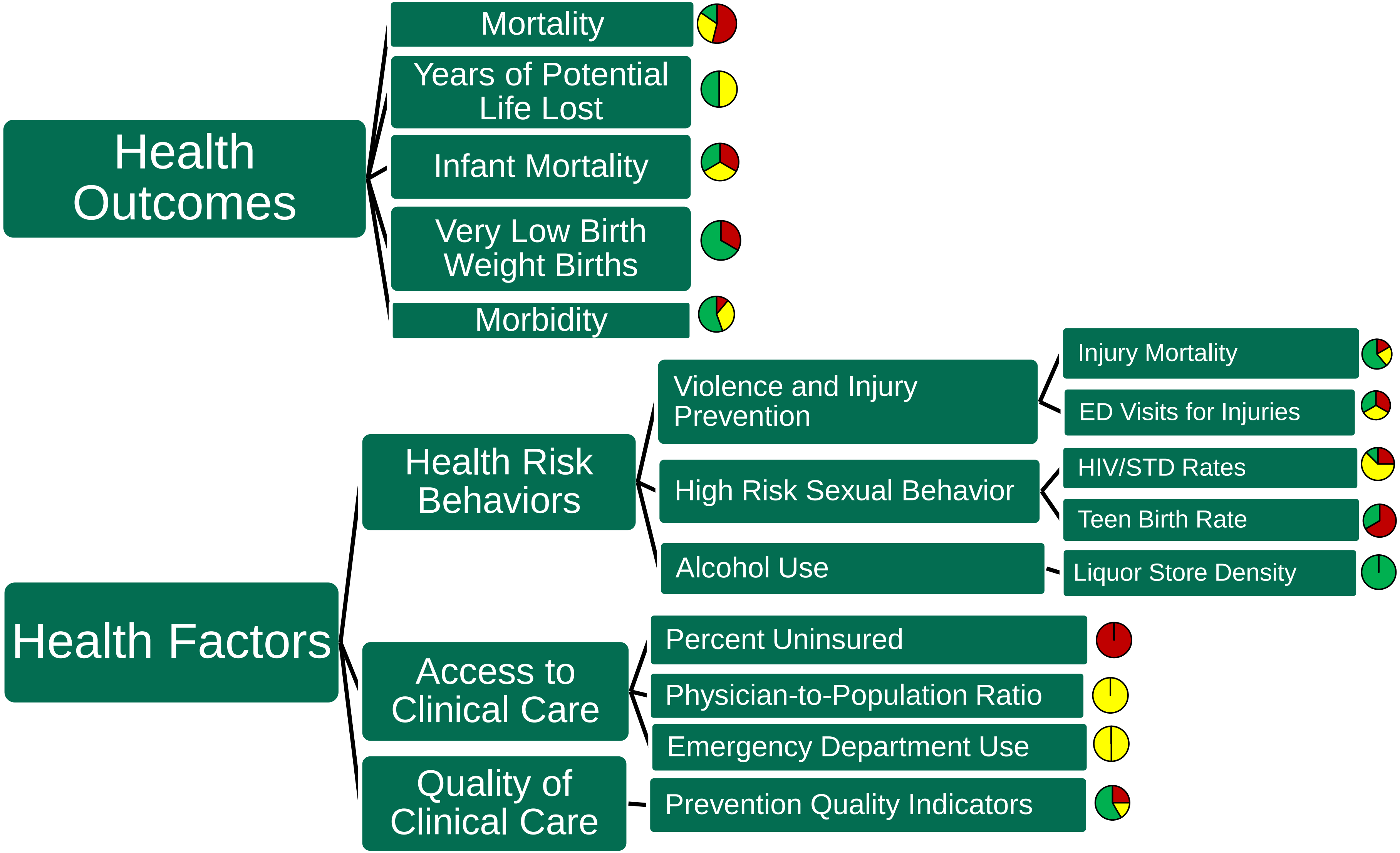
🟢 – Doing better than the benchmark
🟡 – Same as/not significantly different from the benchmark
🔴 – Worse than the benchmark

*Benchmark Counties are: Maricopa, Los Angeles, Cook, Miami-Dade, Bexar, Harris and Tarrant



