

# Chronic Disease in Texas

### A Surveillance Report Of Disease Indicators

### Health Promotion Unit

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#### INTRODUCTION

This report was prepared by the Texas Department of State Health Services, Health Promotion Unit to monitor outcomes for certain chronic disease conditions and associated medical and behavioral risk factors. This report updates the previous *Chronic Disease in Texas: A Surveillance Report of Disease Indicators* published in 1998.

Chronic disease conditions are the major cause of illness, disability, and death in Texas as well as in the United States today. Despite broad public awareness of specific lifethreatening diseases such as cancer and heart disease, most people are still not aware that, collectively, chronic disease conditions account for 3 out of every 4 deaths in Texas and the United States. Chronic diseases are defined by the federal Centers for Disease Control and Prevention as those diseases that are prolonged, do not resolve spontaneously, and for which a complete cure is rarely achieved. The Texas Department of State Health Services monitors diseases that: a) fit this broad definition of chronic diseases; b) that are preventable; and c) pose a significant burden in mortality, morbidity and cost. For this updated report, we chose to include the following chronic disease conditions: ischemic heart disease, stroke, lung cancer, breast cancer, cervical cancer, colorectal cancer, asthma, arthritis and diabetes mellitus.

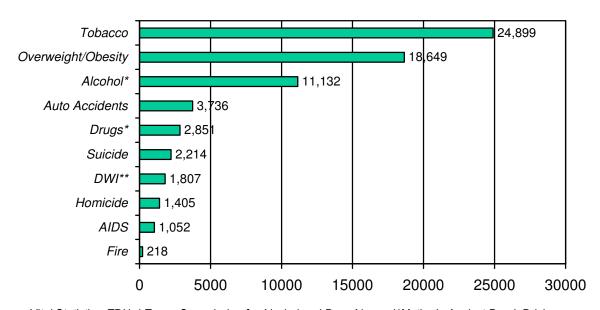
Leading Causes of Death Because of the changing nature of illness and death, Americans are no longer dying from the same diseases as they did in previous generations. Given the limits of prevailing medical and public health knowledge, Americans frequently died at young ages from infectious and parasitic diseases. In 1900, pneumonia and influenza, tuberculosis and gastritis, enteritis and colitis were the three leading causes of death, accounting for nearly one-third of all deaths. As sanitation, nutrition, and living conditions improved and medical technology advanced, deaths from infectious diseases declined steadily and children and young adults survived longer. As a result, deaths from chronic conditions have increased. Today, as we start the 21<sup>st</sup> century, heart disease, cancer and stroke are the three leading causes of death, accounting for almost two-thirds of all deaths.

#### **Preventable (Actual) Causes of Death**

To a certain degree, the major chronic disease killers – cardiovascular disease, cancer, diabetes – are an extension of what individuals choose to do, or not to do, and the environment in which they live. For example, the figure on the opposite page shows that tobacco use is the most prevalent cause of premature death in Texas, accounting for more than 24,800 lost lives in 2001--more than alcohol, auto accidents, AIDS, drugs, suicides, homicides and fires combined. Tobacco use contributes substantially to deaths from cancer (especially cancers of the lung, esophagus, oral cavity, pancreas, kidney, and bladder), cardiovascular disease (ischemic heart disease, stroke and high blood pressure) and lung disease (chronic obstructive pulmonary disease). The content of this updated report provides information on preventable deaths, its risk factors, and trends over time.

## PREVENTABLE (ACTUAL) CAUSES OF DEATH

#### Actual Causes of Death, Texas 2001



Source: Vital Statistics, TDH; \* Texas Commission for Alcohol and Drug Abuse; \*\*Mother's Against Drunk Driving

#### STRATEGIES TO ADDRESS CHRONIC DISEASES IN TEXAS

- Epidemiology and Surveillance
- Health Education and Community Outreach
- Improve Provision of Clinical Preventive Services
- Community and Worksite Environmental Changes

#### **TDH Chronic Disease Surveillance System**

#### **DATA SOURCES**

- Mortality Data
- Hospital Discharge Data
- Behavioral Risk Factor Surveillance System
- Youth Risk Behavior Survey

#### **MORTALITY DATA**

The death tabulations provided in this report are Texas resident data. There were two significant changes that occurred relating to mortality data starting in 1999. The coding system used for establishing cause of death has been changed from the 9<sup>TH</sup> Revision of the International Classification of Diseases (ICD 9) to the 10<sup>th</sup> Revision (ICD-10). All causes listed on a death certificate are categorized and coded according to this guide. Underlying cause of death is then determined through the use of a computer algorithm, Automated Classification of Medical Entities (ACME), developed by the National Center for Health Statistics. The second significant change was the use of the United States 2000 population as the standard for age adjustment, which replaces the 1940 US standard population.

#### HOSPITAL DISCHARGE DATA

Hospital discharge data are a rich resource of information about the patterns of care, the public health burden and the costs associated with chronic disease morbidity. The Texas Health Care Information Council (THCIC) is responsible for collecting hospital discharge data from all state licensed hospitals except those that are statutorily exempt from the reporting requirement. All reporting hospitals are required to submit discharged inpatient claims data on a quarterly basis, using the uniform bill (UB-92) format.

#### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM

Since behavioral risk factors play a prominent role in chronic disease, finding ways to help people adopt healthier behaviors may be the most promising point of intervention. Surveillance of behavioral risk factors can provide the basis for both launching and evaluating programs designed to reduce the prevalence of unhealthy behaviors. Data on behavioral risk factors are necessary for formulating intervention strategies, justifying resources to support these strategies, and proposing new policies or legislation. The BRFSS is an ongoing telephone survey of adult Texans using a standard protocol and standard interviewing methods.

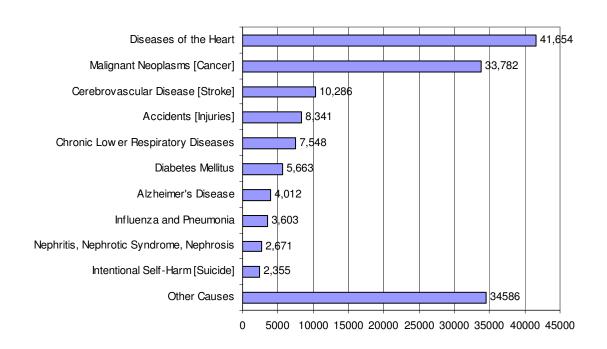
#### YOUTH RISK BEHAVIOR SURVEY

Data from the Youth Risk Behavior Survey (YRBS) provide a wealth of data for state and local health and education officials to implement programs to address the behaviors of young people, create awareness of the extent of risk behaviors among young people, promote state-level changes that support specific health education curricula and coordinated school health programs, and provide evidence-based data to support the need of health education.

