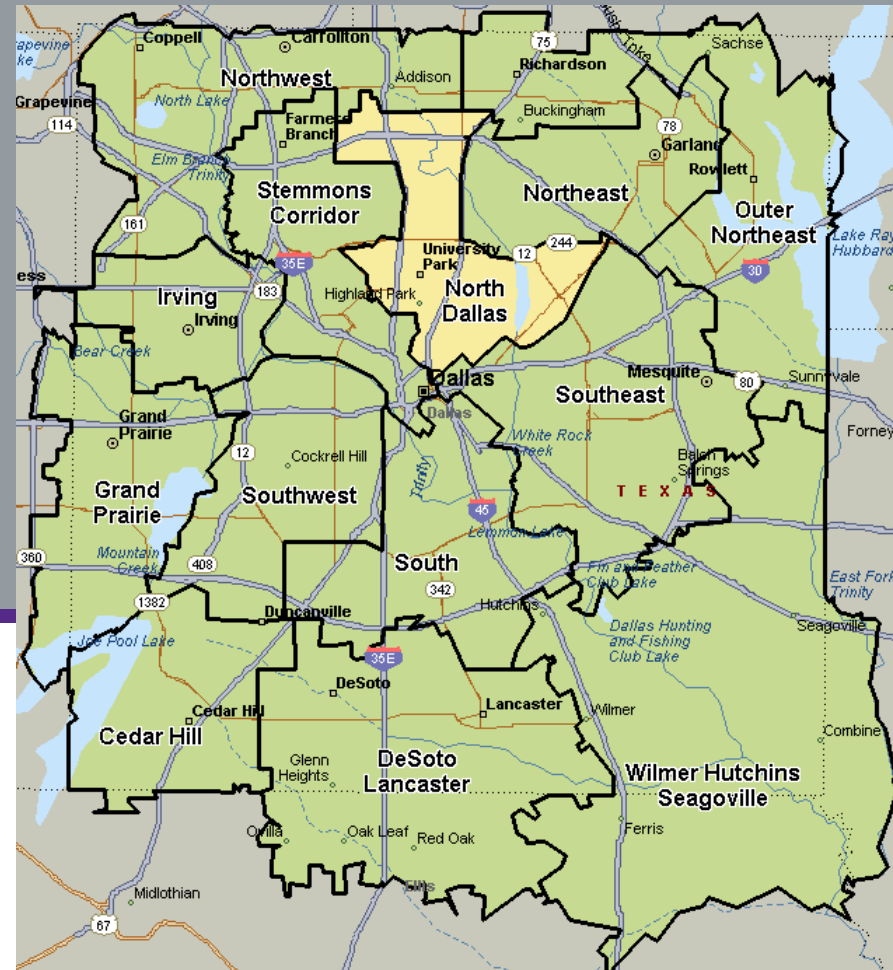


Community Health Assessment

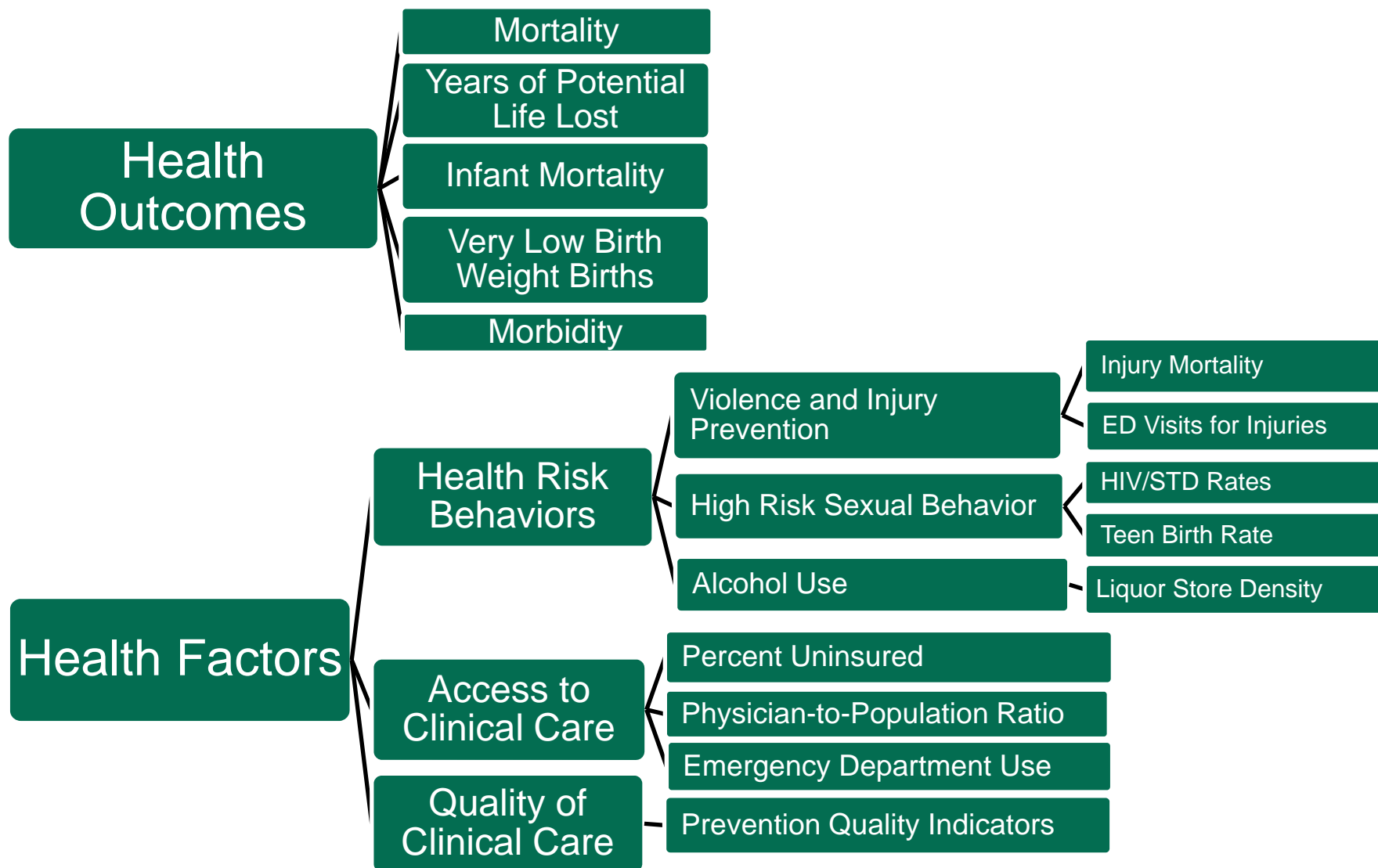
North Dallas Service Area



Parkland



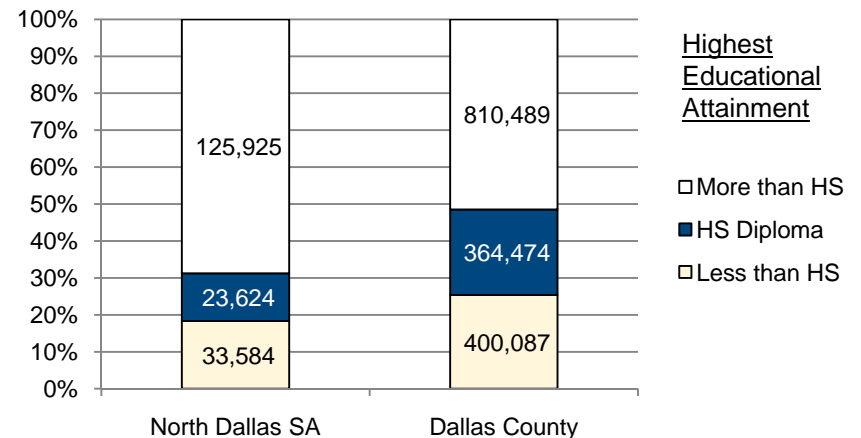
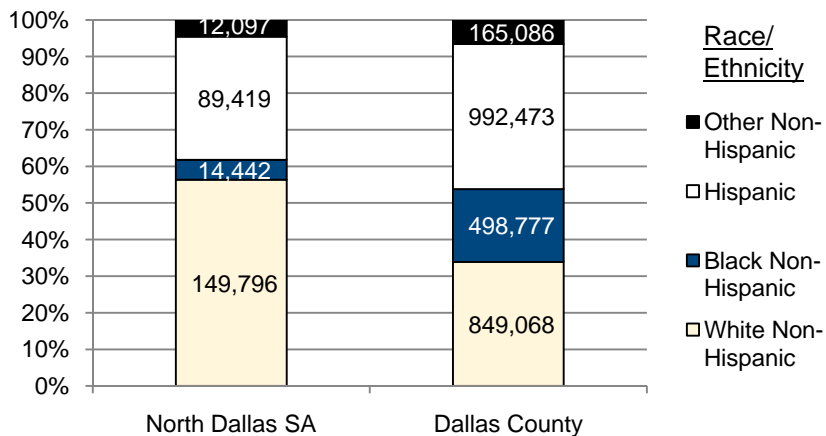
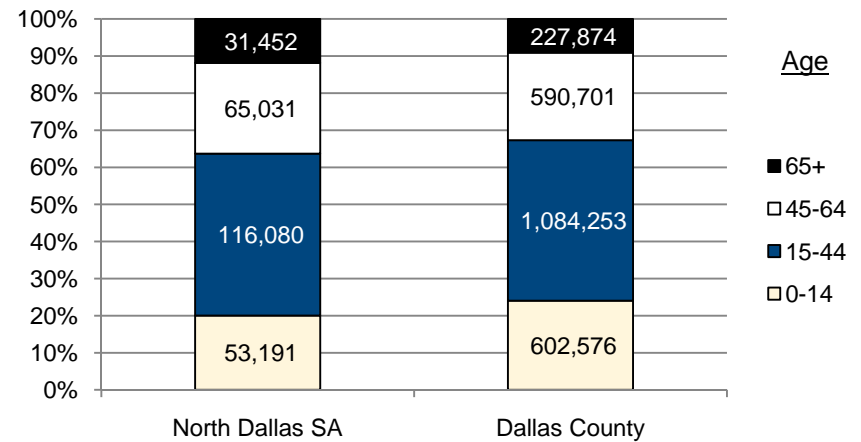
Organizational Model For the Community Health Dashboard



Demographic Profile

North Dallas Service Area

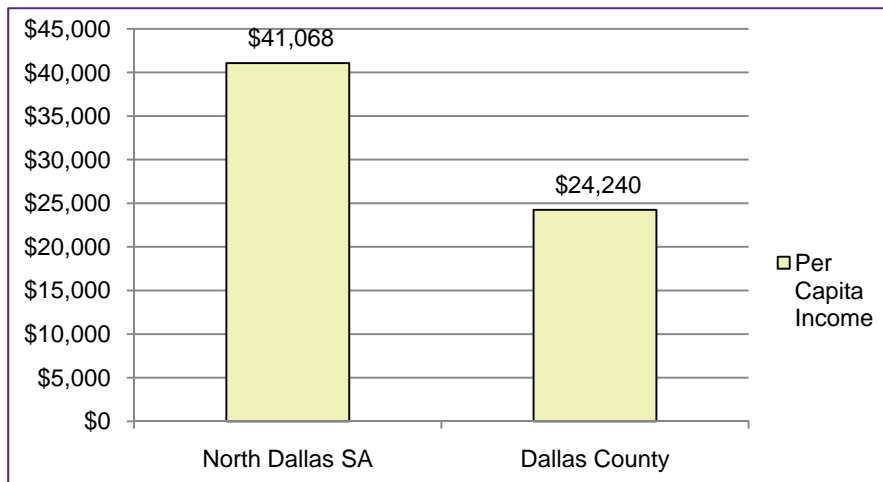
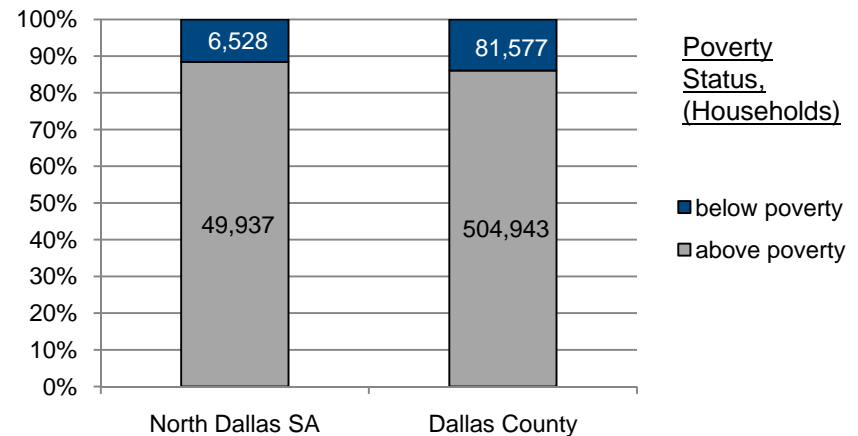
- The population of the North Dallas Service Area is much older (11.8% age 65 and over) than the county population (9.1% age 65 and over).
- The service area is one of the three Dallas County service areas that is majority white (56.4%).
- The North Dallas Service Area has the second highest percentage of people with a high school education or more (68.8%) of the 13 service areas.



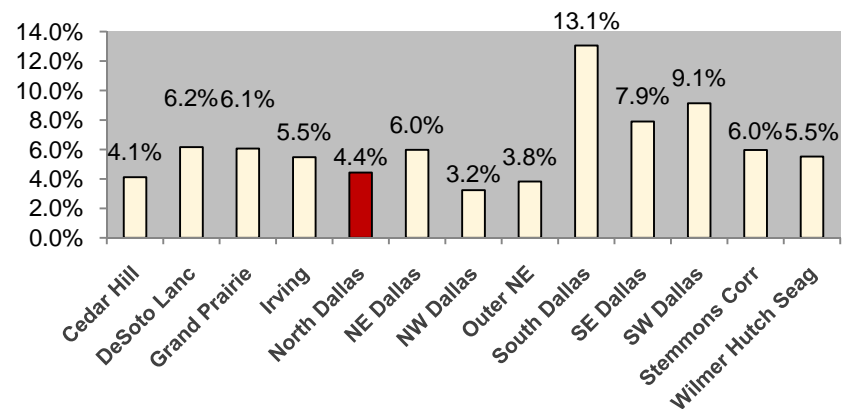
Demographic Profile

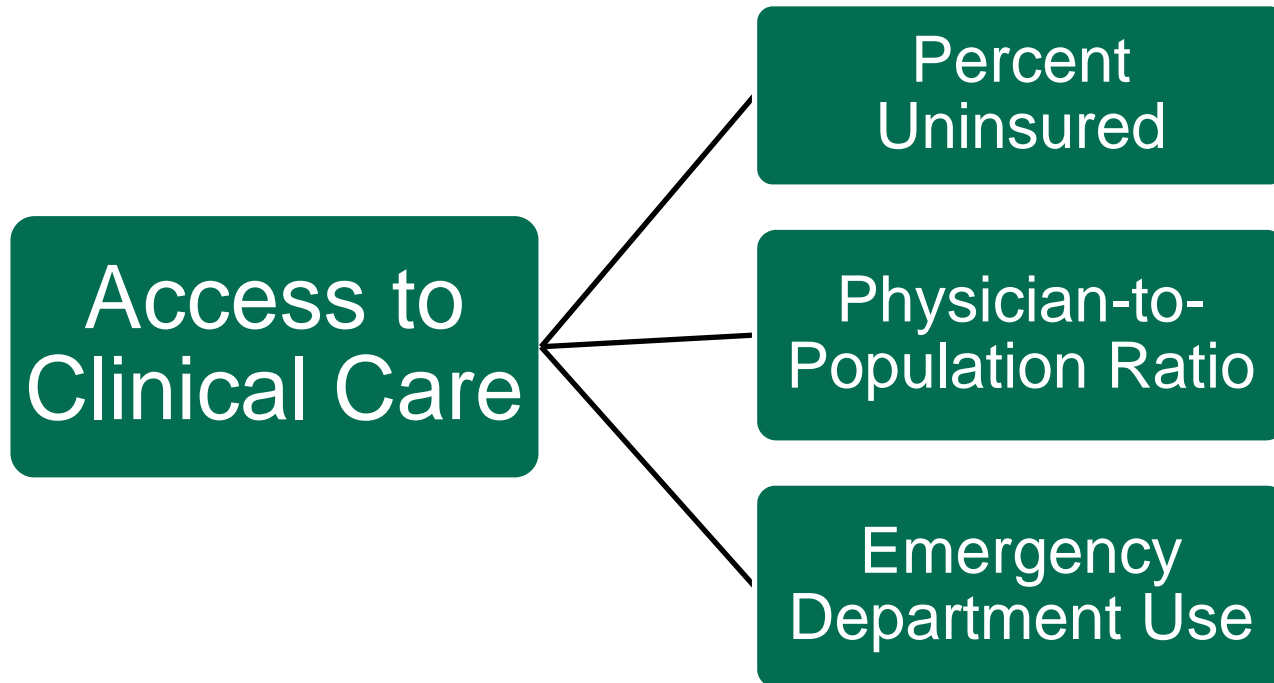
North Dallas Service Area

- The North Dallas Service Area has a lower percentage of households in poverty (11.56%) than Dallas County as a whole (13.91%).
- The Service Area's per capita income (\$41,067) was the highest of the 13 service areas.
- This Service Area ranks fourth in unemployment compared to the other 13 Service Areas.



Percent Unemployed in the Civilian Labor Force

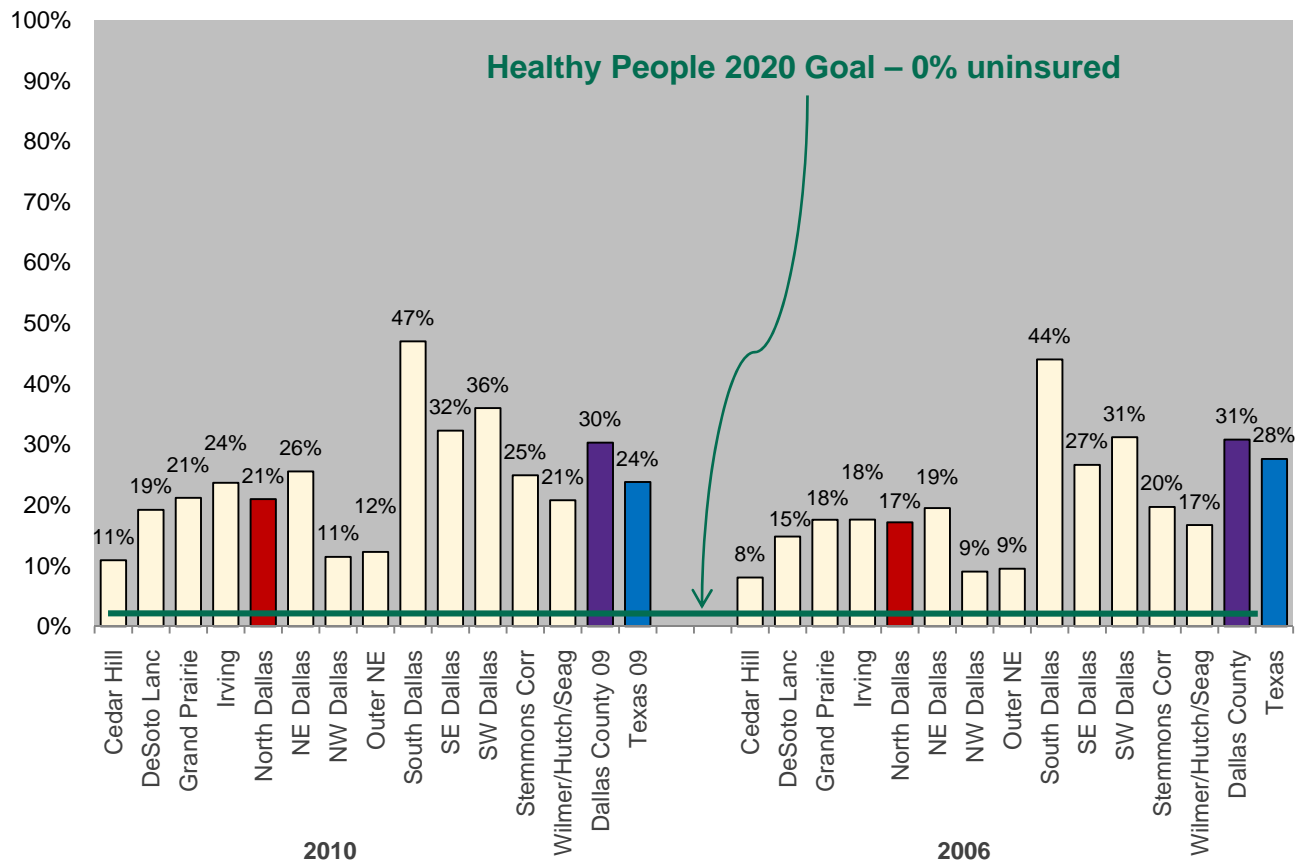




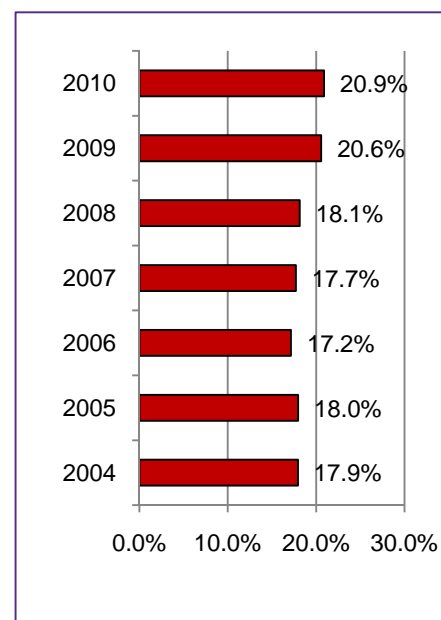
Access to Healthcare: Percent Without Healthcare Insurance

