2021 Community Health Profile

Metro Public Health Department

Metro Public Health Dept
Nashville/Davidson County
Protecting, Improving, and Sustaining Health

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Introduction

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Overview

The Community Health Profile (CHP) report uses publicly available, quantitative indicators to describe the overall health of the Nashville community. It builds on a wide range of community-level health indicators identified through the Community Health Status Assessment (CHSA), one of the assessments in the 2018 Community Health Assessment (CHA) process. The Mobilizing for Action through Planning and Partnerships (MAPP) process was used to conduct this series of assessments. The CHA process engaged community partners from several local organizations in health-related fields to identify indicators of community health to target and evaluate over the next several years in order to improve the health and well-being of the Nashville community.

The CHP establishes a baseline for evaluating improvements in community health and provides empirical data to guide local public, private, and non-profit health initiatives. Each health indicator includes a definition, brief description of its importance, and the most recent or valid quantitative data available at the county level. Comparison data is reported when available, including time series comparisons, geographical comparisons at the state and national levels, and demographic breakouts by age, sex, and race/ethnicity.

This report is intended for a broad audience, including health officials, healthcare providers, researchers, non-profits, educators, and community members. The indicators of community health in this report can:

- inform decision-making and enhance local health programs, initiatives, and policies;
- be included in grant submissions to provide justification for proposed programs;
- be used by area universities for research purposes; and
- be used as a reference guide and for educational purposes in a wide variety of settings.

Indicators of Nashville's Health

The health indicators in this report were identified through the CHSA process. The purpose of the process was to address two questions:

1. How healthy is the community?
2. What does the health status of our community look like?

The CHSA Committee, a diverse group of epidemiologists, academics, researchers, and public health practitioners, met over the course of six months to answer these two questions. The Committee included local public health system institutions representing a range of community interests. Member affiliations included:

- Healthy Nashville Leadership Council
- Metro Public Health Department
- Nashville Chamber of Commerce
- NashvilleHealth
- Saint Thomas Health
- Vanderbilt University Medical Center
- YWCA of Nashville

To answer these questions, the partnering organizations reviewed publicly available data and created an initial database of over 800 indicators. The committee determined that the indicators were compatible with the recommendations from the Catholic Health Association, Centers for Disease Control and Prevention (CDC), and National Association of City and County Health Officials (NACCHO).

The available indicators were categorized according to the 12 categories recommended in the Mobilizing for Action through Planning and Partnership (MAPP) guide:

1. Demographics
2. Socioeconomic Status
3. Social Determinants of Health Inequities
4. Environmental Factors
5. Access to Health Care
6. Behavioral Risk Factors
7. Mental Health and Social Risk Factors
8. Maternal & Child Health
9. Death, Illness and Injury
10. Infectious Disease
11. Sentinel Events
12. Quality of Life

Introduction

Once the indicators had been categorized, the committee prioritized the indicators through a consensus voting process which included three rounds. Using this list of indicators, the committee members pulled the most recent data and wrote the associated data story. The final list of indicators was prioritized using the Hanlon Method (NACCHO, n.d.), scoring for:

- Population affected
- Public health significance of the indicator
- Feasibility of addressing within the next 3-5 years

This final prioritization process led to the indicators that were chosen by the CHSA committee to indicate the health status of Davidson County. These indicators are key measures that reflect health and quality of life in Nashville.

The indicators selected by the CHSA for the present report were based on a broad view of what makes people healthy and what determines health. Factors that contribute to a person's current state of health, or influence health, can be biological, socioeconomic, psychosocial, behavioral, or social.[1]

A Broad Definition of Health

The World Health Organization defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[2] The indicators in this report reflect this broad definition of health,. This definition includes not only health care and diseases, but also socioeconomic, built environment, and other factors that contribute to the overall health of the community but may not always be considered when targeting improved health outcomes.

As such, the content of this report includes measures of health that recognize the importance of, and interplay between, behavior and context in the health and well-being of individuals.

Inclusion of a broad range of health indicators in this report supports the idea that health should be a consideration in decision-making across multiple health and non-health sectors. Housing, law enforcement, education, urban planning, and numerous others have important roles to play in improving community health.

[1]Centers for Disease Control and Prevention. (2014). Social determinants of health. http://www.cdc.gov/socialdeterminants/Definitions.html

[2]Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19–22 June 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948

Structure of the Report

This report includes over 150 community health indicators divided into 10 categories:

Demographics
includes population characteristics such age, sex, and race/ ethnicity. It also includes measures of population growth, nativity, veteran status and disability.

Socioeconomic Status
includes indicators of income, poverty, public assistance, educational achievement, housing, linguistic isolation, and employment and job growth.

Social Determinants of Health Inequity
includes indicators of violent crime, family structure, homelessness, food security, and access to public transportation and parks and green spaces.

Environment
includes indicators of air quality and water safety.

Access to Health Care
includes indicators of health insurance and provider availability.

Behavioral Risk factors
includes indicators of physical inactivity, smoking, excessive alcohol use, unhealthy diets, use of available health care or primary prevention services, and behaviors that do not promote safety or prevent injury.

Mental Health and Social Risk factors
includes indicators of mental disorders, psychological wellness, domestic violence, drug overdose, and utilization of available substance use treatment.

Death, Illness and Injury
includes indicators of leading causes of death, and illness or death from high impact diseases or health conditions such as motor vehicle crashes, poisoning, drug overdose, homicide, suicide, and chronic diseases like stroke, diabetes, cancer and Alzheimer's;.

