

# Chronic Disease in Harris County, Texas

August 2011

Like the rest of the nation, chronic disease has emerged as the leading cause of death in Harris County. The top five leading causes of death (see Table 1), including chronic diseases such as heart disease, cancer and stroke, account for 60% of all deaths in Harris County.<sup>1</sup>

Health depends on the interaction of health risk behaviors, genetics and our environment. The opportunity to lead a healthy lifestyle influences the risk of developing chronic diseases. Likewise, the environment in which we live, work, learn and play impacts our opportunity to make healthier choices.<sup>2</sup>

This profile describes chronic disease morbidity and mortality in Harris County as well as related behavioral and environmental determinants.

Table 1: Leading Causes of Mortality, Harris County, 2008

Top 5 Causes of Death	Total Deaths	Mortality Rate*
Heart Disease	4,924	196.1
Cancer	4,896	177.3
Stroke	1,195	49.5
Accidents	1,373	41.1
Chronic Lower Respiratory Disease	870	36.2
All Causes	21,922	693.5

\*Deaths per 100,000 persons, age-adjusted to the 2000 Standard population.

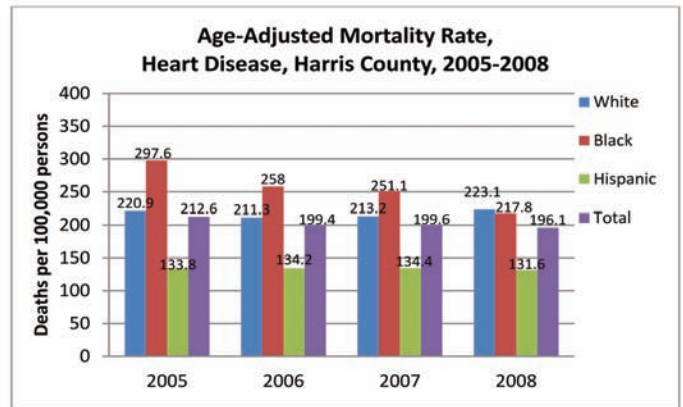
Source: Texas Department of State Health Services, Center for Health Statistics



# Heart Disease

Ranked the top leading cause of death in Harris County and the U.S., the rate of mortality due to heart disease declined over the years from a rate of 212.6 per 100,000 in 2005 to 196.1 per 100,000 in 2008.<sup>3</sup>

Within this time period, the rate for African-Americans was markedly higher than the overall rate, at 297.6 per 100,000 in 2005 and 217.8 per 100,000 in 2008. The substantial decline, however, is noteworthy and shows a narrowing disparity.

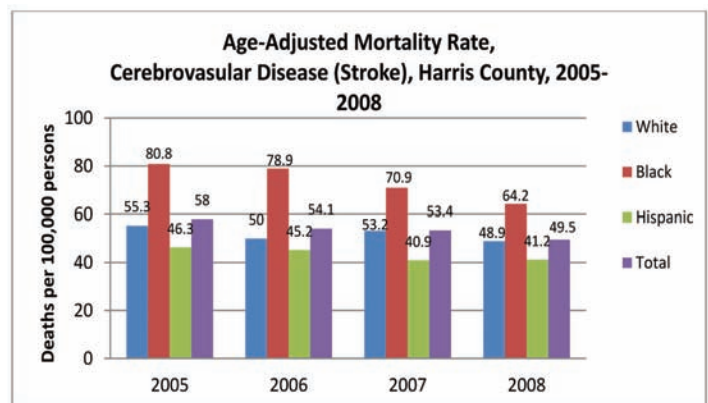


Source: Texas Department of State Health Services, Center for Health Statistics

Behavioral Risk Factor Surveillance System (BRFSS) data from 2010 show that 4.9% of surveyed adults living in Harris County reported having been diagnosed with some form of heart disease, compared with 6.6% of Texas adults and 6.6% of U.S. adults.<sup>4</sup> More African American respondents reported having been diagnosed with heart disease than white or Hispanic respondents—9% of African American respondents reported being diagnosed with cardiovascular disease, compared with 4.9% of white and 3% of Hispanic respondents.