North Dallas Service Area

Percent Uninsured



Percent Without Health Insurance, North Dallas Service Area

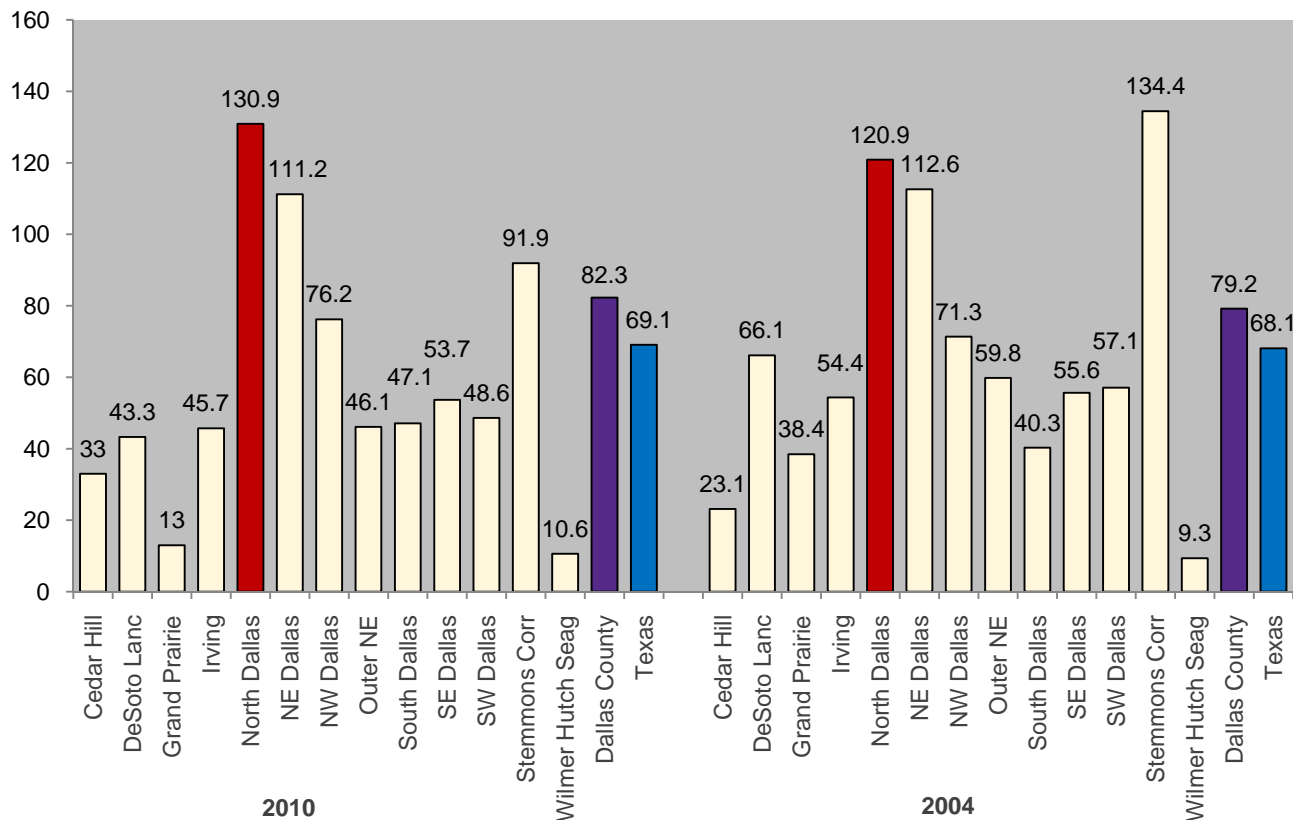


Source: 2006 Solucient, Inc.; 2010 Market Planner Plus; Denominator population data from Claritas, Inc.; except 2010 from Nielson/Claritas Pop-Facts mid 2010 version. Dallas County and Texas rates from US Census Bureau's American Community Survey 2009

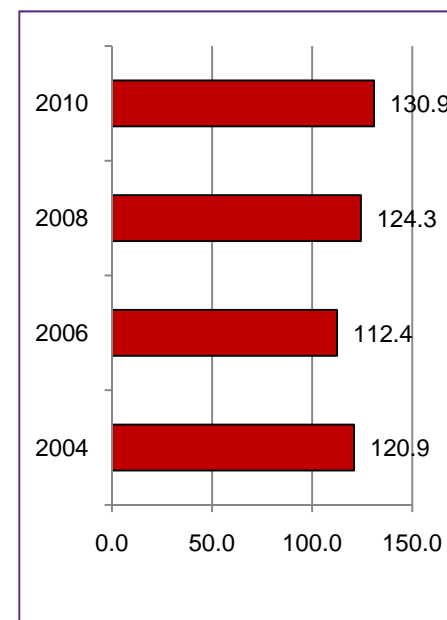
Access to Healthcare: Primary Care Physician-to-Population Ratio

North Dallas Service Area

Primary Care Physicians per 100,000



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



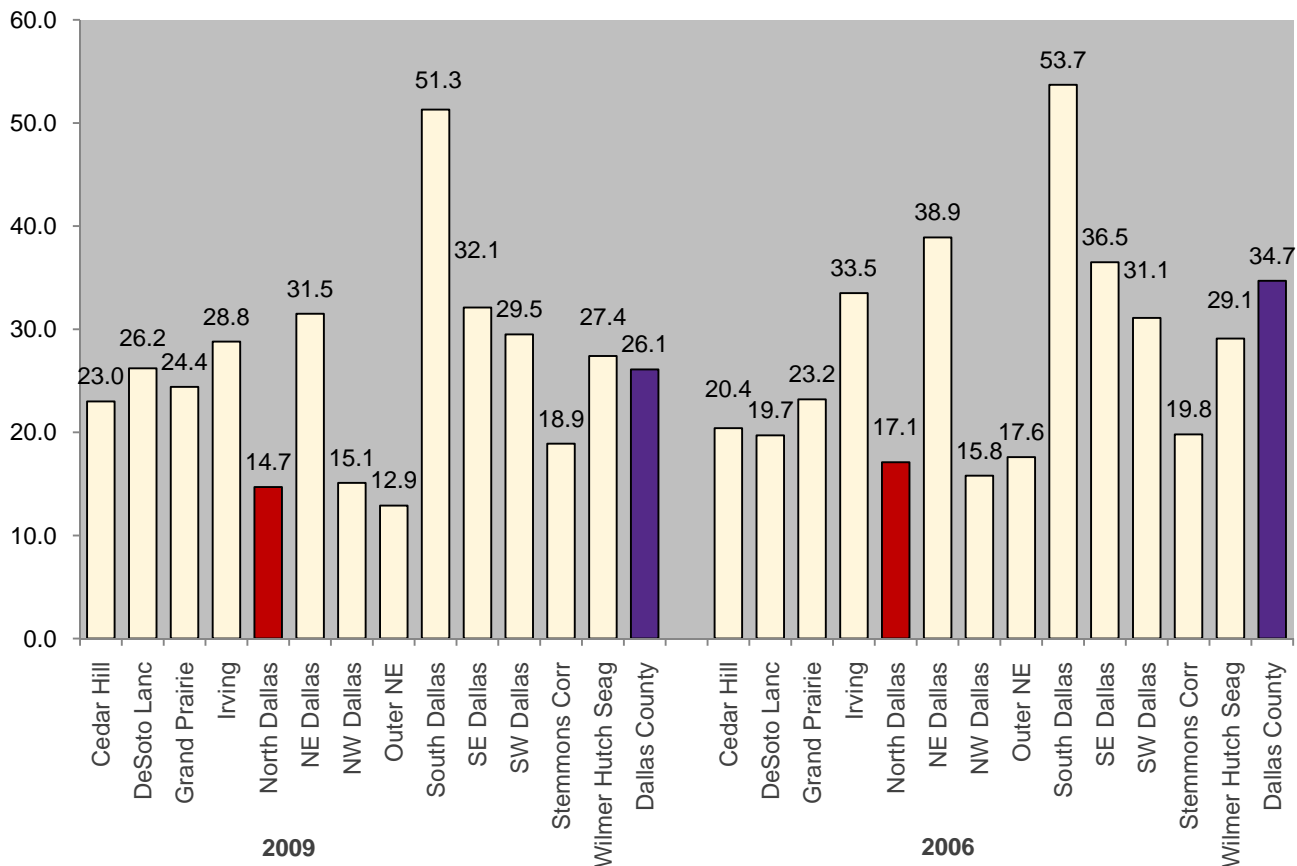
Source: Texas Medical Association Physician Practice Address files; denominator population data from Claritas, Inc., except 2010 from Nielson/Claritas, Inc. Pop Facts. Mid 2010 version.

County and State sources is Texas Bureau of Primary Care. [http://www.dshs.state.tx.us/chs/hprc/tables/Primary-Care-Physicians-\(PC\)-by-County-of-Practice---September,-2010/](http://www.dshs.state.tx.us/chs/hprc/tables/Primary-Care-Physicians-(PC)-by-County-of-Practice---September,-2010/) and <http://www.dshs.state.tx.us/chs/hprc/tables/04PC.shtm>

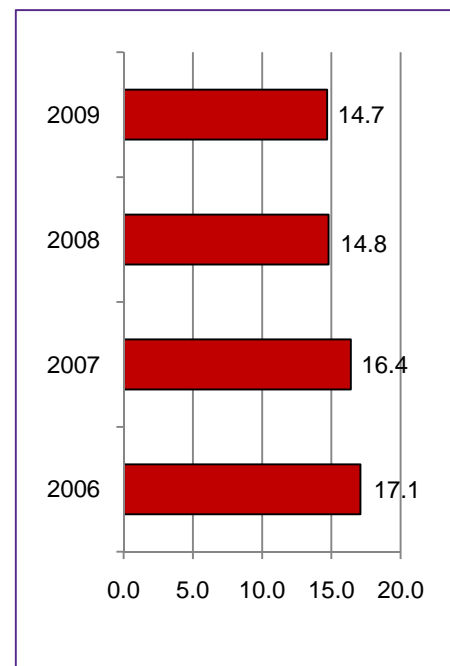
Access to Healthcare: Non-Emergent ED Utilization

North Dallas Service Area




Non-Emergent ED Visits, per 1,000 Population

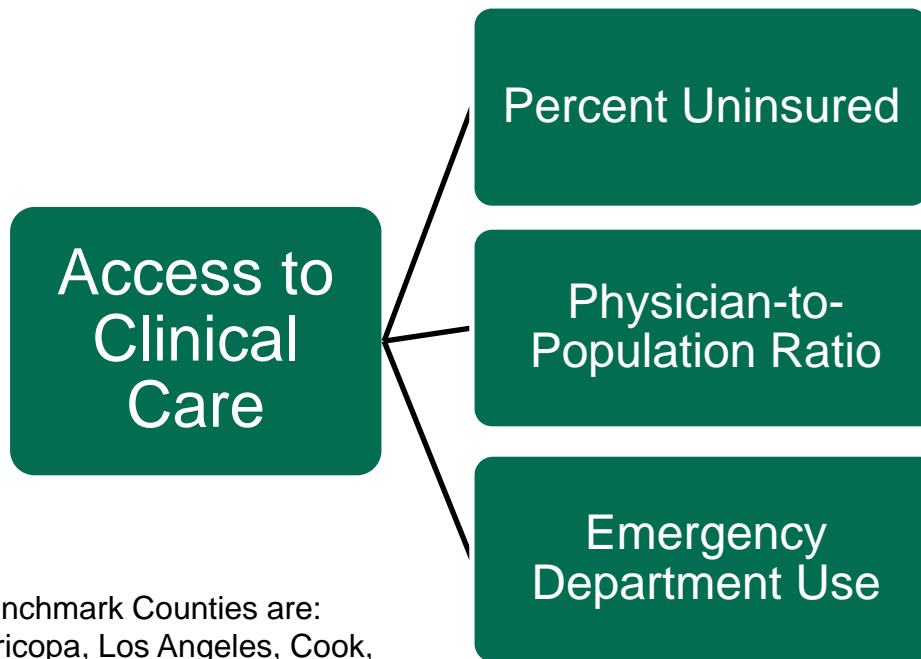


Rate of Non-Emergent ED Visits, per 1,000, Irving Service Area









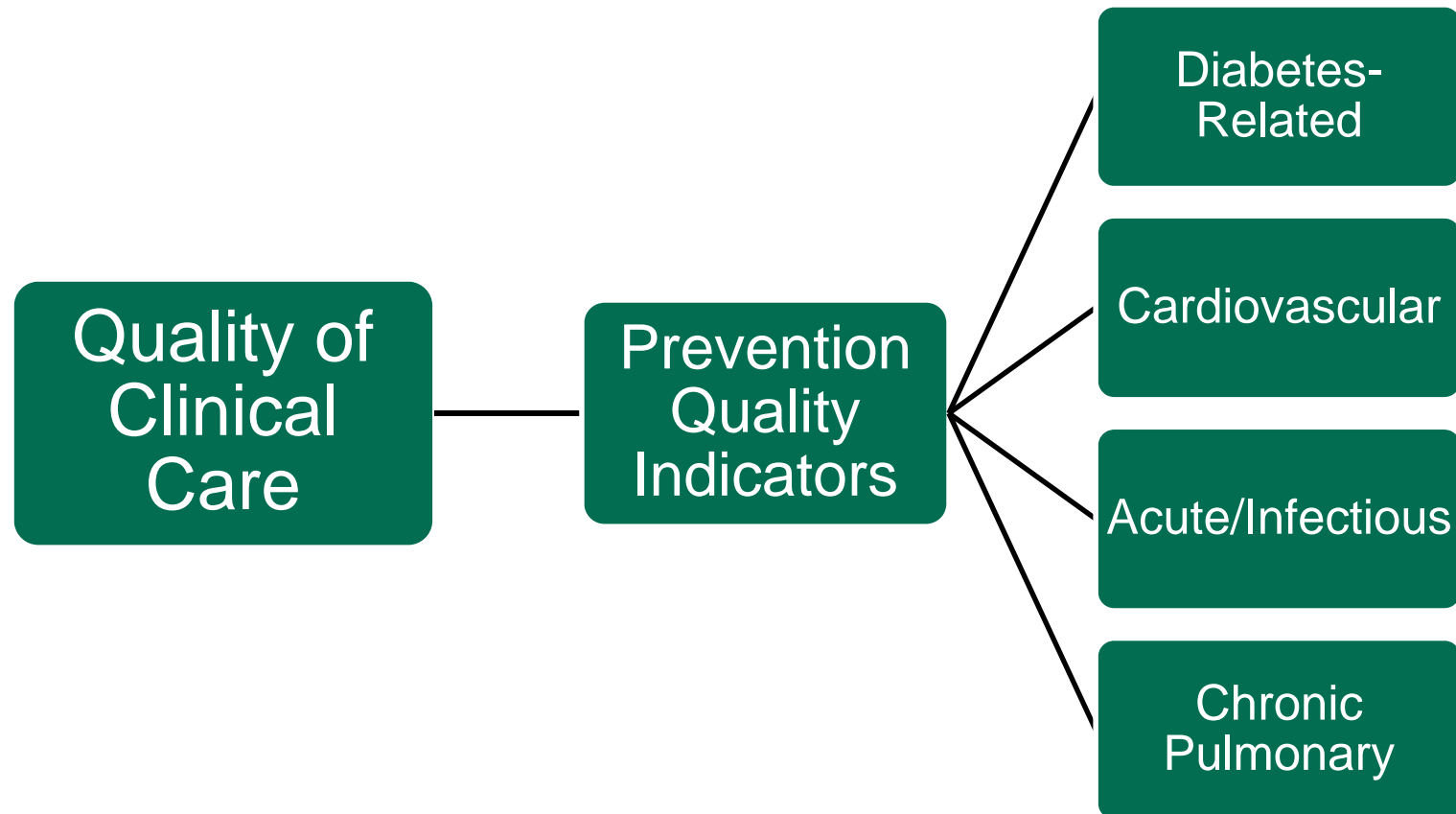
Source: DFWHC, Outpatient Data System; NYU Algorithm for determining appropriate Emergency Dept. use; denominator population data from Claritas, Inc.

-  – 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

North Dallas Compared to Healthy People 2020 Goal	North Dallas Compared to Benchmark Counties* (Quartiles)	North Dallas Compared to Past Years' Data (CI)
		
N/A		
N/A	N/A	



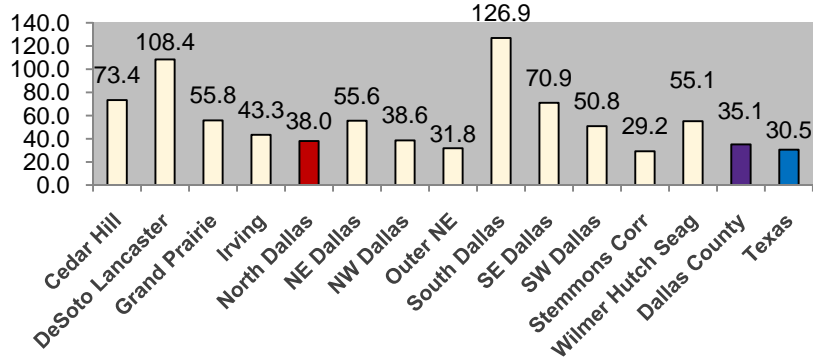
Healthcare Quality: Rate of Preventable Hospitalizations, 2008

Diabetes-Related Hospitalizations

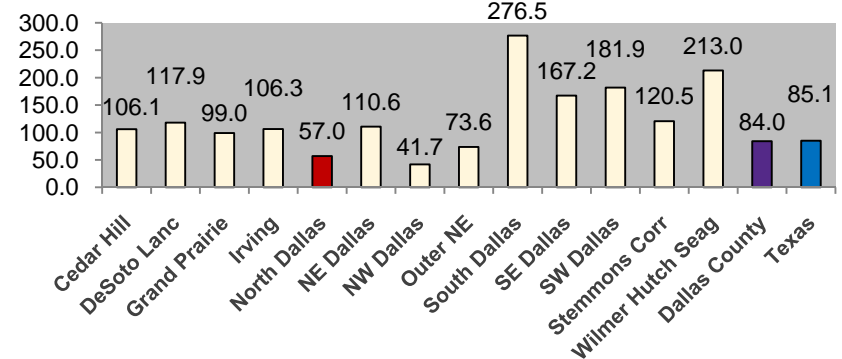
North Dallas Service Area



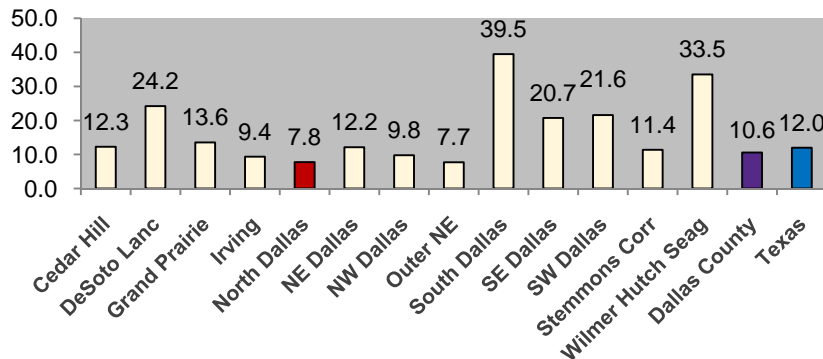
Diabetes Short Term Complications, 2008



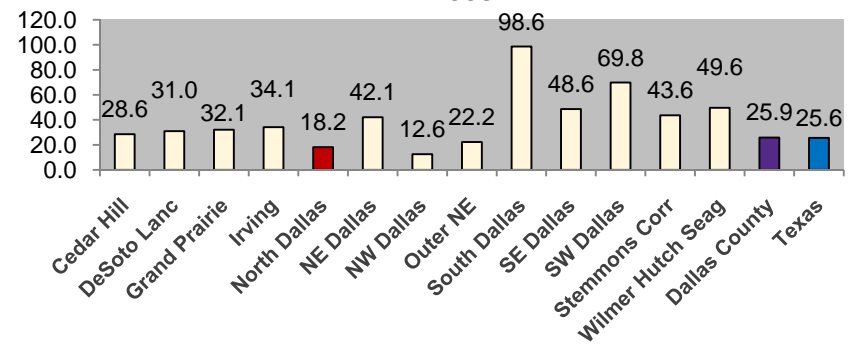
Diabetes Long Term Complications, 2008



Uncontrolled Diabetes, 2008



Lower Extremity Amputation Among Diabetics, 2008



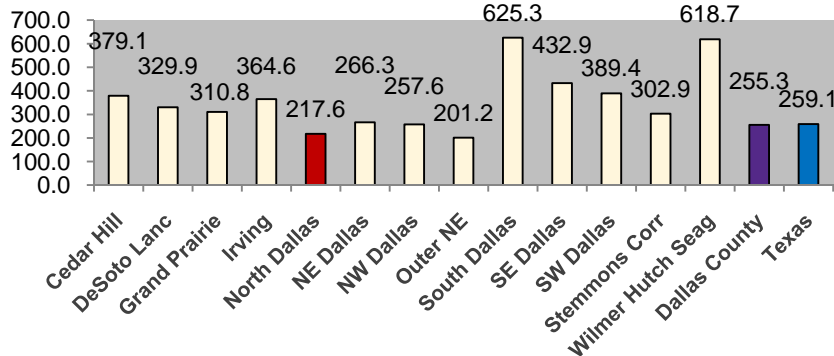
Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from Claritas, Inc.; County and State rates from Texas Department of State Health Services, Texas Health Care Information Council, 2003, 2005 and 2008