Maternal and Child Health
includes indicators related to pregnancy outcomes, and measures of infant and child health such as birth weight, breastfeeding, immunization, abuse and neglect, and hospitalizations for childhood diseases like asthma.

Infectious Diseases
includes incidence and prevalence of key notifiable infectious diseases that are at the core of local surveillance and control efforts such as Chlamydia, Gonorrhea, Syphilis, HIV, TB and Hepatitis (B and C), and food-borne diseases .

Introduction

Each section begins with a brief introduction and highlights the data in that section. Within each category, the indicators are labelled for quick reference. For example, demographics indicators are labelled D1, D2, etc., and environmental indicators E1, E2, etc.

Each indicator page includes:

- brief statement about its importance
- description of the data
- data source
- the data for Davidson County

Also included, when available, are comparable data at the state and national levels; data stratified by sex, age, and race/ethnicity to show disparities; multiple years (e.g., most recent 5 years) of data to show changes over time; and national benchmarks.

All information for each indicator is contained on a single page to facilitate their use as "one-pagers" that can easily be copied for use in meetings or presentations.

Demographics

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Tracking the demographics of a community is useful for understanding trends that help predict current and future public health needs. Demographic data provides valuable insights about a community's future infrastructure needs, resource allocation priorities, and demand for municipal and other services.

For example, demographic data are often used to determine where assistance programs should be targeted, what businesses might move to the community, and how voting districts are drawn.

In fact, demographic data impact nearly everything in a community: how far someone must travel to the store, how much city leaders charge in property taxes, and how much support schools receive from local, state, and federal sources. Changes in population size, age, race and ethnicity also affect the healthcare resources needed, and the cost of care provided. Demographic indicators can help assess disparities in access to resources and vulnerability to risks, that contribute to people's health.

Section Highlights

- The population in Davidson County has increased 2.2% since 2015, which is similar to that of that United States (2.1%), and lower than that of the State (3.5%). (Indicator D1)
- The percentage of the population in Davidson County aged 65 years or older was 12.2% in 2018, an increase of 9.9% from 2014. (Indicator D3)
- In 2018, 13.9% of the population in Davidson County was born in a country other than the United States. This percentage is much higher than that for the state (5.1%) but is nearly the same as the percentage for the United States (13.7%). (Indicator D7)
- In 2018, 5.1% of residents in Davidson County were veterans. This percentage is lower, than the proportion for the state (8.2%) and the United States (7.1%). (Indicator D8)
- Residents living with a physical, mental, or emotional disability represented 10.9% of the population in Davidson County in 2018, compared to 12.6% in the state and 15.4% nationwide. (Indicator D9)

Demographics

D1 Total Population

Tracking population change over time helps provide context for other changes in the community and can help determine whether additional resources and infrastructure might be needed to support a growing population.

Data Description

This indicator shows the total population of Davidson County.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Total Population, Table B01003. U.S. Census Bureau. Quick Facts. Retrieved from: https://www.census.gov/quickfacts/fact/table/

County

694,144 total population in 2019

2.2% increase from 2015

State

6,829,174 total population in 2019

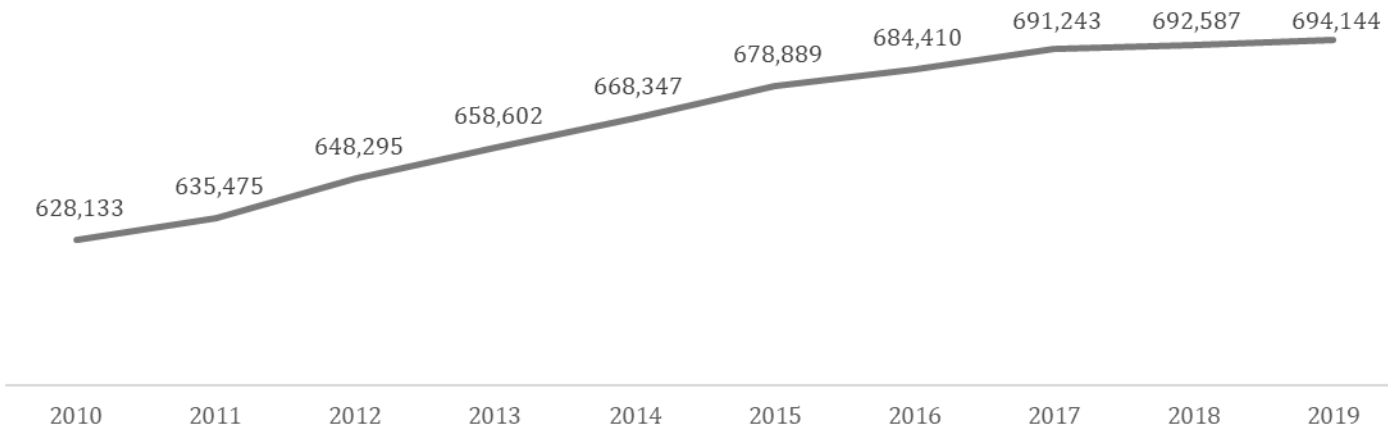
3.5% increase from 2015

National

328,239,523 total population in 2019

2.1% increase from 2015

Davidson County Population, 2010-2019



D2 Population by Age

The age structure of a population is important in planning for the future of a community, particularly for schools, community centers, health care, and childcare. A population with more youth will have greater education and childcare needs, while an older population may have greater health care needs.

