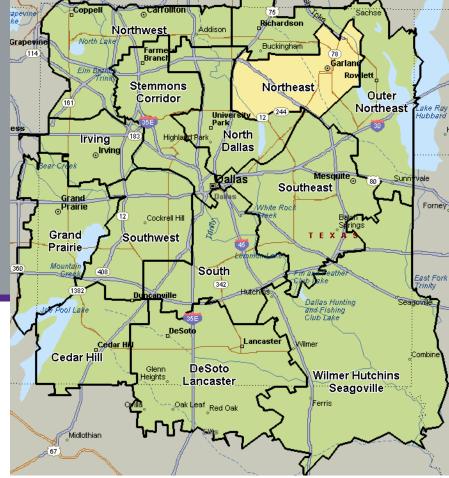
Community Health Assessment

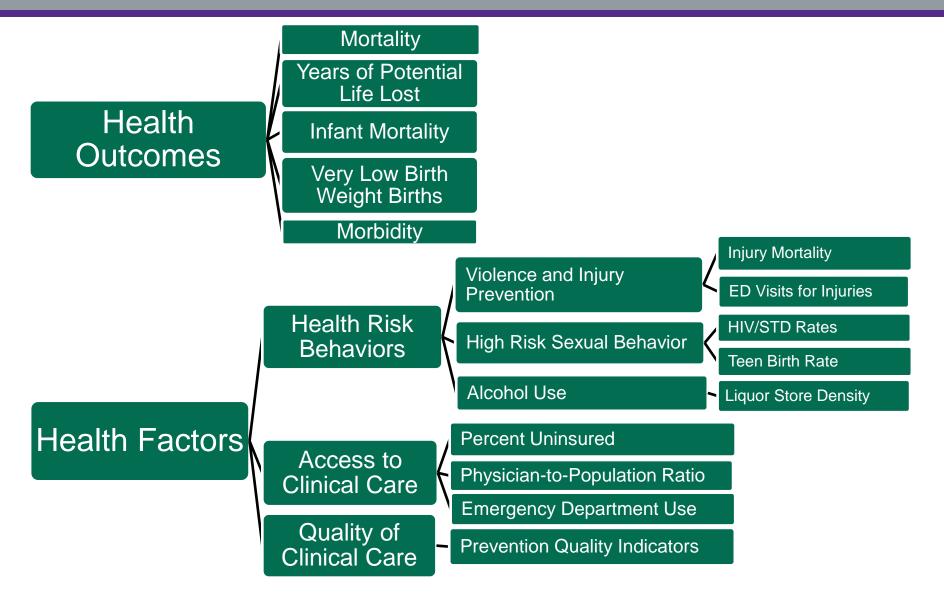
Northeast Dallas Service Area







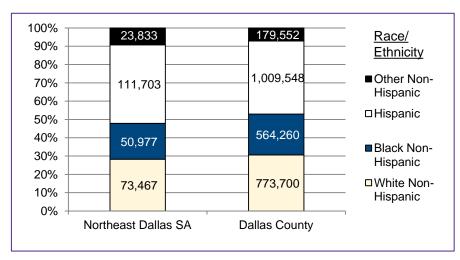
Organizational Model For the Community Health Dashboard

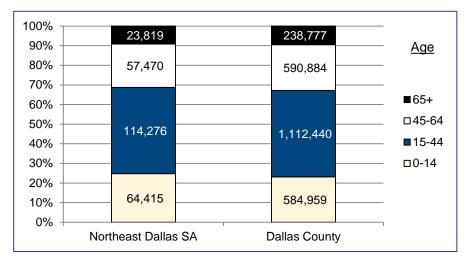


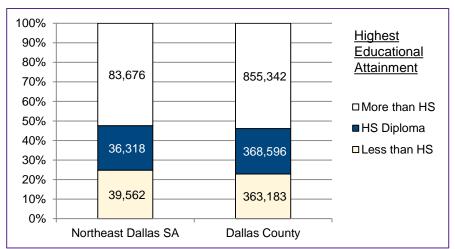


Demographic Profile Northeast Dallas Service Area

- The population of the Northeast Dallas Service Area is slightly younger than the county population.
- Forty-three percent of the population of the service area is Hispanic.
- The percentage of adults 25 and older for this Service Area who have not finished high school is slightly higher that of the County as a whole, with 24.8% within the Service Area who did not complete high school.



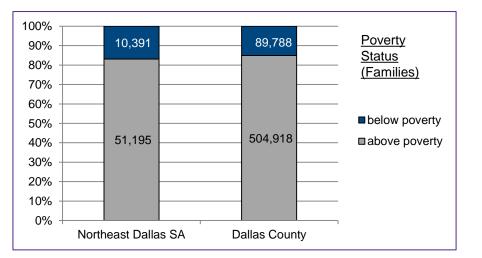


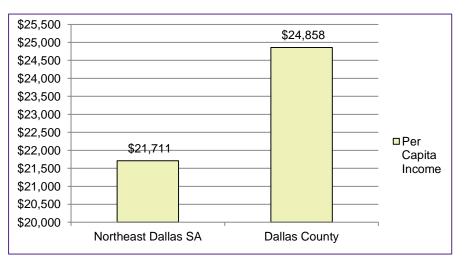


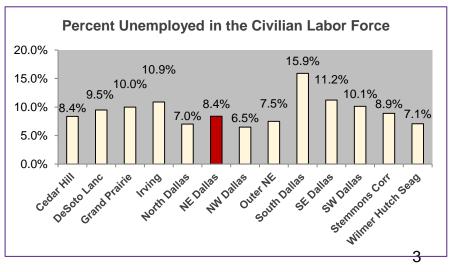


Demographic Profile Northeast Dallas Service Area

- The Northeast Dallas Service Area has a slightly higher percentage of families in poverty as Dallas County as a whole (16.9%).
- The Service Area's per capita income (\$21,711) was the seventh highest of the 13 service areas.
- The percent unemployed for this Service Area (8.4%) is lower than the rate for Dallas County as a whole (9.2%)

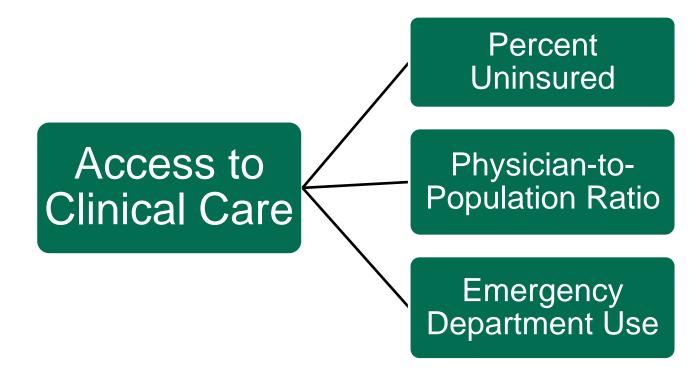








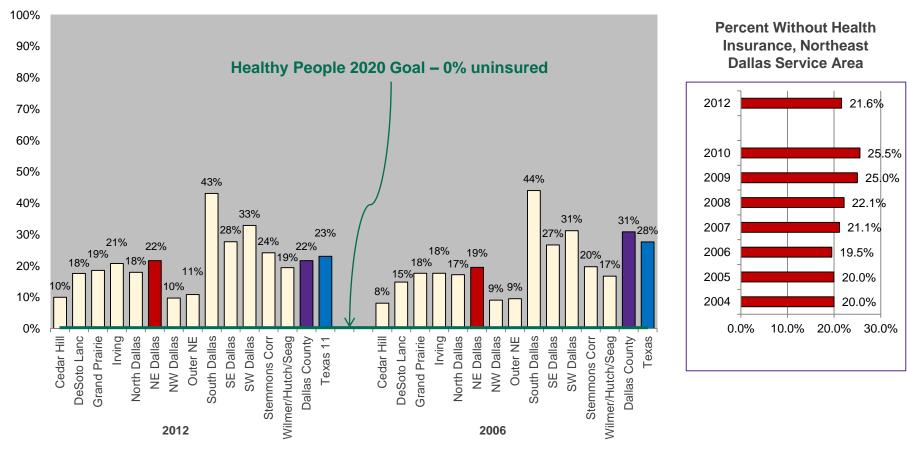
Access to care





Access to Healthcare: Percent Without Healthcare Insurance Northeast Dallas Service Area

