

Chronic Disease in Harris County, Texas

March 2016

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), include chronic diseases such as heart disease, cancer and stroke and account for 59.8% of all deaths in Harris County.¹

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.²

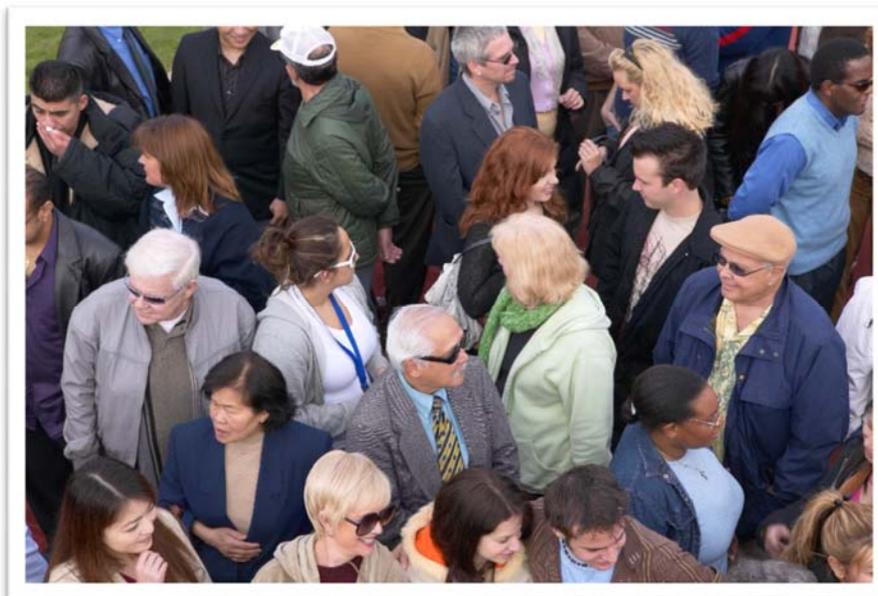
This profile describes chronic disease morbidity and mortality in Harris County as well as related behavioral and environmental determinants.

Table 1: Leading Causes of Mortality, Harris County, 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

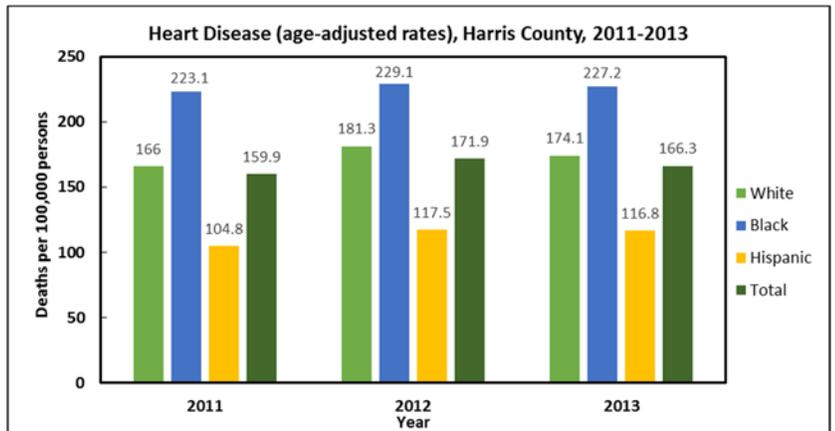
Source: Center for Health Statistics, Texas DSHS



Heart Disease

Ranked the top leading cause of death in Harris County and the U.S., the rate of mortality due to heart disease has actually declined from a rate of 171.9 deaths per 100,000 in 2012 to 166.3 deaths per 100,000 in 2013.³

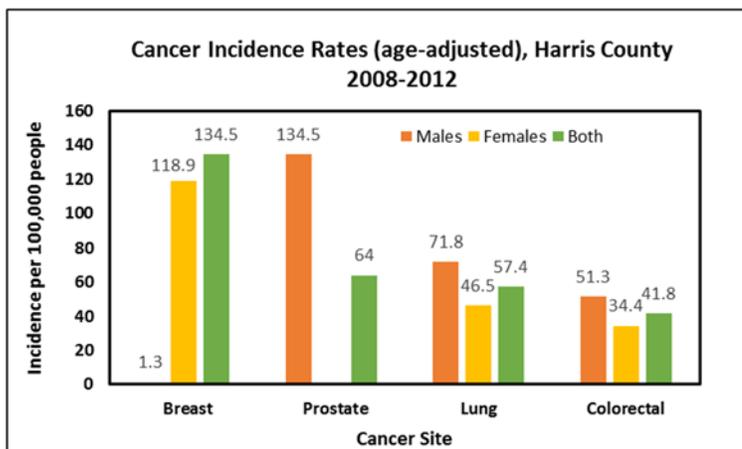
However, within this time period, the rate for African-Americans was markedly higher than the overall rate, at 223.1 deaths per 100,000 in 2011 and 227.2 deaths per 100,000 in 2013. It is important to note, that this rate has increased over the years while the overall rate has declined, indicating an increasing disparity.