Healthcare Quality: Rate of Preventable Hospitalizations, 2008

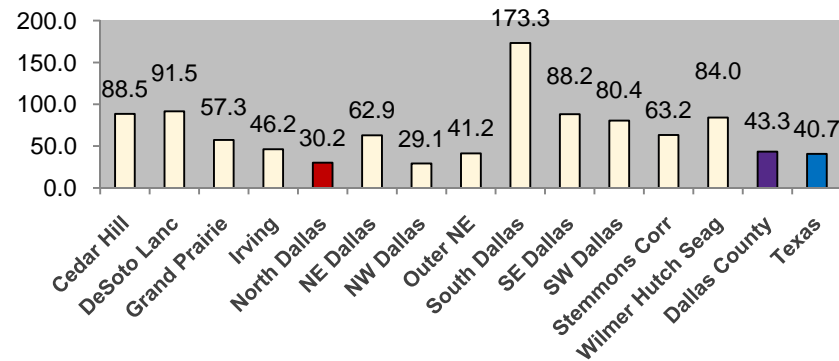
Cardiovascular Disease Hospitalizations

North Dallas Service Area

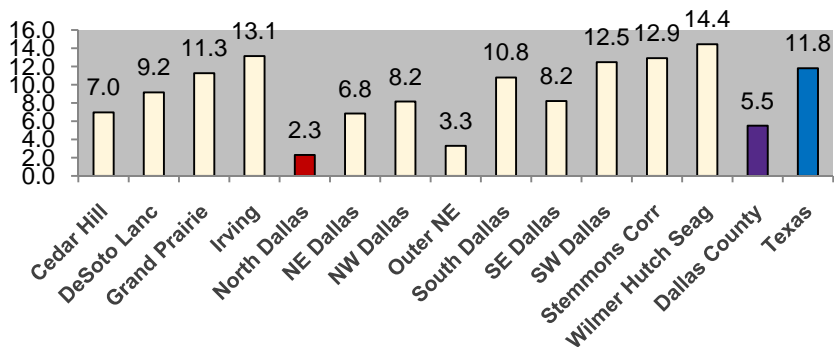
Congestive Heart Failure, 2008



Hypertension, 2008



Angina Without Cardiac Procedure, 2008

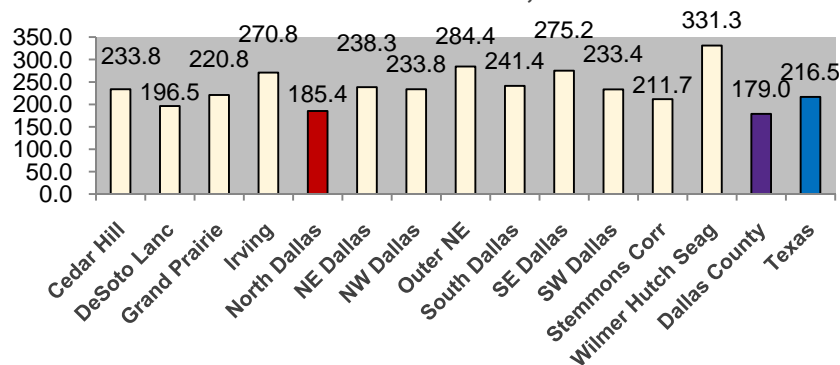


Healthcare Quality: Rate of Preventable Hospitalizations, 2008

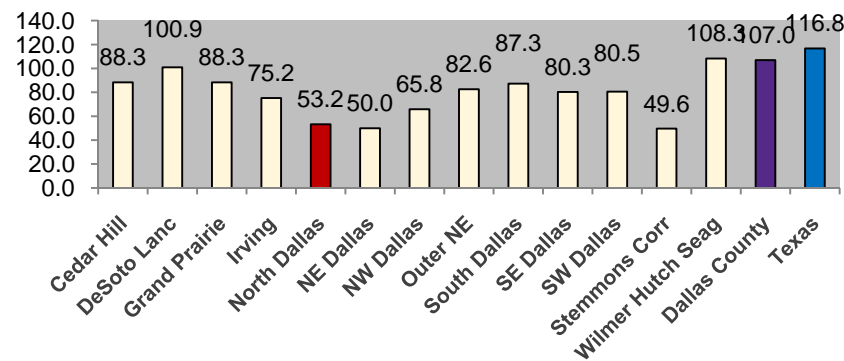
Acute/Infectious Disease Hospitalizations

North Dallas Service Area

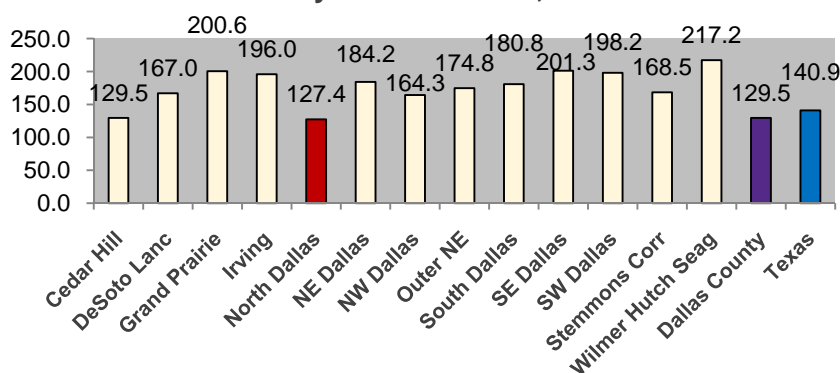
Bacterial Pneumonia, 2008



Dehydration, 2008



Urinary Tract Infection, 2008

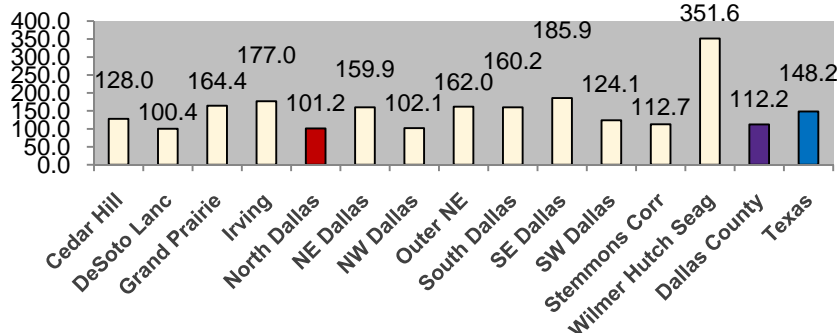


Healthcare Quality: Rate of Preventable Hospitalizations, 2008

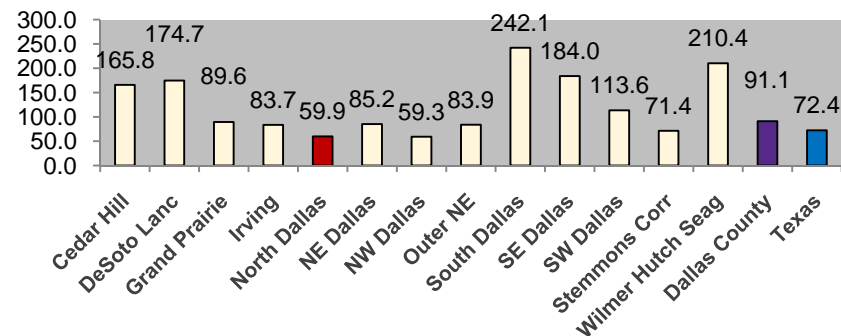
Chronic Pulmonary Disease Hospitalizations




North Dallas Service Area

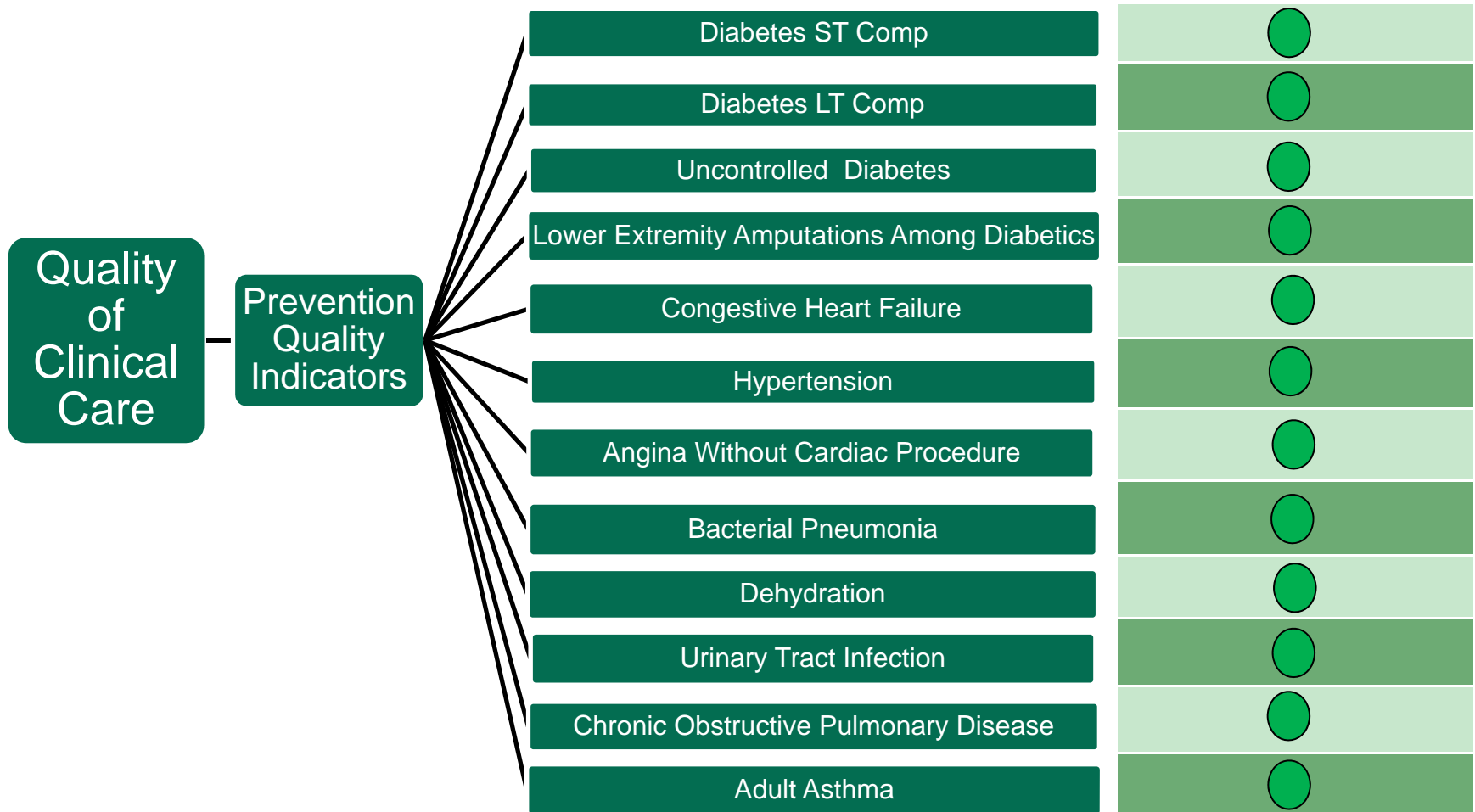
Chronic Obstructive Pulmonary Disease, 2008

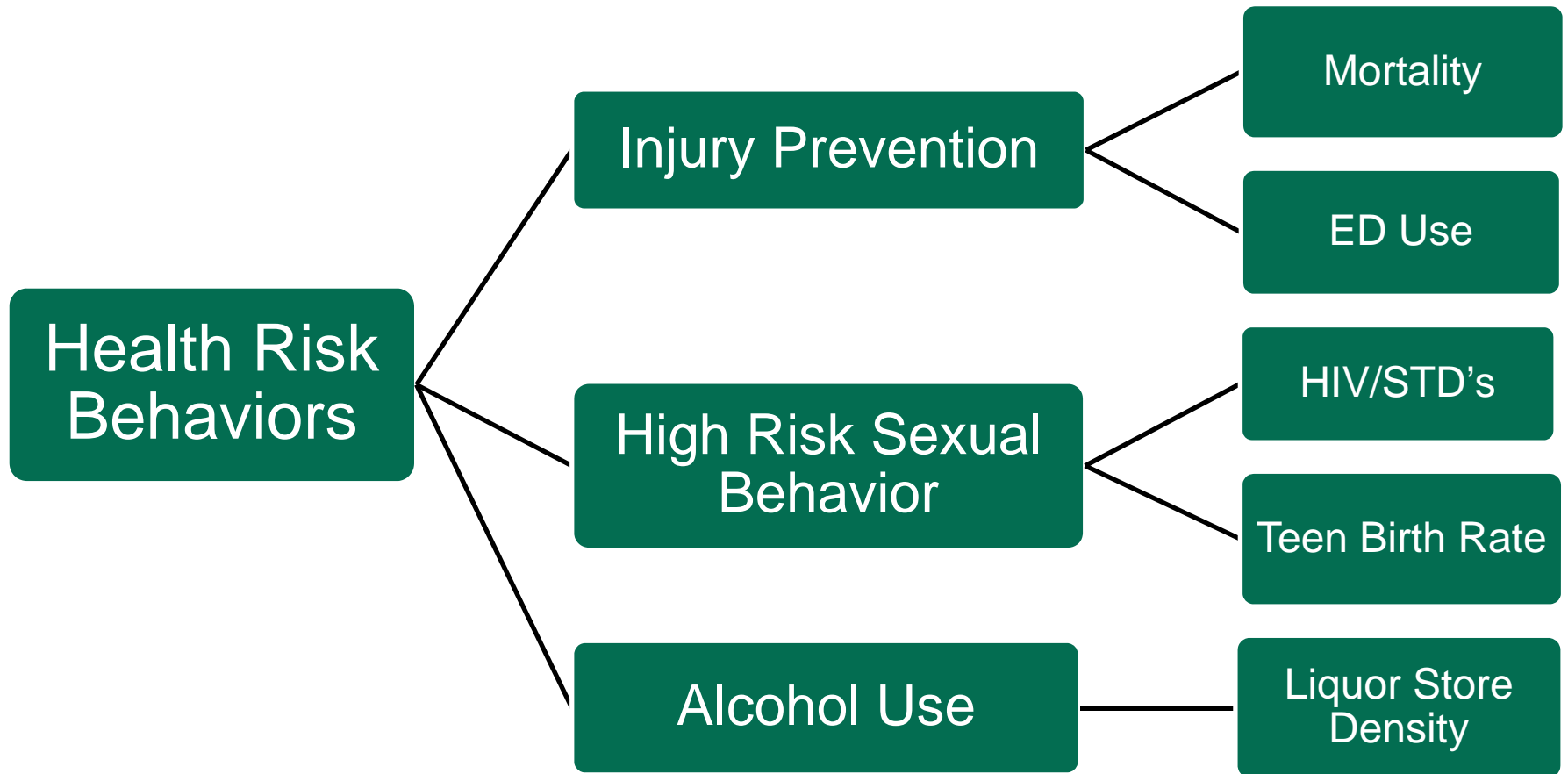


Adult Asthma, 2008



-  – Doing better than the benchmark
-  – Same as/not significantly different from the benchmark
-  – Worse than the benchmark

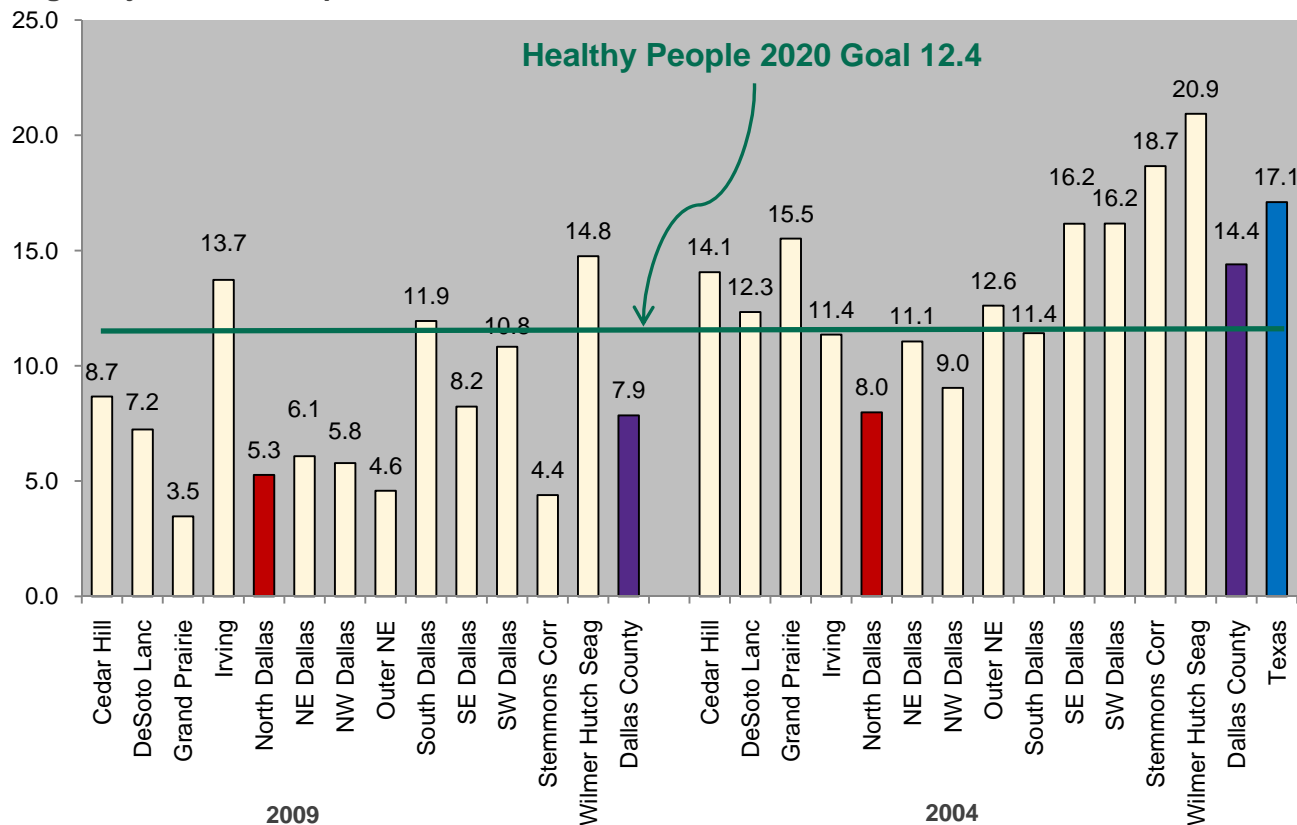




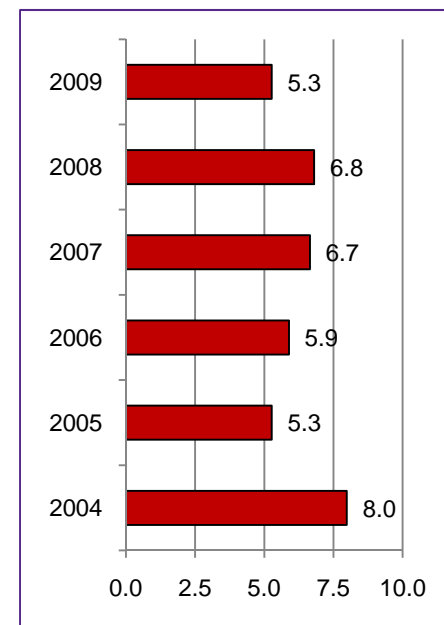
Risk Factors: Auto Accident Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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



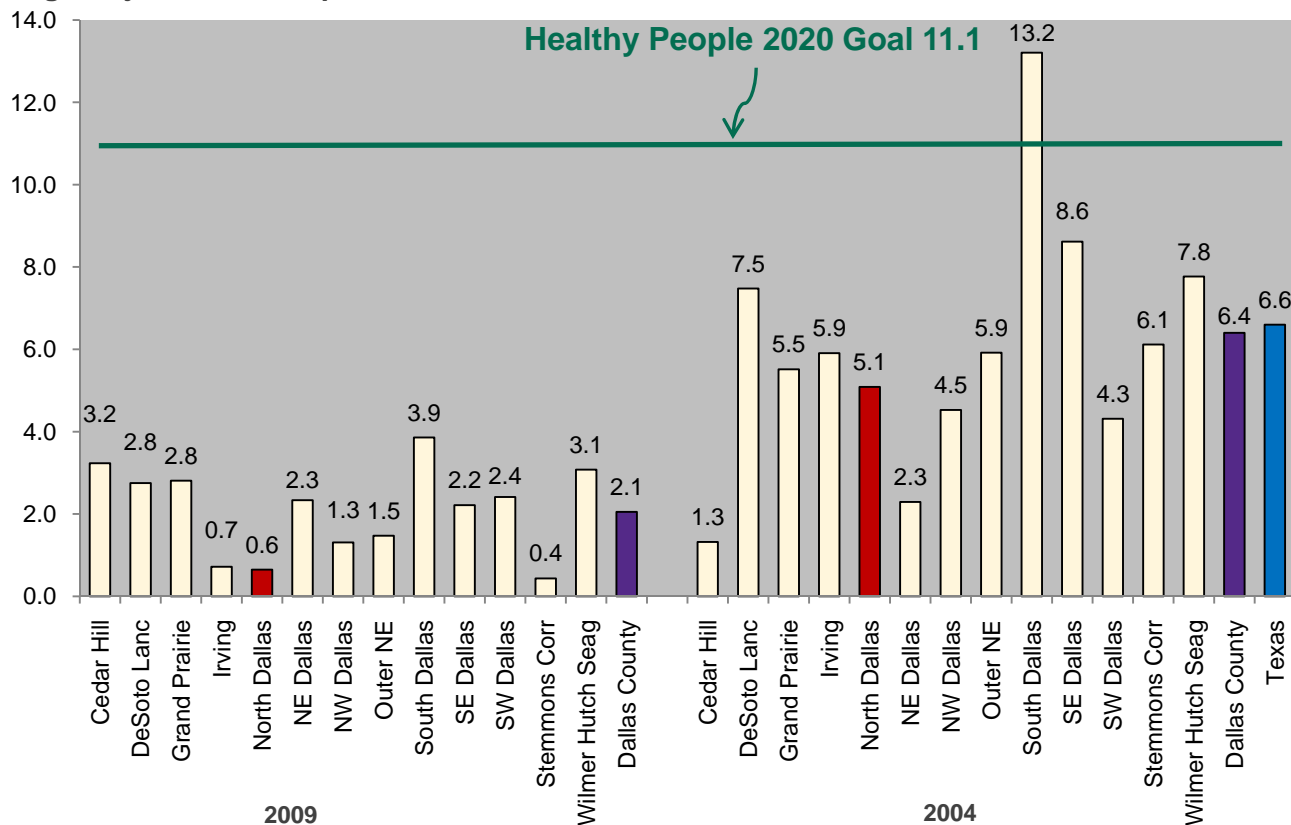
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Accidental Poisoning