Percent Uninsured

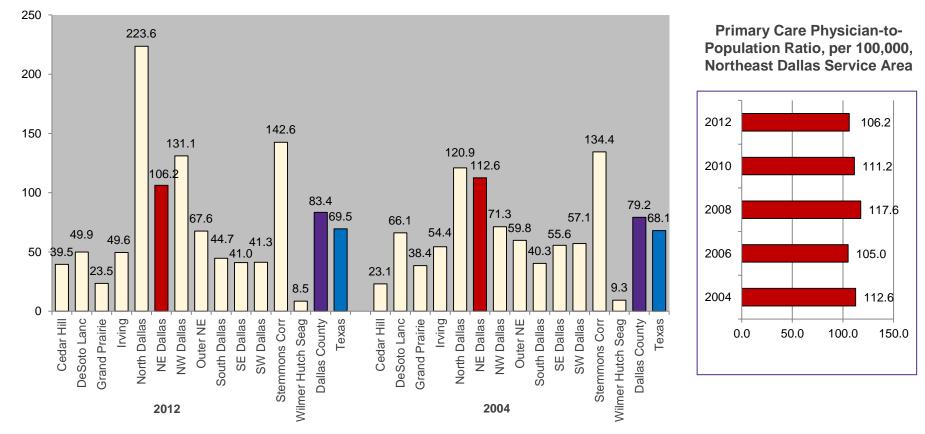


Source: 2012 Truven Analytics, Inc. Denominator population data from Claritas, Inc.; Texas rate from US Census Bureau's American Community Survey 2011; 2006 Solucient, Inc.



Access to Healthcare: Primary Care Physician-to-Population Ratio Northeast Dallas Service Area

Primary Care Physicians per 100,000



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.

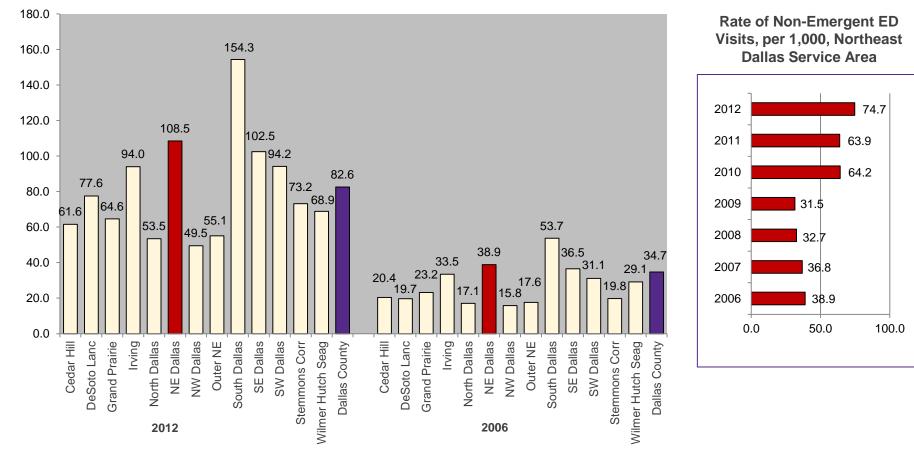
6



Access to Healthcare: Non-Emergent ED Utilization

Northeast Dallas Service Area





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

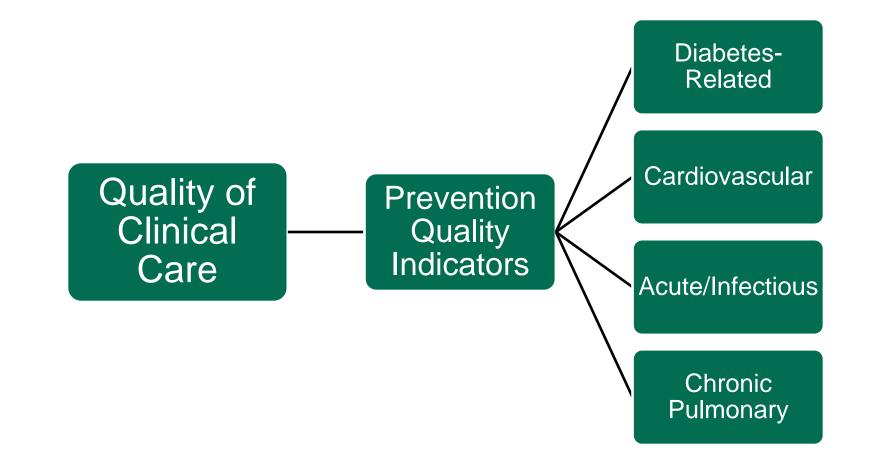


Access to Care

 Doing better than the benchmark Same as/not significantly different from the benchmark Worse than the benchmark 	Northeast Dallas Compared to Healthy People 2020 Goal	Northeast Dallas Compared to Other Service Areas (Quartiles)	Northeast Dallas Compared to Past Years' Data (CI)
Percent Uninsured			
Access to Clinical Care Population Ratio	N/A		
Emergency Department Use	N/A		

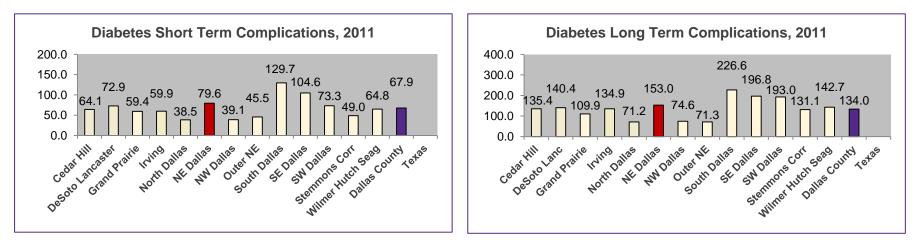


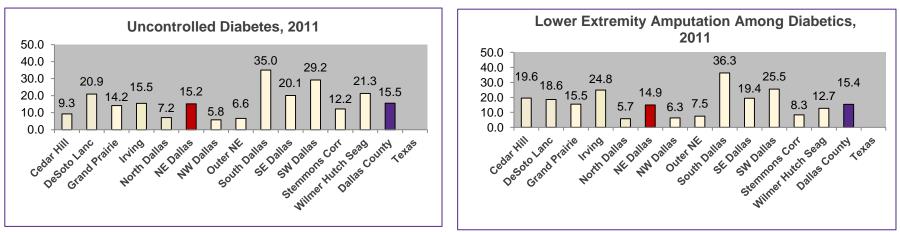
Quality of care





Healthcare Quality: Rate of Preventable Hospitalizations, 2011 Diabetes-Related Hospitalizations Northeast Dallas Service Area

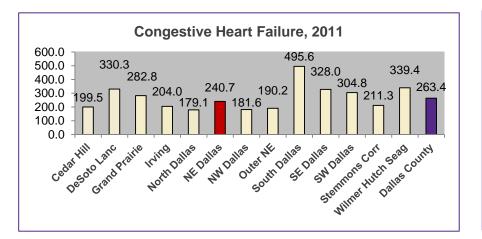


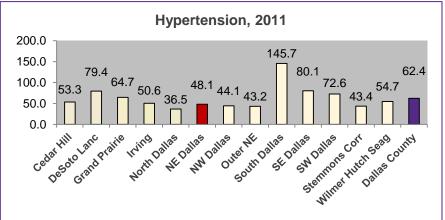


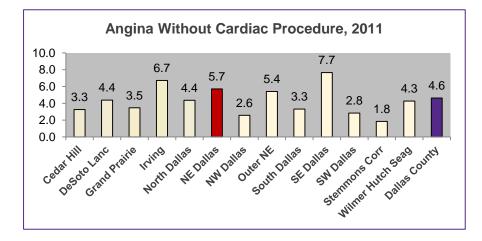
Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey