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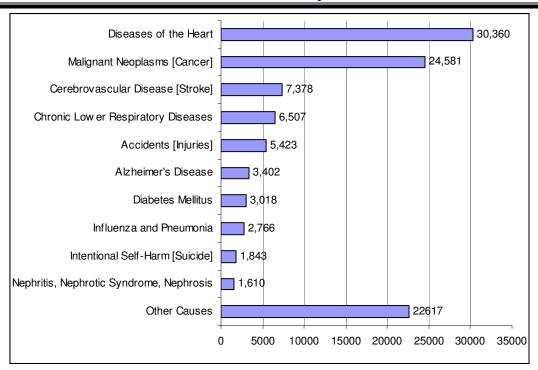
# **MORTALITY DATA**

## MORTALITY DATA – LEADING CAUSES OF DEATHS 2003



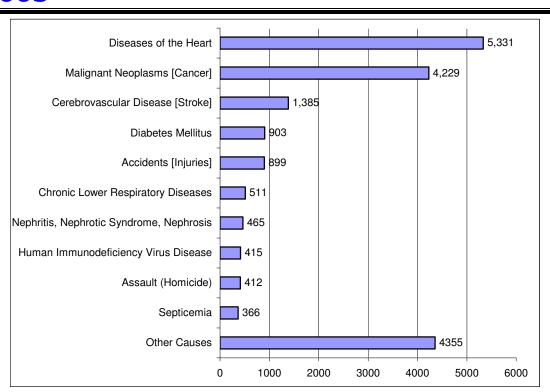
A total of 154,501 Texas residents died in 2003. The leading cause of death, diseases of the heart, accounted for 27 percent of those deaths, while the second most common cause of death, malignant neoplasms accounted for 22 percent. Cerebrovascular diseases, injuries and chronic lower respiratory diseases ranked third, fourth and fifth respectively. Together, these five leading causes of death represented 66 percent of all deaths in 2003.

# MORTALITY DATA – LEADING CAUSES OF DEATHS AMONG WHITES, 2003



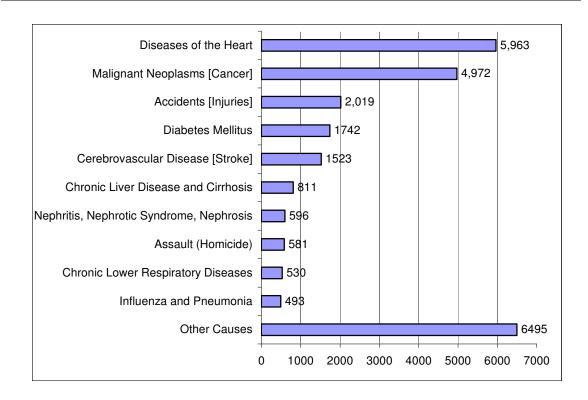
A total of 109,505 White residents died in 2003. The leading cause of death, diseases of the heart, was responsible for 28 percent of these deaths while malignant neoplasms, the second most common cause of death, accounted for 22 percent. Cerebrovascular diseases ranked third and accounted for seven percent of all deaths among Texas White residents. These top three leading causes of death accounted for 57 percent of all Texas White resident deaths in 2003.

# MORTALITY DATA – LEADING CAUSES OF DEATHS AMONG AFRICAN AMERICANS, 2003



A total of 19,271 African American residents died in 2003. The leading cause of death, diseases of the heart, was responsible for 28 percent of these deaths while malignant neoplasms, the second most common cause of death, accounted for 22 percent. Cerebrovascular diseases ranked third and accounted for seven percent of all deaths among Texas African American residents. Diabetes was the fourth leading cause of deaths accounting for five percent of all deaths among Texas African American residents. Injuries were the fifth leading cause of death accounting for another five percent of all deaths among Texas African American residents. Together, the five leading cause of deaths accounted for 66 percent of deaths among African Americans in Texas in 2003.

## MORTALITY DATA – LEADING CAUSES OF DEATHS AMONG HISPANICS, 2003



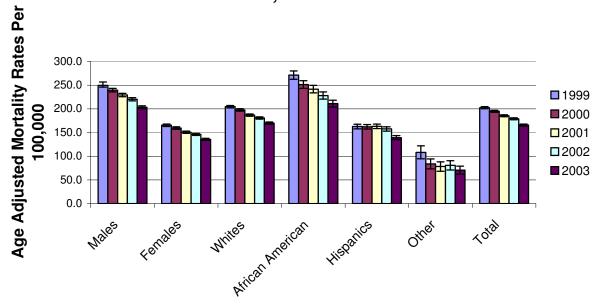
There were a total of 25725 deaths among Hispanics in Texas in 2003. The leading cause of death, diseases of the heart, was responsible for 23 percent of all deaths while malignant neoplasms (19 percent of all deaths) was the second most common cause of death. The third leading cause of deaths was deaths due to injuries, which accounted for eight percent of all deaths. Diabetes was the fourth leading cause of death (seven percent of all deaths) and cerebrovascular diseases (six percent of all deaths) were the fifth leading cause of deaths. Together, these 5 leading causes of death represented 63 percent of all deaths among Hispanic residents in Texas in 2003.

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# **Selected Chronic Disease Conditions**

### MORTALITY DATA – ISCHEMIC HEART DISEASE

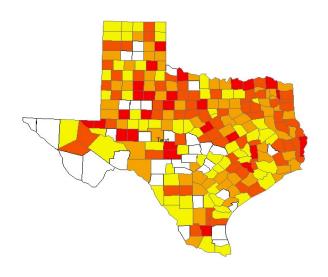
#### Ischemic Heart Disease, ICD I20-I25 Texas, 1999-2003



- The overall age-adjusted mortality rate (AAMR) for ischemic heart disease (IHD) declined from 202.4 per 100,000 in 1999 to 165.8 per 100,000 in 2003. The decrease was statistically significant. AAMR for males and females and for Whites and African Americans also showed significant decline during the same period. AAMR for Hispanics, however, stayed relatively level through 2002, and then showed a significant decline in 2003.
- While mortality rates due to IHD are declining, patterns of disease still show that Texas males had a significantly higher risk of dying from IHD than females.
- In addition, among the race/ethnicity groups, African Americans had a higher risk of dying from IHD than Whites, Hispanics and Other races.

### MORTALITY DATA – ISCHEMIC HEART DISEASE

#### Ischemic Heart Disease Mortality (ICD I20-I25) 1999-2003

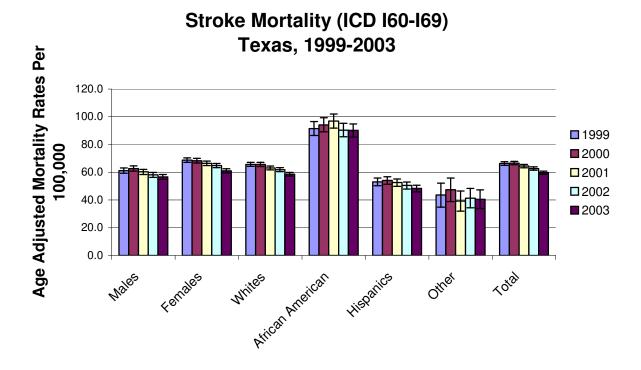


#### Age-Adjuated Mortality Rate per 100,000



- The darkest color in the map represents Texas counties with the highest mortality rates for IHD while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county-specific rates were ranked from highest to lowest and then categorized into quartiles.