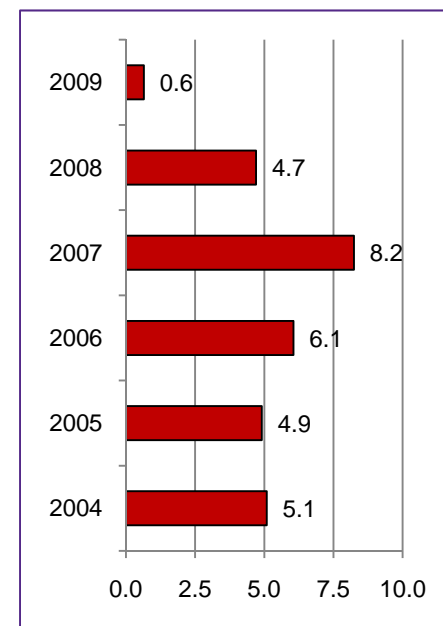
Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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



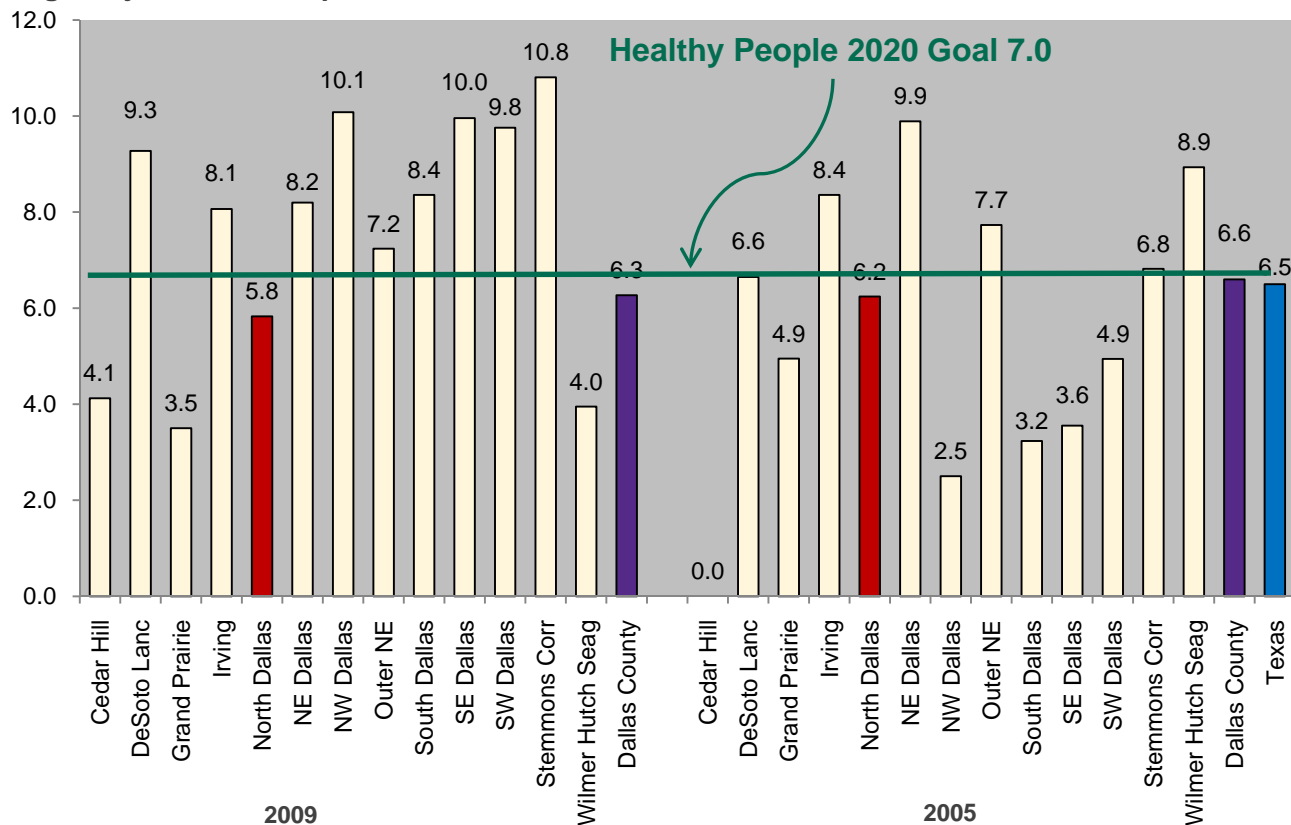
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Accidental Falls

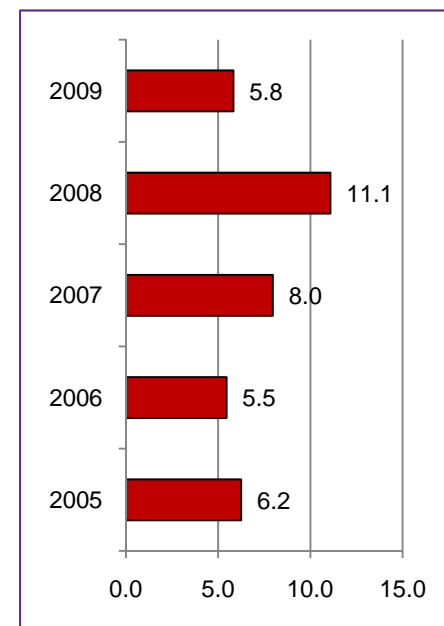
Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



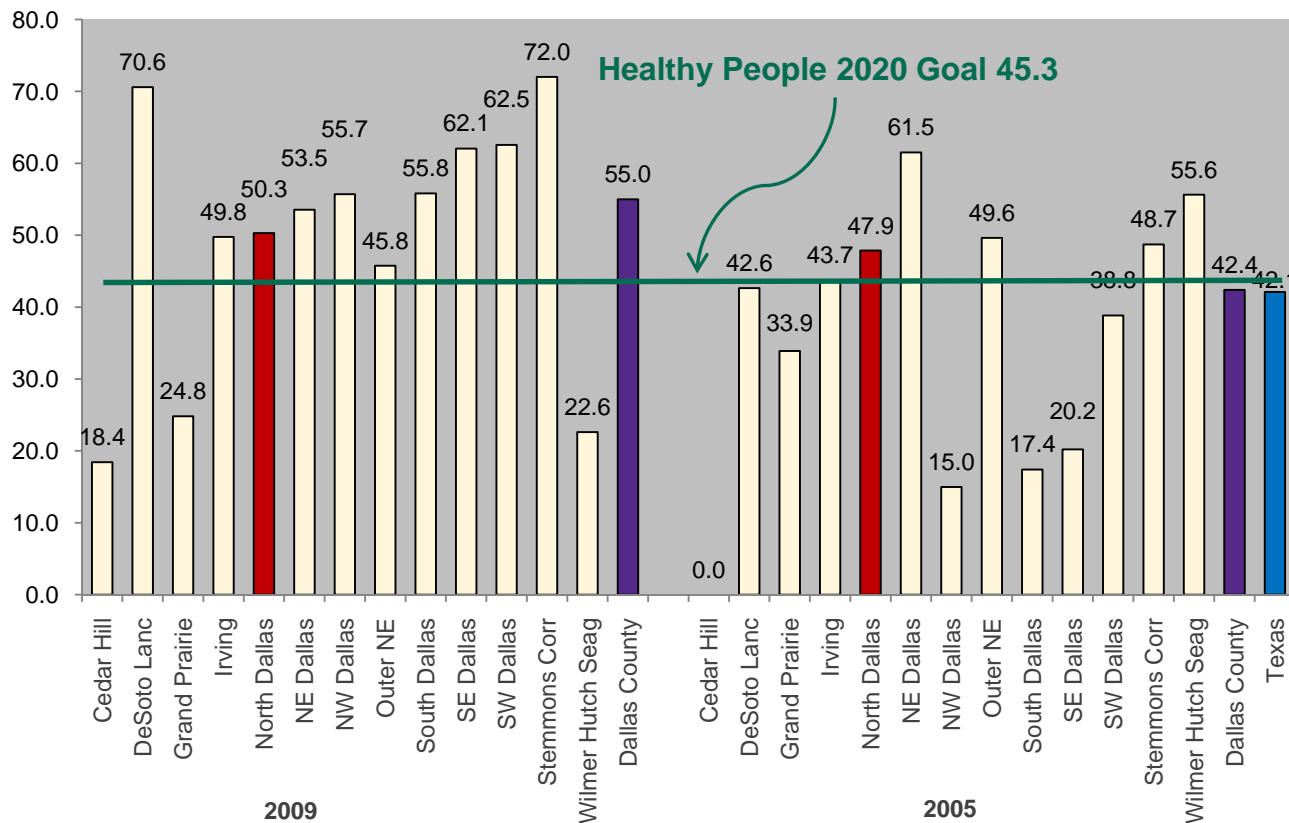
Accidental Falls Mortality Rate,
Age-Adjusted Death Rate per
100,000, North Dallas Service
Area



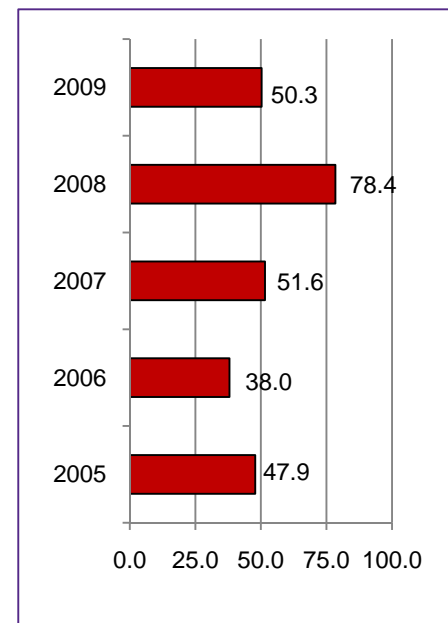
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Falls Death Rates Among Seniors North Dallas Service Area

Falls Deaths Age 65+



Falls fatality rates, ages 65+,
per 100,000, North Dallas
Service Area



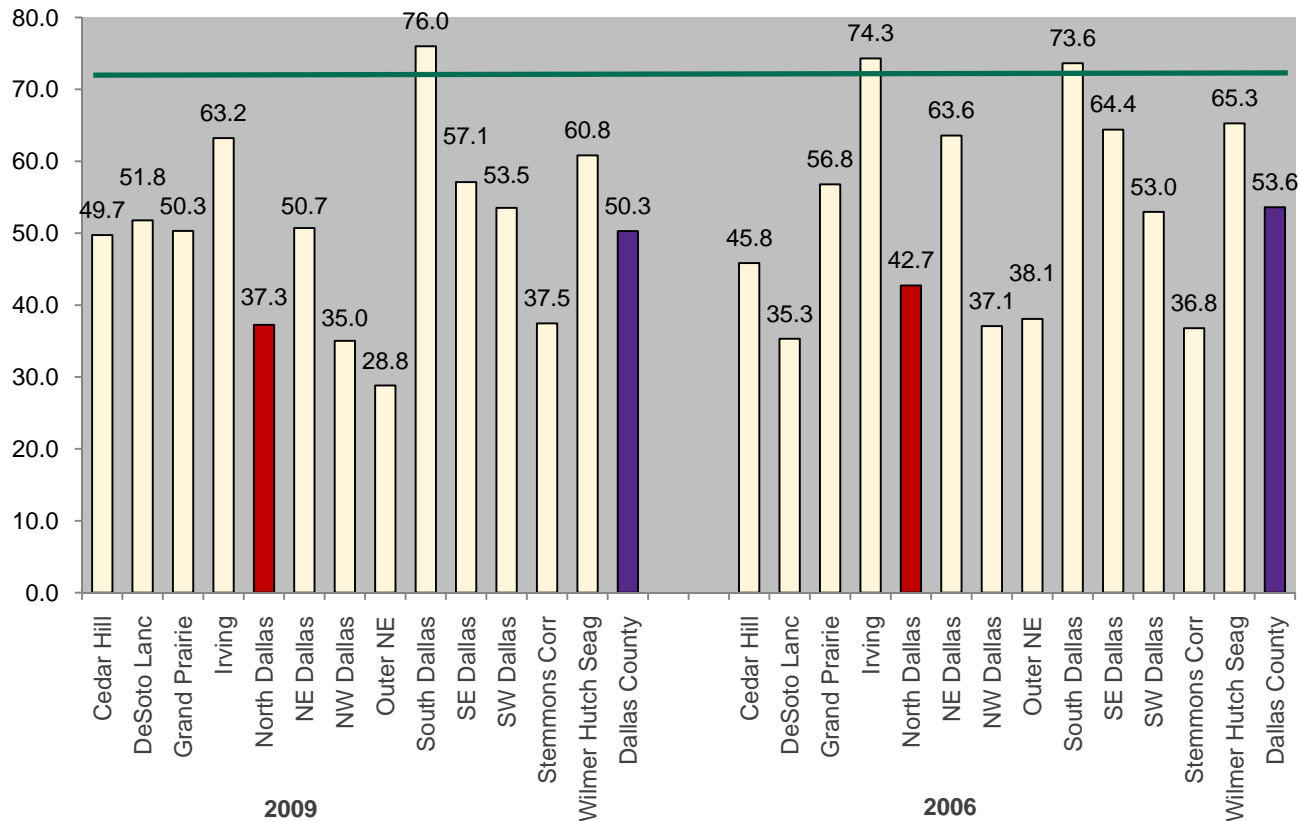
Source: Texas Department of State Health Services, Bureau of Vital Statistics, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death File 2005-2006. CDC 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

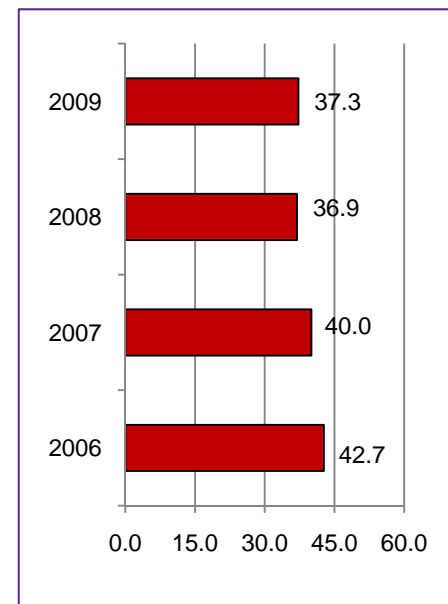
North Dallas Service Area

Rate of Injury-Related ED Visits

Healthy People 2020 Goal 73.3



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



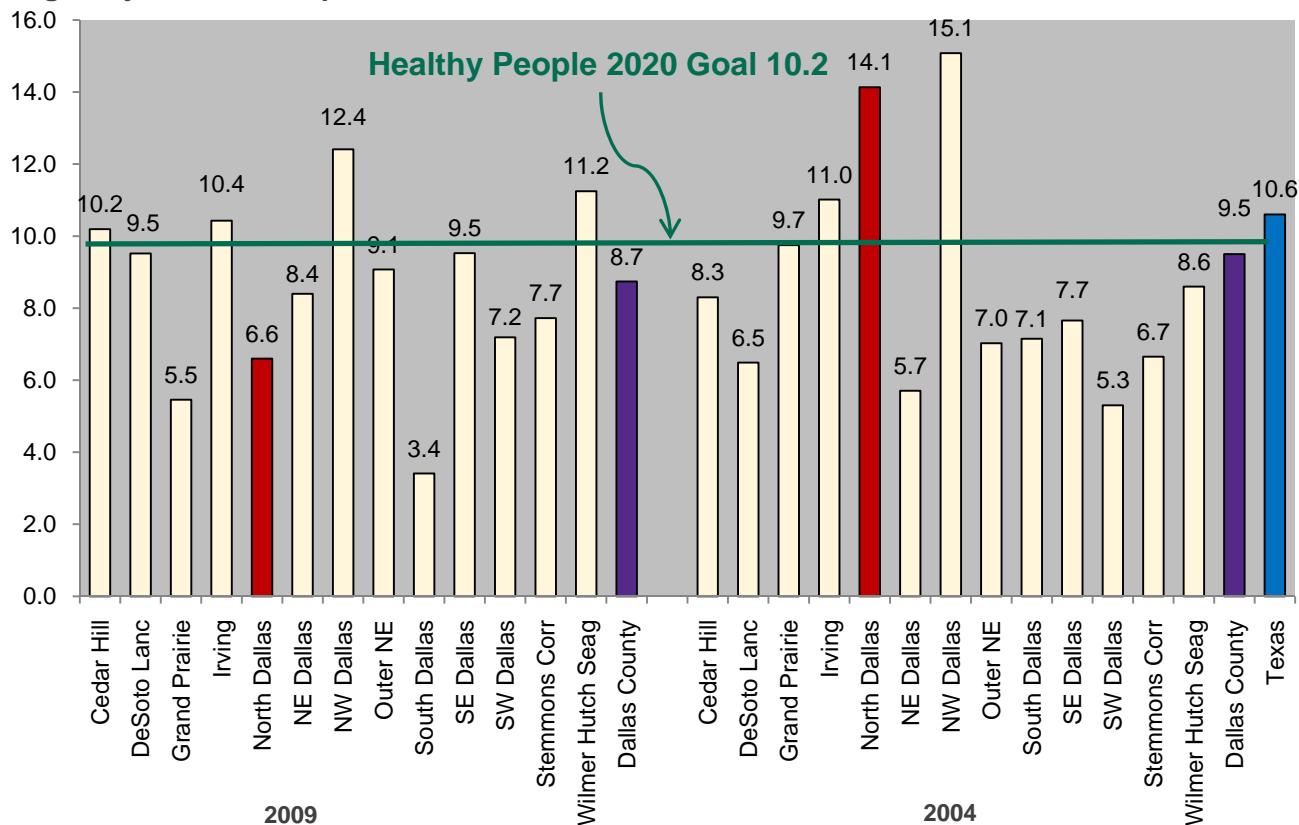
Source: Dallas Fort Worth Hospital Council, COGNOS application, unpublished data; denominator population data from Claritas, Inc.

Risk Factors: Suicide

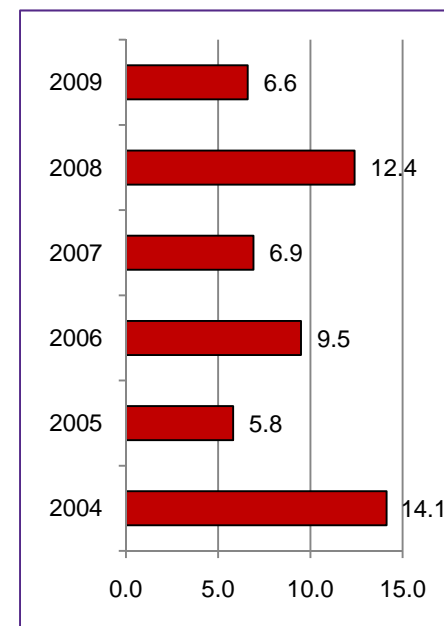
Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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

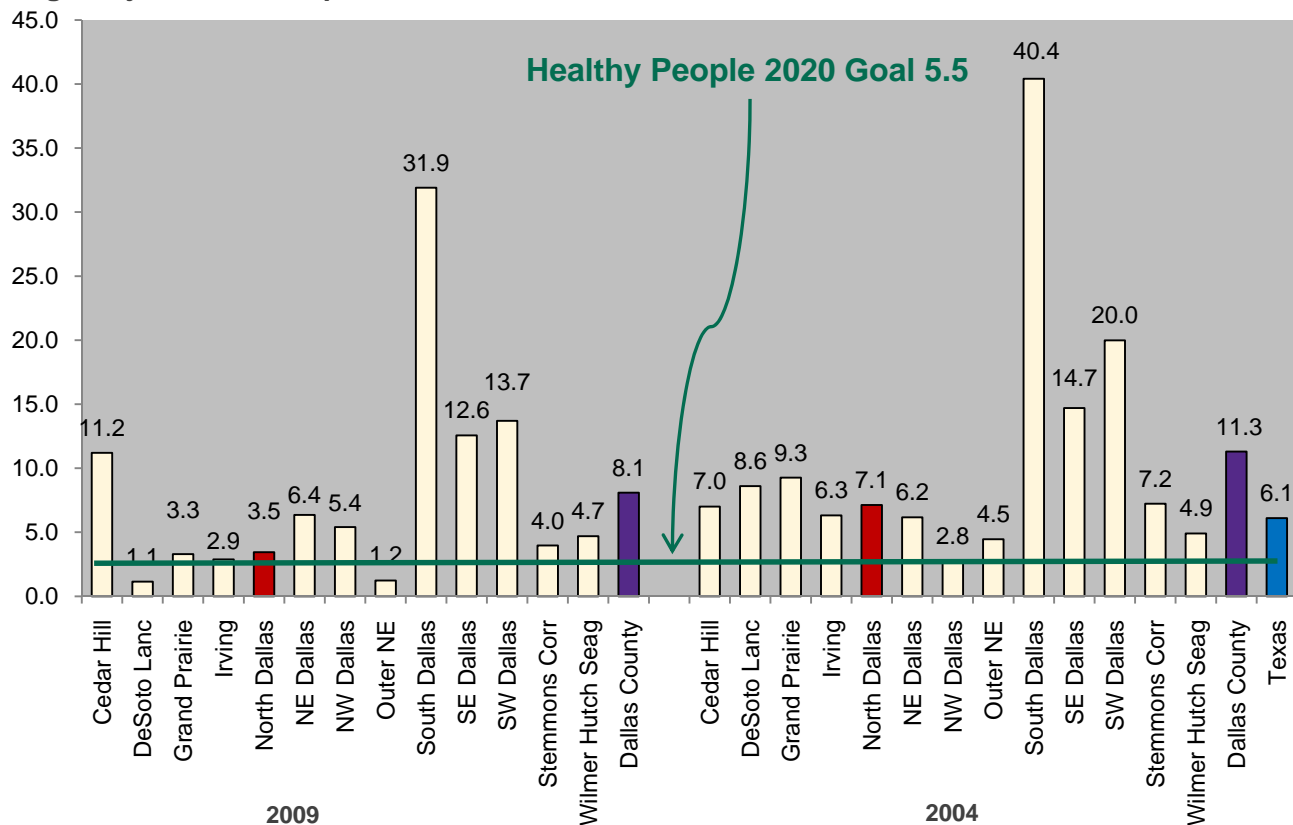


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

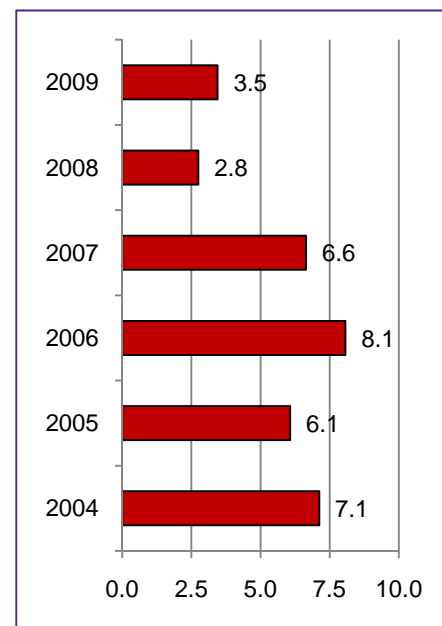
Risk Factors: Homicide Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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