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



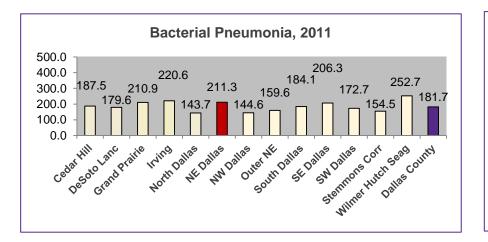


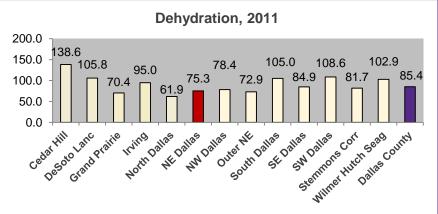


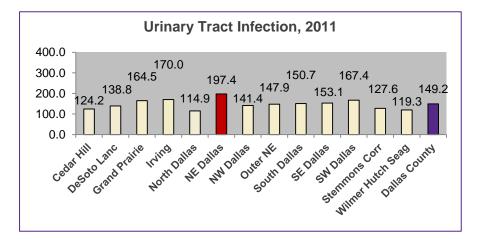
Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey



Healthcare Quality: Rate of Preventable Hospitalizations, 2011 Acute/Infectious Disease Hospitalizations Northeast Dallas Service Area



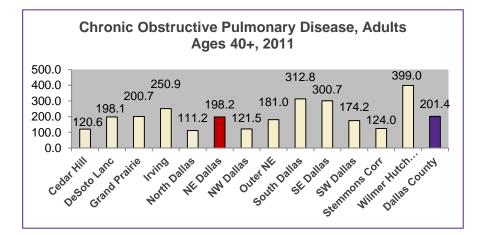


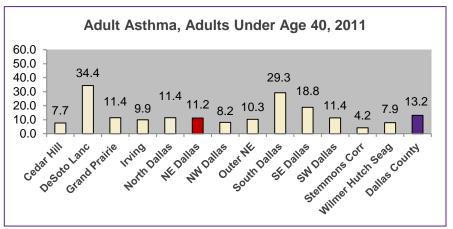


Source: Texas Department of State Health Services, Texas Health Care Information Council, unpublished data; denominator population data from US Census American Community Survey



Healthcare Quality: Rate of Preventable Hospitalizations, 2011 Chronic Pulmonary Disease Hospitalizations Northeast Dallas Service Area



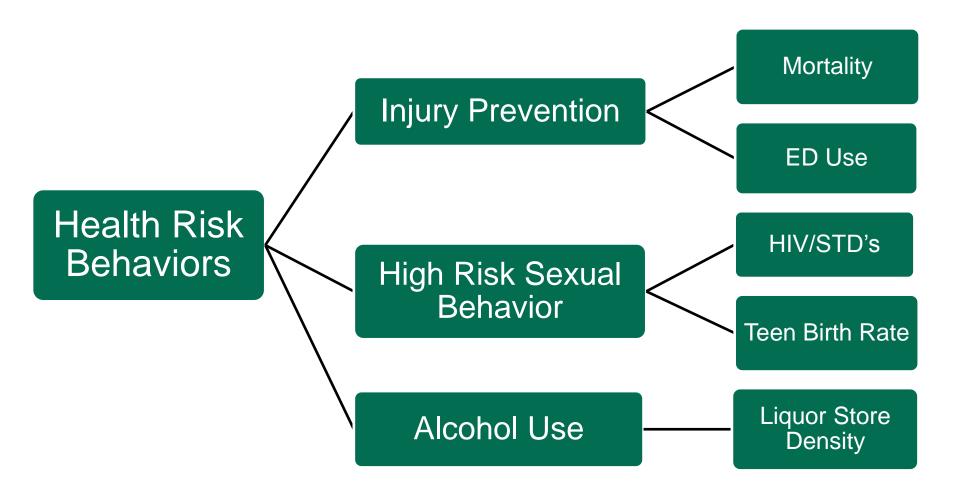




Healthcare Quality

 Doing better than the benchmark Same as/not significantly different from the benchmark Worse than the benchmark 		Northeast Dallas Compared to 12 Other Service Areas (Quartiles)	Northeast Dallas Compared to Past Years' Data (Percent Change vs. 2010)
	Diabetes ST Comp		
Quality of Clinical Care	Diabetes LT Comp	\bigcirc	
	Uncontrolled Diabetes		
	Lower Extremity Amputations Among Diabetics		
	Congestive Heart Failure		
	Hypertension		
Care	Angina Without Cardiac Procedure		
	Bacterial Pneumonia		
	Dehydration		
	Urinary Tract Infection		
	Chronic Obstructive Pulmonary Disease		
	Adult Asthma		

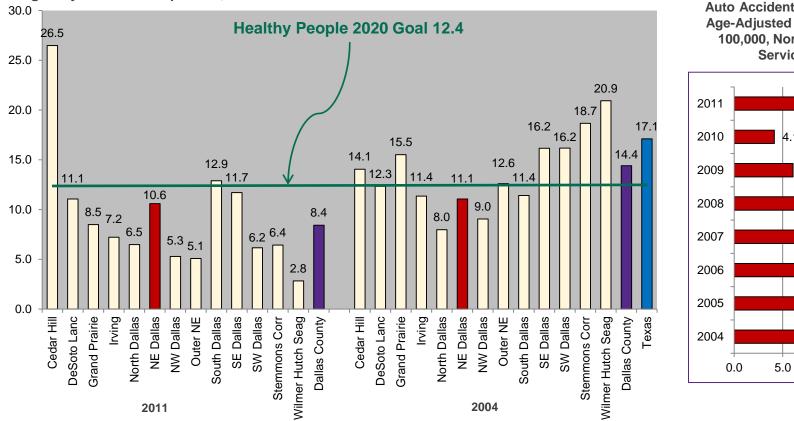






Risk Factors: Auto Accident Mortality Rates

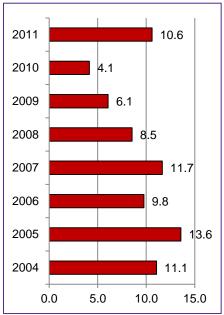
Northeast Dallas Service Area



Age-Adjusted Deaths per 100,000

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

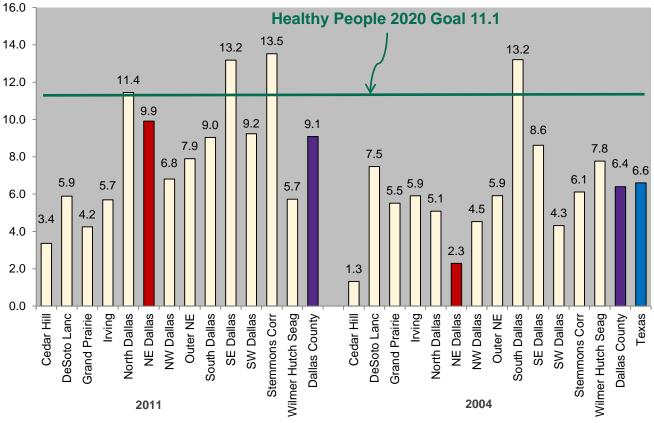
Auto Accident Mortality Rate, Age-Adjusted Death Rate per 100,000, Northeast Dallas Service Area



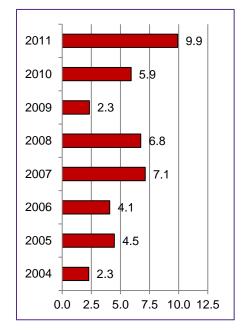


Risk Factors: Accidental Poisoning Mortality Rates Northeast Dallas Service Area

Age-Adjusted Deaths per 100,000



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

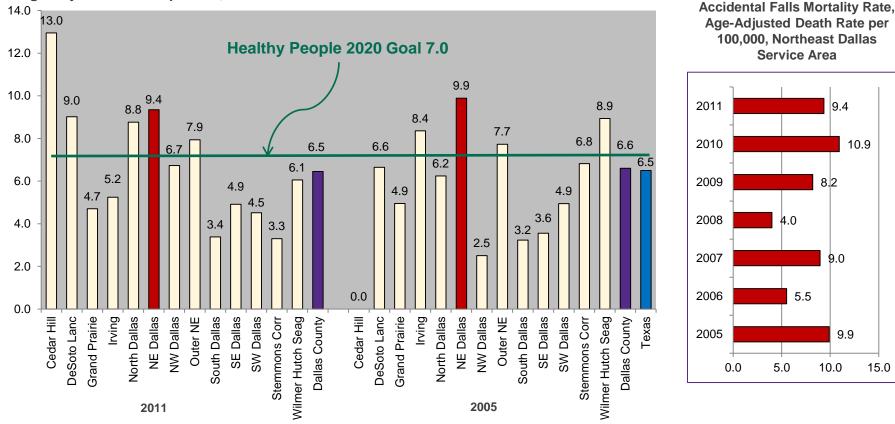


Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.