Data Description

This indicator shows the population by age group in Davidson County.

Data Source

U.S. Census Bureau. (2013–2018). American Community Survey, 1–year population estimates, Table S0101.

Population distribution by Age, Davidson County, 2013-2018

	2013	2014	2015	2016	2017	2018
Total Estimate	**658,602**	**668,347**	**678,889**	**684,410**	**691,243**	**692,587**
Under 5 years	7.2%	7.0%	7.0%	6.9%	6.8%	6.6%
5 to 9 years	6.0%	6.0%	6.3%	5.9%	5.9%	5.9%
10 to 14 years	6.2%	5.6%	5.1%	5.5%	5.4%	5.3%
15 to 19 years	5.9%	5.7%	5.7%	5.6%	5.6%	5.7%
20 to 24 years	7.9%	7.6%	7.6%	7.5%	7.3%	7.1%
25 to 29 years	9.9%	10.1%	10.3%	10.4%	10.6%	10.7%
30 to 34 years	9.2%	9.1%	9.0%	9.2%	9.4%	9.5%
35 to 39 years	6.9%	7.2%	7.4%	7.6%	7.5%	8.1%
40 to 44 years	7.4%	6.6%	6.4%	6.1%	6.1%	5.8%
45 to 49 years	6.5%	6.1%	6.1%	6.1%	6.1%	6.0%
50 to 54 years	6.5%	6.5%	6.4%	6.1%	5.9%	5.7%
55 to 59 years	6.2%	6.2%	6.3%	6.2%	6.1%	6.4%
60 to 64 years	5.1%	5.3%	5.4%	5.3%	5.5%	5.1%
65 to 69 years	3.5%	3.8%	3.9%	4.3%	4.5%	4.3%
70 to 74 years	2.2%	2.7%	2.6%	2.6%	2.7%	3.1%
75 to 79 years	1.5%	1.9%	1.8%	2.1%	1.9%	2.0%
80 to 84 years	1.1%	1.4%	1.3%	1.2%	1.5%	1.3%
85 years and over	0.9%	1.4%	1.5%	1.2%	1.3%	1.4%
Median Age (in yrs.)	34.2	34.4	34.2	34.2	34.4	34.5

D3 Senior Population

Understanding the proportion of seniors in the population provides policy makers with important data for programmatic and infrastructure planning.

Data Description

This indicator shows the percentage of the senior population or population aged 65 years or older.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year population estimates, Table DP05.