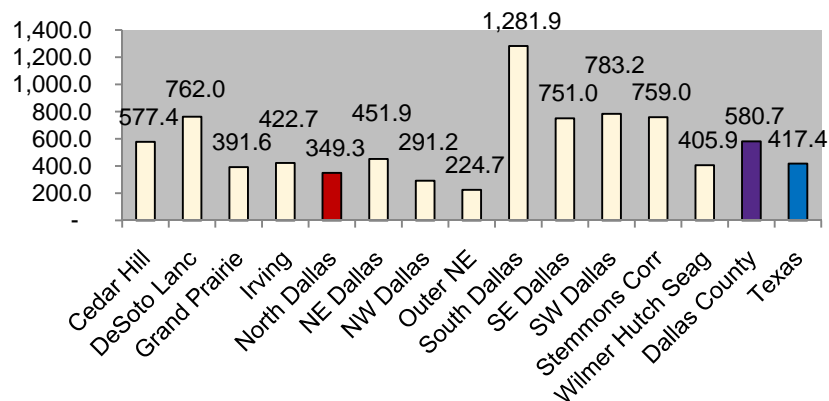


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

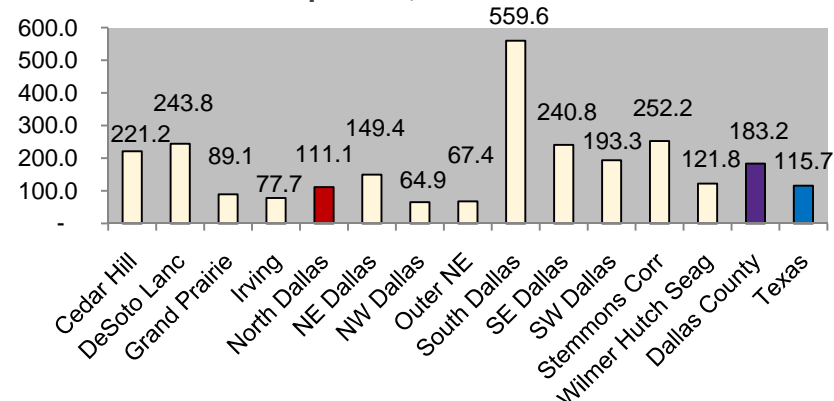
Risk Factors: High Risk Sexual Behavior, Sexually Transmitted Disease Incidence Rates, 2009

North Dallas Service Area

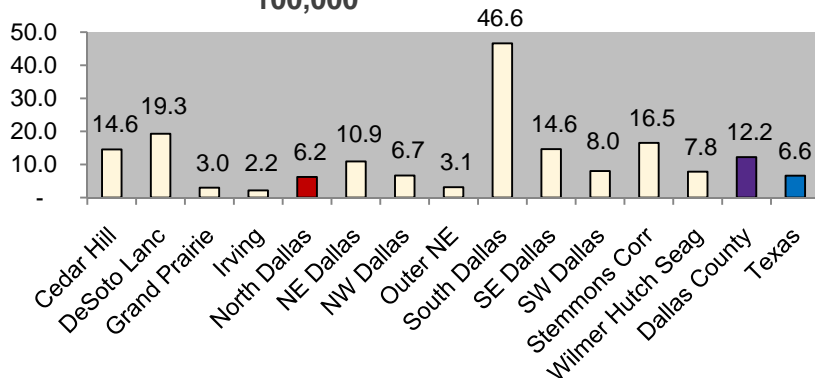
Chlamydia Incidence per 100,000



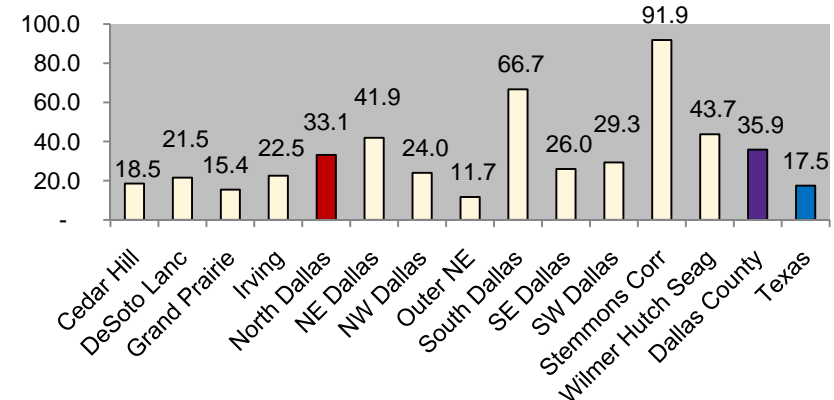
Gonorrhea Incidence per 100,000



Primary & Secondary Syphilis Incidence per 100,000



New HIV Incidence per 100,000

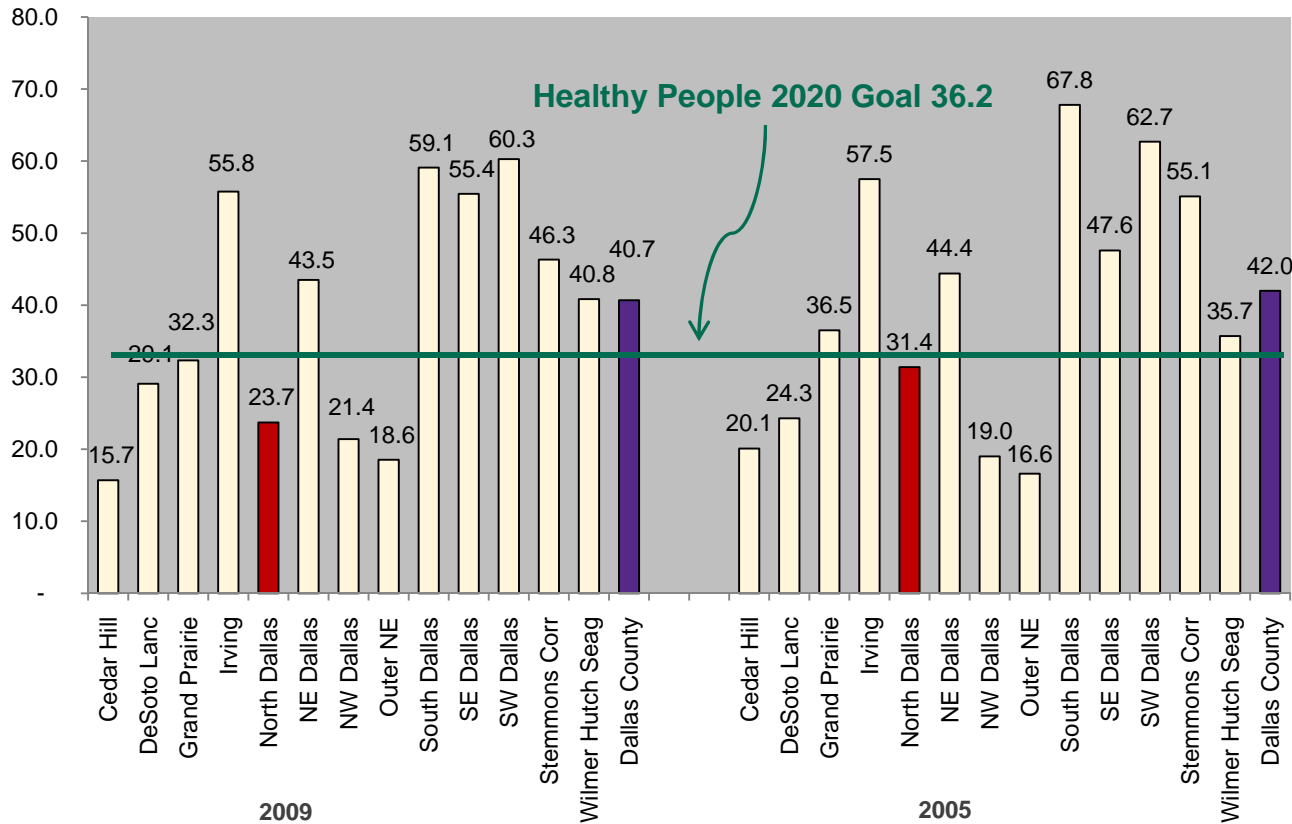




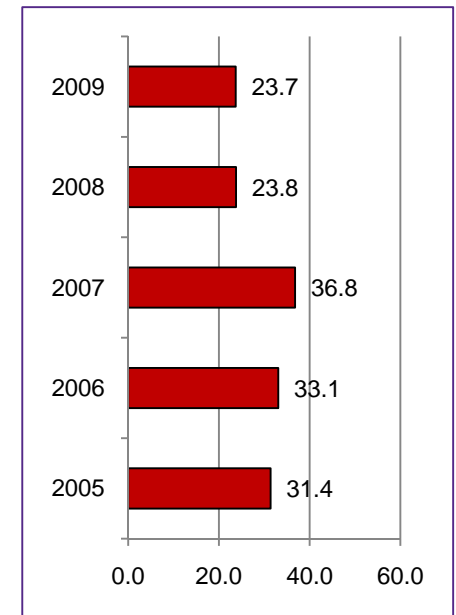
Risk Factors: High Risk Sexual Behavior, Teen Birth Rates

North Dallas Service Area

Teen Birth Rate



Teen Births, Rate Per 1,000 Girls
Ages 15-17, North Dallas
Service Area

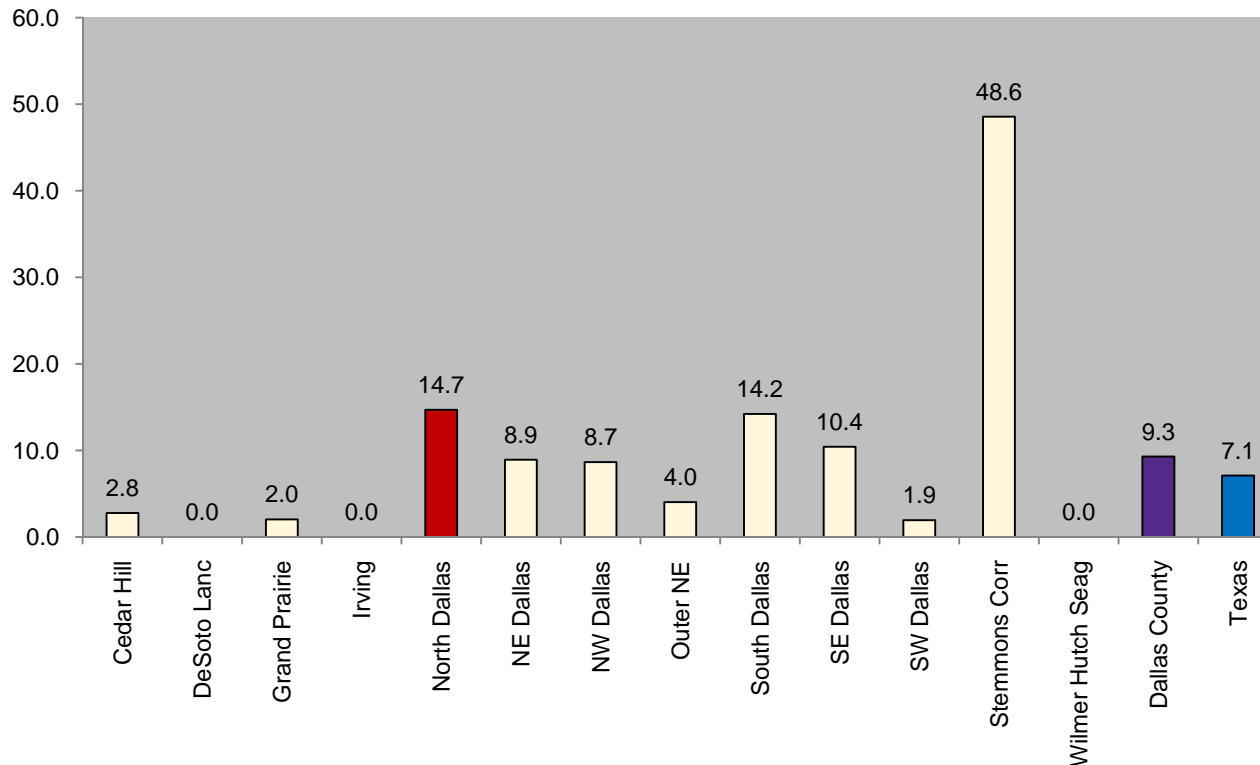


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

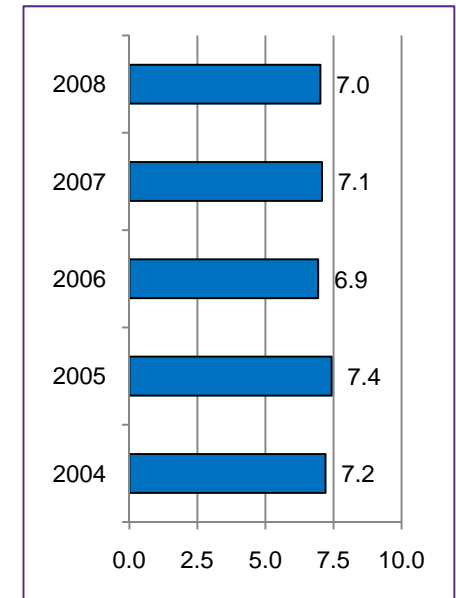
Risk Factors: Liquor Store Density, 2007

North Dallas Service Area




Liquor Stores Per 100,000, 2007

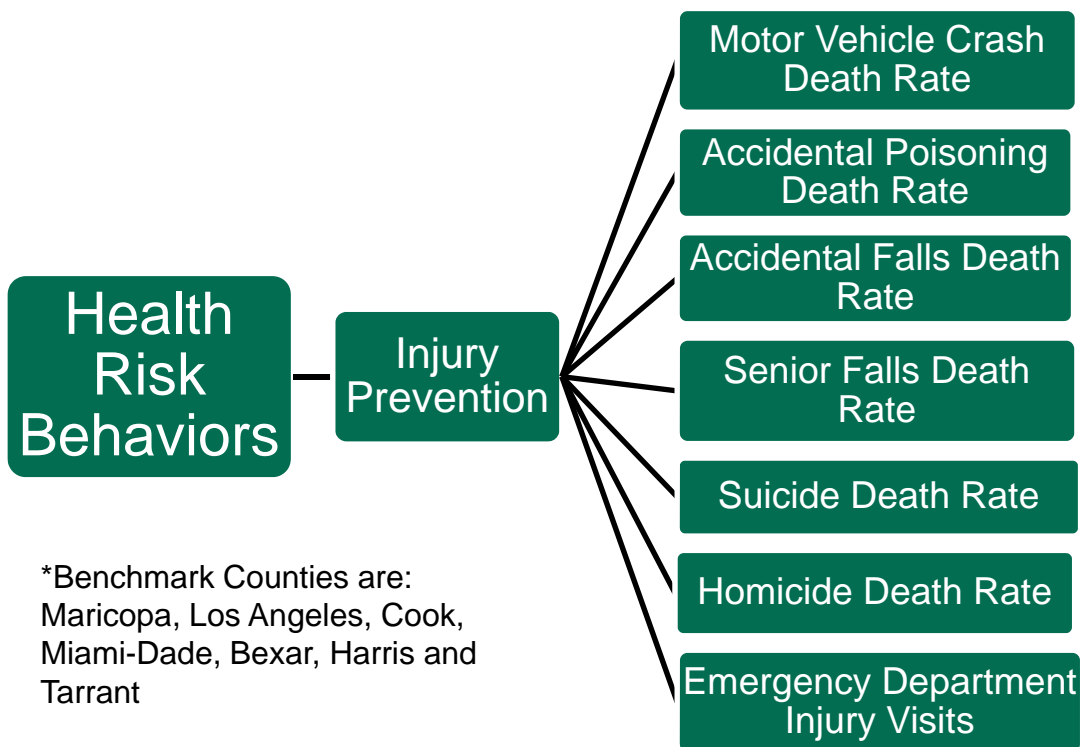























Liquor Store Density, Stores per 100,000, State of Texas






Source: 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, denominator is American Community Survey 2007 population estimate

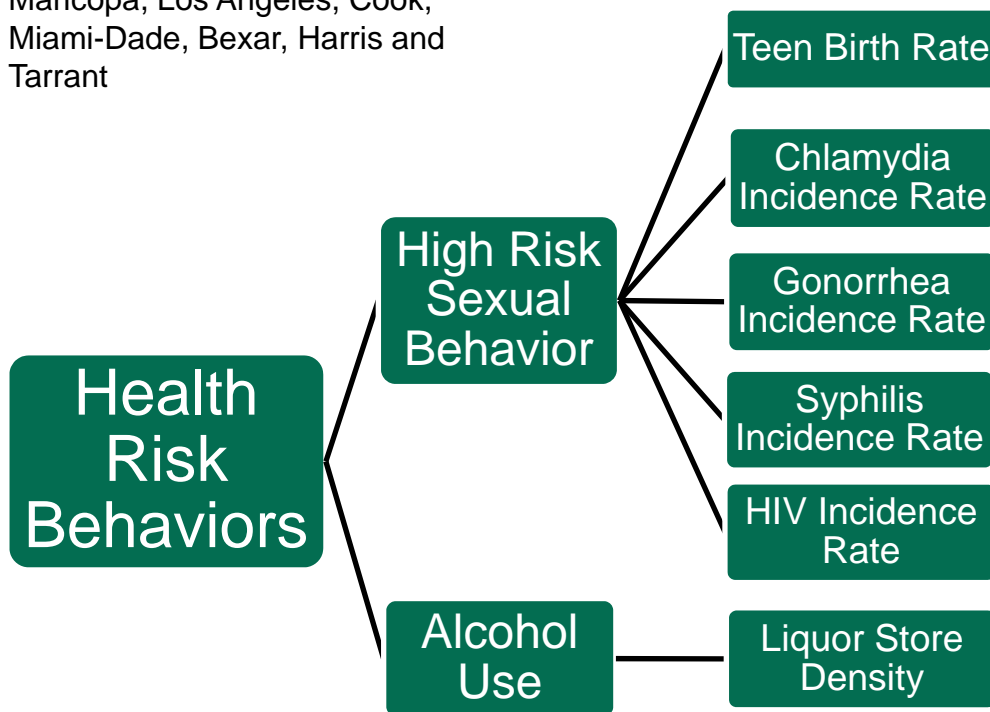
-  – Doing better than the benchmark
-  – Same as/not significantly different from the benchmark
-  – Worse than the benchmark















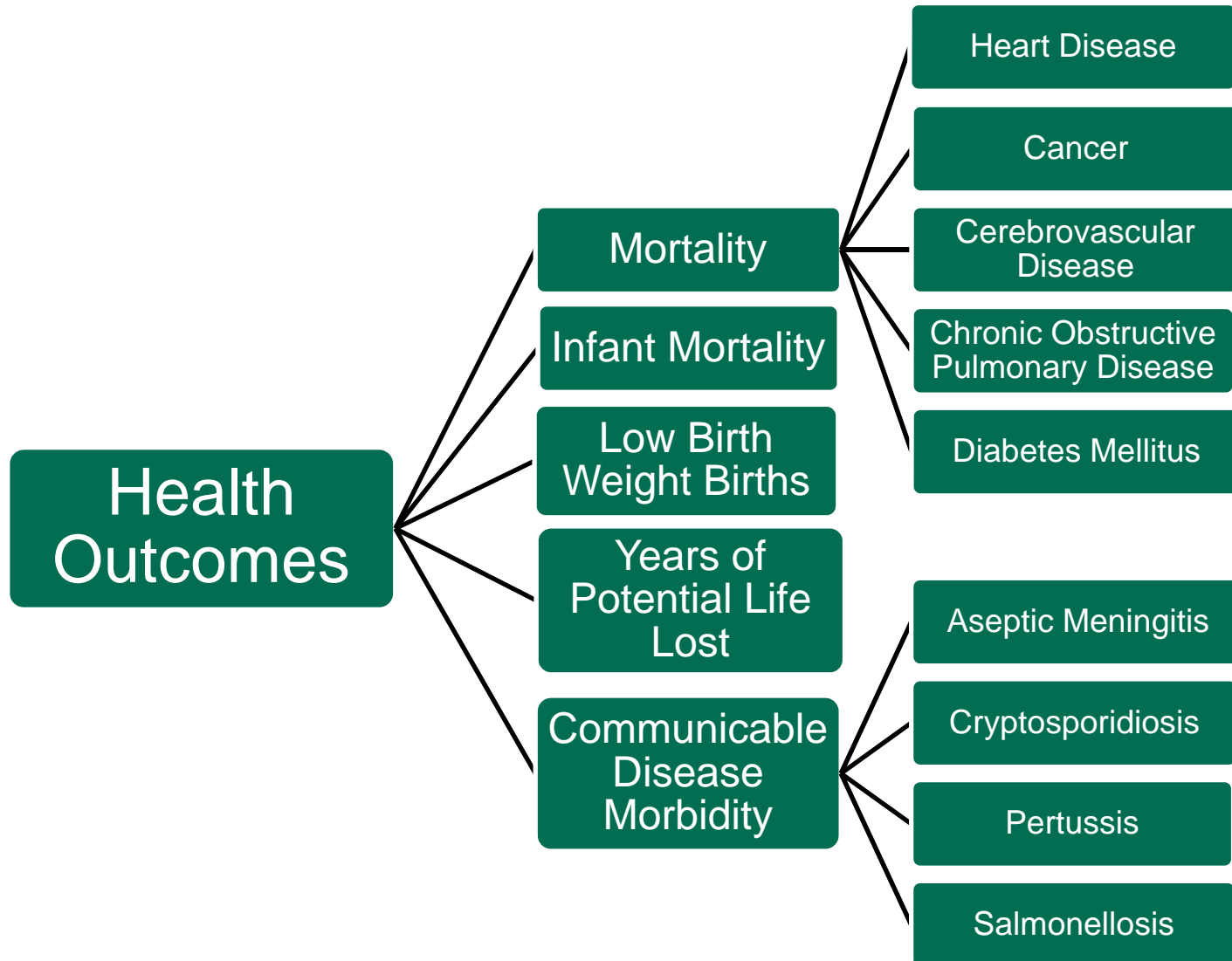
North Dallas Compared to Healthy People 2020 Goal	North Dallas Compared to Benchmark Counties* (Quartiles)	North Dallas Compared to Past Years' Data (CI)
		