Risk Factors: Accidental Falls Mortality Rates

Northeast Dallas Service Area



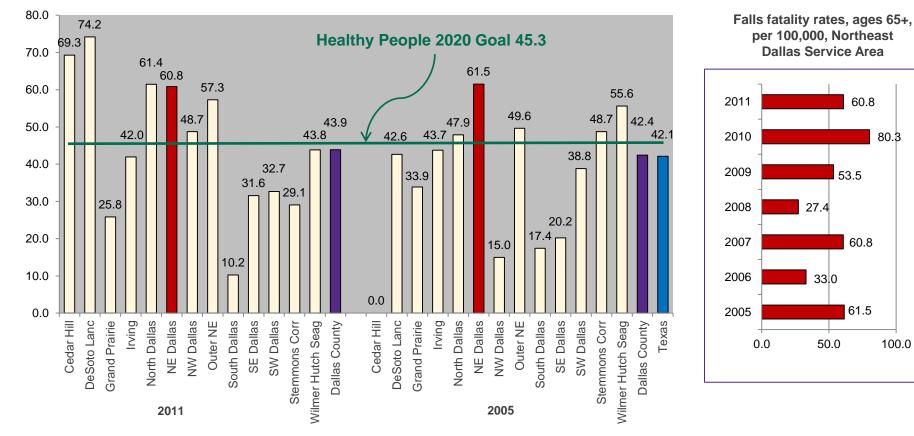
Age-Adjusted Deaths per 100,000

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



Risk Factors: Falls Death Rates Among Seniors *Northeast Dallas Service Area*

Falls Deaths Age 65+

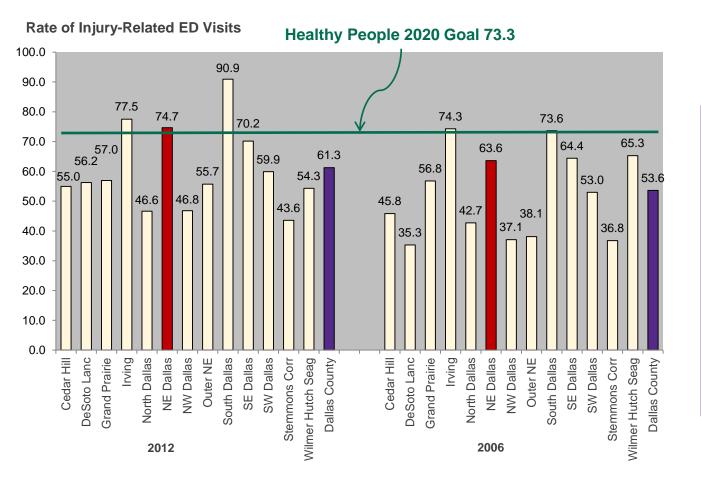


Source: Texas Department of State Health Services, Bureau of Vital Statistics, unpublished data; denominator population data from US Census Bureau American Community Survey. 2005 Dallas County data from Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death File 2005-2006. CDC WONDER On-line Database, compiled from Multiple Cause of Death File 2005-2006Series 20 No. 2L, 2012. Accessed at http://wonder.cdc.gov/mcd-icd10.html on Mar 25, 2010 2:52:15 PM; 2005 Texas data from http://wonder.ctx.us/

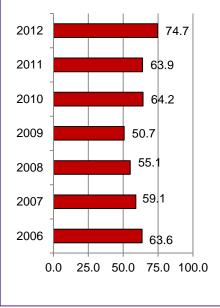


Risk Factors: Rate of Injury-Related ED Visits

Northeast Dallas Service Area



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

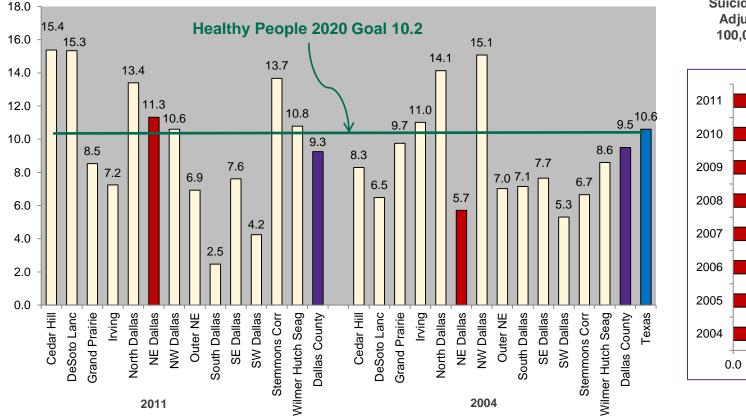


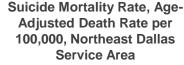
Source: DFWHC ERF Information Quality Services Center Regional Data, 2010. Dallas-Fort Worth Hospital Council Education and Research Foundation, Information and Quality Services Center, Irving, Texas. July 2013. Denominator population data from Claritas, Inc.

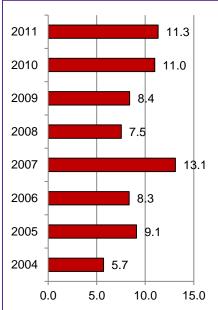








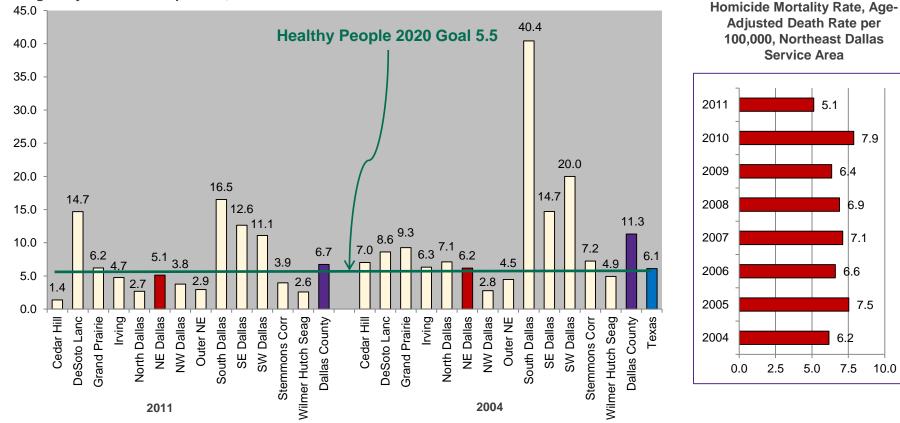




Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data from Claritas, Inc.

Risk Factors: Homicide Mortality Rates

Northeast Dallas Service Area



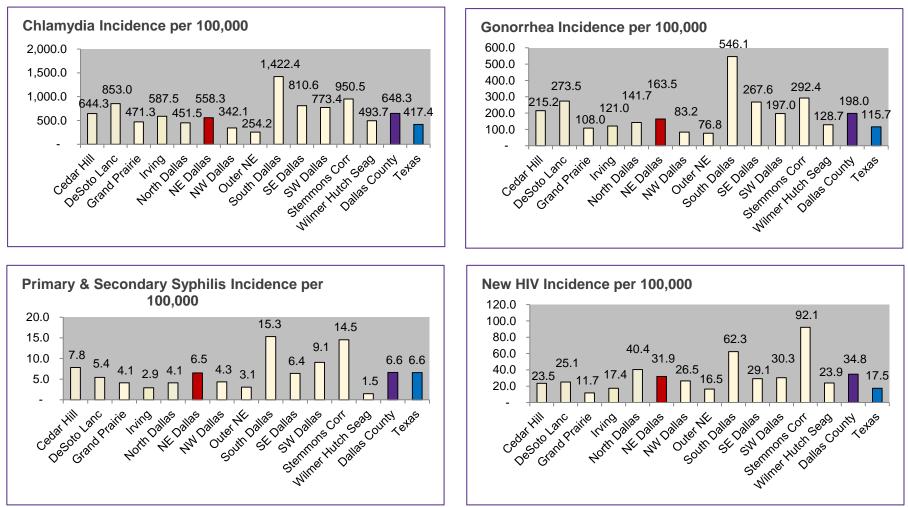
Age-Adjusted Deaths per 100,000

Parkland

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 *Northeast Dallas Service Area*