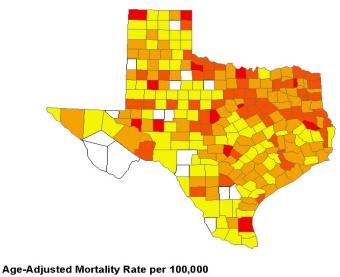
#### **MORTALITY DATA - STROKE**



- The overall age-adjusted mortality rate (AAMR) for stroke declined from 66.3 per 100,000 in 1999 to 59.7 per 100,000 in 2003. The decrease was statistically significant. Males, females and Whites showed significant decline during the same period.
- Texas females had significantly higher risk of dying from stroke than males.
- Among the race/ethnicity groups, African Americans had significantly higher mortality rates compared to Whites and Hispanics and Other races.

#### **MORTALITY DATA - STROKE**

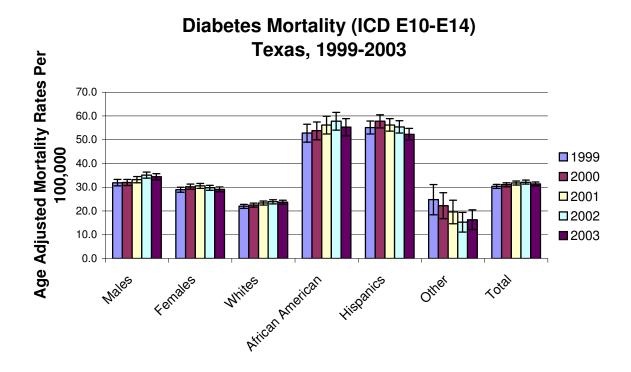
Stroke Mortality (ICD I60-I69) 1999-2003





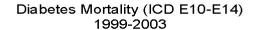
- The darkest color in the map represents Texas counties with the highest mortality rates for stroke while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

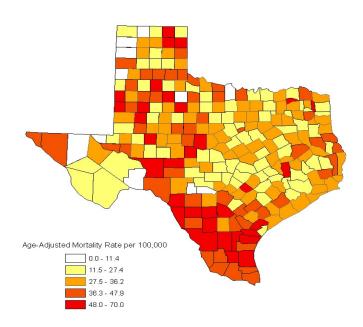
#### **MORTALITY DATA - DIABETES MELLITUS**



- The overall age-adjusted mortality rate (AAMR) for diabetes mellitus increased slightly from 30.4 per 100,000 in 1999 to a peak of 32.1 per 100,000 in 2002, but decreased slightly to 31.4 per 100,000 in 2003. These changes were not statistically significant.
- Texas males had significantly higher risk of dying from diabetes than females.
- Among the race/ethnicity groups, African Americans and Hispanics had significantly higher mortality rates due to diabetes compared to Whites and Other races.

#### **MORTALITY DATA - DIABETES**

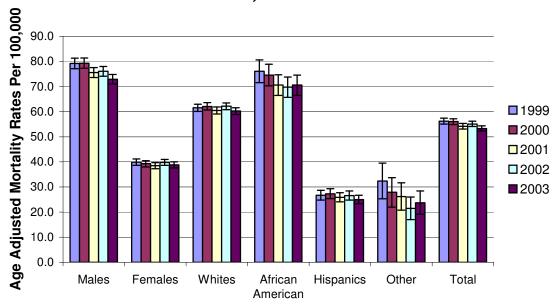




- The darkest color in the map represents counties with the highest mortality rates for diabetes while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

#### **MORTALITY DATA – LUNG CANCER**

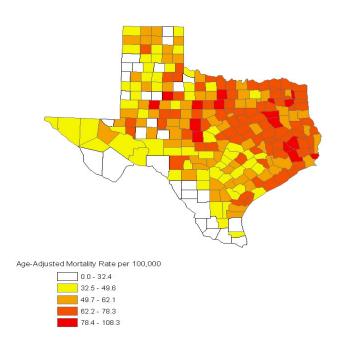
#### Lung Cancer Mortality (ICD C34) Texas, 1999-2003



- The overall age-adjusted mortality rate (AAMR) for lung cancer decreased slightly from 56.2 per 100,000 in 1999 to 53.3 per 100,000 in 2003 and was statistically significant. Decreases in mortality rates can be noted also among males, African Americans and Other races during the same study period, with the decrease in rates among males reaching statistical significance, but not for African Americans or Other races.
- Despite the decreases in mortality rates, Texas males had twice the rate of lung cancer mortality as females.
- Among the race/ethnicity groups, African Americans had the highest mortality rates of the disease while Hispanics and Other races had the lowest mortality rates.

#### **MORTALITY DATA – LUNG CANCER**

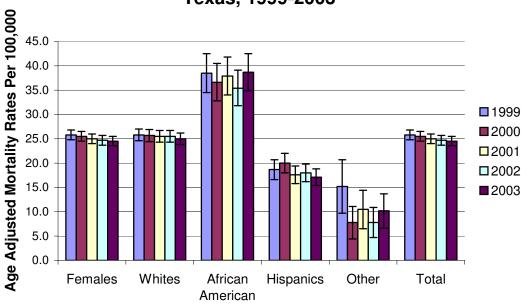
#### Lung Cancer Mortality (ICD C34) 1999-2003



- The darkest color in the map represents counties with the highest mortality rates for lung cancer while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

# **MORTALITY DATA – FEMALE BREAST CANCER**

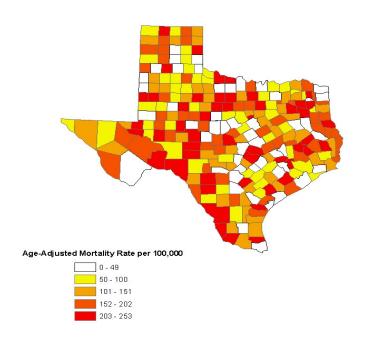




- The overall age-adjusted mortality rate (AAMR) for breast cancer showed a slight decrease from 25.8 per 100,000 in 1999 to 24.5 per 100,000 in 2003. The decrease in mortality rate, however, was not statistically significant.
- Among the race/ethnicity groups, African Americans had significantly higher mortality rates compared to Whites, Hispanics and Other races.

# **MORTALITY DATA – FEMALE BREAST CANCER**

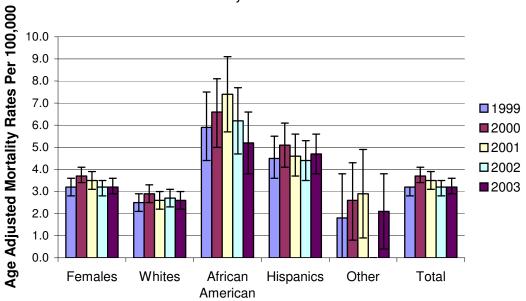
Female Breast Cancer Mortality (ICD C50) 1999-2003



- The darkest color in the map represents counties with the highest mortality rates for lung cancer while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

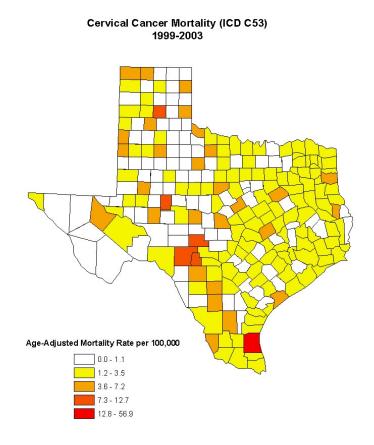
# **MORTALITY DATA – CANCER OF THE CERVIX**

### Female Cervical Cancer Mortality (ICD C53) Texas, 1999-2003



- The overall age-adjusted mortality rate (AAMR) for cancer of cervix remained level from 1999 to 2003.
- Among the race/ethnicity groups, African Americans and Hispanics had significantly higher mortality rates of the disease compared to Whites.