County

12.2% of total population in 2018

9.9% increase from 2014

State

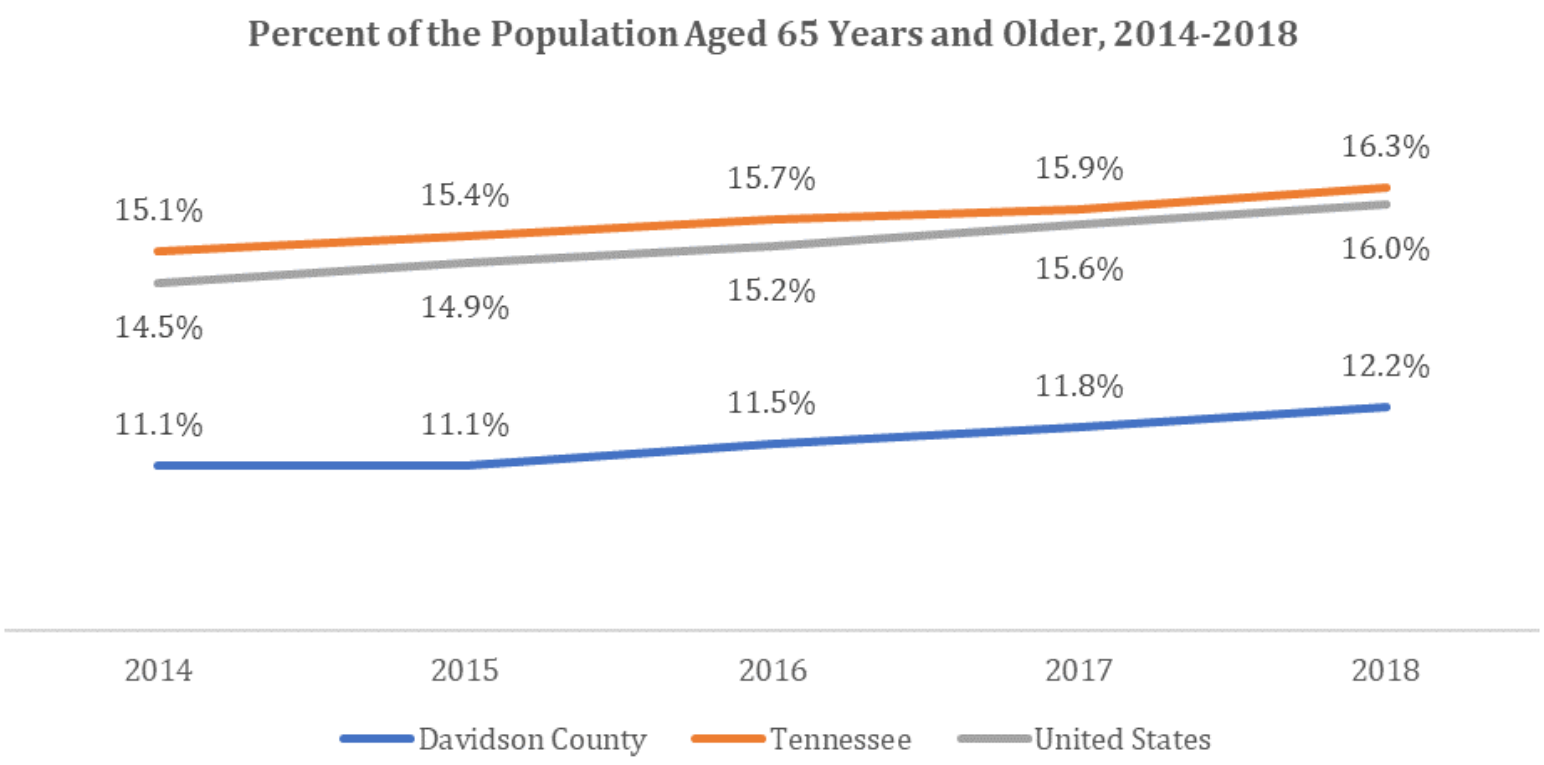
16.3% of total population in 2018

7.9% increase from 2014

National

16.0% of total population in 2018

10.3% increase from 2014



D4 Population by Sex

The study of the age and sex structure of a population provides communities with a context to assess economic, social, health, and cultural factors. The data helps various planning agencies assess current service delivery and modify plans to accommodate future projections.

Data Description

This indicator shows the percentage of the population by sex in Davidson County.

Data Source

U.S. Census Bureau. (2013-2018). American Community Survey, 1–year estimates. ACS Demographic and Housing Estimates, Table DP05.

County

48.3% of the population was male in 2018

51.7% of the population was female in 2018

State

48.8% of the population was male in 2018

51.2% of the population was female in 2018

National

49.2% of the population was male in 2018

50.8% of the population was female in 2018

D5 Population by Race/Ethnicity

Tracking changes in racial/ethnic distribution over time helps provide context for other changes in the community. It can help determine whether additional resources may be needed to reach out to immigrant or minority communities on health issues that disproportionately impact those groups, as well as address any potential barriers to care (such as language or cultural barriers.)

Data Description

This indicator shows the percentage of Davidson County residents by racial/ethnic group.

Data Source

U.S. Census Bureau. (2013-2018). American Community Survey, 1–year estimates. ACS Demographic and Housing Estimates, Table DP05.

Racial/Ethnic Distribution in Davidson County in 2013 and 2018

Race/Ethnicity	2013	2018
Hispanic or Latino (of any race)	9.9%	10.4%
Mexican	5.8%	6.1%
Puerto Rican	0.5%	0.4%
Cuban	0.5%	0.6%
Other Hispanic or Latino	3.1%	3.4%
Not Hispanic or Latino (of any race)	90.1%	89.6%
White Alone	62.3%	63.0%
Black or African-American Alone	27.5%	27.1%
American Indian and Alaska Native Alone	0.3%	0.1%
Asian Alone	3.3%	3.7%
Native Hawaiian and Other Pacific Islander Alone	0.1%	0.1%
Two or More Races	2.2%	2.4%

D6 Population Growth

Considering population size and its heavy impact on service and resource availability, population growth is a critical determinant of public health. Trends in fertility and mortality rates offer insight into the health and development challenges posed by population growth and possible future demographic scenarios.[1]

Data Description

This indicator shows the annual change in the number of individuals in a population, expressed as a percentage of the population in the previous year.