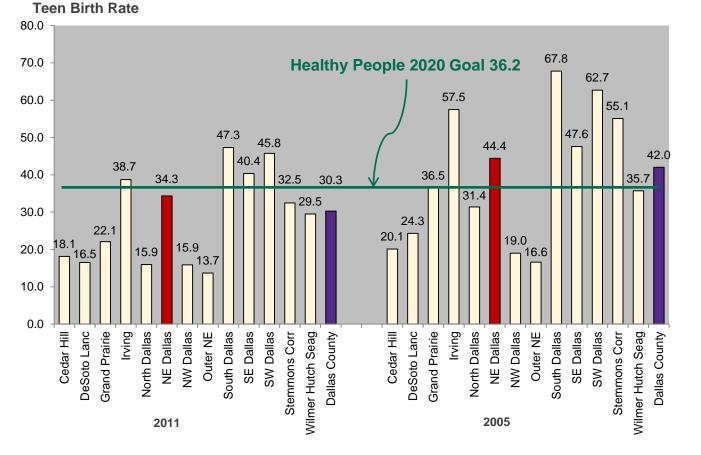


Source: Texas Department of State Health Services, Bureau of STD/HIV, unpublished data; Denominator population data from Claritas, Inc.; Dallas County and Texas Rates are from http://www.dshs.state.tx.us/hivstd/reports/STD2011.pdf and http://www.dshs.state.tx.us/hivstd/reports/HIV2011.pdf

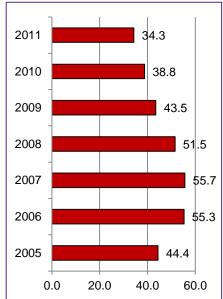


Risk Factors: High Risk Sexual Behavior, Teen Birth Rates

Northeast Dallas Service Area



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



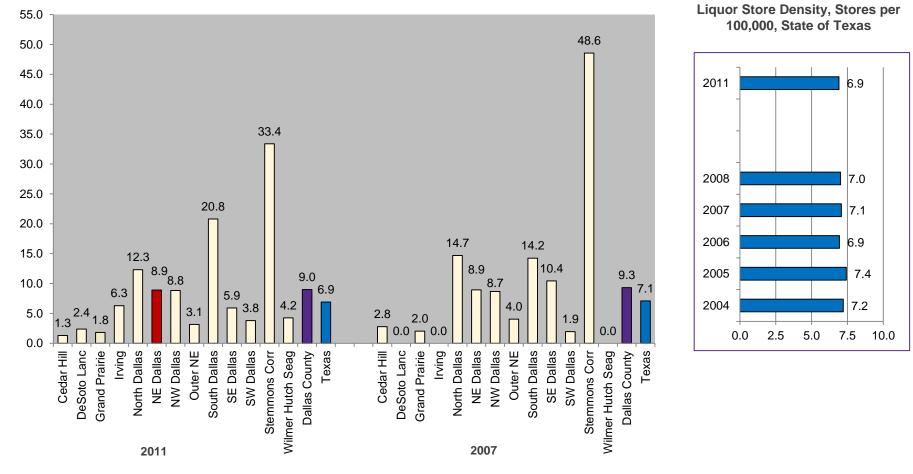
Source: Texas Department of State Health Services, Bureau of Vital Statistics; denominator population data Nielson/Claritas mid 2011 Pop Facts



Risk Factors: Liquor Store Density, 2011

Northeast Dallas Service Area

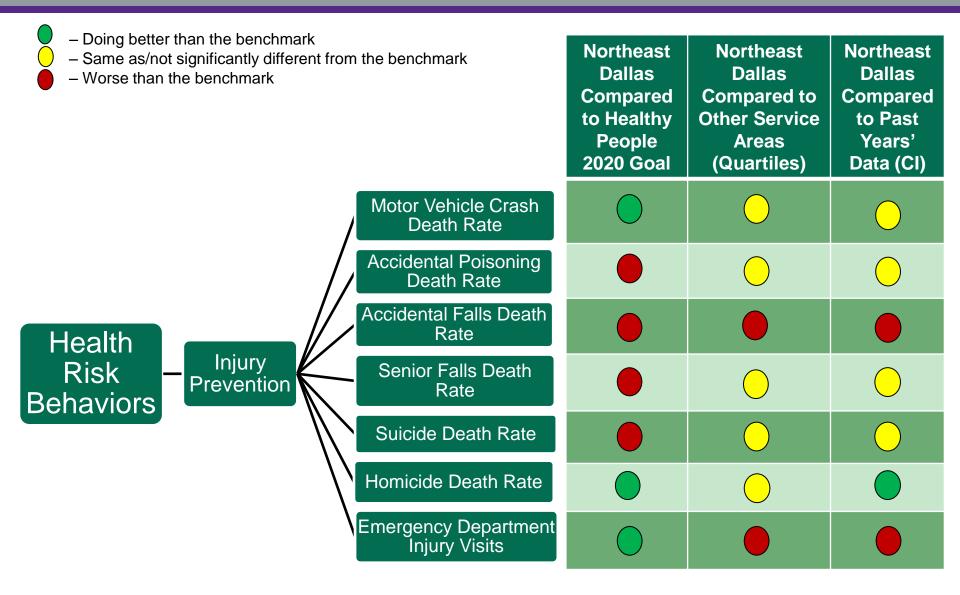




Source: US Census Bureau, 2011 County Business Patterns; denominator population data from US Census Bureau; 2007 from US Census Bureau, 2007 Economic Census; denominator population data from Claritas, Inc.; Dallas County and State of Texas data from US Census Bureau, NIACS annual business estimates



