Cardiovascular Disease Mortality

Cardiovascular disease (CVD) is a general term given to any disease affecting the heart or blood vessels. CVD is the leading cause of death in the U.S. (Nabel, 2003). The American Heart Association estimated that 79.4 million Americans (one in three) had one or more forms of CVD in 2004. Approximately 36% of all deaths in the U.S. (871,500) were attributable to CVD that same year. Heart disease and cerebrovascular disease (stroke) are the two main causes of CVD death.

Heart Disease Mortality

Heart disease is the leading cause of death in the U.S., accounting for 28% of all deaths in 2003. It is the leading cause of death for both men and women, as well as for African-Americans, Hispanics, and whites. U.S. African-Americans have the highest age-adjusted heart disease death rate (300/100,000), followed by whites (228/100,000) and then Hispanics (173/100,000). Coronary heart disease, which can lead to heart attacks, is the most common form of heart disease in the U.S.; however, several other heart conditions also fall under the term heart disease.

The risk of heart disease, and subsequently heart disease mortality, increases with age. Approximately 83% of coronary heart disease deaths occur among persons 65 or older. Men have a greater risk of heart disease than women, especially at younger ages. The major risk factors for heart disease include high blood pressure, high blood cholesterol levels, cigarette smoking, and diabetes. About 75% of diabetics die of some form of heart or blood vessel disease. In addition, poor diet and physical inactivity have been linked to heart disease, probably because they are related to the major risk factors listed above. Similarly, obesity is an indirect risk factor for heart disease, because obesity is associated with high cholesterol, high blood pressure, and diabetes.

Heart Disease Mortality in South Texas

Overall, South Texas had a lower age-adjusted heart disease mortality rate (229.8/100,000) than did the rest of Texas (262.4/100,000). As shown in Figure 7.7, non-Hispanic whites in South Texas had a lower heart disease mortality rate than non-Hispanic whites in the rest of Texas, but the opposite was seen for Hispanics. South Texas Hispanics had a higher mortality rate than Hispanics in the rest of Texas. Unlike the rest of Texas and nationwide, where Hispanics die less frequently from heart disease than non-Hispanic whites, South Texas Hispanics and non-Hispanic whites had very similar rates.
Gender and age patterns for heart disease mortality in South Texas were the same as the nation. Interesting results were seen when looking at heart disease mortality rates in metropolitan and non-metropolitan counties. For all races combined, non-metropolitan counties in South Texas had a slightly higher heart disease mortality rate than the metropolitan counties (Figure 7.8). Hispanics in non-metropolitan counties also had a higher mortality rate (254.6/100,000) than did Hispanics in metropolitan counties (220/100,000), and this difference in rates was larger than for all races combined. However, the mortality rate among non-Hispanic whites was slightly lower, but not statistically significantly lower, in non-metropolitan counties than in metropolitan counties (Figure 7.8).
Bexar County’s average annual age-adjusted heart disease mortality rate (251.1/100,000) was slightly higher than the mortality rate for South Texas as a whole (225.7/100,000). The Lower Rio Grande Valley area’s rate (197.8/100,000) was slightly lower than all of South Texas (Figure 7.9). Webb County’s mortality rate was similar to South Texas’ rate.

Figure 7.8. Heart disease mortality rates in South Texas, by county designation and race/ethnicity, 1999-2003.
Source: Texas Health Data (http://soupfin.tdh.state.tx.us/death10.htm)

Figure 7.9. Heart disease mortality rates in selected South Texas locations, 1999-2003.
Source: Texas Health Data (http://soupfin.tdh.state.tx.us/death10.htm)
Cerebrovascular Disease Mortality

Cerebrovascular disease, more commonly known as stroke, is the third leading cause of death in the U.S. A stroke is characterized by neurological damage that occurs either when the brain’s blood supply is blocked or when a blood vessel in the brain bursts. About 500,000 new strokes occur each year in the U.S. Stokes not only cause more than 160,000 deaths in the U.S. each year, it also is the leading cause of long-term disability. Individuals who have had strokes can sustain major disabilities such as paralysis or speech problems. Almost 75% of all strokes occur among individuals aged 65 or older. Stroke incidence in men is greater than incidence in women at younger ages, but not at older ages.