		
		
		
		
		
		

-  – 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



North Dallas Compared to Healthy People 2020 Goal	North Dallas Compared to Benchmark Counties* (Quartiles)	North Dallas Compared to Past Years' Data (CI)
		
N/A		
N/A		
N/A		
N/A		
N/A		N/A

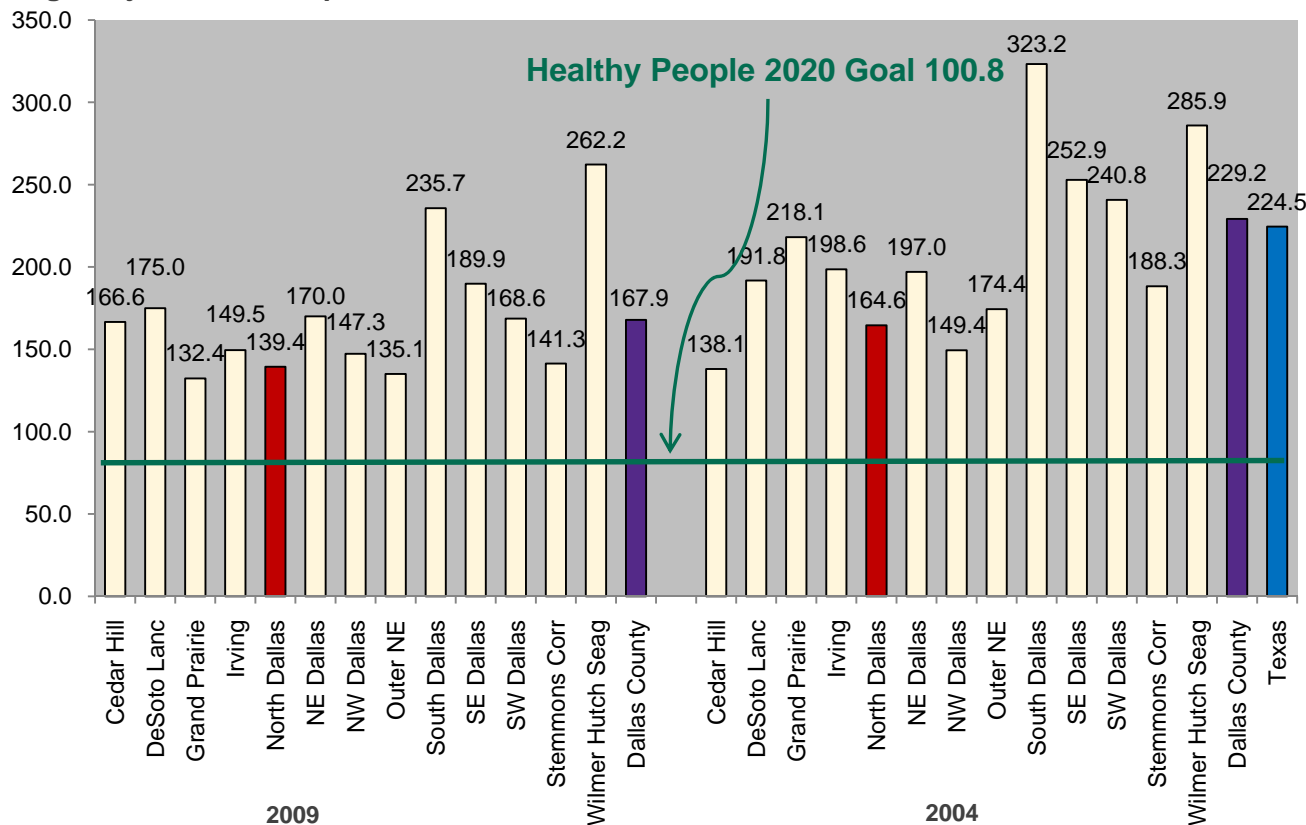


Health Outcomes: Heart Disease

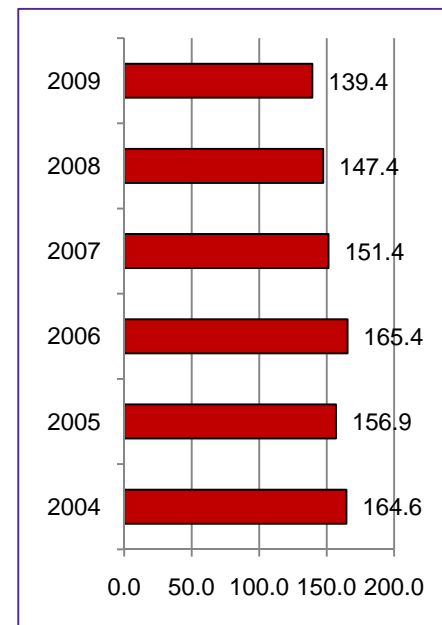
Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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

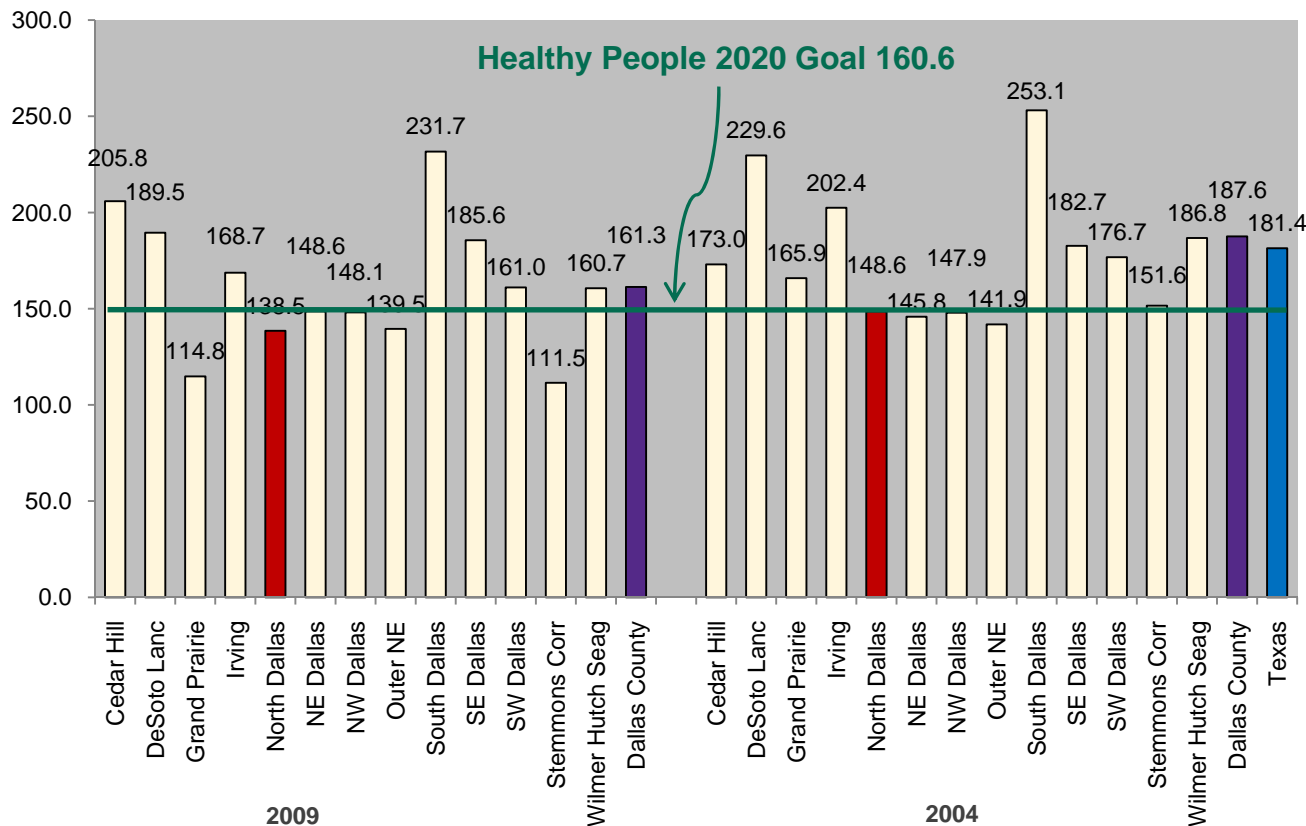


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

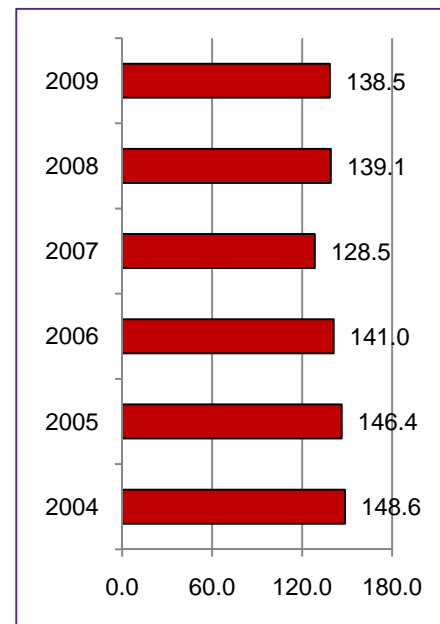
Health Outcomes: Cancer Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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

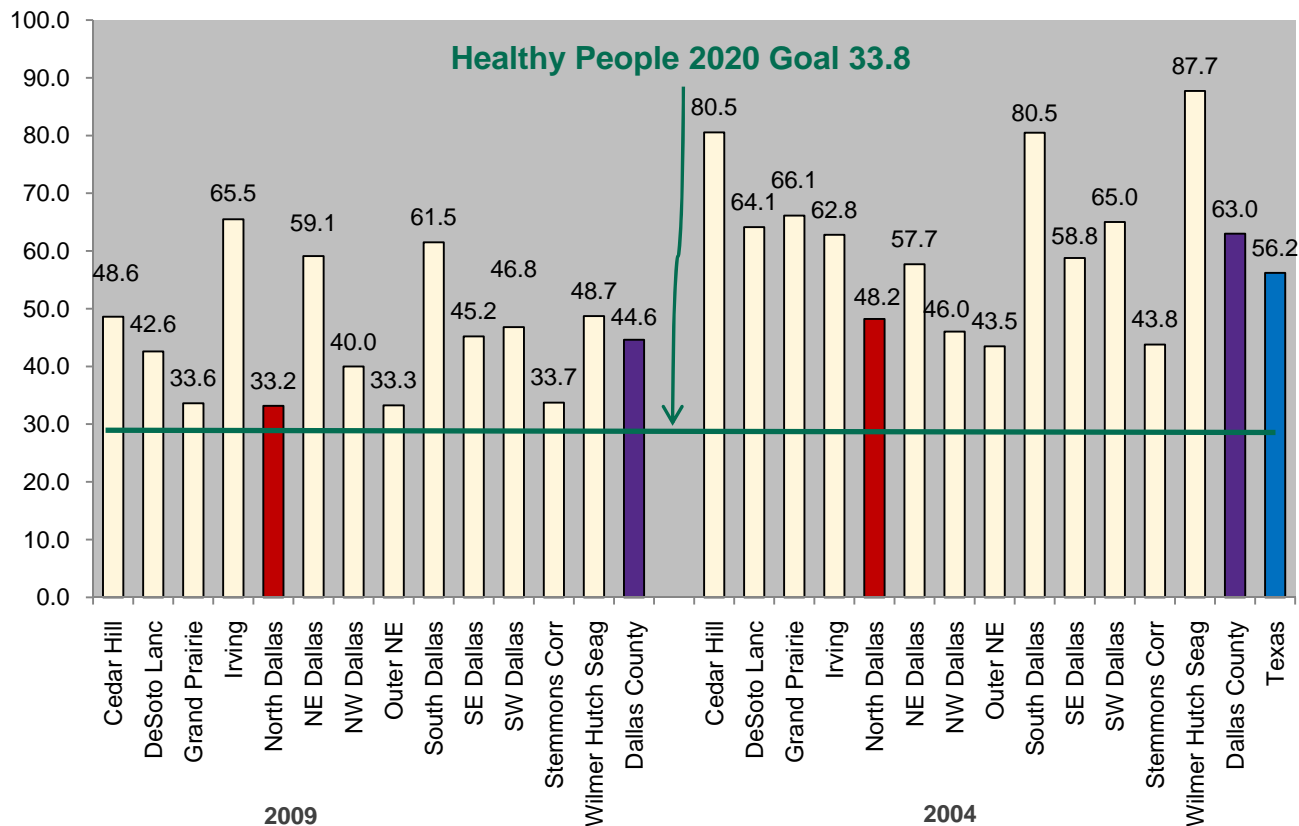


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

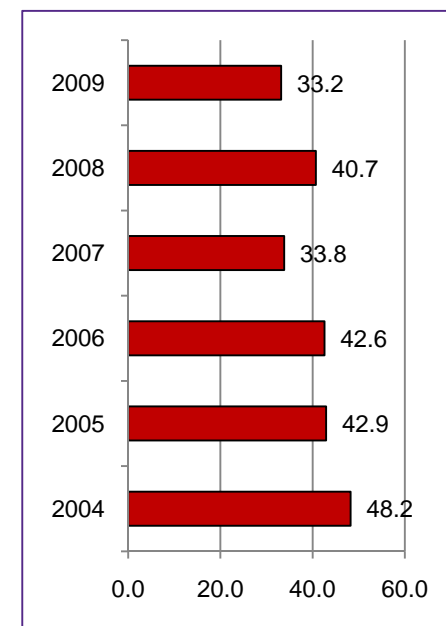
Health Outcomes: Cerebrovascular Disease Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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

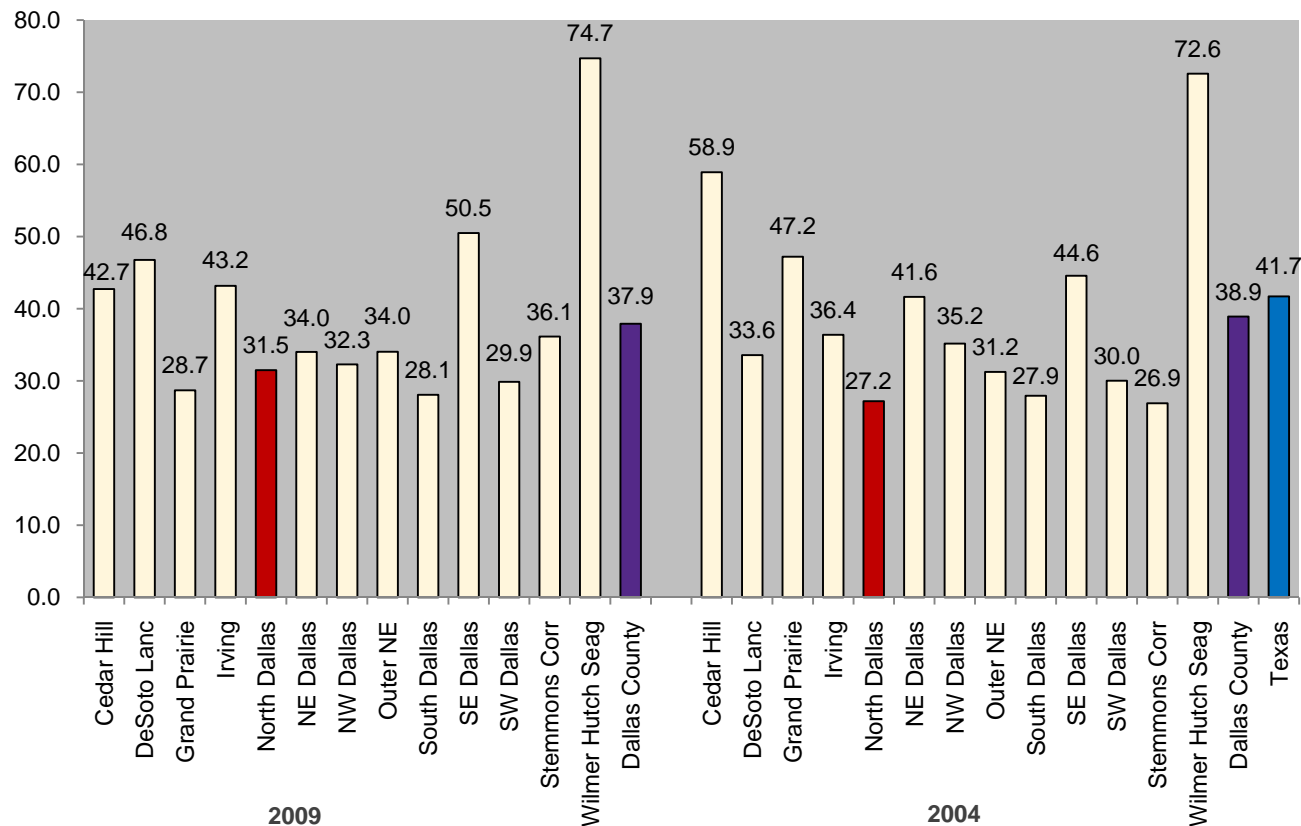


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

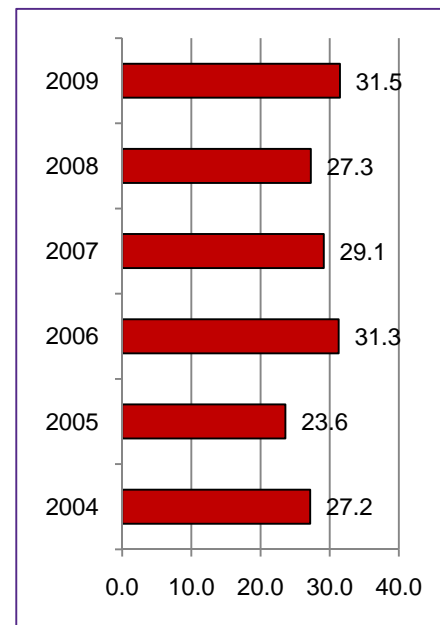
Health Outcomes: Chronic Obstructive Pulmonary Disease Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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



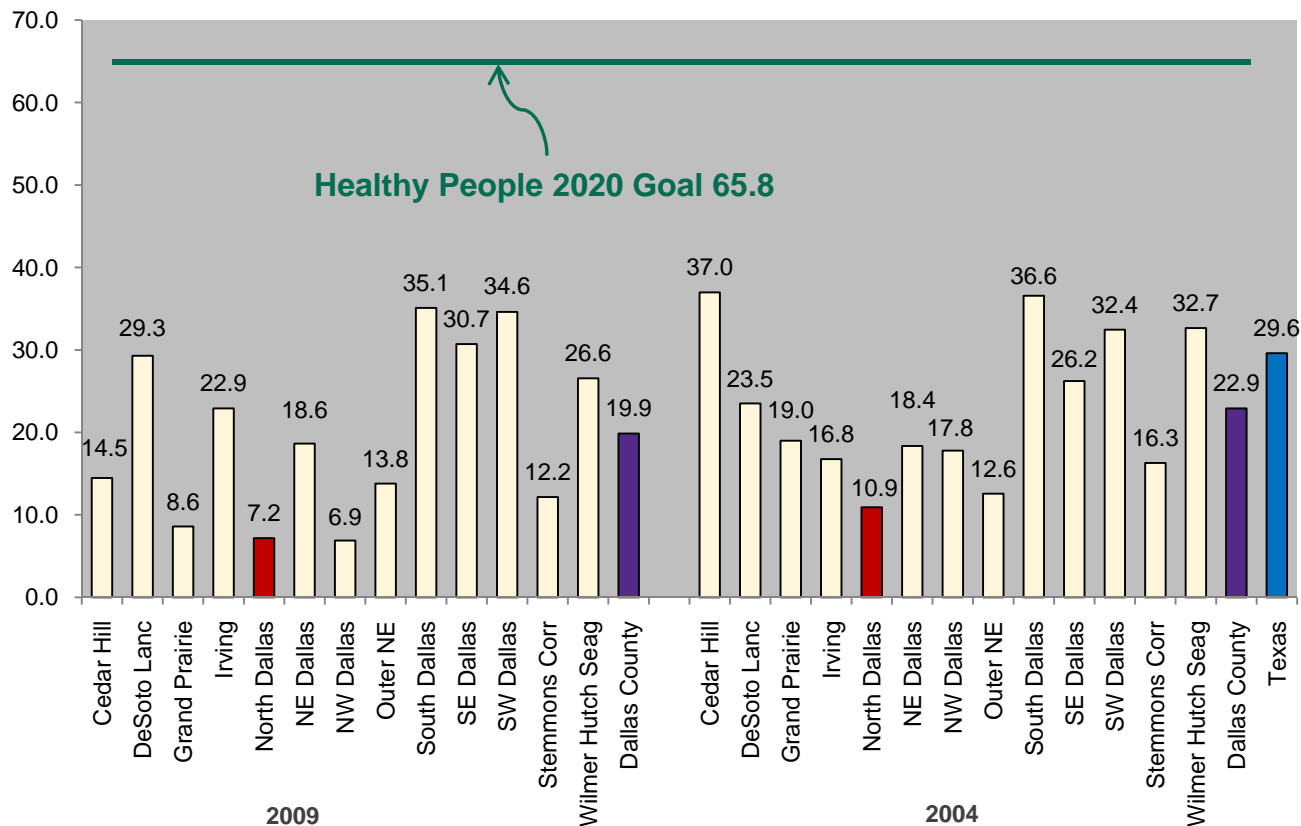
NOTE: No Healthy People 2020 goal matches this metric.