Data Source

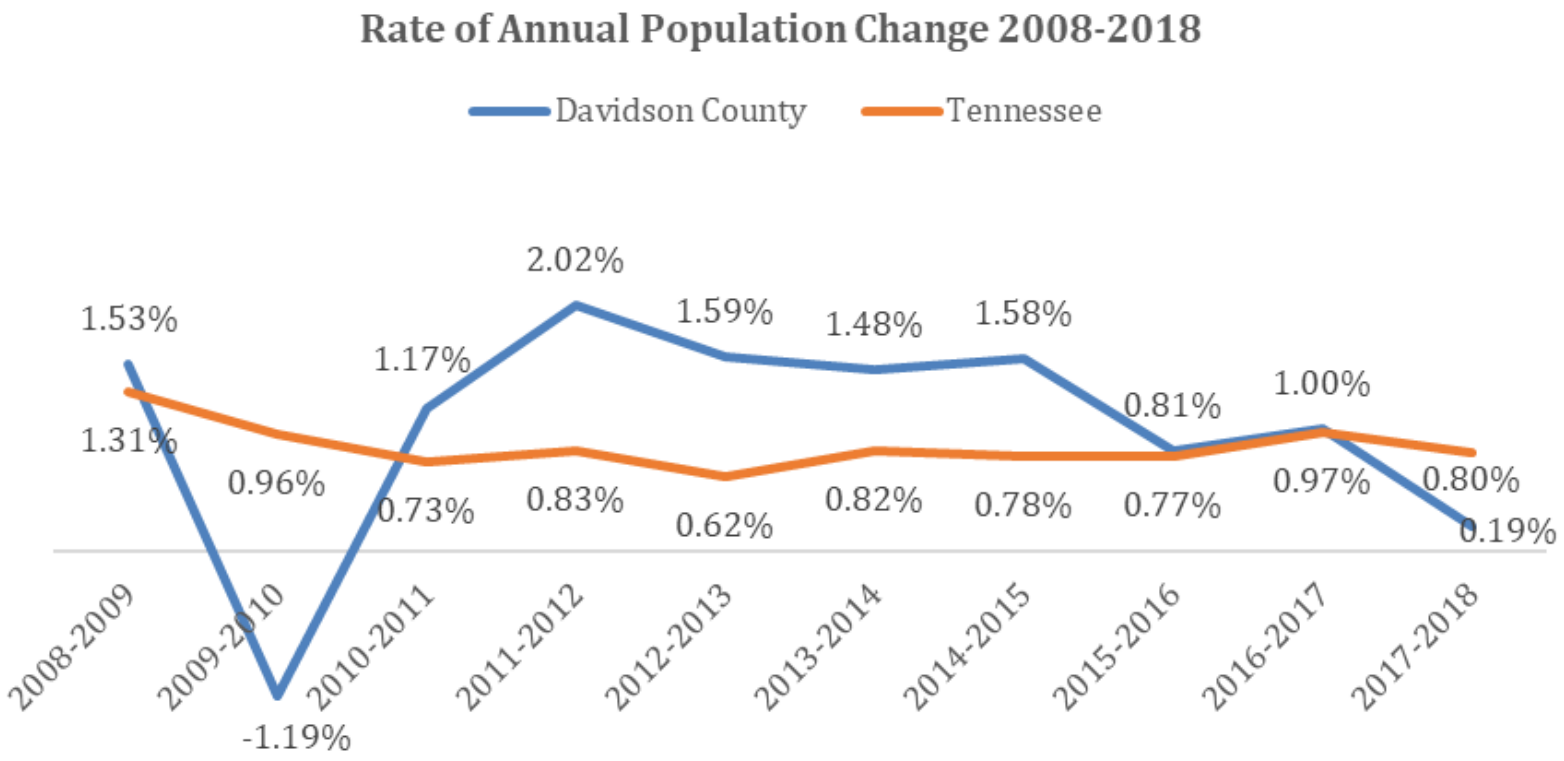
U.S. Census Bureau (2008-2018). American Community Survey, 1–year estimates. Total Population.

County

0.19% population increase in 2017-2018

State

0.80% population increase in 2017-2018



S. Haddock, ... R. Engelman, in International Encyclopedia of Public Health, 2008

D7 Foreign-Born Residents

The percentage of foreign-born residents helps provide context for other changes in the community. It can help determine whether additional resources may be needed to reach out to immigrant or minority communities on health issues that disproportionately impact those groups, as well as address any potential barriers to care such as language or culture.

Data Description

This indicator shows the percentage of residents who were born outside of the United States, and the region of the world where they were born.

Data Source

U.S. Census Bureau. (2018). American Community Survey, 5–year estimates. Selected Social Characteristics in the United States, Table DP02.

County

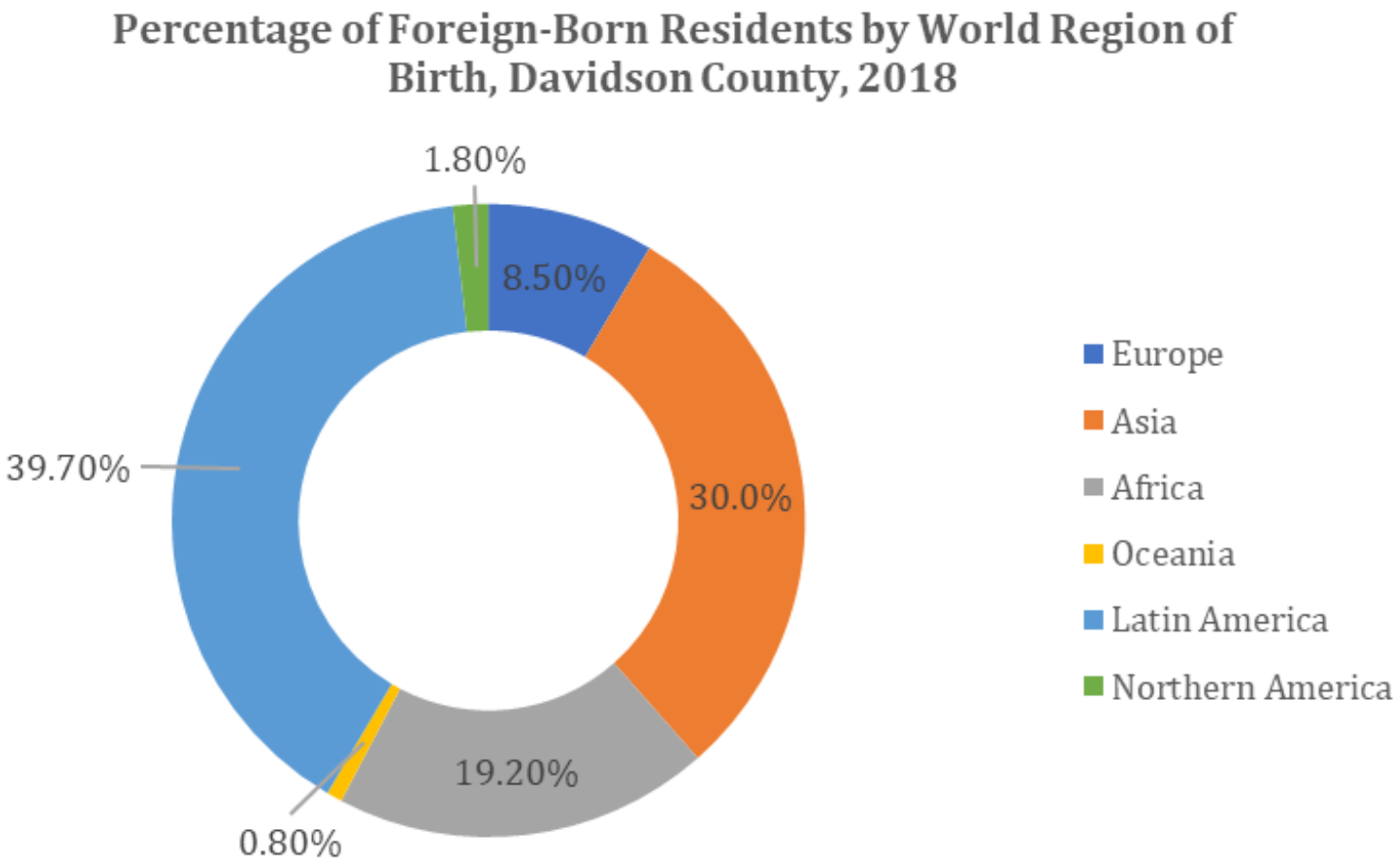
13.9 % of residents were foreign-born, 2018