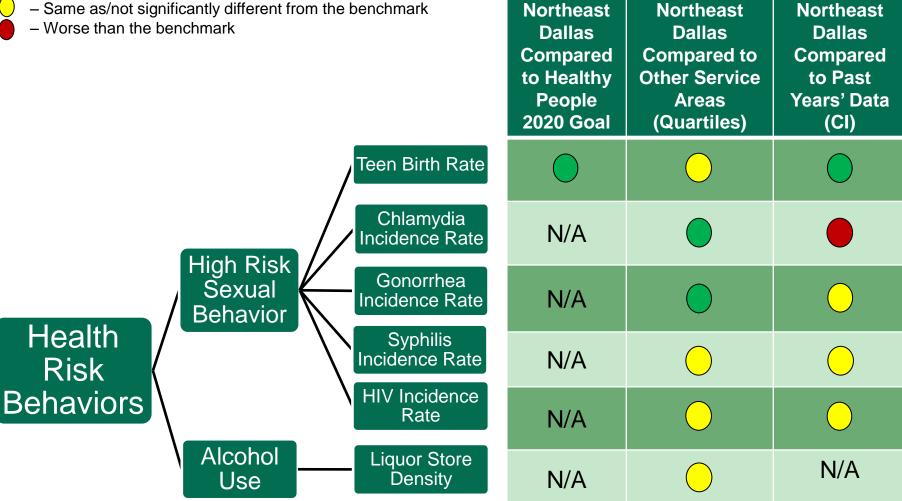
Health Risk Behaviors





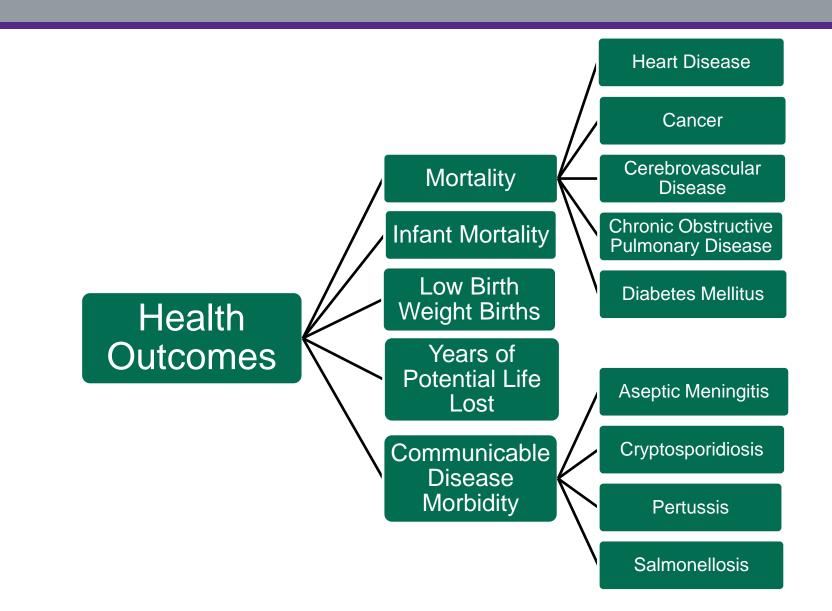
Health Risk Behaviors

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





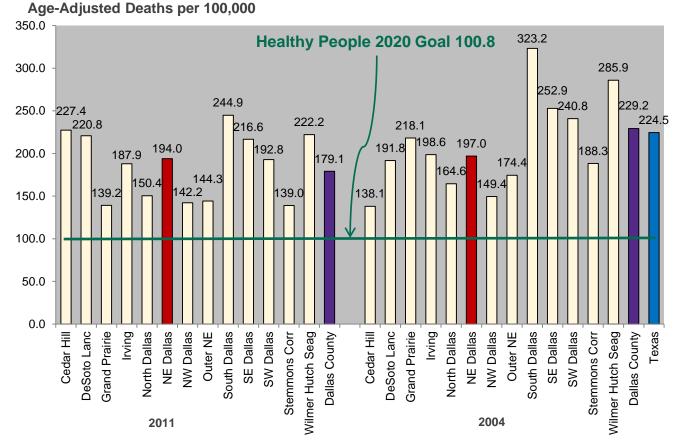
Health Outcomes



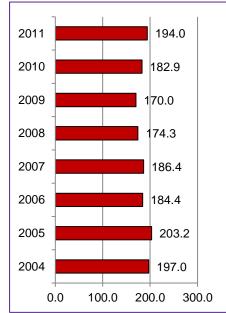


Health Outcomes: Heart Disease Mortality Rates

Northeast Dallas Service Area



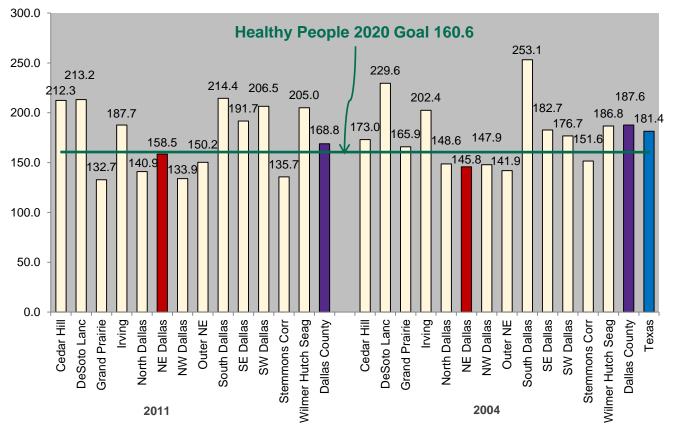
Heart Disease Mortality Rate, Age-Adjusted Death Rate per 100,000, Northeast Dallas Service Area



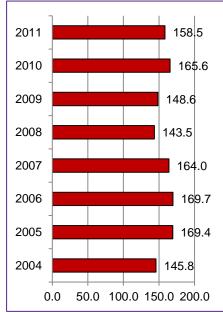


Health Outcomes: Cancer Mortality Rates Northeast Dallas Service Area

Age-Adjusted Deaths per 100,000



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

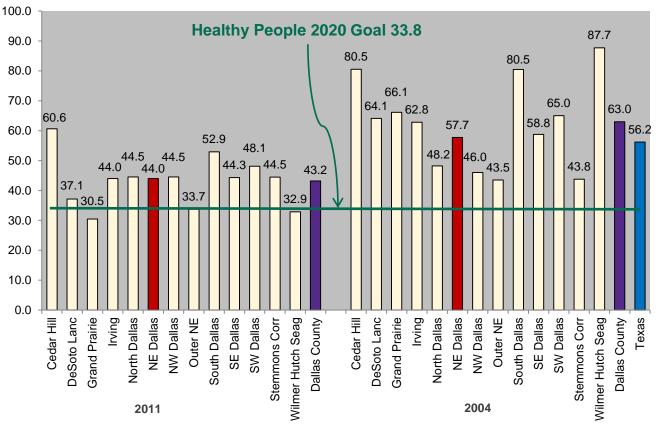




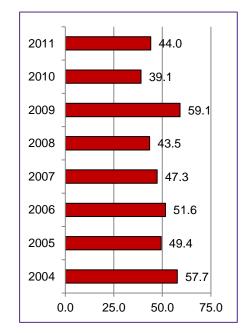
Health Outcomes: Cerebrovascular Disease Mortality Rates

Northeast Dallas Service Area

Age-Adjusted Deaths per 100,000

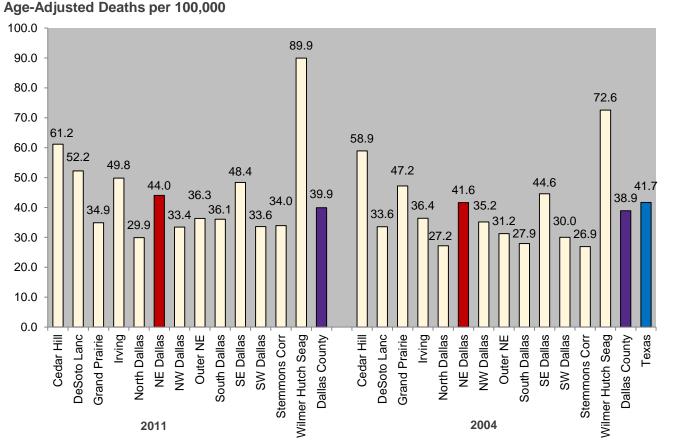


Cerebrovascular Disease Mortality Rate, Age-Adjusted Death Rate per 100,000, Northeast Dallas Service Area

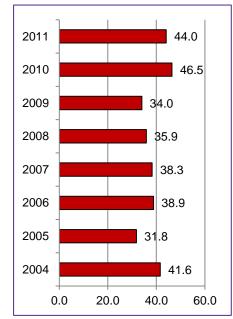




Health Outcomes: Chronic Obstructive Pulmonary Disease Mortality Rates Northeast Dallas Service Area



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



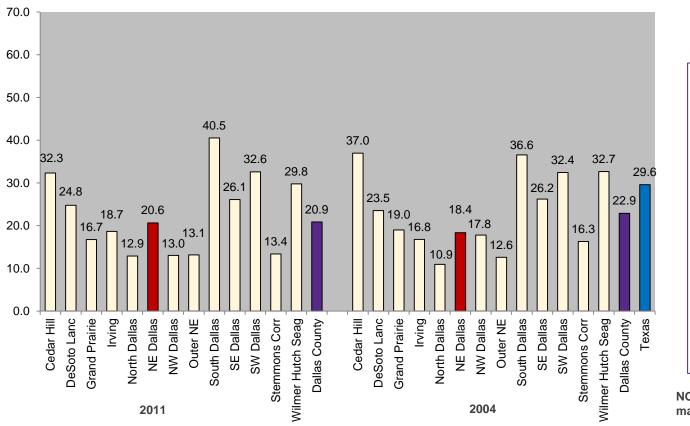
NOTE: No Healthy People 2020 goal matches this metric.



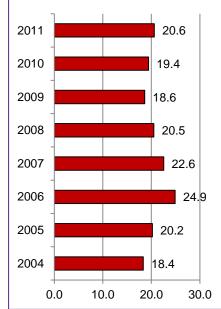
Health Outcomes: Diabetes Mortality Rates

Northeast Dallas Service Area

Age-Adjusted Deaths per 100,000



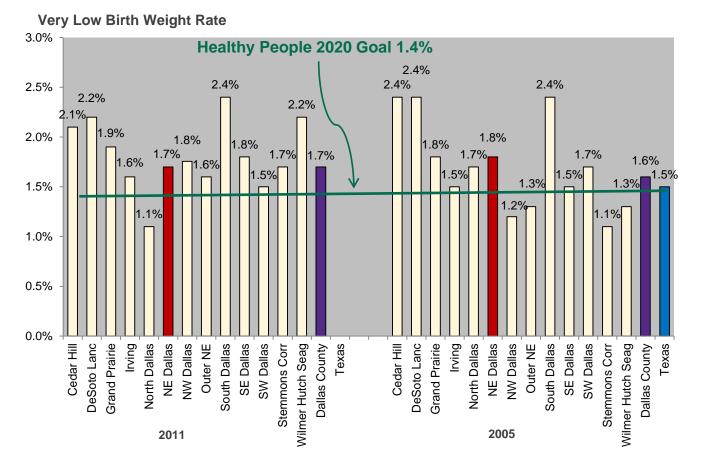
Diabetes Mellitus Mortality Rate, Age-Adjusted Death Rate per 100,000, Northeast Dallas Service Area



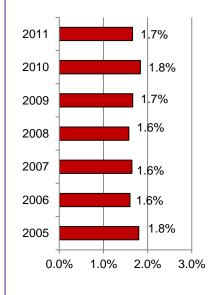
NOTE: No Healthy People 2020 goal matches this metric.