# Stroke

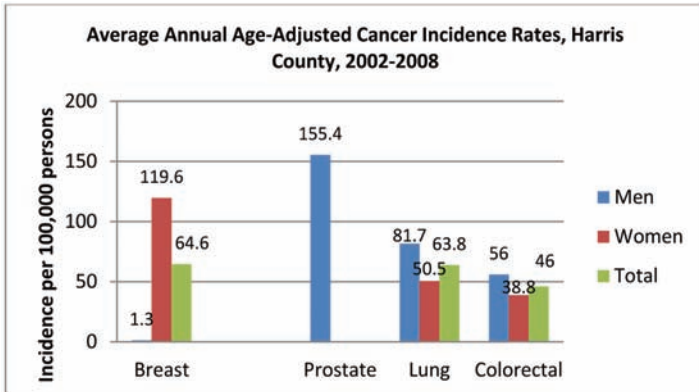
The overall rate of mortality due to stroke, the fourth leading cause of death in Harris County, decreased by 15% between 2005 and 2008. Similar to heart disease mortality rates, mortality rates due to stroke vary widely among racial and ethnic groups in Harris County. While the rate of death from stroke among African Americans remains higher than the overall rate, the rate has declined 20.5% between 2005 and 2008.<sup>3</sup>



Source: Texas Department of State Health Services, Center for Health Statistics

# Cancer

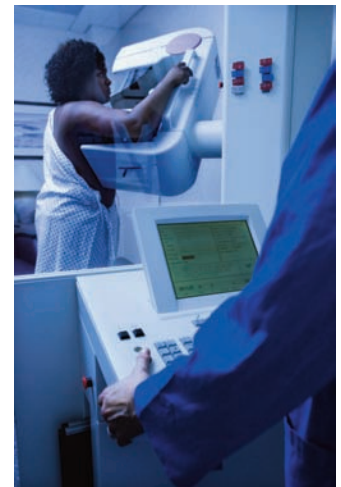
Cancer, the second leading cause of death in the U.S., is responsible for almost one in four deaths in Harris County.<sup>1</sup> Texas Department of State Health Services (DSHS) reports that from 2002 to 2008 the number of newly diagnosed cancer cases among Harris County residents was 90,299.<sup>5</sup> During this time, the average annual age-adjusted cancer rate was 452.5 cases per 100,000 persons. In comparison, the State rate was 450.3 cases per 100,000 persons.



Source: Texas Department of State Health Services, Texas Cancer Registry

From 2002-2008 breast cancer was the most commonly diagnosed cancer among Harris County women and prostate cancer was the most commonly diagnosed cancer among Harris County men. However, lung cancer was the leading cancer killer for both men and women in Harris County.

Certain cancers can be detected early through regular screening activities, thus increasing the odds for successful treatment. Mammography screening can be effective in reducing mortality from breast cancer, the second leading cancer killer among women. According to the 2010 BRFSS, 70.8% of women aged 40 or over surveyed in Harris County reported having had a mammogram in the past two years.<sup>4</sup> In comparison, 70.1% of Texas women and 75.4% of women in the U.S. reported having had a mammogram in the past two years.



By identifying abnormal cells before they become cancerous, the pap test has been shown to reduce cervical cancer incidence and death. BRFSS data from 2010 show that 78.9% of surveyed women aged 18 or over in Harris County reported having had a pap test in the past three years compared to 81.9% of Texas women and 79.4% of U.S. women.<sup>4</sup>

The prostate specific antigen (PSA) is an effective cancer screening test that can identify prostate cancer in its early stages, when treatment is most effective. According to the 2010 BRFSS, 58.6% of Harris County men aged 40 or over reported having had a PSA test. In comparison, 62.7% of Texas men and 65% of U.S. men reported having had a PSA test.

Table 2: Preventive Cancer Screening in Houston MSA, 2004-2010

Screening	2004	2006	2008	2010
No Mammogram in 2 years	31.1	32.2	26	29.8
No Pap Test in 3 years	15.1	23.8	18.4	20.2
No Prostate Specific Antigen (PSA)	44.5	60.5	51.1	50.7

Source: Texas Department of State Health Services, BRFSS

## Oral Diseases

Oral diseases such as tooth decay, gum disease and cancer are among the most prevalent health problems in the U.S. Regular dental visits can identify and prevent oral health conditions. BRFSS data from 2010 show that 61.6% of surveyed adults in Harris County reported having visited a dentist or a dental clinic in the past year, compared to 57.2% in 2008.<sup>4</sup> In 2010, 59.9% of Texas adults and 68.5% of U.S. respondents reported a dental visit in the past year.

