

Leading Causes of Death in Harris County, Texas

March 2016

Hear disease, cancer, stroke, accidents and chronic lower respiratory disease are the top five leading causes of death in the U.S and in Harris County (see Table 1). A common thread among them is their tendency to cause disability, poor health or diminished quality of life at later life stages when death is not the immediate outcome. A premature infant who survives is at greater risk of life-long disabilities than an infant not born prematurely. Similarly, when a teenager suffers a severe traumatic brain injury as a result of a motor vehicle accident, life-long disability is likely to occur.

Table 1: Leading Causes of Mortality, Harris County, 2013

Top 5 Causes of Death	Total Deaths	Mortality Rate*
Diseases of the Heart	5202	166.3
Malignant Neoplasms	5412	159.9
Cerebrovascular Diseases	1227	40.6
Accidents	1401	36.7
Chronic Lower Respiratory Diseases	953	32

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

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

Leading causes of death differ by race and ethnicity. For example, while diabetes is not considered one of the top five leading causes of death overall in Harris County, death due to diabetes ranked 5th for Hispanics and 6th in 2013 for African-Americans (see Table 2).¹

Even further, leading causes of death vary by life stage. For example, vital statistics¹ data for Harris County in 2013 show that injury is the leading cause of death among children and adolescents; whereas heart disease and cancer are the leading causes of death for adults. This profile highlights primary causes of death at each stage across the lifespan among Harris County residents, as well as some of the reasons they occur.

Table 2: Leading Causes of Mortality by Race/Ethnicity, Harris County, 2013

Cause of Death	Mortality Rate and (Rank)		
	White	Black	Hispanic
Diseases of the Heart	174.1 (1)	227.2 (1)	116.8 (2)
Malignant Neoplasms	170.1 (2)	200.3 (2)	117.2 (1)
Cerebrovascular Diseases	36.8 (5)	59.1 (3)	34.3 (3)
Accidents	47.9 (3)	36.3 (5)	27.6 (4)
Chronic Lower Respiratory Diseases	42.5 (4)	27.8 (8)	12.8 (9)
Diabetes Mellitus	14.7 (10)	32.5 (6)	24.3 (5)
Septicemia	21.7 (6)	43.4 (4)	17.9 (6)
Alzheimer's Disease	17.3 (8)	14.5 (12)	7.6 (11)
Nephritis, Nephrotic Syndrome and Nephrosis	13.1 (11)	31.6 (7)	15.6 (7)
Influenza and Pneumonia	15.3 (9)	16.9 (10)	11.4 (10)
Chronic Liver Disease and Cirrhosis	12.1 (12)	9 (13)	14.1 (8)
Intentional Self-Harm (Suicide)	18.7 (7)	4.9 (14)	4.4 (14)
Assault (Homicide)	4.3 (14)	20.7 (9)	6.7 (12)
All Causes	784.1	953.1	541.6

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

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

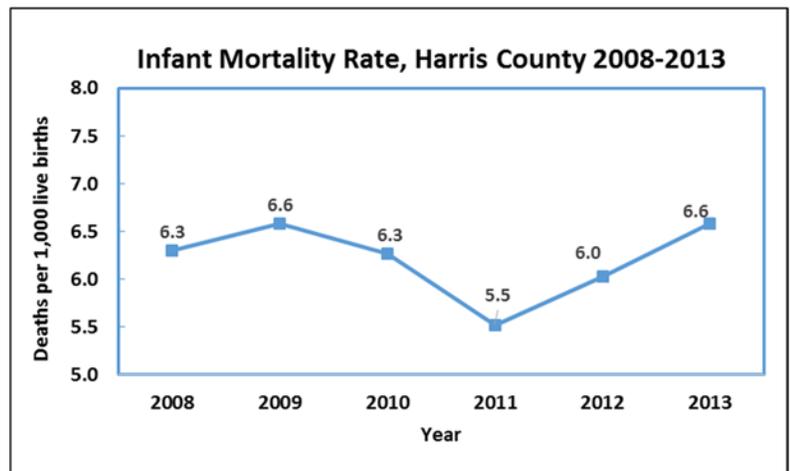


Infants

Low birth weight, birth defects and maternal complications during pregnancy are the leading causes of infant mortality in Harris County.

In 2013, the rate of infant mortality (i.e. death before age one) was 6.6 deaths per 1,000 births in Harris County. This rate is higher when compared to the State rate, which is 5.7 deaths per 1,000 births.² Harris County infant mortality rate is also higher than the U.S. 2013 rate which is at 5.96 deaths per 1,000 births.³

There are differences in infant mortality rates among racial groups. Reflecting national trends, the 2013 infant mortality rate among African Americans in Harris County was 13 deaths per 1,000 births, compared with 6.7 deaths per 1,000 births among whites and 4.9 deaths per 1,000 births among Hispanics.



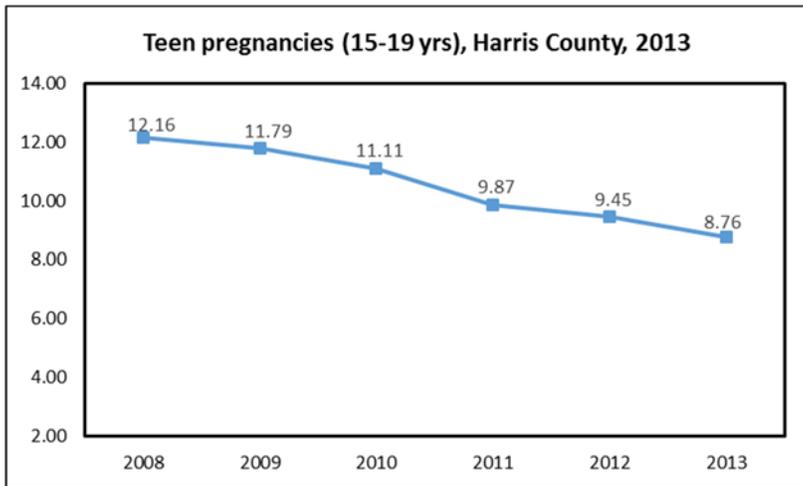
Source: Texas Department of State Health Services, Center for Health Statistics

Underlying factors



Infant health is largely shaped by maternal factors during pregnancy. **Adequate prenatal care** is associated with healthy pregnancy outcomes, while receiving late or no prenatal care has been linked with low birth weight, premature birth and infant mortality.