State

5.1% of residents were foreign-born, 2018

National

13.7% of residents were foreign-born, 2018



D8 Veteran Status

Data regarding military veterans are used for policy analyses, program development, and allocation of budget to support veteran programs and facilities. Demographic trends among veterans may vary from those of the general population.

Data Description

This indicator shows the percentage of veterans among the civilian population aged 18 years and over.

Data Source

U.S. Census Bureau. (2014-2018). American Community Survey, 1–year estimates. Veteran Status, Table S2101.

County

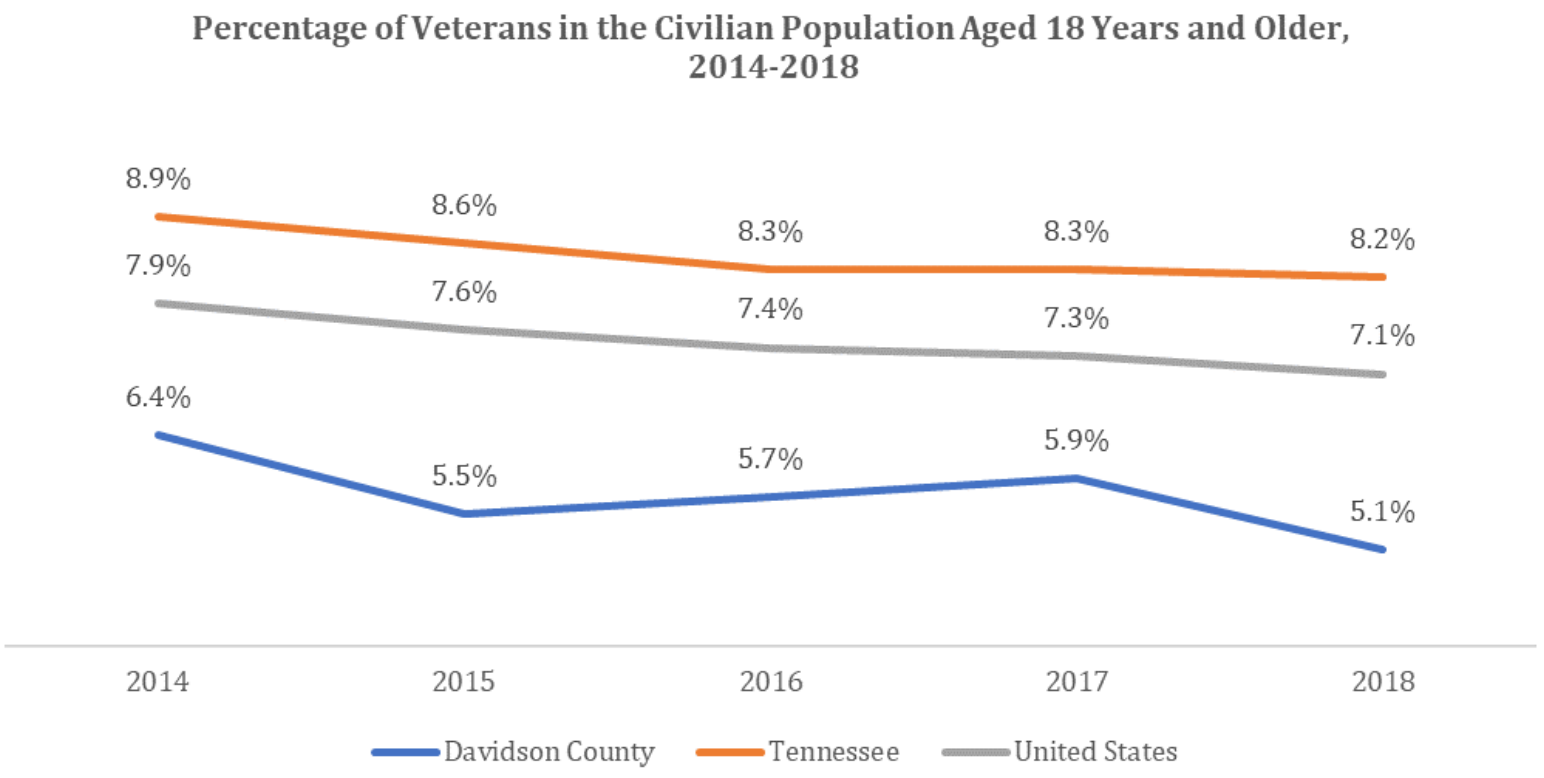
5.1% of total residents in 2018

State

8.2% of total residents in 2018

National

7.1% of total residents in 2018



D8 Population with Disabilities

People with a disability have difficulties performing activities due to a physical, mental, or emotional condition. The extent to which a person is limited by a disability is heavily dependent on the social and physical environment in which he or she lives. Without sufficient accommodations, people with disabilities may have difficulties living independently or fulfilling work responsibilities. Several federal agencies use information on the size, distribution, and needs of the disabled population in order to develop policies, distribute funds, and develop programs for individuals with disabilities.

Data Description

This indicator shows the percentage of persons with disability among the civilian noninstitutionalized population.

Data Source

American Community Survey (2014-2018). Disability Characteristics. Table C18120