Source: Center for Health Statistics, Texas DSHS

Behavioral Risk Factor Surveillance System (BRFSS) data from 2014 show that 2.8% of surveyed adults living in Harris County reported having been diagnosed with some form of heart disease, compared with 3.7% of Texas adults and 4.2% of U.S. adults.⁴ More African American respondents reported having been diagnosed with heart disease than white or Hispanic respondents—7.0% of African American respondents reported being diagnosed with cardiovascular disease, compared with 2.5% of white and 2.1% of Hispanic respondents.

Cancer

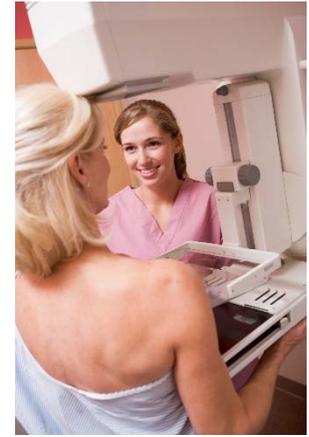


Source: Texas Cancer Registry, Texas DSHS

Cancer, the second leading cause of death in the U.S., is responsible for almost one in four deaths in Harris County.¹ Texas Department of State Health Services (DSHS) reports that from 2008 to 2012 the number of newly diagnosed cancer cases among Harris County residents was 73,919.⁵ During this time, the average annual age-adjusted cancer rate was 444.1 cases per 100,000 persons. In comparison, the State rate was 427.6 cases per 100,000 persons.

From 2008-2012 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 2014 BRFSS, 81.6% of women aged 40 or over surveyed in Harris County reported having had a mammogram in the past two years.⁴ In comparison, 69.0% of Texas women and 75.6% of women in the U.S. reported having had a mammogram in the past two years.

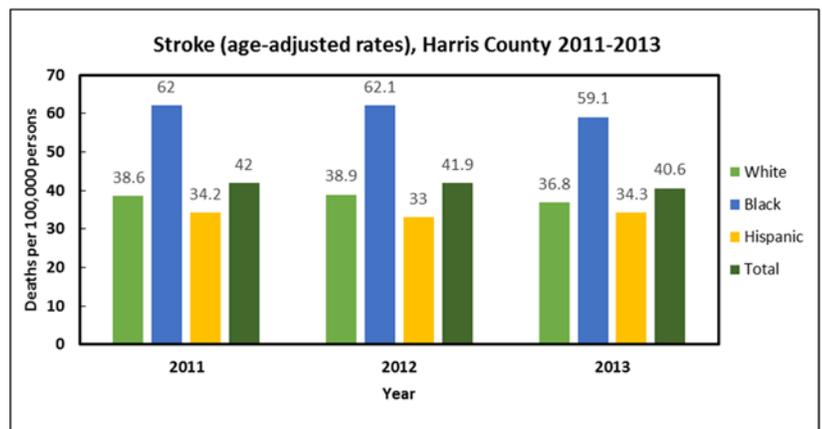


By identifying abnormal cells before they become cancerous, the Papanicolaou test (Pap test) has been shown to reduce cervical cancer incidence and death. BRFSS data from 2014 show that 70.0% of surveyed women aged 18 or over in Harris County reported having had a pap test in the past three years compared to 74.6% of Texas women and 73.2% of U.S. women.⁴

Prostate specific antigen (PSA) is produced by the prostate and is used as a screening tool for prostate cancer. PSA can be elevated in men who have prostate cancer, but can also be elevated by other conditions that affect the prostate. Currently, the Centers for Disease Control and Prevention (CDC), along with the U.S. Preventative Services Task Force (USPSTF) and the American Academy of Family Physicians (AAFP), recommend against routine PSA based screening for men who do not have symptoms, while the American Urological Association (AUA), the American Cancer Society, and The American College of Physicians have other recommendations. Patients and their families should have an open conversation with their health care provider about prostate cancer, the screening tools available, and the risks and benefits of screening and then along with their health care provider make an informed decision on whether to be tested.