Fewer women in Harris County are receiving prenatal care than other Texas women. The Texas Department of State Health Services (DSHS) reports that in 2013, 59.2% of Harris County women received prenatal care during the first trimester, compared to the State rate of 62.5%.⁴ In 2013, African American mothers in Harris County had the highest rates of late or no prenatal care at 14%, compared to 8.3% for white mothers and 11.5% for Hispanic mothers.



Low birth weight (LBW), a condition also associated with maternal factors during pregnancy, occurs when a newborn’s weight at birth is less than 5.5 pounds. LBW can lead to developmental disorders such as cerebral palsy, mental retardation and vision and hearing loss according to TDSHS.

The rate of LBW among infants decreased by about 2.8% in Harris County in 2013 compared to 2008. TDSHS data report that 6880 or 10.1% of Harris County infants born in 2013 were LBW or very LBW. This compares to a rate of 9.7% for Texas and 9.4% for the U.S.^{3,4}

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

Finally, **infants born to teenage mothers** are at greater risk of low birth weight, disability and mortality during the first year of life. According to TDSHS, teenage mothers are less likely to receive adequate prenatal care, less likely to gain adequate weight during pregnancy and more likely to smoke than older mothers.

Vital statistics data show that there were 1,945 births to mothers age 17 and under in Harris County in 2013.⁴ This represents 2.8% of all Harris County births. In comparison, the State rate was 3.2% of all births. Among Harris County teen births (ages 15-19), 65.1% of the mothers were Hispanic, 21.5% were African American and 11.3% were white.

Children & Adolescents

The fewest number of deaths occur among children and adolescents combined compared to deaths among infants, adults and older adults.¹ Children are defined here as those aged 1-12; adolescents are aged 13-17.

Injury, either intentional or unintentional, was consistently ranked the top leading cause of death among children and adolescents in Harris County in recent years. In 2014, death due to unintentional injuries (accidents) was the leading cause of death among children and 2nd leading cause of death among adolescents. Homicide however was the leading cause of death among adolescents in 2014.



Underlying factors

A closer look at the underlying causes of unintentional injury among children and adolescents in Harris County reveals that **transportation accidents** and **accidental drowning** are the primary reasons for injury death. In 2014, 38 deaths occurred among persons ages 1-17 due to transportation accidents, most of which were motor vehicle crashes.¹

On the other hand, death due to intentional injury in children and adolescents, whether it is suicide or homicide is related to many risk factors, one of which is **mental illness** in both youth and adults. According to the U.S. Substance Abuse and Mental Health Services Administration's National Survey on Drug Use and Health, 6.8% of persons ages 18 or older experienced major depressive episode in the past year in Harris County based on a 2011-2012 annual average.⁶ This compares to an estimate of 8.7% for youth ages 12 to 17.

Adults and Older Adults



Adults are defined here as those age 18-64; older adults are age 65 and older.¹ The leading causes of death for these age groups, heart disease and cancer, are consistent with the leading causes of death in Harris County overall (see Table 1). In 2014, heart disease is ranked first followed by cancer among both adults and older adults.

There were 2,920 deaths among adults in 2014 due to heart disease, which is equivalent to a rate of 81.2 deaths per 100,000. For older adults, there were 7,198 deaths due to heart disease, or 745.3 deaths per 100,000.

Cancer is responsible for 2,297 deaths among adults and 3,733 deaths among older adults in 2014. This translates to a death rate of 103.2 deaths per 100,000 adults and 1131 deaths per 100,000 older adults in Harris County. The proportion of cancer deaths by gender is split almost evenly in both age groups. Among women, breast cancer is the second leading cancer killer, while prostate cancer accounts for the second highest number of cancer deaths among men. Lung cancer is the leading cancer killer in both men and women.⁷

Underlying factors

What lies below the surface of the leading causes of death are modifiable behaviors that are considered actual causes of death. According to the American Medical Association, tobacco followed by **physical inactivity** and **poor nutrition** are the leading actual causes of death⁸ driving much of the mortality observed in adults and older adults. For more information on these and other related risk factors, see the data profile on [chronic disease](#).



Data Sources:

1. Texas Department of State Health Services (DSHS), Center for Health Statistics. Unpublished data, accessed March 2016.
2. DSHS, Center for Health Statistics. Texas Health Data: Death Tables, <http://soupfin.tdh.state.tx.us/deathdoc.htm>, accessed March 2016.
3. Centers for Disease Control and Prevention (CDC), FastStats, <http://www.cdc.gov/nchs/fastats/>, accessed March 2016.
4. DSHS, Center for Health Statistics. Texas Health Data: Birth Data, <http://soupfin.tdh.state.tx.us/birthdoc.htm>, accessed March 2016.
5. Substance Abuse and Mental Health Services Administration (SAMHSA), National Survey on Drug Use and Health 2012, accessed February 2014.
6. DSHS, Texas Cancer Registry, <http://www.dshs.state.tx.us/tcr>, accessed March 2016.
7. Mokdad et al. "Actual Causes of Death in the U.S., 2000." JAMA. 291, no.10 (2004):1238-1245.