Health Outcomes: Diabetes

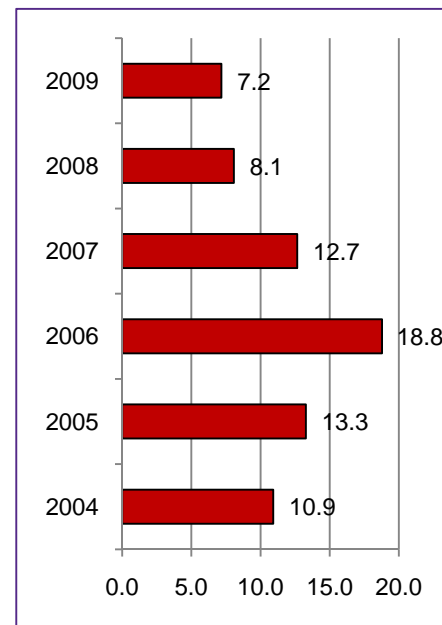
Mortality Rates

North Dallas Service Area

Age-Adjusted Deaths per 100,000



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



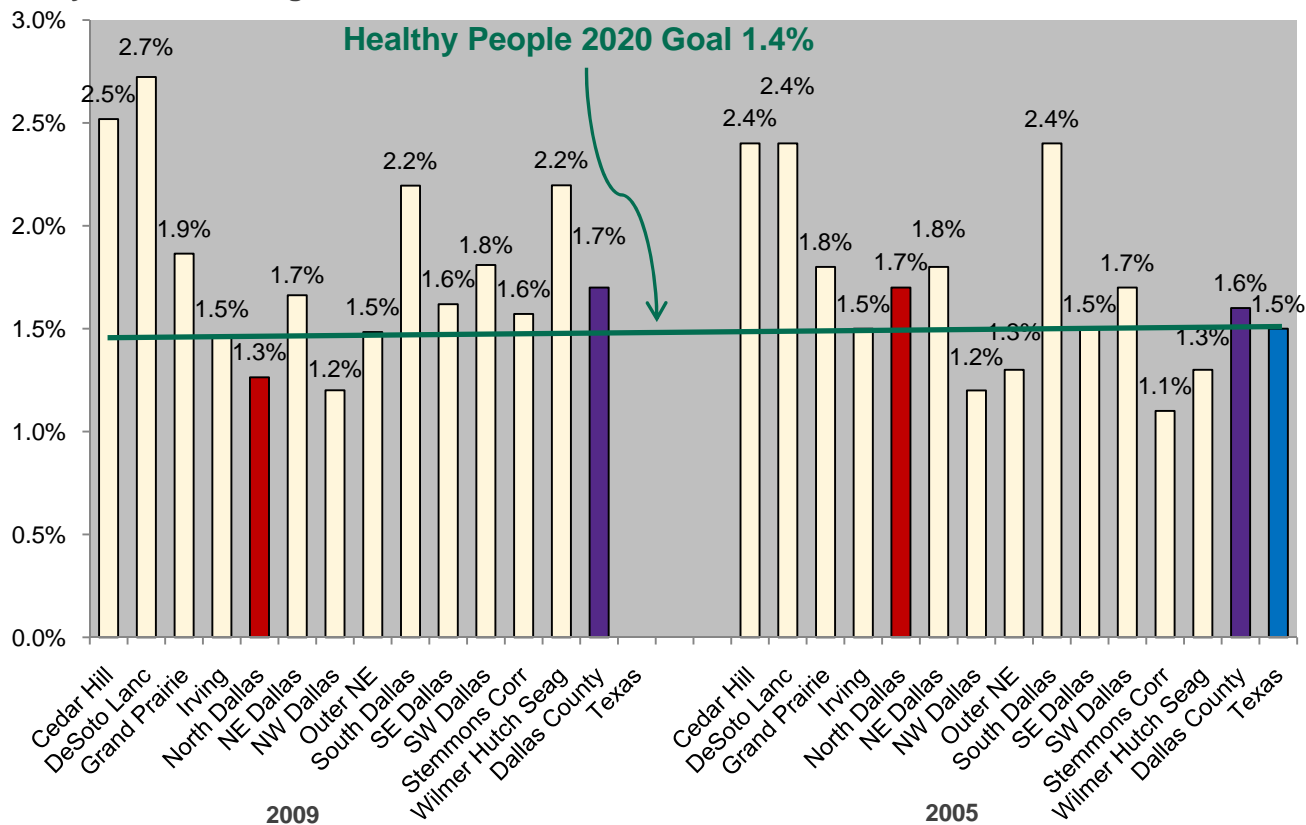
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.



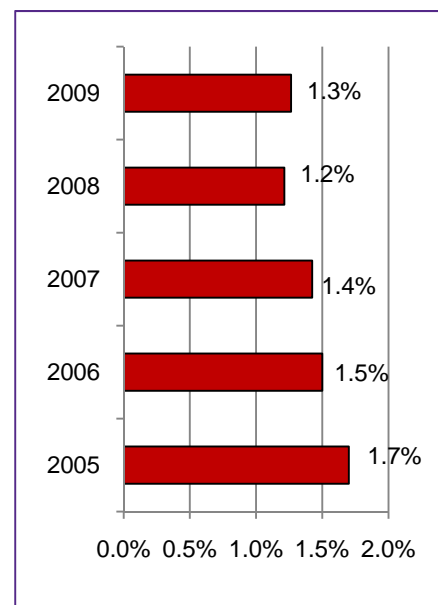
Health Outcomes: Birth Outcomes, Rate of Very Low Birth Weight Births

North Dallas Service Area

Very Low Birth Weight Rate



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

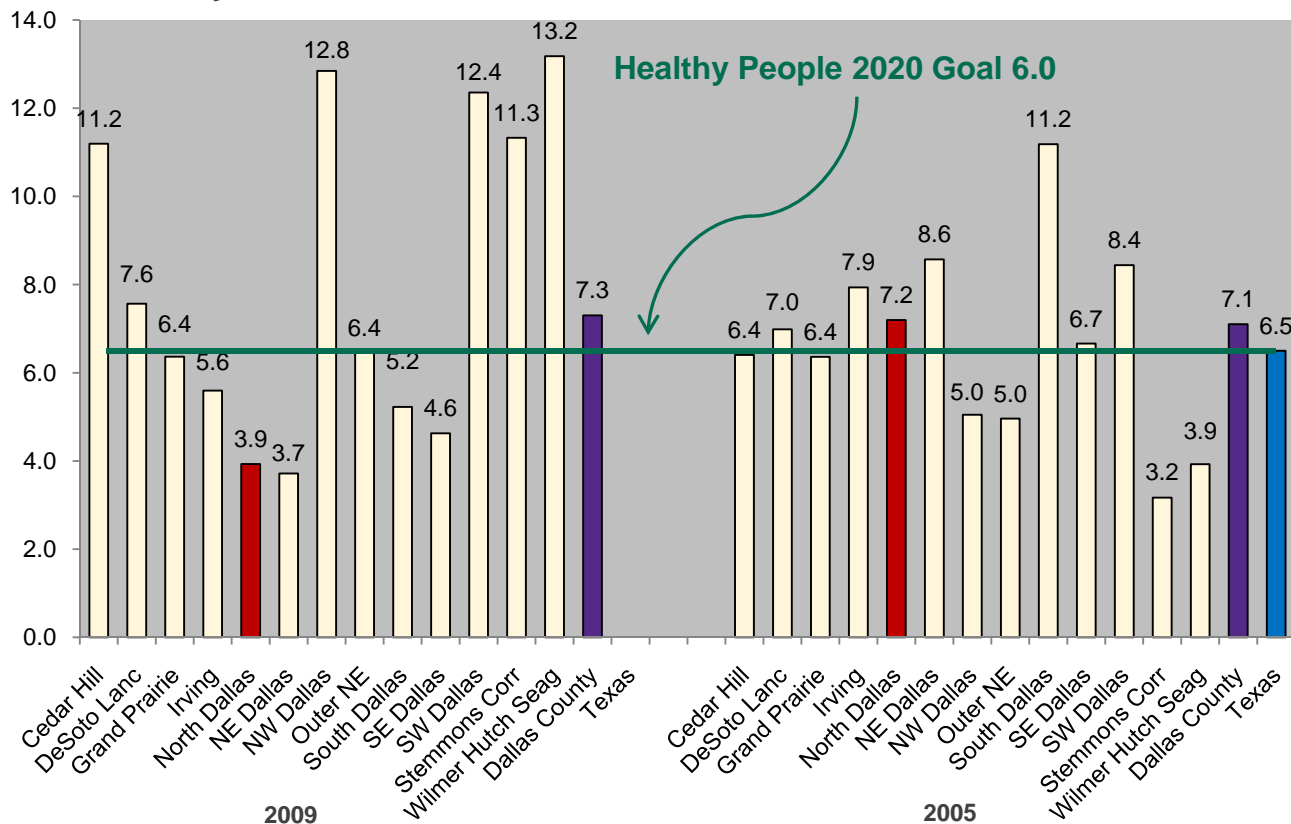


Source: Texas Department of State Health Services, Bureau of Vital Statistics;
Denominator population data from Claritas, Inc.

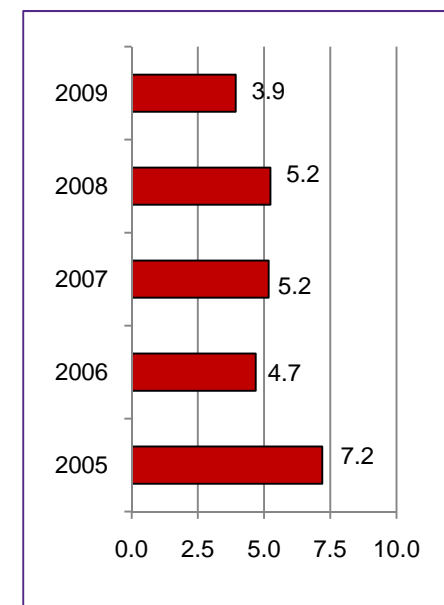
Health Outcomes: Birth Outcomes, Infant Mortality Rate

North Dallas Service Area

Infant Mortality Rate



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

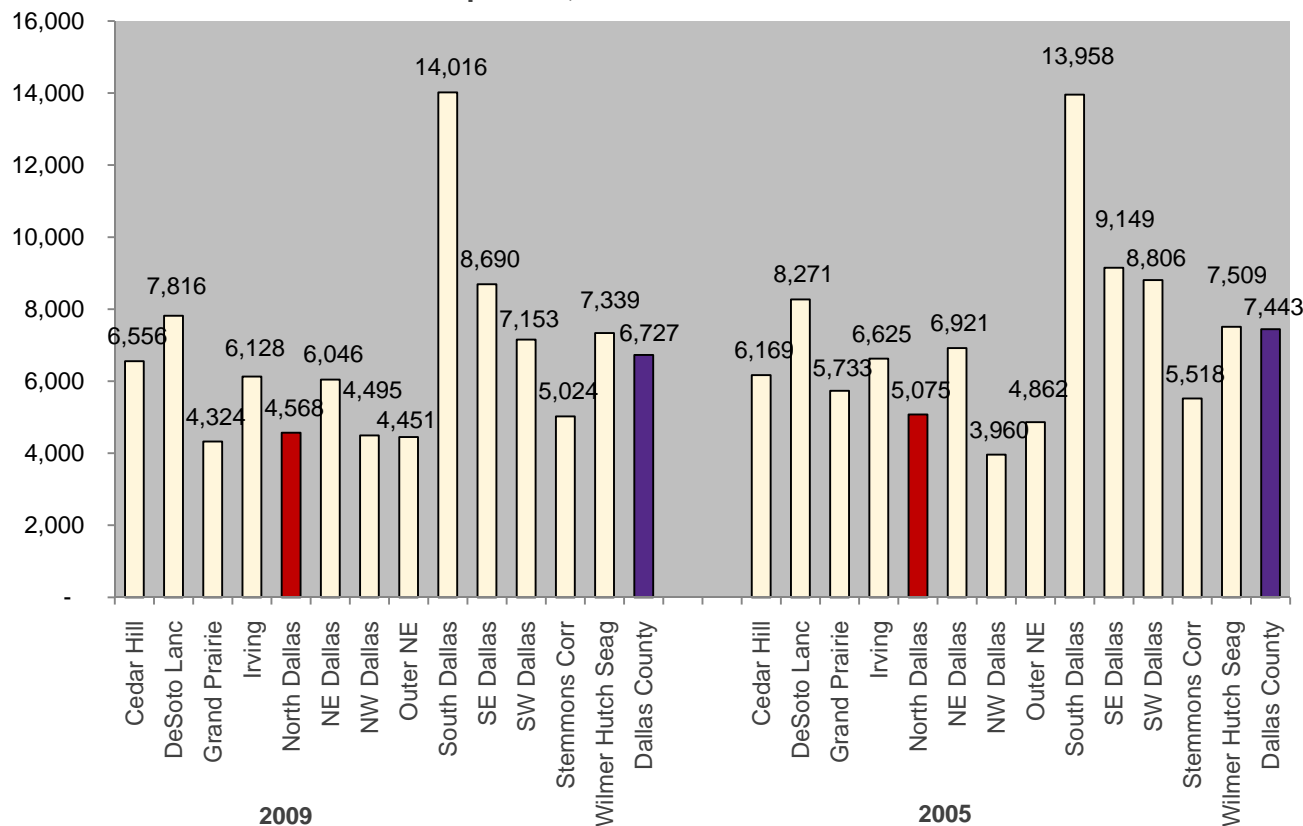


Source: Texas Department of State Health Services, Bureau of Vital Statistics;
Denominator population data from Claritas, Inc.

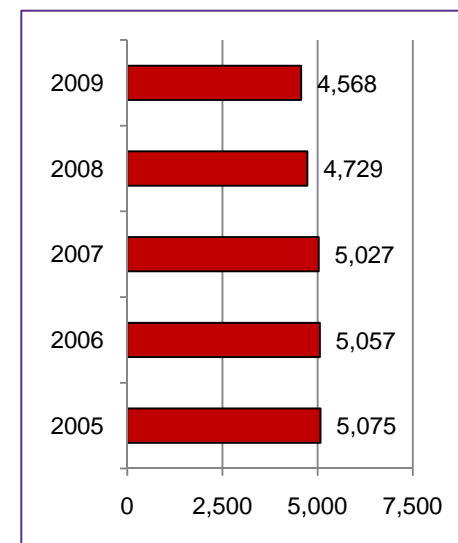
Health Outcomes: Years of Potential Life Lost, All Causes

North Dallas Service Area

Years of Potential Life Lost Rate per 100,000*



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



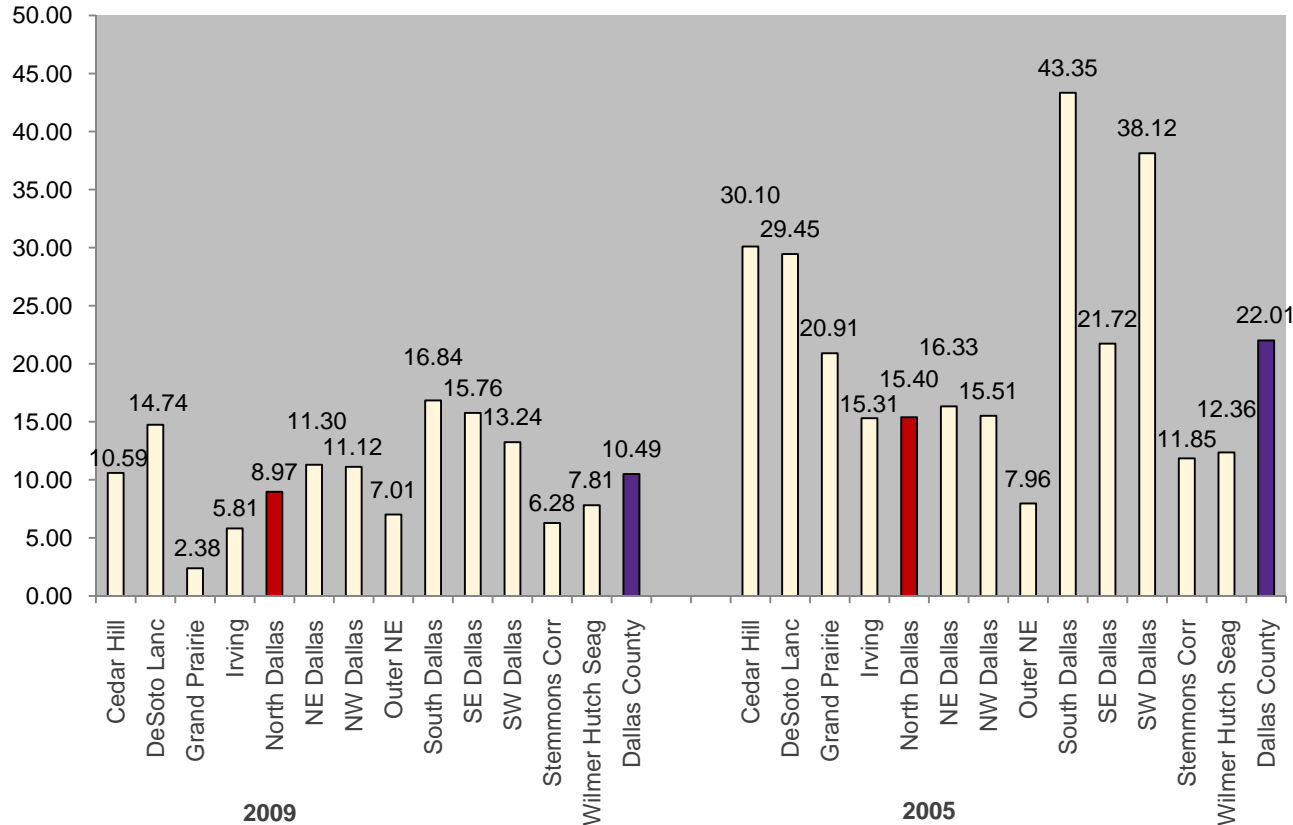
*Years of Potential Life Lost Rate is defined as the rate of deaths under age 75 per 100,000 population under age 75.



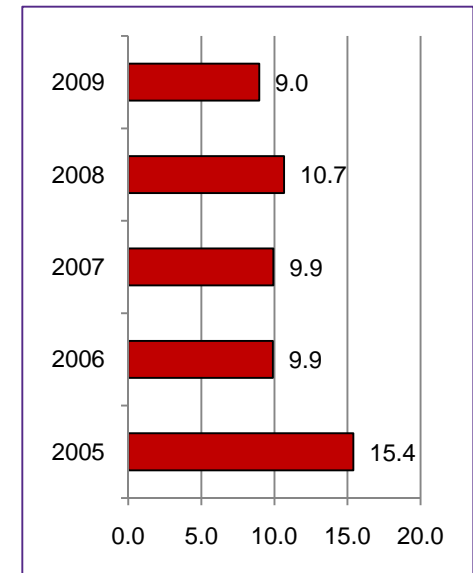
Health Outcomes: Reportable Communicable Disease Rates

North Dallas Service Area

Aseptic Meningitis Incidence, per 100,000



**Aseptic Meningitis Incidence
Rate, per 100,000, North
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/departments/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf>;

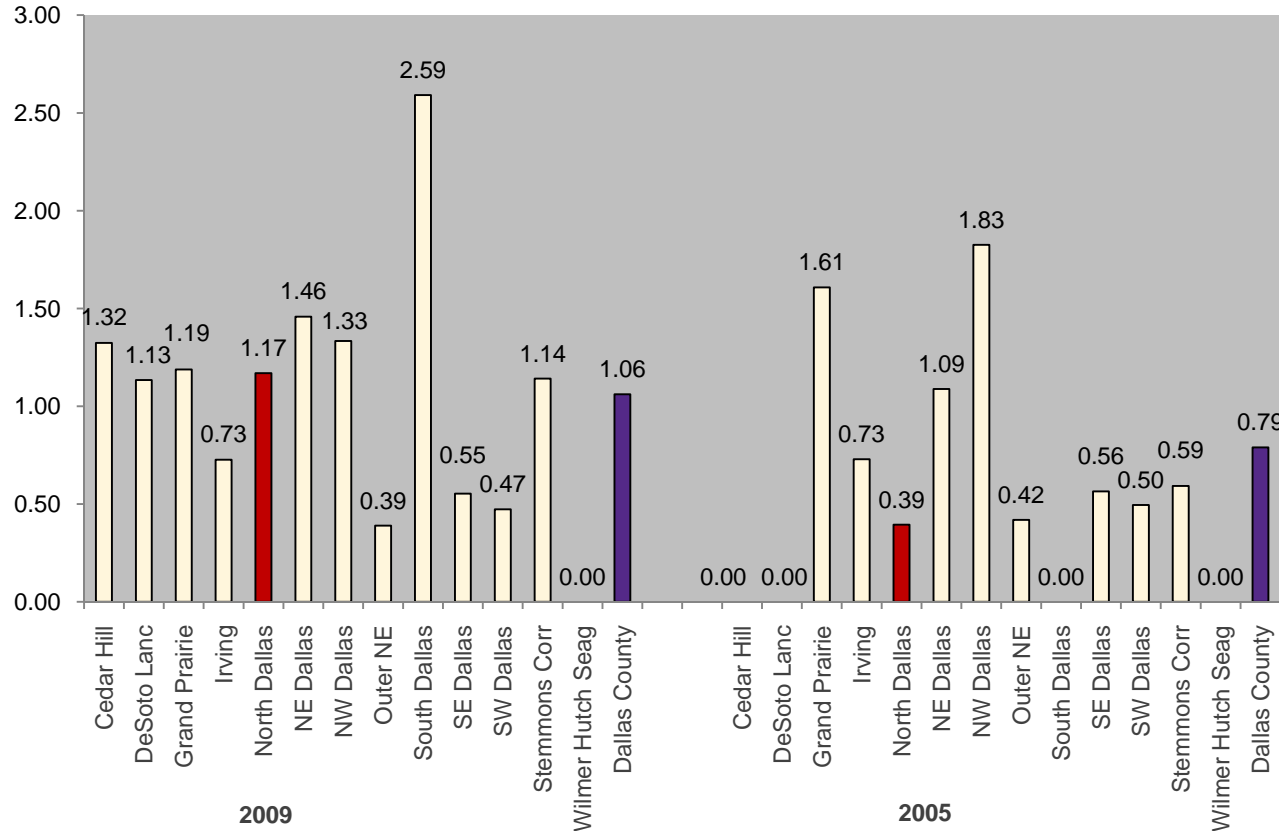
2005 Dallas County denominator population data from American Community Survey.