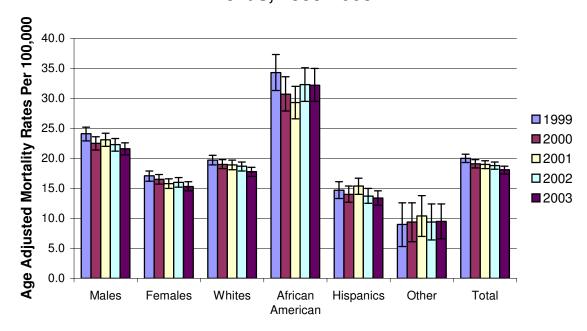
#### **MORTALITY DATA - CERVICAL CANCER**



- The darkest color in the map represents counties with the highest mortality rates for lung cancer while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 1999-2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

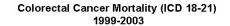
#### **MORTALITY DATA - COLORECTAL CANCER**

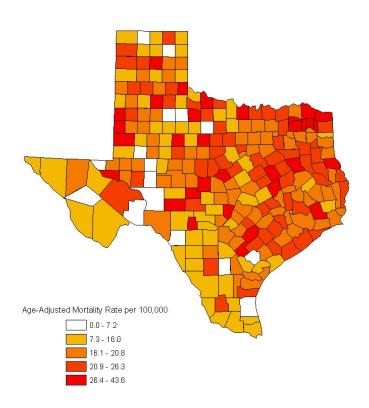
#### Colorectal Cancer Mortality (ICD 18-20) Texas, 1999-2003



- The overall age-adjusted mortality rate (AAMR) for colorectal cancer decreased from 20.0 per 100,000 in 1999 to 18.1 per 100,000 in 2003. The decrease, however, was not statistically significant.
- Texas males have significantly higher risk of dying from colorectal cancer than females.
- Among the race/ethnicity groups, African Americans have significantly higher mortality rates of the disease compared to Whites, Hispanics and Other races.

#### **MORTALITY DATA - COLORECTAL CANCER**

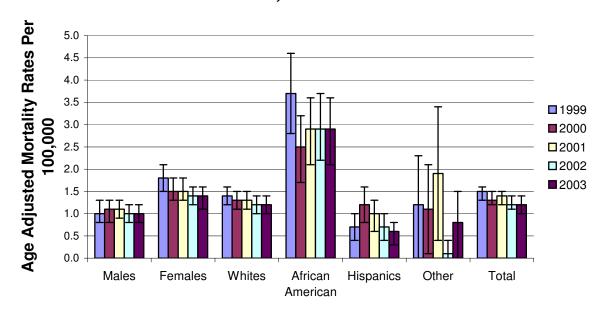




- The darkest color in the map represents counties with the highest mortality rates for lung cancer while the lightest color represents counties with the lowest mortality rates. County-specific mortality rates were age-adjusted and represent data for 2003.
- NOTE: Although county rates provide a high degree of specificity, rates in counties with small populations and few deaths for a specific condition can be unstable. For each map, county specific rates were ranked from highest to lowest and then categorized into quartiles.

#### **MORTALITY DATA - ASTHMA**

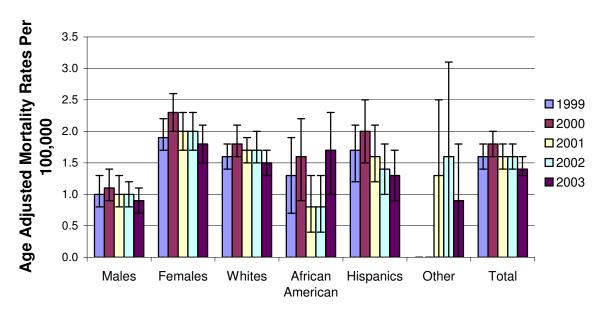
#### Asthma Mortality (ICD J45) Texas, 1999-2003



- The overall age-adjusted mortality rate (AAMR) for asthma stayed relatively stable from 1999 through 2003.
- Texas females have higher mortality rates from asthma than males, although these differences did not always achieve statistical significance.
- Among the race/ethnicity groups, African Americans had significantly higher mortality rates compared to Whites and Hispanics.

#### **MORTALITY DATA - ARTHRITIS**

#### Arthritis Mortality (ICD M00-M25) Texas, 1999-2003



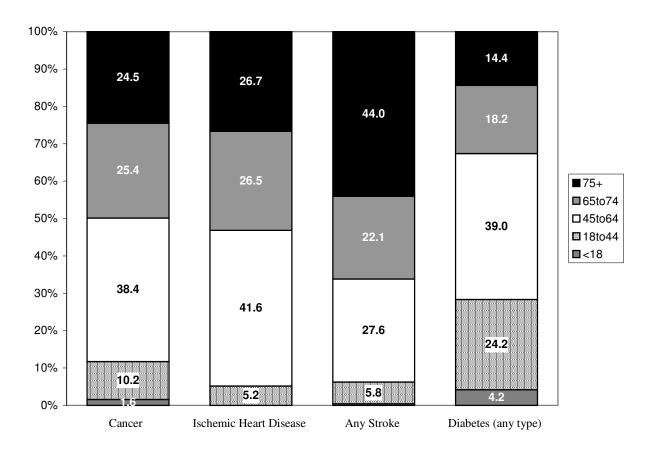
- The overall age-adjusted mortality rate (AAMR) for arthritis stayed relatively stable from 1999 through 2003.
- Texas females had significantly higher risk of dying from arthritis than males.
- Among race/ethnicity groups, no consistent patterns were apparent in mortality rates.

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# HOSPITAL DISCHARGE DATA

#### **HOSPITAL DISCHARGE DATA**

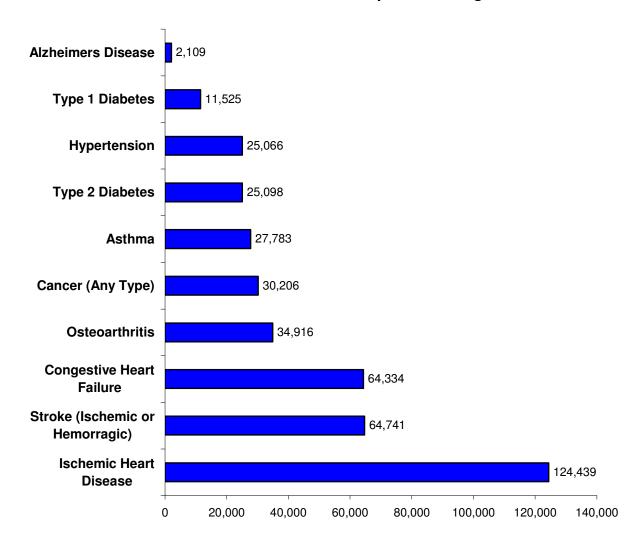
#### Percent Distribution of Discharges by Age



In 2003, patients aged 65 years of age and older accounted for the highest proportion of hospital discharges for cancer (50%), ischemic disease (53%) and stroke (66%). Discharges for diabetes-related diagnoses had a higher proportion of patients aged 45 to 64 years (39%) and 18 to 44 years (24%). Patients aged 65 years and older accounted for 33% of all diabetes-related hospital discharges.