Major risk factors for stroke include high blood pressure, heart disease, diabetes, and cigarette smoking. Diabetics have a stroke risk two to four times higher than individuals without diabetes. Smoking doubles the risk of cerebrovascular disease. Other risk factors for stroke include pregnancy and physical inactivity.

Cerebrovascular Disease Mortality in South Texas

Overall, South Texas had a lower annual age-adjusted cerebrovascular disease mortality rate (53.9/100,000) than did the rest of Texas (66.3/100,000) from 1999-2003. The non-Hispanic white population in South Texas also had a lower mortality rate than non-Hispanic whites in the rest of Texas. No difference in rates was seen in the Hispanic population with regards to location (South Texas vs. the rest of Texas). As with heart disease mortality, Hispanics and non-Hispanic whites in South Texas had very similar stroke mortality rates (Figure 7.10).

![Figure 7.10. Stroke mortality rates in South Texas and the rest of Texas by race/ethnicity, 1999-2003.](http://soupfin.tdh.state.tx.us/death10.htm)

Source: Texas Health Data (http://soupfin.tdh.state.tx.us/death10.htm)
The cerebrovascular mortality age trend in South Texas was similar to the age trend observed nationally. Even though stroke mortality rates in South Texas were very similar between males and females for all races combined, among Hispanics, males had a higher mortality rate than females, and among non-Hispanic whites, females had a higher mortality rate than males (Figure 7.11).

![Graph showing stroke mortality rates in South Texas by sex and race/ethnicity, 1999-2003.](http://soupfin.tdh.state.tx.us/death10.htm)

**Figure 7.11.** Stroke mortality rates in South Texas by sex and race/ethnicity, 1999-2003. Source: Texas Health Data (http://soupfin.tdh.state.tx.us/death10.htm)

As seen with heart disease mortality rates, Bexar County had a higher mortality rate (61/100,000) than did South Texas as a whole (53.9/100,000), and the Lower Rio Grande Valley region had a lower mortality rate (38.4/100,000) than all of South Texas.

### References


Asthma

Asthma is a chronic disease of the respiratory system characterized by episodes of airway inflammation, usually in response to one or more triggers.\(^1\) If not properly managed, asthma can be life-threatening. While the overall prevalence of asthma has increased in the U.S. over the past two decades, it has stabilized in recent years.\(^1,2\) An estimated 20.5 million Americans, including 6.2 million children, had asthma in 2004.\(^1\) Asthma is the most common chronic disease among children and is the third-leading cause of hospitalization in children younger than age 15.\(^3\)

Nationally, asthma prevalence decreases with age. The highest prevalence of asthma in 2004 was seen in people ages 5-17 (almost 10\%). Among adults, asthma prevalence is higher in women than in men. This trend is reversed for children, however; among those less than age 18, boys have a higher prevalence of asthma than girls. In 2004, prevalence of asthma in the U.S. was highest in African-Americans (9\%), followed by non-Hispanic whites (almost 7\%) and then Hispanics (5\%).\(^1\)

Current Asthma in South Texas

Nearly 7\% of adult South Texas residents were estimated to currently have asthma in 2002-2005. This percentage was similar to the estimates of current asthma in the rest of Texas (7\%) and nationwide (8\%). In South Texas, a slightly higher, but not significantly higher, percentage of non-Hispanic whites (almost 8\%) currently have asthma than Hispanics (5\%). The prevalence of current asthma was more than twice as high in females (9\%) than in males (4\%).

The current asthma prevalence age trends for Hispanic and non-Hispanic white adults differed. A slightly higher percentage of Hispanics were estimated to currently have