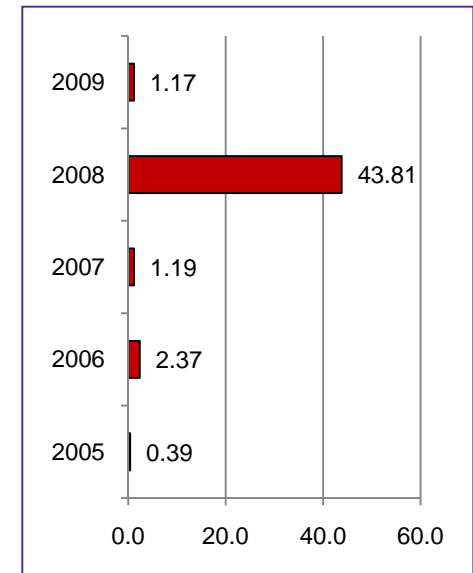
Health Outcomes: Reportable Communicable Disease Rates

North Dallas Service Area

Cryptosporidiosis Incidence, per 100,000



**Cryptosporidiosis Incidence
Rate, per 100,000, North
Dallas Service Area**



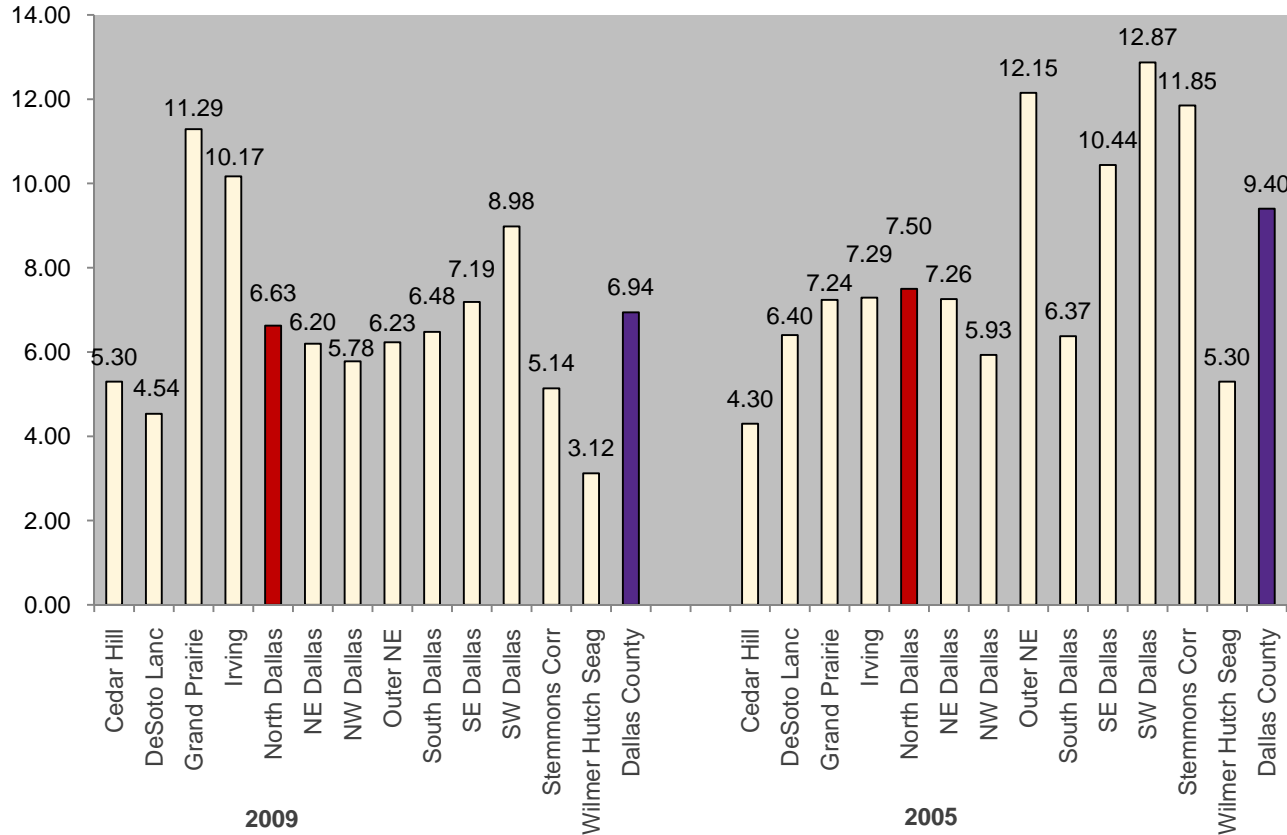
Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site:
<http://www.dallascounty.org/departments/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf>;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



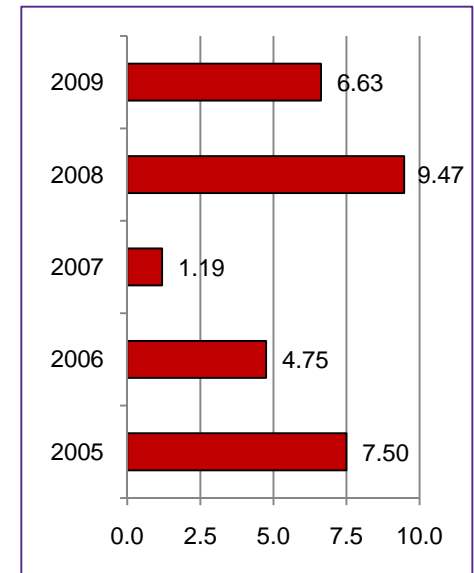
Health Outcomes: Reportable Communicable Disease Rates

North Dallas Service Area

Pertussis Incidence, per 100,000



Pertussis Incidence Rate, per 100,000, North Dallas Service Area



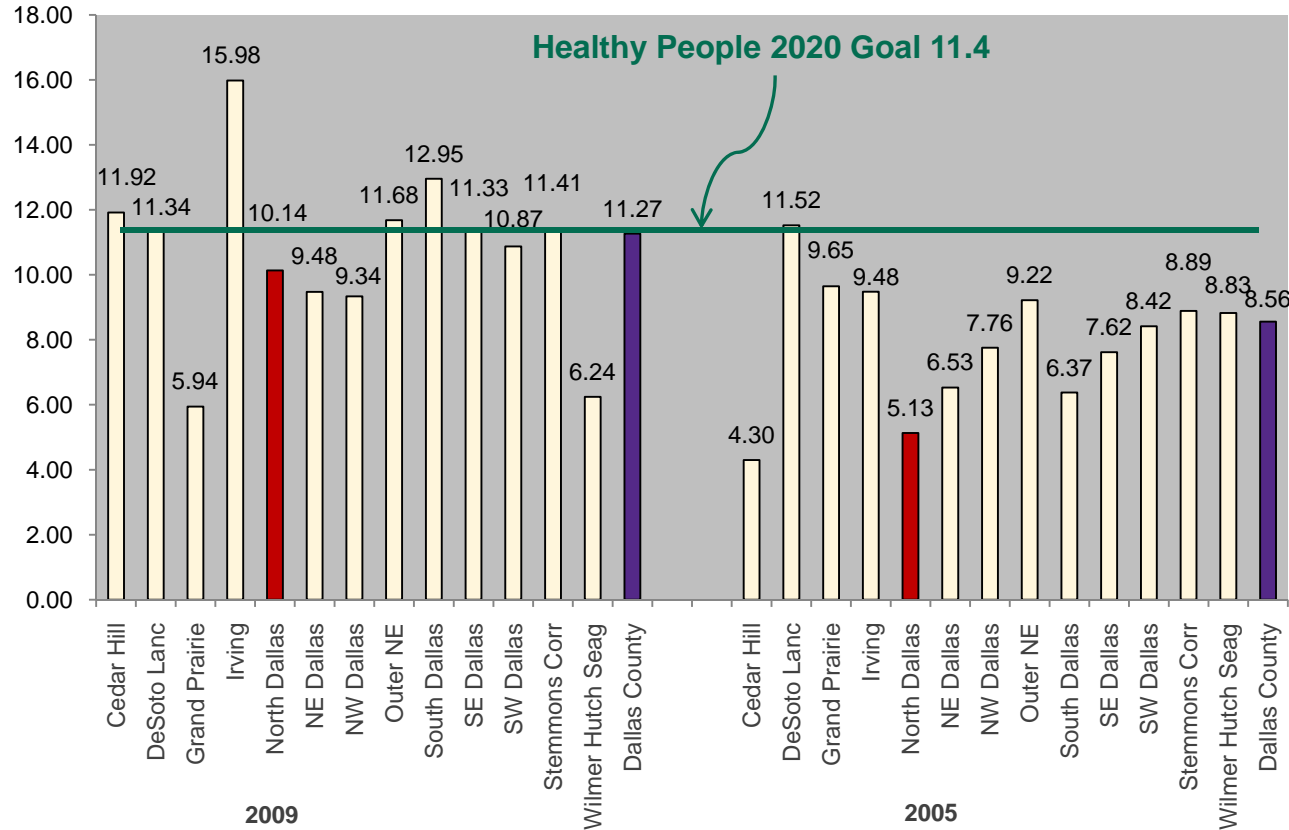
Source: Texas Department of State Health Services, Infectious Disease Control Unit, unpublished data; denominator population data from Claritas, Inc.; 2005 Dallas County data from Dallas County Health and Human Services web site:
<http://www.dallascounty.org/departments/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf>;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



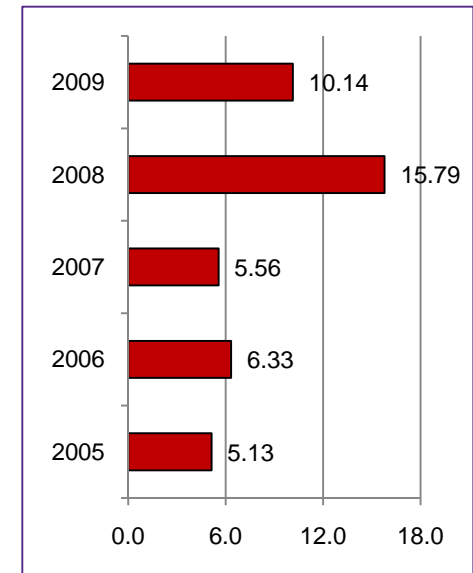
Health Outcomes: Reportable Communicable Disease Rates

North Dallas Service Area




Salmonellosis Incidence, per 100,000

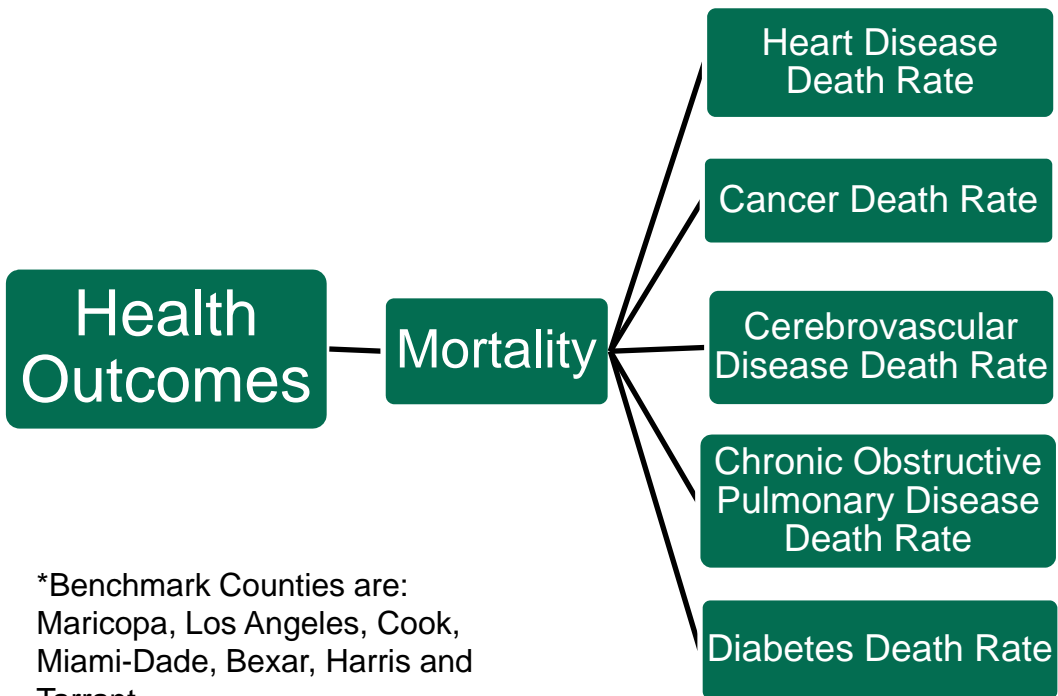


Salmonellosis Incidence Rate,
per 100,000, North Dallas
Service Area






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/departments/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf>;
2005 Dallas County denominator population data from American Community Survey.

-  – 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

North Dallas Compared to Healthy People 2020 Goal	North Dallas Compared to Benchmark Counties* (Quartiles)	North Dallas Compared to Past Years' Data (CI)
		
		
		
N/A		
		

-  – 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 Outcomes

Communicable Disease Morbidity

Infant Mortality Rate

Very Low Birth Weight Birth Rate














Years of Potential Life Lost Rate

Aseptic Meningitis Incidence Rate

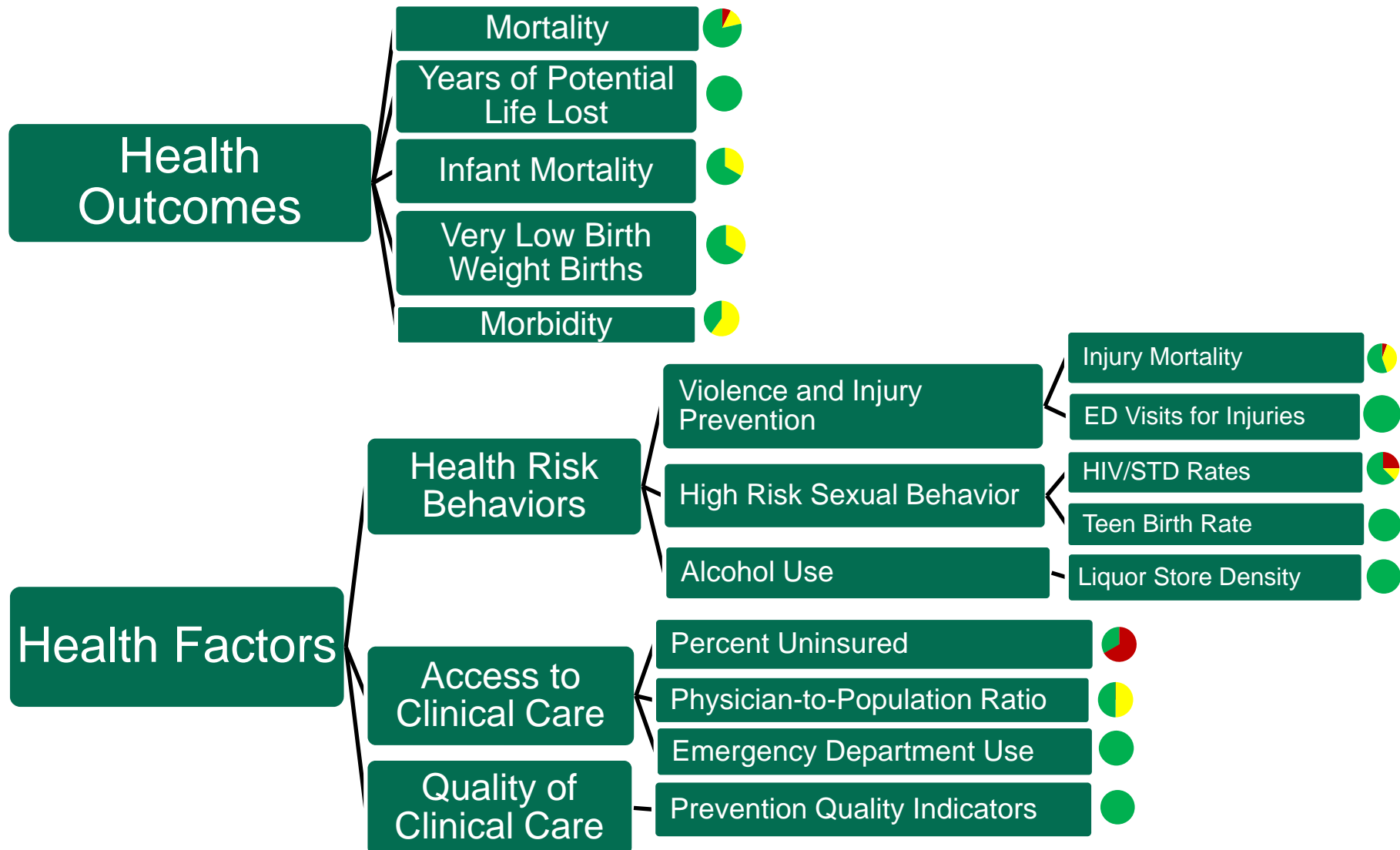
Cryptosporidiosis Incidence Rate

Pertussis Incidence Rate

Salmonellosis Incidence Rate

North Dallas Compared to Healthy People 2020 Goal	North Dallas Compared to Benchmark Counties* (Quartiles)	North Dallas Compared to Past Years' Data (CI)
		
		
N/A		
N/A	N/A	
N/A	N/A	
N/A	N/A	
	N/A	

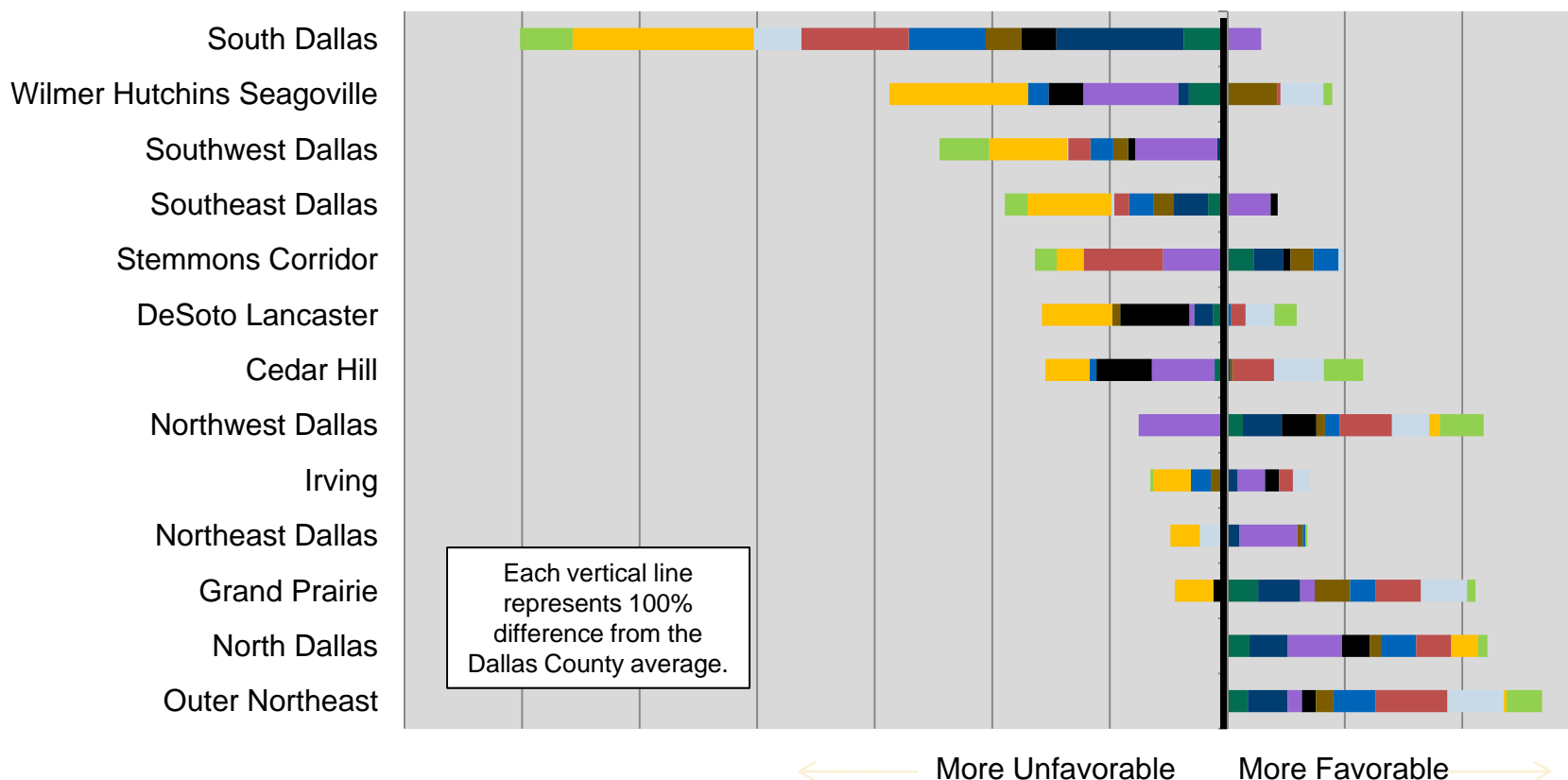
Summary – Model With Stoplight Pie Charts, North Dallas Service Area





Parkland

Deviations from the Dallas County mean



NOTE: All data are from the years 2007-2010, years available varies by topic.

- Mortality
- Very Low Birth Weight
- High Risk Sexual Behavior
- Socioeconomic
- Years of Potential Life Lost
- Morbidity
- Access to Clinical Care
- Violence and Injury
- Preventable Hospitalizations
- Infant Mortality

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

- **Mortality.** For each service area and for Dallas County, add the 2009 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 2009 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 2009 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.
 - The 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. By giving the three equal statistical weight (STDs, HIV and teen births) you could set off debates over which has the most impact over harm to the area's health status, but 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 2010 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 100,00), 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.**



- **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.