#### **HOSPITAL DISCHARGE DATA**

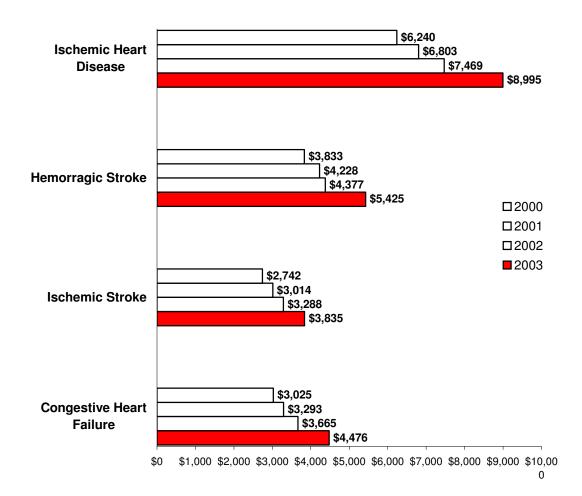
#### **Number of Selected First-Listed Hospital Discharges--2003**



In 2003, ischemic heart disease had the highest number of discharges for chronic disease hospitalizations, followed by stroke and congestive heart failure.

#### HOSPITAL DISCHARGE DATA – ESTIMATED AVERAGE HOSPITAL CHARGE PER DAY

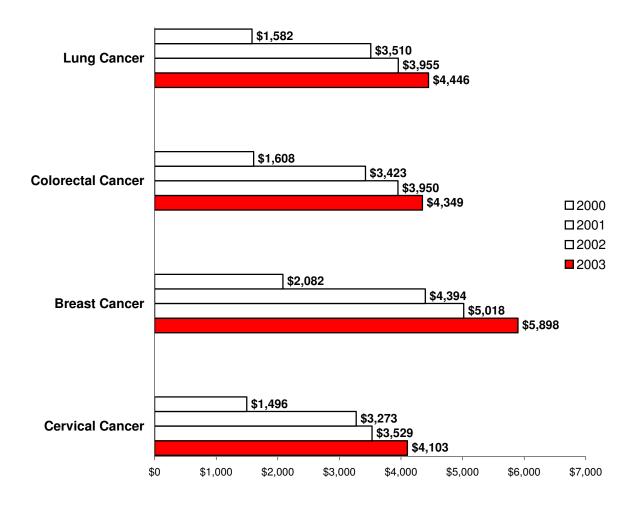
### Estimated Average Hospital Charge per Day for Selected CVD Diagnoses



Estimated average hospital charges per day for selected CVD diagnoses have increased each year from 2000 to 2003. Among the specific CVD disease conditions, average hospital charges were highest for ischemic heart disease, followed by hemorrhagic stroke, congestive heart failure and ischemic stroke.

#### HOSPITAL DISCHARGE DATA – ESTIMATED AVERAGE HOSPITAL CHARGE PER DAY

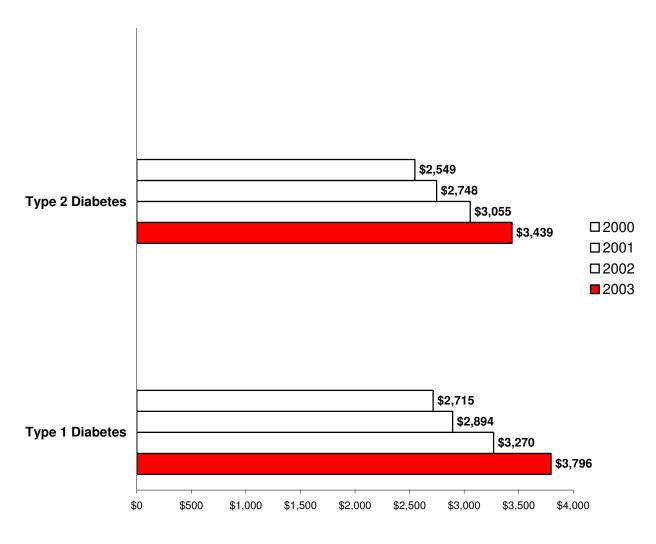
### Estimated Average Hospital Charge per Day for Selected Cancer Diagnoses



Estimated average hospital charges per day for selected cancer diagnoses have increased each year from 2000 to 2003. Among the specific cancer disease conditions, average hospital charges were highest for female breast cancer, followed by lung cancer, colorectal cancer and cervical cancer.

#### HOSPITAL DISCHARGE DATA – ESTIMATED AVERAGE HOSPITAL CHARGE PER DAY

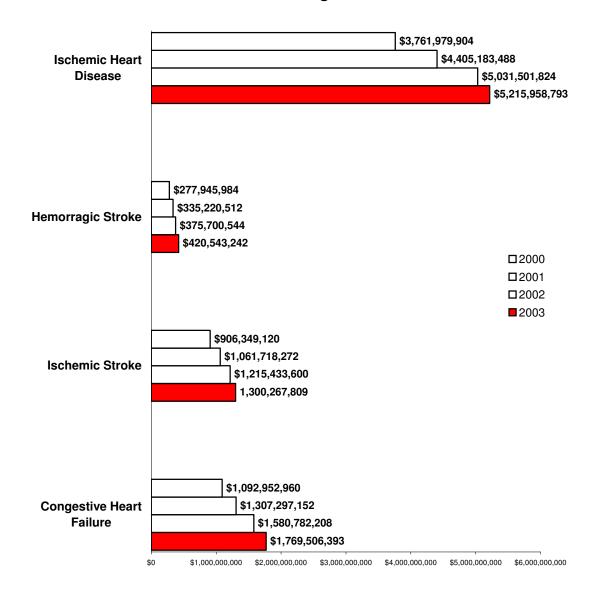
#### **Estimated Average Hospital Charge per Day for Diabetes**



Estimated average hospital charges per day for specific types of diabetes mellitus have increased each year from 2000 to 2003. In 2003, the average hospital charge per day was highest for patients diagnosed with Type 1 diabetes.