Stroke

The overall rate of mortality due to stroke, the third leading cause of death in Harris County, decreased by 3.3% between 2011 and 2013. 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 5.0% between 2011 and 2013.³

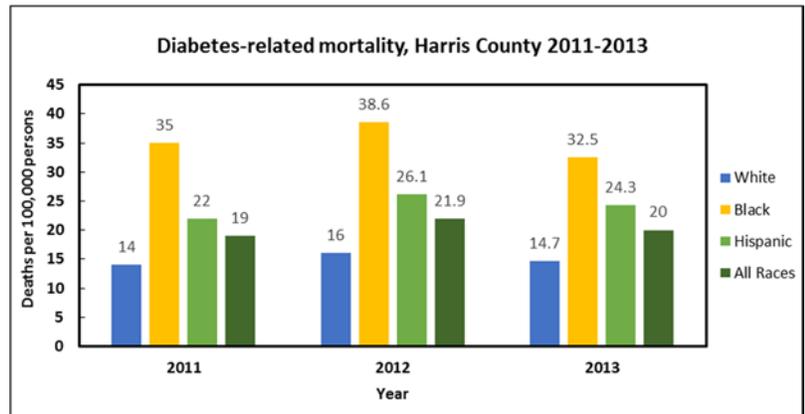


Source: Center for Health Statistics, Texas DSHS

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 remained highest the African Americans between 2011 and 2013, when compared to whites and Hispanics.³

Diagnosing and managing diabetes can prevent or delay progression of the disease and related, adverse health outcomes. According to the 2014 BRFSS, 10.4% of surveyed adults in Harris County reported having ever been diagnosed with diabetes not related to pregnancy.⁴ In comparison, 11.0% of Texas adults and 10.0% of U.S. adults reported having been diagnosed with diabetes.

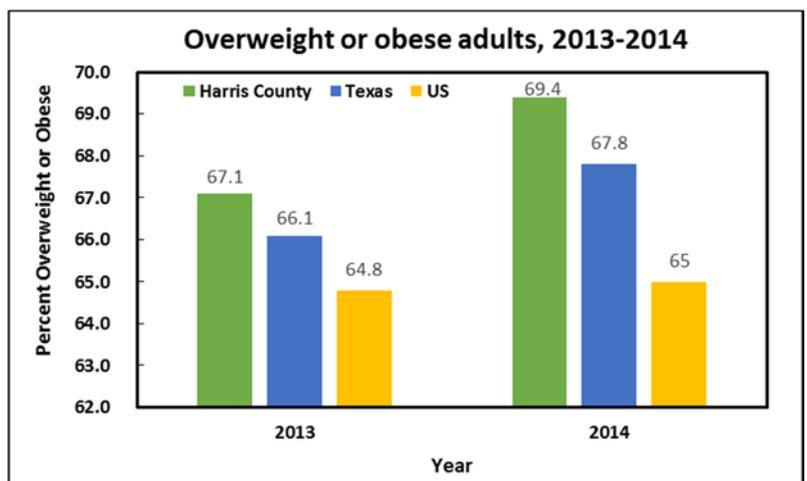


Age-adjusted mortality rates. Source: Center for Health Statistics, Texas DSHS

Overweight & Obesity

According to CDC, the proportion of people classified as overweight and obese people has increased dramatically since the late 1980s.⁷ 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.⁴

According to BMI calculations based on 2014 BRFSS data, 69.4% of surveyed adults in Harris County were overweight or obese, compared with 67.8% of Texas adults and 65% of U.S. adults. Male respondents in the Harris County area were more likely to be overweight and obese than females, with 74.5% of male respondents overweight or obese compared with 64.1% of female respondents. Further, 74.8% of Hispanic respondents were overweight or obese compared with 63.2% of white respondents.