According to the Centers for Disease Control and Prevention (CDC), more than 30,000 new cases of cancer of the oral cavity and pharynx are diagnosed each year in the U.S.<sup>5</sup> Between 2002 and 2008 there were a total of 2,157 cancers related to the oral cavity and pharynx diagnosed in Harris County—an annual age-adjusted rate of 10.0 cases per 100,000 persons.<sup>5</sup>

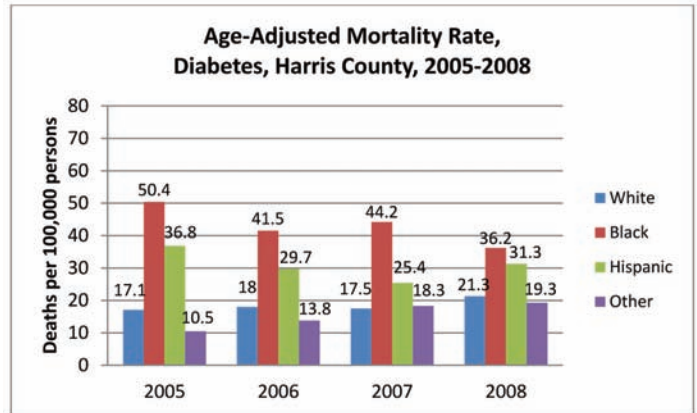


Males in Harris County are diagnosed with oral cancers more often than females—the annual incidence rate among men is almost three times higher than that of women.

# Diabetes

Diabetes, a condition marked by high blood sugars, can lead to other health problems such as heart disease, blindness and kidney failure. Among racial and ethnic groups, the mortality rate due to diabetes increased for both whites and Hispanics between 2007 and 2008, while African Americans experienced a 19% decrease.<sup>3</sup>

Diagnosing and managing diabetes can prevent or delay progression of the disease and related, adverse health outcomes. According to the 2010 BRFSS, 8.5% of surveyed adults in Harris County reported having ever been diagnosed with diabetes not related to pregnancy.<sup>4</sup> In comparison, 9.7% of Texas adults and 9.3% of U.S. adults reported having been diagnosed with diabetes.

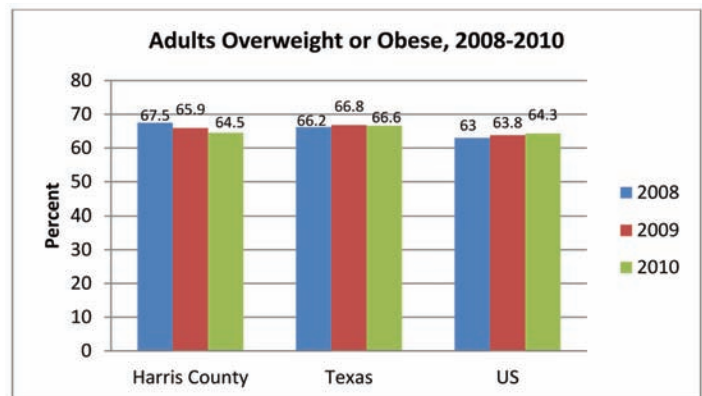


Source: Texas Department of State Health Services, Center for Health Statistics

# Overweight & Obesity

According to CDC, the proportion of overweight and obese people has increased dramatically since the late 1980s.<sup>7</sup> Adults are considered overweight if their Body Mass Index (BMI), a correlate of body fat, is in the range of 25.0-29.9, and obese if their BMI is 30.0 or above.<sup>4</sup>

According to BMI calculations based on 2010 BRFSS data, 64.5% of surveyed adults in Harris County were overweight or obese, compared with 66.6% of Texas adults and 64.3% of U.S. adults. Male respondents in the Harris County area were more likely to be overweight and obese than females, with 72.6% of male respondents overweight or obese compared with 55.6% of female respondents. Further, 73.1% of Hispanic respondents were overweight or obese, compared with 73.3% of African American respondents and 62.4% of white respondents.

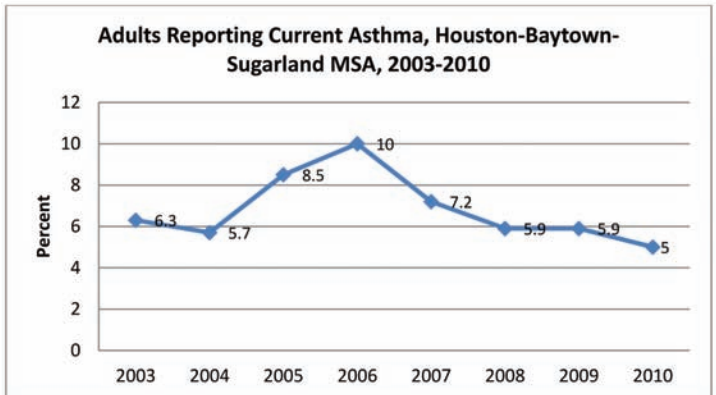


Source: Texas Department of State Health Services, BRFSS

# Asthma

CDC reports that asthma, a lung disease that causes episodic wheezing, shortness of breath and coughing is one of the most common chronic childhood diseases.<sup>8</sup>