# **HOSPITAL DISCHARGE DATA – ESTIMATED TOTAL HOSPITAL CHARGES**

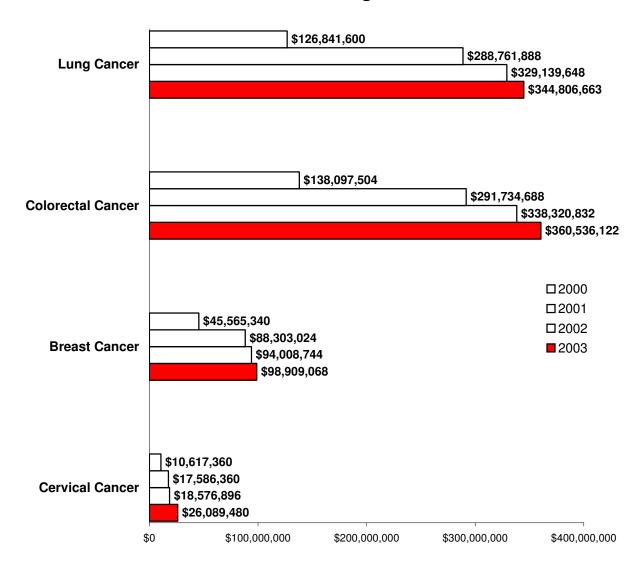
### Total Hospital Charges for Selected First Listed CVD Diagnoses



Total hospital charges for selected CVD diagnoses have increased each year from 2000 to 2003. Total hospital charges were highest for ischemic heart disease followed by congestive heart failure, ischemic stroke and hemorrhagic stroke.

# **HOSPITAL DISCHARGE DATA – ESTIMATED TOTAL HOSPITAL CHARGES**

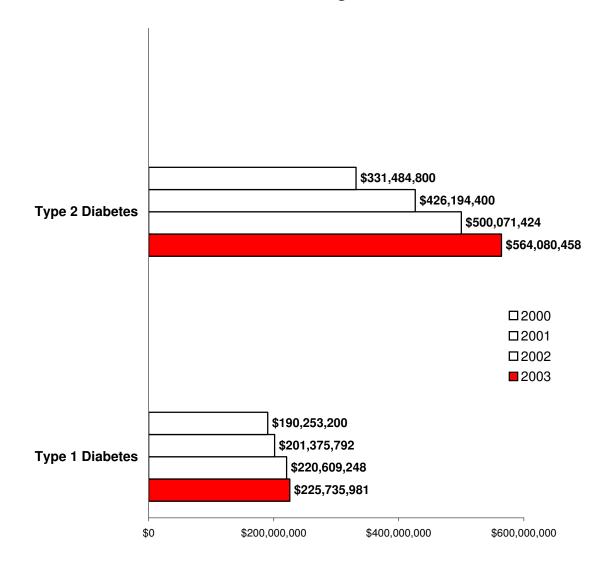
# Total Hospital Charges for Selected First Listed Cancer Diagnoses



Total hospital charges for selected cancer types have increased each year from 2000 to 2003. In 2003, total hospital charges were highest for colorectal cancer, followed by lung cancer, breast cancer and cervical cancer.

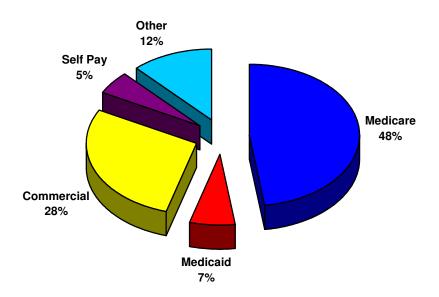
# **HOSPITAL DISCHARGE DATA – ESTIMATED TOTAL HOSPITAL CHARGES**

# Total Hospital Charges for First Listed Diabetes Diagnoses



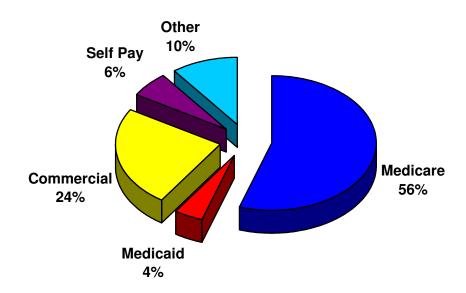
Total hospital charges for types of diabetes mellitus have increased each year from 2000 to 2003. In 2003, total hospital charges were highest for type 2 diabetes mellitus.

# Standard Source of Primary Payment for Any Cancer Discharges--2003



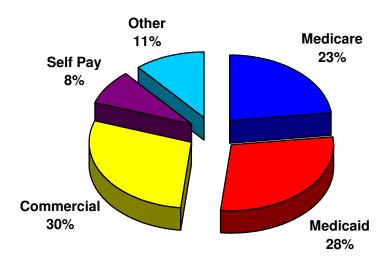
In 2003, standard sources of the primary payment for cancer-related hospital discharges include Medicare (48 percent), commercial (28 percent), Medicaid (7 percent), other sources (e.g., worker's compensation, Blue Cross, CHAMPUS, other federal program including VA) (12 percent) and self-pay (5 percent).

### **Standard Source of Primary Payment for Ischemic Heart Disease Discharges--2003**



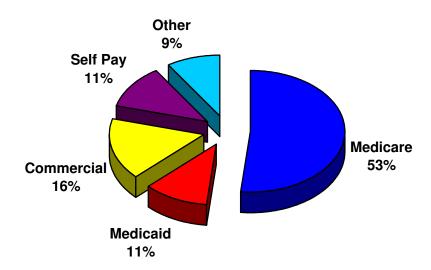
In 2003, standard sources of the primary payment for ischemic heart disease-related hospital discharges include Medicare (56 percent), commercial (24 percent), Medicaid (4 percent), other sources (e.g., worker's compensation, Blue Cross, CHAMPUS, other federal program including VA) (10 percent) and self-pay (6 percent).

### Standard Source of Primary Payment for Asthma Discharges--2003



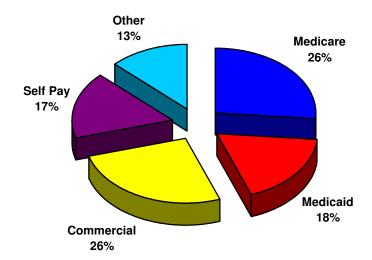
In 2003, standard sources of the primary payment for asthma-related hospital discharges include Medicare (23 percent), commercial (30 percent), Medicaid (28 percent), other sources (e.g., worker's compensation, Blue Cross, CHAMPUS, other federal program including VA) (11 percent) and self-pay (8 percent).

# Standard Source of Primary Payment for Type 2 Diabetes Discharges--2003



In 2003, standard sources of the primary payment for type 2 diabetes-related hospital discharges include Medicare (53 percent), commercial (16 percent), Medicaid (11 percent), other sources (e.g., worker's compensation, Blue Cross, CHAMPUS, other federal program including VA) (9 percent) and self-pay (11 percent).

### Standard Source of Primary Payment for Type 1 Diabetes Discharges--2003



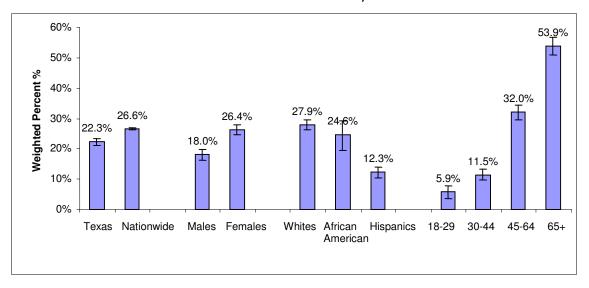
In 2003, standard sources of the primary payment for type 1 diabetes-related hospital discharges include Medicare (26 percent), commercial (26 percent), Medicaid (18 percent), other sources (e.g., worker's compensation, Blue Cross, CHAMPUS, other federal program including VA) (13 percent) and self-pay (17 percent).