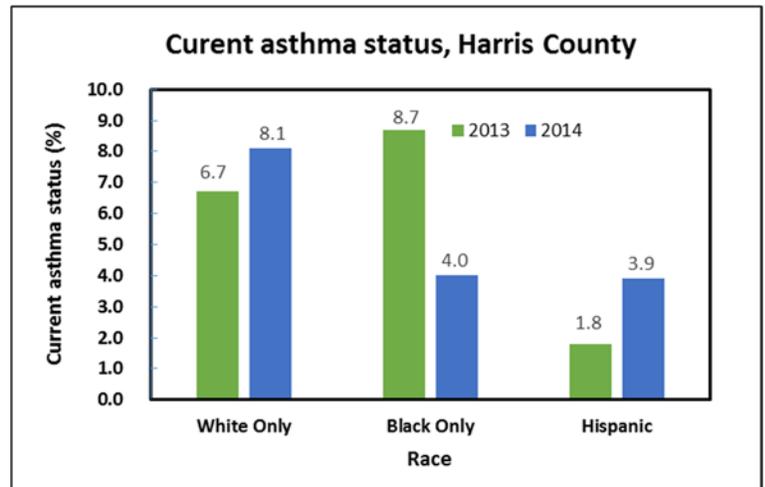


Source: BRFSS, Texas Department of State Health Services

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.⁸

According to 2014 BRFSS data, 9.3% of surveyed adults in Harris County reported having ever been told they have asthma and still have asthma. In comparison, 11.1% of Texas respondents and 8.9% of respondents in the U.S. reported ever having been told they have asthma and still have asthma.⁴



Source: BRFSS, Texas Department of State Health Services

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 2014 show that 58.2% of surveyed adults in Harris County reported having visited a dentist or a dental clinic in the past year, compared to 61.2% in 2010.⁴ In 2014, 58.2% of Texas adults and 65.3% 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.⁶ With an annual average count of 392 people with cancers related to the oral cavity and pharynx diagnosed in Harris County—the annual age-adjusted rate remained stable at 11 cases per 100,000 persons between 2008 and 2012.⁵

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

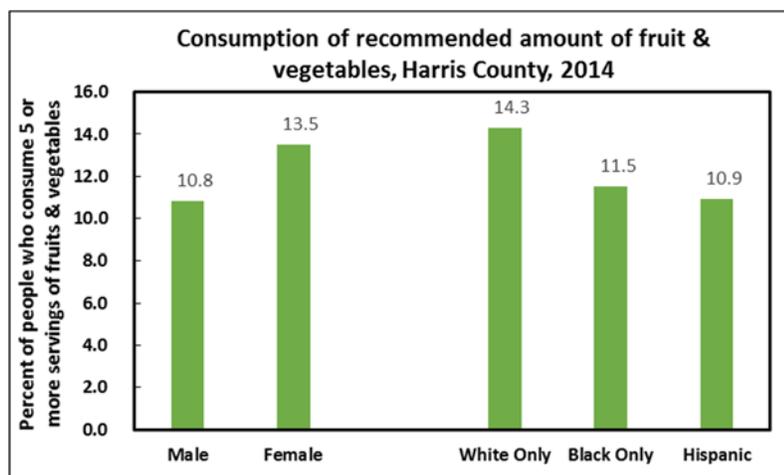


Determinants of Chronic Diseases

Nutritional Intake

Poor nutrition is a leading cause of preventable illness. CDC recommends that all Americans regularly consume fruits and vegetables each day.⁹ A diet rich in fresh fruits and vegetables can prevent the development of chronic diseases. Less than 15% of people in Harris County are consuming recommended servings of vegetables and fruits.

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.

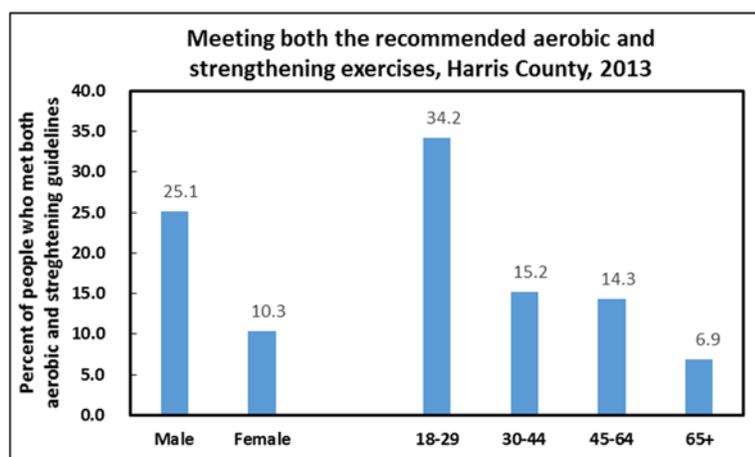


Source: BRFSS, Texas Department of State Health Services

“According to the United States Department of Agriculture, over 340,000 Harris County residents live in food deserts, which are mostly low-income areas with few or no grocery stores selling healthy food.”¹⁰

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.