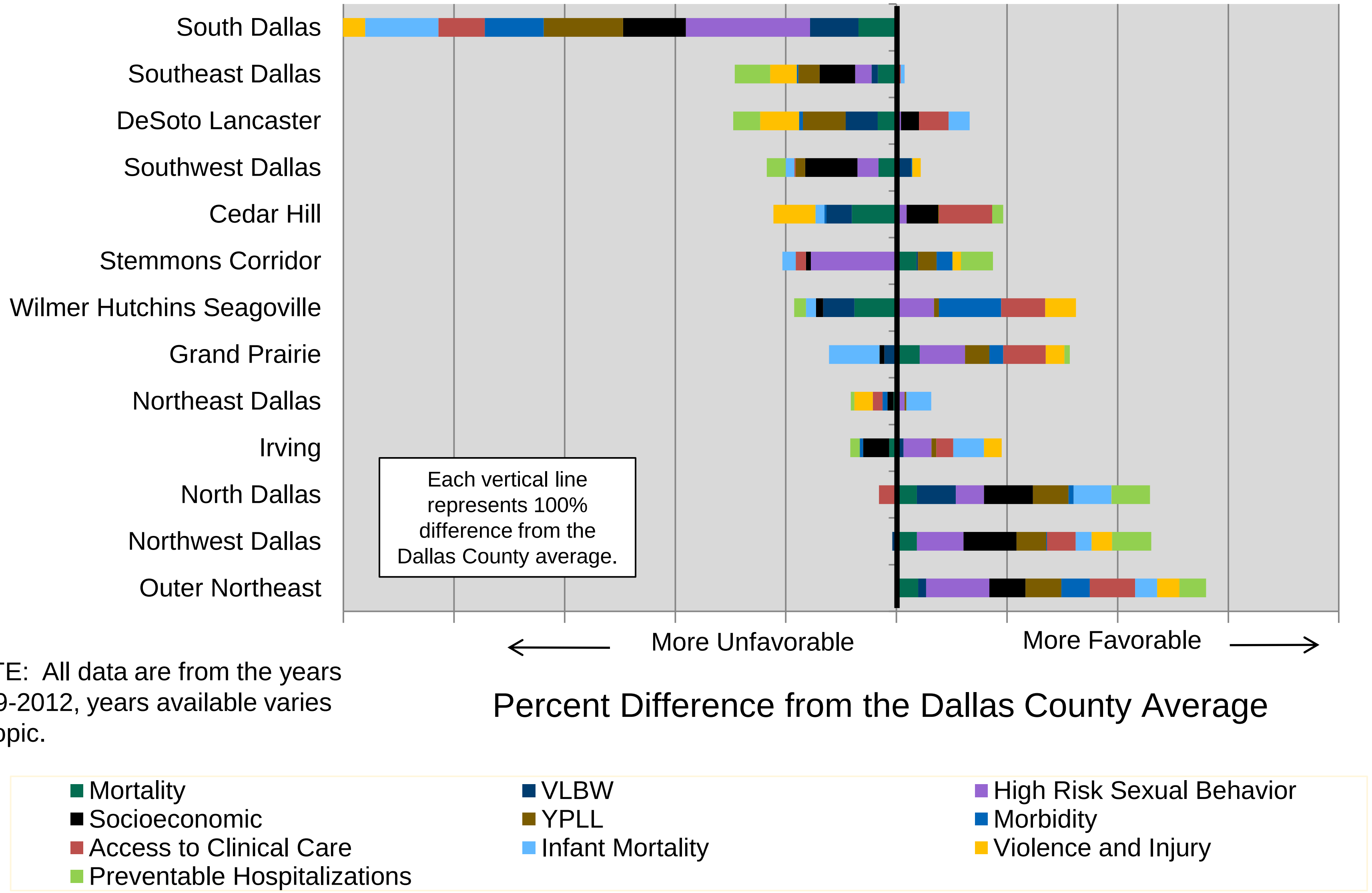
		Southwest Dallas Compared to Healthy People 2020 Goal	Southwest Dallas Compared to Bench-mark Counties* (Quartiles)	Southwest Dallas Compared to Past Years' Data (CI)
Health Outcomes	Infant Mortality Rate	🔴	🟡	🟢
	Very Low Birth Weight Birth Rate	🔴	🟢	🟢
	Years of Potential Life Lost Rate	N/A	🟡	🟢
Communicable Disease Morbidity	Aseptic Meningitis Incidence Rate	N/A	🟡	🟢
	Cryptosporidiosis Incidence Rate	N/A	🟢	🟢
	Pertussis Incidence Rate	N/A	🔴	🟡
	Salmonellosis Incidence Rate	🟢	🟢	🟡

Summary – Model With Stoplight Pie Charts, Southwest Dallas Service Area



- Health Outcomes
  - Mortality
  - Years of Potential Life Lost
  - Infant Mortality
  - Very Low Birth Weight Births
  - Morbidity
- Health Factors
  - Health Risk Behaviors
    - Violence and Injury Prevention
      - Injury Mortality
      - ED Visits for Injuries
    - High Risk Sexual Behavior
      - HIV/STD Rates
      - Teen Birth Rate
    - Alcohol Use
      - Liquor Store Density
  - Access to Clinical Care
    - Percent Uninsured
    - Physician-to-Population Ratio
    - Emergency Department Use
  - Quality of Clinical Care
    - Prevention Quality Indicators

Deviations from the Dallas County mean



NOTE: All data are from the years 2009-2012, years available varies by topic.