Health Outcomes: Birth Outcomes, Rate of Very Low Birth Weight Births Northeast Dallas Service Area



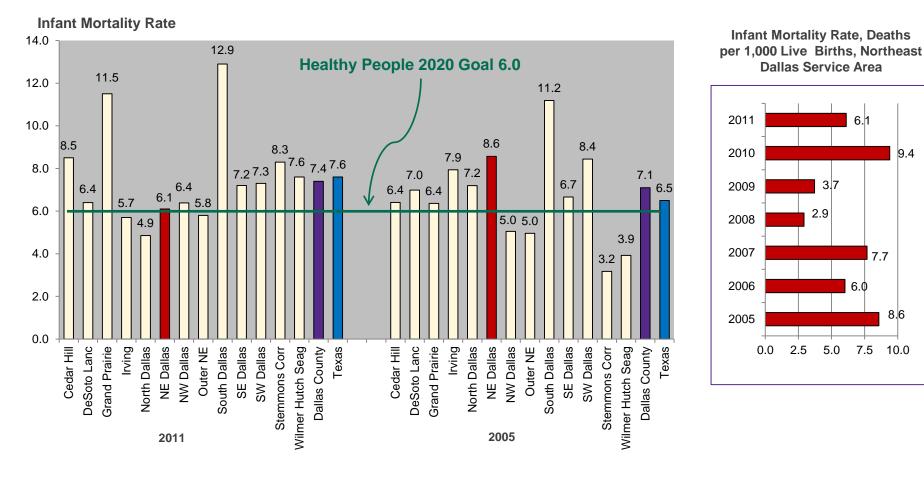
Very Low Birth Weight Rate, % of Births Below 1500 Grams at Birth, Northeast Dallas Service Area





Health Outcomes: Birth Outcomes, **Infant Mortality Rate**

Northeast Dallas Service Area



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

8.6

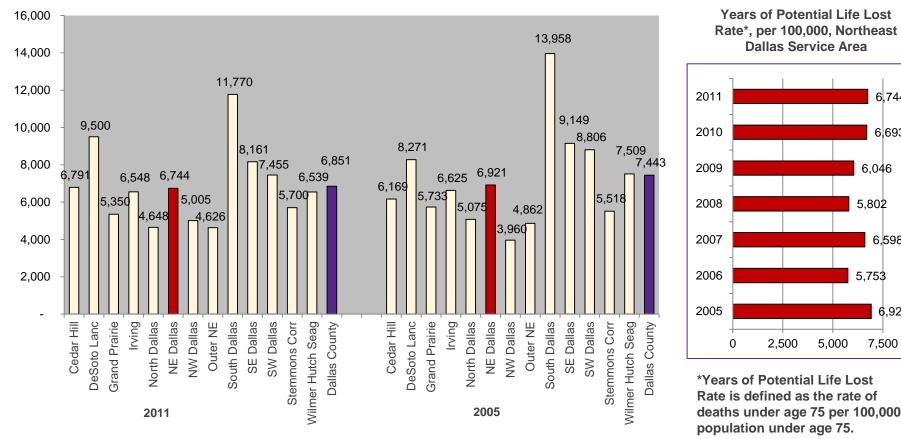
10.0

9.4



Health Outcomes: Years of Potential Life Lost, All Causes Northeast Dallas Service Area

Years of Potential Life Lost Rate per 100,000*



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

6.744

6.693

6.046

5,802

5,753

5,000

6.598

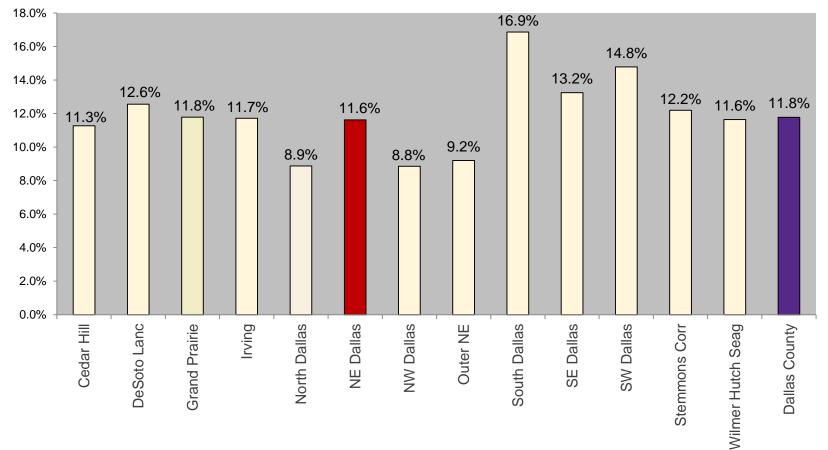
6,921

7,500



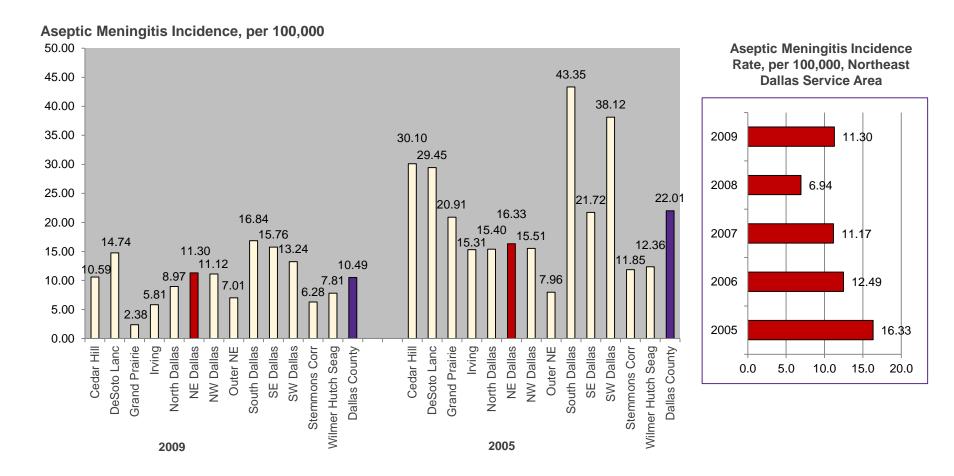
Health Outcomes: Estimated Diabetes Prevalence Rates (Diagnosed and Undiagnosed) Northeast Dallas Service Area

Diabetes Prevalence, percent



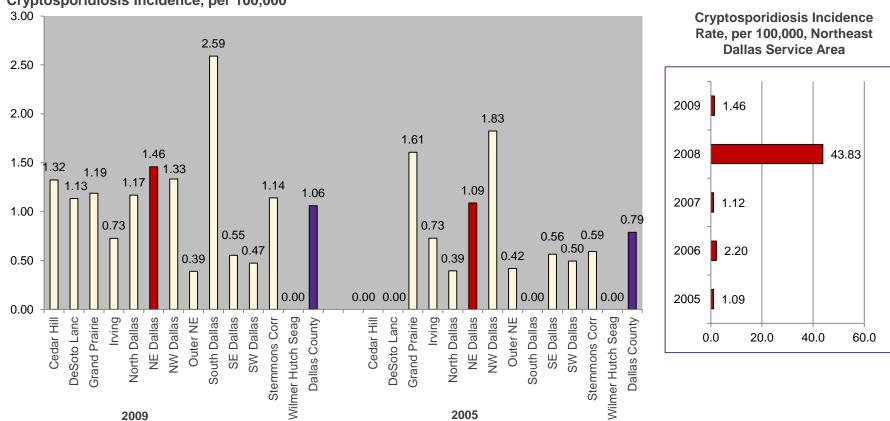
Source: US Diabetes Index, National Minority Quality Forum and Centers for Disease Control and Prevention, 2012; based on NHANES population prevalence estimates, 2010. Denominator population data 2010 from Nielson/Claritas, Inc. Pop Facts. Mid 2010 version





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: <u>http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf</u>; 2005 Dallas County denominator population data from American Community Survey.