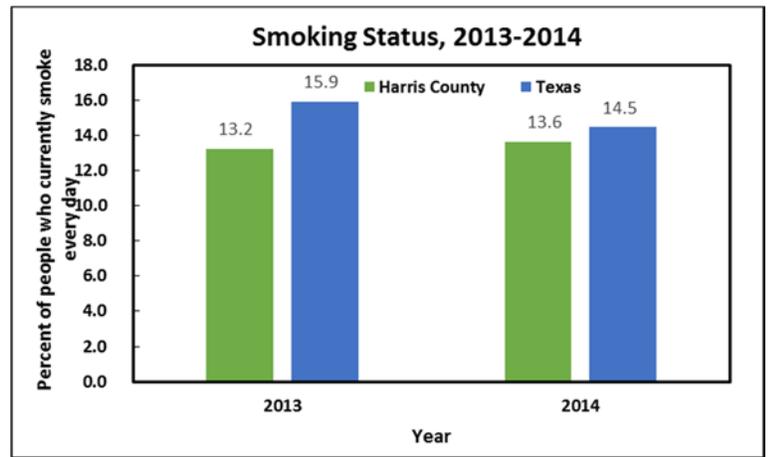


Source: BRFSS, Texas Department of State Health Services

HCPH Built Environment Unit launched in 2015 aims to promote health and wellness through environments where people live, learn, work, worship and play in Harris County, Texas.¹¹

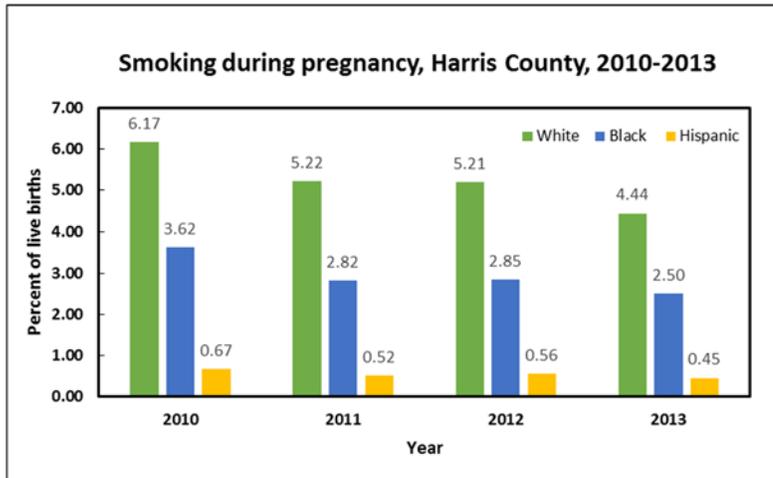
Tobacco Use

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.¹² 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: BRFSS, Texas Department of State Health Services

The American Lung Association's State of Tobacco Control 2016 grades Texas on "F" for tobacco prevention and control spending, state smoking restrictions in both public and private areas and coverage of smoking cessation programs.¹³

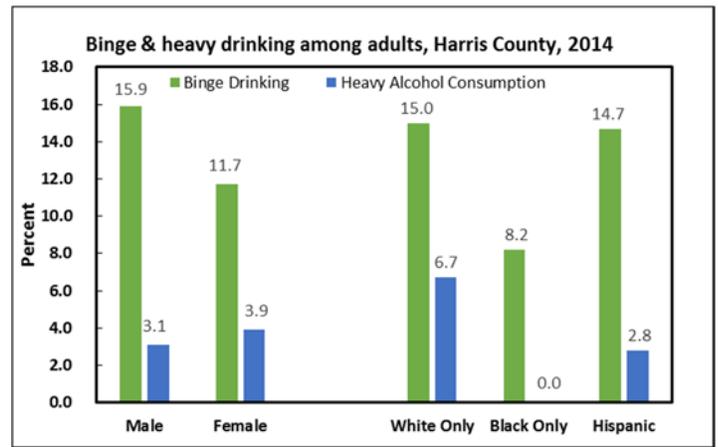


Source: BRFSS, Texas Department of State Health Services

Smoking during pregnancy can be harmful to both mothers and babies. According to CDC, research has shown that smoking during pregnancy causes pregnancy complications, premature birth, low birth weight, stillbirth and Sudden Infant Death Syndrome (SIDS).¹⁴ In Harris County, smoking during pregnancy decreased by 19.6% between 2010 and 2013.¹⁵

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.¹⁶ 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: BRFSS, Texas Department of State Health Services

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.¹⁷

Data Sources:

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