Methods of calculating deviations from the Dallas County mean for the preceding chart

- **Mortality. For each service area and for Dallas County, add the 2011 age-adjusted death rates per 100,000 for the five leading causes of death, to get a single number. Calculate for each service area the percent deviation from the Dallas County total, from -infinity to +infinity. That deviation is the mortality deviation for the chart. Because heart disease and cancer predominate, this tends to over-weight these two causes compared to the other three (stroke, COPD and diabetes).**
- **Years of potential life lost. Using the Years of Potential Life Lost Rate per 100,000, calculate for each service area the percent deviation from the Dallas County YPLL rate, from -infinity to +infinity. That deviation is the YPLL deviation for the chart.**
- **Infant Mortality. Using the Infant mortality rate per 1,000 live births, calculate for each service area the percent deviation from the Dallas County infant mortality rate, from -infinity to +infinity. That deviation is the infant mortality deviation for the chart.**
- **Very Low Birth Weight. Using the Very Low Birth Weight rate per 1,000 live births, calculate for each service area the percent deviation from the Dallas County VLBW rate, from -infinity to +infinity. That deviation is the VLBW deviation for the chart.**
- **Morbidity. For each service area and for Dallas County, add the 2009 incidence rates per 100,000 for the four reportable diseases (aseptic meningitis, cryptosporidiosis, pertussis, salmonellosis), to get a single number. Calculate for each service area the percent deviation from the Dallas County total, from -infinity to +infinity. That deviation is the morbidity deviation for the chart. Meningitis and salmonellosis are more common, so this tends to over-weight them, although all are fairly rare in a population sense.**
- **Violence and Injury. Three steps:**
  - For each service area and for Dallas County, add the 2011 age-adjusted death rates for the injury-related causes of death (motor vehicle crashes, poisoning, falls, suicide and homicide) and the age-specific seniors falls death rate (all of which are in units of deaths per 100,000), to get a single number. Calculate for each service area the percent deviation from the Dallas County total, from -infinity to +infinity.
  - Then using the rate per 100,000 of ED visits for injuries, calculate for each service area the percent deviation from the Dallas County rate, from -infinity to +infinity.
  - Calculate the arithmetic mean of these two percent deviations. That is the Violence and Injury deviation for the chart. This might over-weight ED visits somewhat, but it is qualitatively different from mortality.

Methods of calculating deviations from the Dallas County mean for the preceding chart

- **High Risk Sexual Behavior. Three steps:**
  - For each service area and for Dallas County, add the 2011 incidence rates for three non-HIV STDs (Chlamydia, gonorrhea and syphilis), to get a single number in units of cases per 100,000. Calculate for each service area the percent deviation from the Dallas County total, from -infinity to +infinity.
  - Then using the rate of new HIV diagnoses per 100,000, calculate for each service area the percent deviation from the Dallas County rate, from -infinity to +infinity.
  - Then using the rate of births to girls 15-17, per population of girls 15-17, calculate for each service area the percent deviation from the Dallas County rate, from -infinity to +infinity.
  - Calculate the arithmetic mean of these three percent deviations. That is the High Risk Sexual Behavior deviation for the chart. This might under-weight syphilis somewhat. Each category is given an the equal statistical weight (STDs, HIV and teen births), since they are qualitatively quite different we probably can't resolve that to everyone's satisfaction.
- **Access to Clinical Care. For each service area and for Dallas County, add the 2011 percent of people without health insurance and rate of non-emergent ED user per 1000 population, then subtract the rate of primary care physicians per 100,000 population (since higher is better for this measure), to get a single number. Calculate for each service area the percent deviation of this total from the Dallas County total, from -infinity to +infinity. That deviation is the access to care deviation for the chart. Although these three measures are in different units, the values were in the range of 5-130 (in different units), such that the contributions of each of the three measures to the total was approximately equal.**
- **Quality of Clinical Care. There are 12 preventable hospitalization discharge rates for each service area, age-adjusted in units of discharges per 100,000. Some are more common, such as bacterial pneumonia (in the range of 100-400 discharges per 100,000), while some are more rare (around 5-10 per 100,000). So for each service area and for Dallas County, for each discharge category calculate the percent deviation from the Dallas County rate. Calculate the arithmetic average of these 12 deviations, that deviation is the quality of care deviation for the chart.**
- **Socioeconomic indicators. There are four socioeconomic indicators—percent age 65 or older, percent age birth to 14, percent of adults age 25+ without a high school diploma, percent of the population below the federal poverty limit. For each service area and for Dallas County, for each of these four indicators calculate the percent deviation from the Dallas County rate. Calculate the arithmetic average of these four deviations, that deviation is the socioeconomic deviation for the chart.**

Notes:

- Age Adjusted Death Rates: Death rates that control for the effects in population age distributions. The centers for Disease Control and Prevention established the standard population weights for direct age adjustments. The need for age adjustment becomes particularly important when cause-specific mortality is of interest. Unadjusted rates for chronic diseases (cardiovascular diseases, cancers, or chronic lower respiratory diseases) may appear to be higher for older populations when compared to a younger population. With age-adjustment those differences may be reduced or even reversed. A mechanism for adjusting the age structure differences is needed to determine if there really are mortality differences between two populations. By applying age-specific mortality rates to a standard population, direct standardization controls for differences in population composition. Mortality trends can be more accurately compared along geographic, temporal, or race/ethnicity lines, etc. In short, standardization lets us look at what the death rate would be in one population if that population had the same age structure as the standard population. Beginning with 1999 events, the United States year 2000 population is used as the standard for age-adjusting.