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# Behavioral Risk Factor Surveillance System

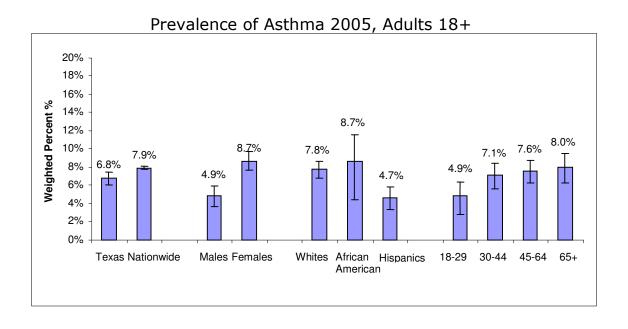
# BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of Arthritis in 2005\*

#### Prevalence of Arthritis 2005, Adults 18+



- Texas had significantly lower rates of arthritis than the National Average.
- Females had significantly higher prevalence rates compared to males.
- Among the race/ethnic groups, Whites and African Americans had significantly higher prevalence rates than Hispanics.
- Arthritis prevalence increased significantly with increasing age.

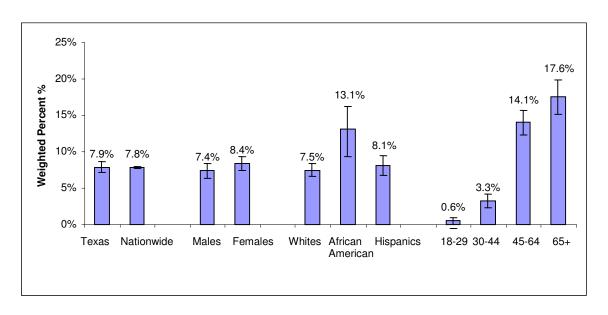
# BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of Asthma in 2005\*



- Texas had significantly lower rates of asthma than the National Average.
- Females had significantly higher prevalence rates compared to males.
- Among the race/ethnic groups, African Americans and Whites had the highest prevalence rates, with Whites having significantly higher rates than Hispanics.
- Asthma prevalence increased with increasing age, although these trends were not significant.

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of Diabetes in 2005\*

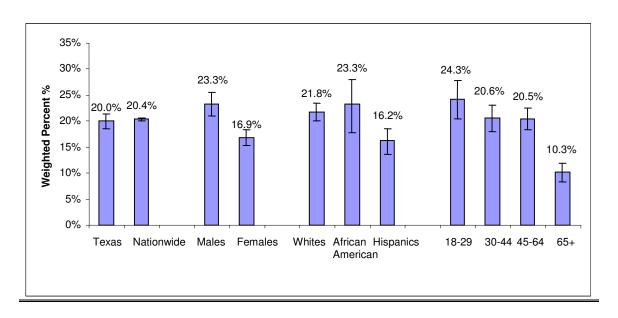
#### Prevalence of Diabetes 2005, Adults 18+



- Texas prevalence rates of diabetes were similar to the National Average.
- Females had a slightly higher prevalence rates compared to males, although this difference was not statistically significant.
- Among the race/ethnic groups, African Americans had significantly higher prevalence rates compared to whites and Hispanics.
- Diabetes prevalence increases with increasing age, although not all of the comparisons achieved statistical significance.

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM - Prevalence of Smoking in 2005\*

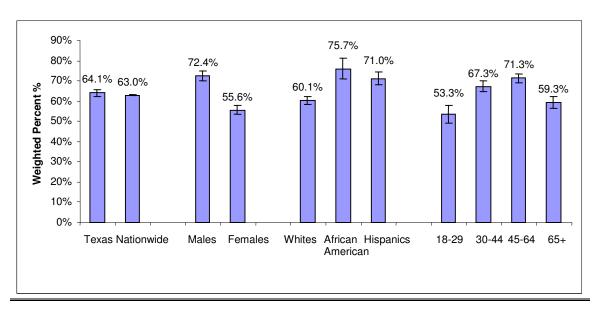
#### Prevalence of Smoking 2005, Adults 18+



- Texas prevalence rates of cigarette smoking were similar to the National Average.
- Males had a significantly higher prevalence rates compared to females.
- Among the race/ethnic groups, African Americans and Whites had the highest prevalence rates, with Whites having significantly higher rates than Hispanics.
- Cigarette smoking prevalence decreased with increasing age, although not all of the comparisons achieved statistical significance.

# BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of Overweight and Obesity 2005\*

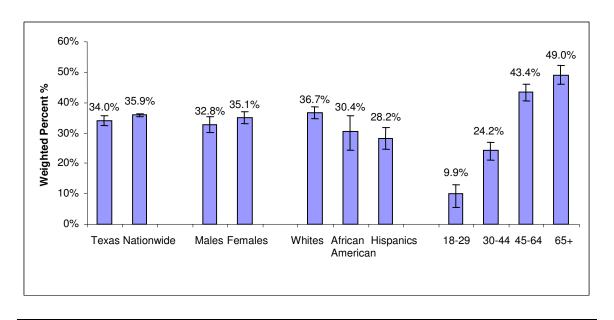
Prevalence of Overweight and Obesity 2005, Adults 18+



- Texas prevalence rates of overweight and obesity were similar to the National Average.
- Males had a significantly higher prevalence rate of overweight and obesity compared to females.
- Among the race/ethnic groups, African Americans and Hispanics had significantly higher prevalence of overweight and obesity compared to Whites.
- Persons age 30-64 had significantly higher rates of overweight and obesity compared to persons age 18-29 and 65+.

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of High Cholesterol in 2005\*

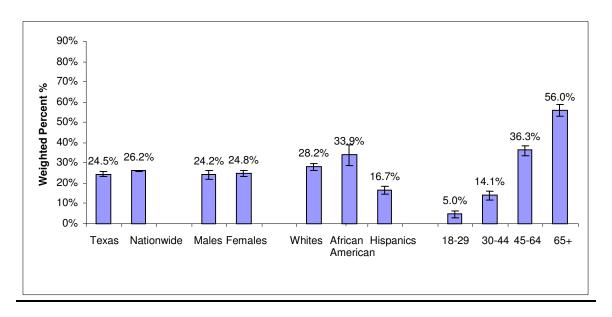
Prevalence of High Blood Cholesterol 2005, Adults 18+



- Texas prevalence rates of high blood cholesterol were similar to the National Average.
- Females and males had similar prevalence rates of high blood cholesterol.
- Among the race/ethnic groups, Whites had significantly higher prevalence rates of high blood cholesterol compared to Hispanics.
- High blood cholesterol increased with increasing age, although not all of the comparisons achieved statistical significance.

### BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM – Prevalence of High Blood Pressure in 2005

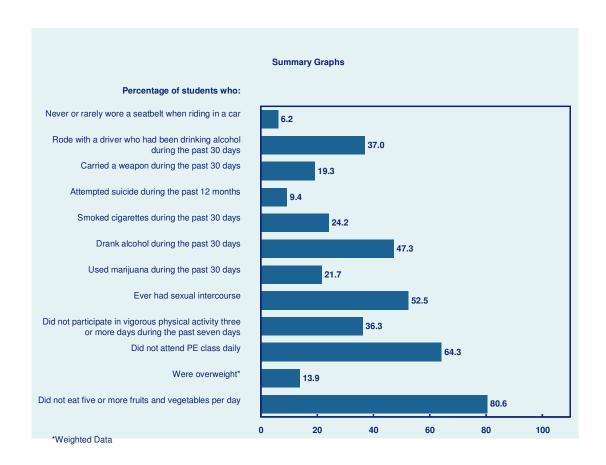
Prevalence of High Blood Pressure 2005, Adults 18+



- Texas prevalence rates of high blood pressure were similar to the National Average.
- Males had a similar prevalence rate of high blood pressure compared to females.
- Among the race/ethnic groups, Whites and African Americans had significantly higher prevalence rates of high blood pressure compared to Hispanics.
- High blood pressure prevalence increased significantly with increasing age

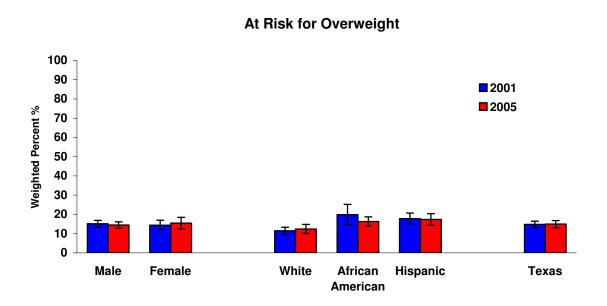
# Youth Risk Behavior Survey

# YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM – Prevalence of Risky Behaviors Among Public High School Students—2005\*



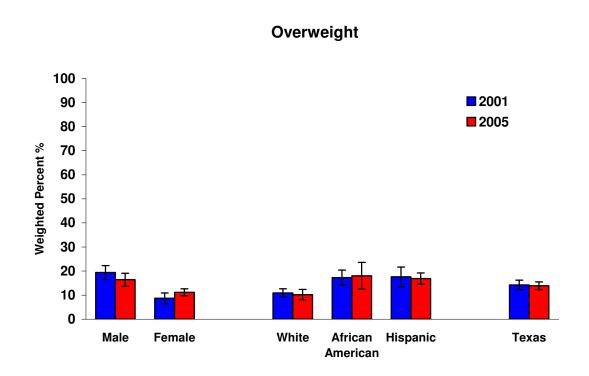
The Texas Youth Risk Behavior Survey (YRBS) provides a wealth of data for state and local health and education officials to a) implement or modify programs to address the behaviors of young people; b) create awareness of the extent of risk behaviors among young people; c) promote state-level changes that support specific health education curricula and coordinated school health programs; and d) provide evidence-based data to support the need for health education. The YRBS was designed to focus the nation on behaviors among youth related to the leading causes of mortality and morbidity among both youth and adults and to assess how these risk behaviors change over time.

### YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM - Prevalence of Risky Behaviors Among Public High School Students -- At Risk for Becoming Overweight



- The percentage of students who are at risk for becoming overweight changed little from 2001 (**14.8**% 95% CI, 12.9%-16.5%) to 2005 (**15.7**% (95% CI, 14.8%-16.6%).
- The proportion of students who are at risk for becoming overweight is greater among African American (16.3%) and Hispanic students (17.4%) than among White students (12.4%), although differences are not statistically significant. No differences exist among students by gender and grade levels.

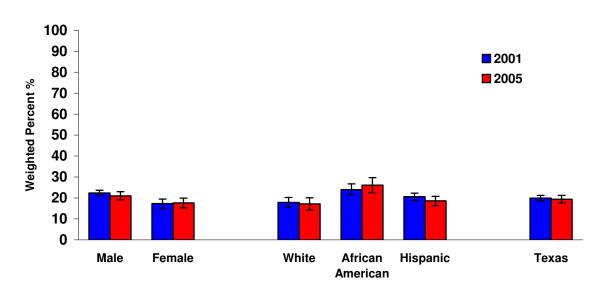
### YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM - Prevalence of Risky Behaviors Among Public High School Students -Overweight



- The percentage of students who are overweight <u>decreased</u> from **14.2**% (95% CI, 12.1%-16.2%) in 2001 to **13.9**% (95% CI, 12.3%-15.5%) in 2003 (see Figure 2). The decline, however, was not statistically significant.
- Male students (16.4%) are significantly more likely than female students (11.2%) to be overweight. However, the percentage of male students who are overweight has decreased since 2001 (19.4%) while the percentage of female students has increased (8.6%).
- The proportion of students who are overweight is greater for African American (18.0%) and Hispanic students (16.9%) than White students (10.2%), although differences were not statistically significant.

### YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM – Prevalence of Risky Behaviors Among Public High School Students -- 5 or more Servings of Fruits and Vegetables

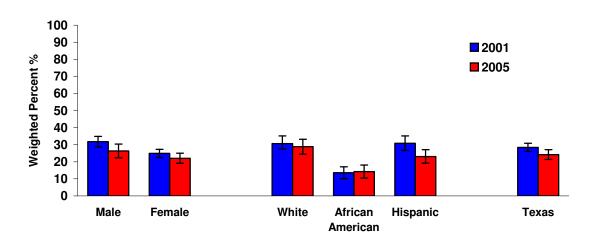
### Ate 5 or More Servings of Fruits or Vegetables in Past 7 Days



- The percentage of students who reported that they ate five or more servings of fruits and vegetables per day during the past seven days changed little from 2001 (19.9% 95% CI, 18.6%-21.2%) to 2005 (19.4% 95% CI, 17.6%-21.2%).
- Male students (21.0%) are more likely to report that they are five or more servings of fruits and vegetables per day during the past seven days than female students (17.6%). The difference is not statistically significant, however.
- Overall, African American students (26.1%) were significantly more likely to report that they eat five or more servings of fruits and vegetables than White students (17.2%) and Hispanic students (18.6%).

### YOUTH RISK BEHAVIOR SURVEILLANCE SYSTEM - Prevalence of Tobacco Use Among Public High School Students -2001-2005

### Percent of Students Who Smoked One or More Cigarettes in the Past 30 Days



- The prevalence of current cigarette use (i.e., smoked cigarettes on ≥ 1 of the 30 days preceding the survey) <u>decreased</u> from **28.4**% (95% CI, 26.0%-30.8%) in 2001 to **24.2**% (95% CI, 21.3%-27.1%) in 2005. The decrease, however, was not statistically significant.
- The prevalence of current cigarette use declined among both male and female students from 2001 to 2005. The decrease, however, was not statistically significant.
- Overall, African American students (14.2%) were less likely to report current cigarette use than Hispanic (23.1%) or White (28.9%) students.