County

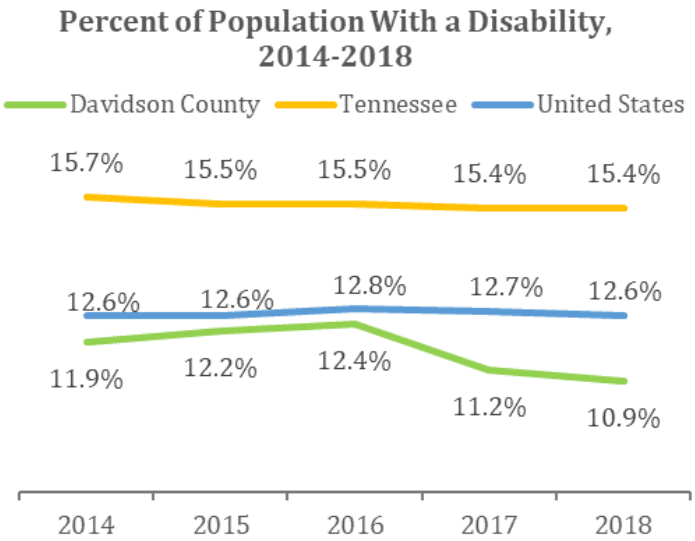
10.9% of the population with disability in 2018

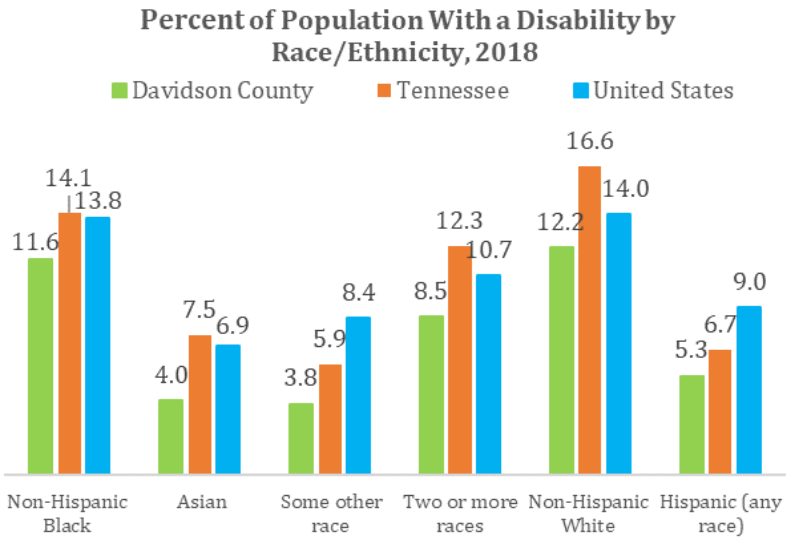
State

12.6% of the population with disability in 2018

National

15.4% of the population with disability in 2018





Socioeconomic Status

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Socioeconomic status (SES) refers to the social and economic factors (i.e., education, income, occupation) that influence what positions individuals or groups hold within the structure of a society. [1] Examining changes in SES indicators such as poverty, income, employment, social services, and housing costs provides contextual information that can help explain or predict health trends and how they may change over time.

For example, examining housing affordability can help determine whether housing costs may be contributing to increased stress, less money available for healthy food, or deferred home maintenance that can lead to health-related housing problems such as mold or pests. Tracking changes in homelessness can help determine if current efforts are effectively addressing the issue, or if additional resources should be provided. Examining income inequality and poverty provides an indication of whether economic conditions are improving or worsening, and for whom, and helps assess the potential health implications of those trends. Together, SES indicators help measure the potential to access community-level resources that can improve health such as adequate housing and education, access to adequate health care, and availability of healthy food choices.