According to 2010 BRFSS data, 4.9% of surveyed adults in Harris County reported having ever been told they have asthma and still have asthma. In comparison, 7.4% of Texas respondents and 8.6% of respondents in the U.S. reported ever having been told they have asthma and still have asthma.<sup>4</sup>

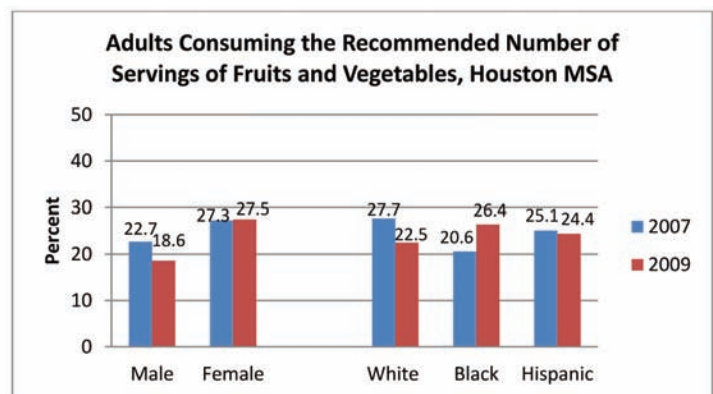


Source: Texas Department of State Health Services, BRFSS

## Determinants of Chronic Diseases

### Nutritional Intake

Poor nutrition is a leading cause of preventable illness. CDC recommends that all Americans regularly consume fruits and vegetables each day.<sup>9</sup> A diet rich in fresh fruits and vegetables can prevent the development of chronic diseases. One's ability to maintain a healthy diet is influenced by their access to supermarkets and grocery stores in their communities. As in other areas throughout the nation, some communities in Harris County—called **"food deserts"**—lack adequate access to healthy food options.



Source: Texas Department of State Health Services, BRFSS

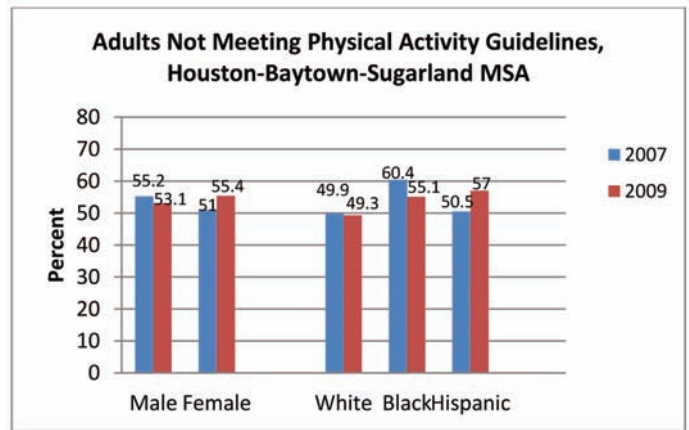
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*According to the Food Trust, the Greater Houston area has 185 fewer supermarkets compared to the national rate of per capita supermarkets.<sup>10</sup>*

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### Physical Activity

Physical inactivity is a growing challenge among both adults and children in the U.S. Engaging in regular physical activity helps to prevent chronic diseases. The design of communities can facilitate or limit our participation in physical activity. For example, the presence of sidewalks and safe areas for children to play can encourage more walking and other outdoor exercise.



Source: Texas Department of State Health Services, Center for Health Statistics

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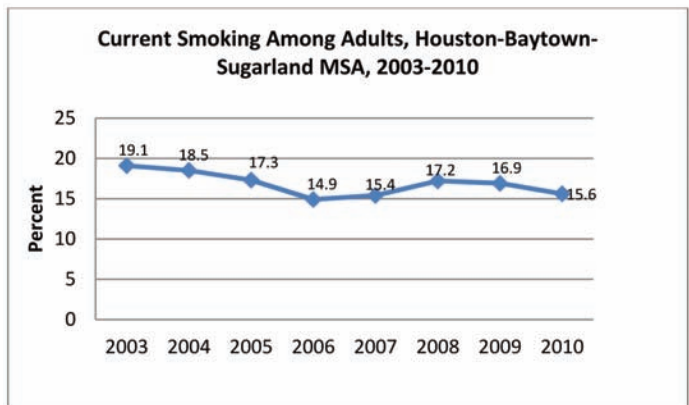
*The CDC Healthy Community Design Initiative recommends action steps to advance healthy community design principles.<sup>11</sup>*