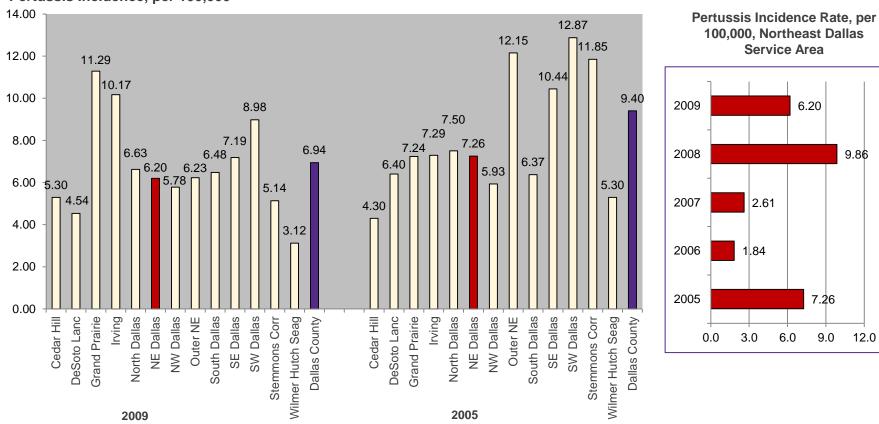




Cryptosporidiosis Incidence, per 100,000

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.

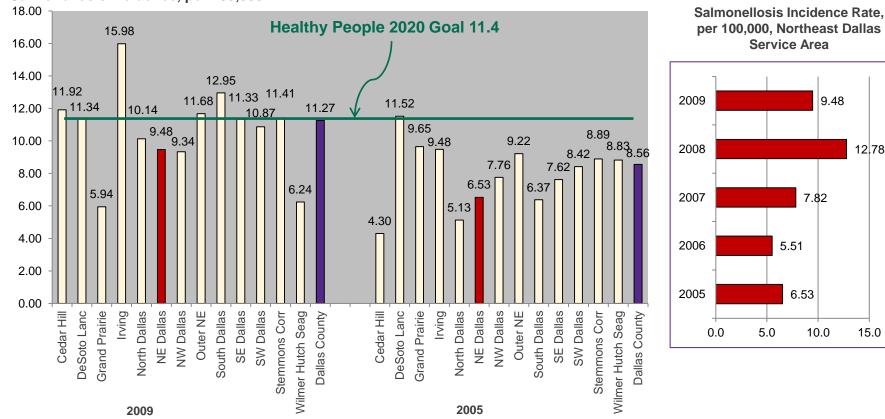




Pertussis Incidence, per 100,000

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: <u>http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf</u>; 2005 Dallas County denominator population data from American Community Survey.





Salmonellosis Incidence, per 100,000

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: <u>http://www.dallascounty.org/department/hhservices/services/communicable/documents/ReportableConditions2003-07Annual.pdf;</u> 2005 Dallas County denominator population data from American Community Survey.



Health Outcomes

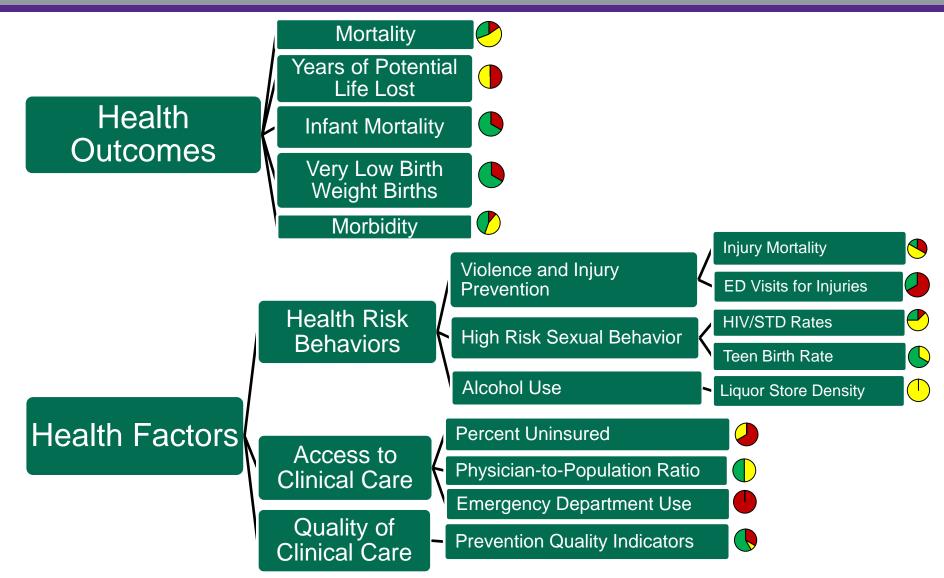
 Doing better than the benchmark Same as/not significantly different from the benchmark Worse than the benchmark 	Northeast Dallas Compared to Healthy People 2020 Goal	Northeast Dallas Compared to Other Service Areas (Quartiles)	Northeast Dallas Compared to Past Years' Data (CI)
Heart Disease Death Rate		\bigcirc	\bigcirc
Cancer Death Rate			\bigcirc
Health Outcomes — Mortality — Cerebrovascular Disease Death Rate			\bigcirc
Chronic Obstructive Pulmonary Disease Death Rate		\bigcirc	\bigcirc
Diabetes Death Rate	N/A	\bigcirc	\bigcirc



Health Outcomes

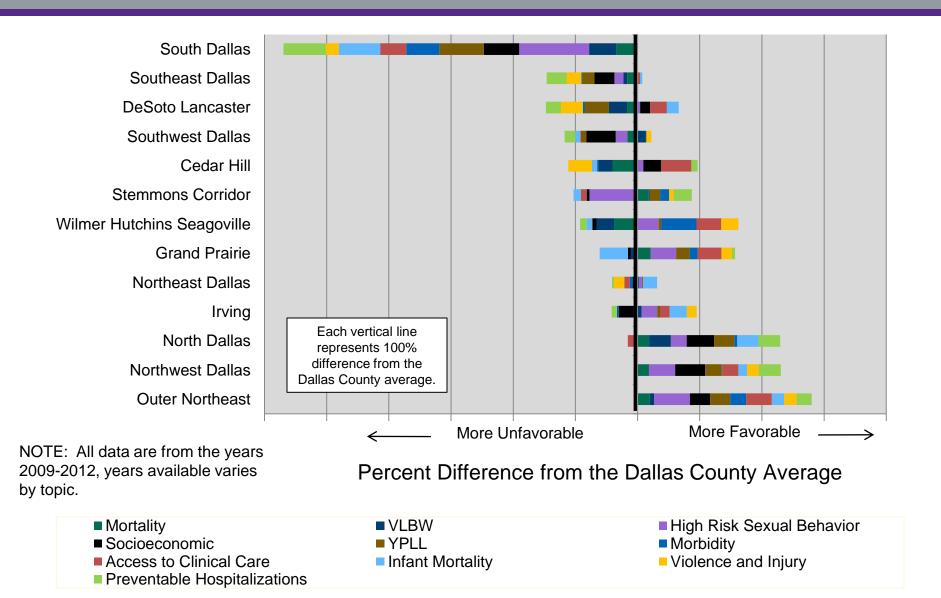
 Doing better that Same as/not sig Worse than the 	nificantly different from the benchmark	Northeast Dallas Compared to Healthy People 2020 Goal	Northeast Dallas Compared to Other Service Areas (Quartiles)	Northeast Dallas Compared to Past Years' Data (CI)
Health Outcomes Communicable Disease Morbidity Hertussis Ind Rate	Infant Mortality Rate		\bigcirc	\bigcirc
	Very Low Birth Weight Birth Rate			
	Years of Potential Life Lost Rate	N/A	\bigcirc	
	Aseptic Meningitis Incidence Rate	N/A	\bigcirc	\bigcirc
		N/A		
	Morbidity Pertussis Incidence	N/A		\bigcirc
	Salmonellosis Incidence Rate		\bigcirc	\bigcirc

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





Parkland Deviations from the Dallas County mean





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.





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.