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### Tobacco Use

Tobacco use is the leading cause of preventable morbidity, disability and mortality in the nation. Nearly 20% of all deaths can be linked to tobacco.<sup>12</sup> Secondhand smoke exposure is also harmful and can cause sudden infant death syndrome, acute respiratory infections, ear problems and more frequent and severe asthma attacks in children.



Source: Texas Department of State Health Services, Center for Health Statistics

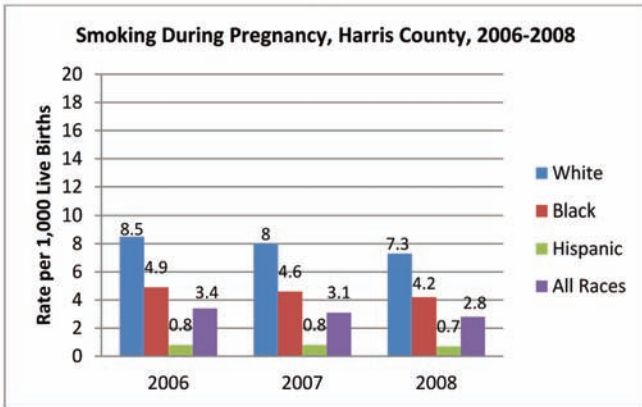
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*The American Lung Association’s State of Tobacco Control 2010 grades Texas an “F” for tobacco prevention and control spending, state smoking restrictions in both public and private areas and coverage of smoking cessation programs.<sup>13</sup>*

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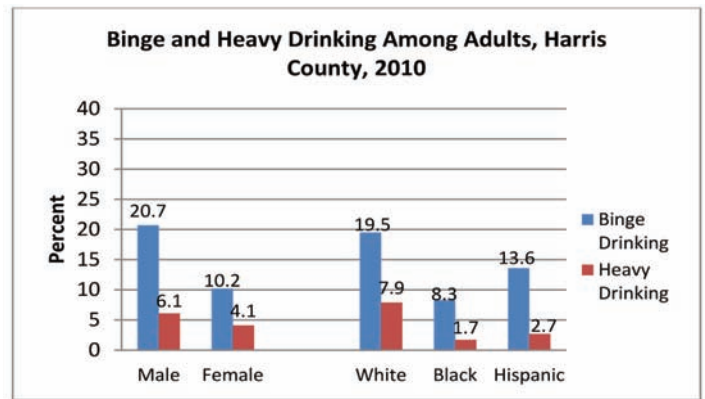


Source: Texas Department of State Health Services, Center for Health Statistics

Smoking during pregnancy can be harmful to both mothers and babies. According to CDC, research as shown that smoking during pregnancy causes pregnancy complications, premature birth, low birth weight, stillbirth and Sudden Infant Death Syndrome (SIDS).<sup>14</sup> In Harris County, smoking rates among pregnant women decreased by 18% between 2006 and 2008.<sup>15</sup>

### Alcohol Use

CDC estimates that 79,000 deaths each year are attributable to excessive alcohol use in the U.S., placing it third among the leading causes of lifestyle-related causes of death.<sup>16</sup> Excessive alcohol use, which includes heavy and binge drinking, is linked with cirrhosis of the liver, motor vehicle crashes, injuries, cancer, risky sexual behavior, violence and child maltreatment.



Source: Texas Department of State Health Services, BRFSS

*In general, communities with higher concentrations of liquor stores experience higher rates of crime, alcohol-related hospitalizations, alcohol-related motor vehicle accidents, and pedestrian injuries.<sup>17</sup>*

### Data Sources:

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2. Centers for Disease Control and Prevention (CDC), Social Determinants of Health: Key Concepts, <http://www.cdc.gov/socialdeterminants/>, accessed May 2011.
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6. CDC, Division of Oral Health, <http://www.cdc.gov/OralHealth/topics/cancer.htm>, accessed July 2011.
7. CDC, Division of Nutrition, Physical Activity and Obesity, <http://www.cdc.gov/obesity/8>, accessed July 2011.
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12. CDC, Fast Facts, [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm), accessed July 2011.
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