Section Highlights

- The median household income increased steadily from $47,933 in 2014 to $60,856 in 2018, which was consistently above state and below national estimates over the 5 years. (Indicator S7)

- Income inequality in the county decreased between 2014 and 2017, consistent with previous trends, and to lower than both the state and nation. Inequality widened in 2018 to about the level in 2014, exceeding both the state and national levels. (Indicator S9)

- In 2018, 15.4% of Davidson County residents lived below the poverty level. This percentage was similar to that for the state (15.3%), but higher than that for the nation (13.1%). Over a quarter (27.5%) of people 18 years or younger lived below the poverty line, more than double that of people 18 to 64 years old (12.7%), and about triple that of those aged 65 and older (9.4%). (Indicators S10-S11)

- Public assistance to needy families declined between 2014 and 2018: Mean cash received declined from $3,402 to $2,673; Supplemental Nutrition Assistance Program (SNAP) recipients declined from 16.2% to 9.9%; and Temporary Assistance for Needy Families (TANF) recipients declined from 6.6% to 1.3% respectively. (Indicators S16-S18)

[1] Krieger N, Williams D R, Moss N E. Measuring social class in US public health research: concepts, methodologies, and guidelines. Annu Rev Public Health 199718341–378

Socioeconomic Status

S1 Speak a Language Other than English

The ability to communicate with government and private service providers, schools, businesses, emergency personnel, and many other people in the United States depends greatly on the ability to speak English. People who speak languages other than English at home and who also have difficulty speaking English may face greater challenges in communication outside their home.

Data Description

This indicator shows the percentage of residents who speak a language other than English at home.

Data Source

U.S. Census Bureau. (2014-2018). American Community Survey, 1–year estimates. Language spoken at home, Table S1601.

County

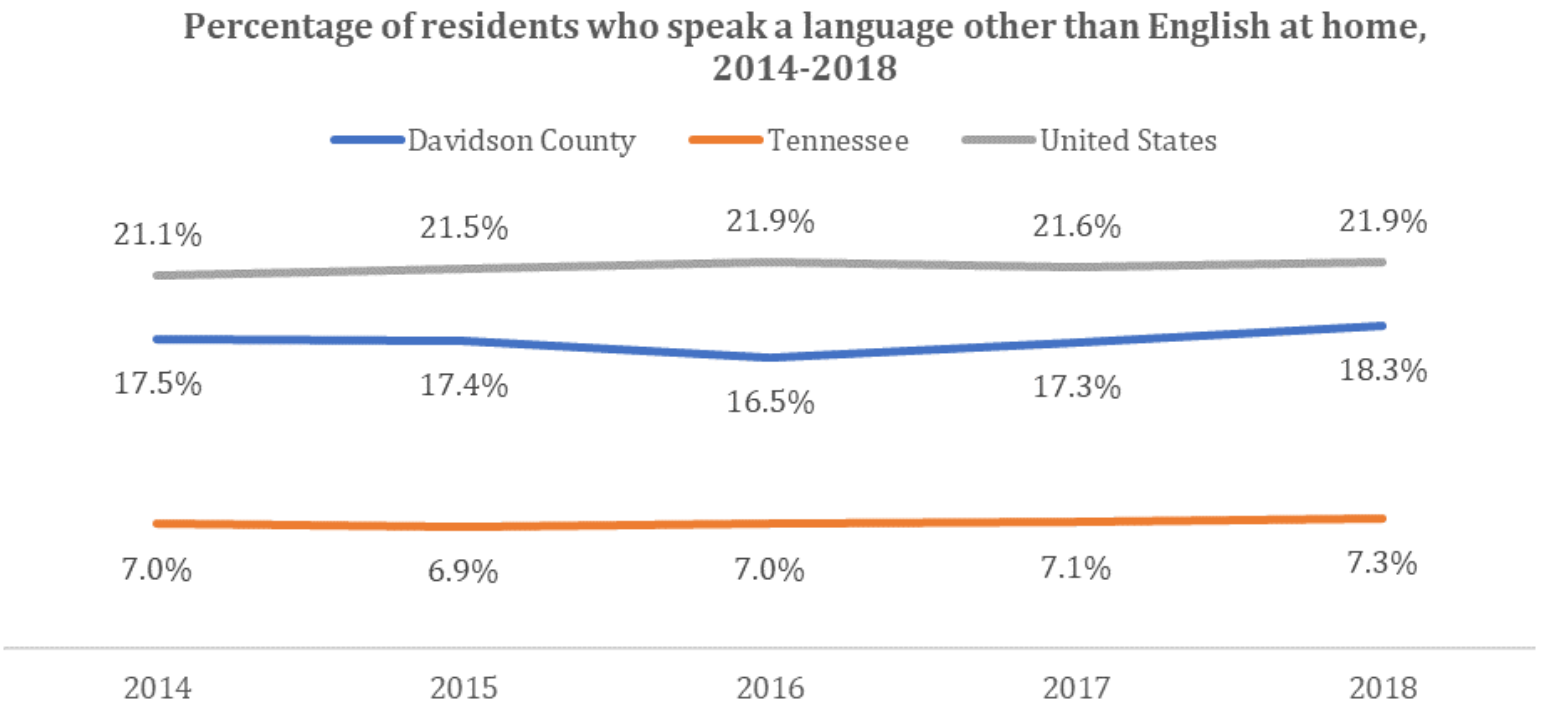
18.3% of residents in 2018

State

7.3% of residents in 2018

National

21.9% of residents in 2018



S2 Linguistic Isolation

Households that are linguistically isolated may have difficulty accessing services such as transportation, healthcare, and social services. In addition, it may limit educational or employment opportunities, which impacts health, earnings, and overall quality of life. Further, members of linguistically isolated households may have difficulty receiving information or services in an emergency, putting their health or lives at risk.[1]

Data Description

This indicator shows the percentage of households where no one aged 14 years and older speaks English only or speaks English "very well." All members of a linguistically isolated household are counted as linguistically isolated individuals, including members under 14 years old who may speak only English.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Limited English Speaking Households, Table S1602.

County

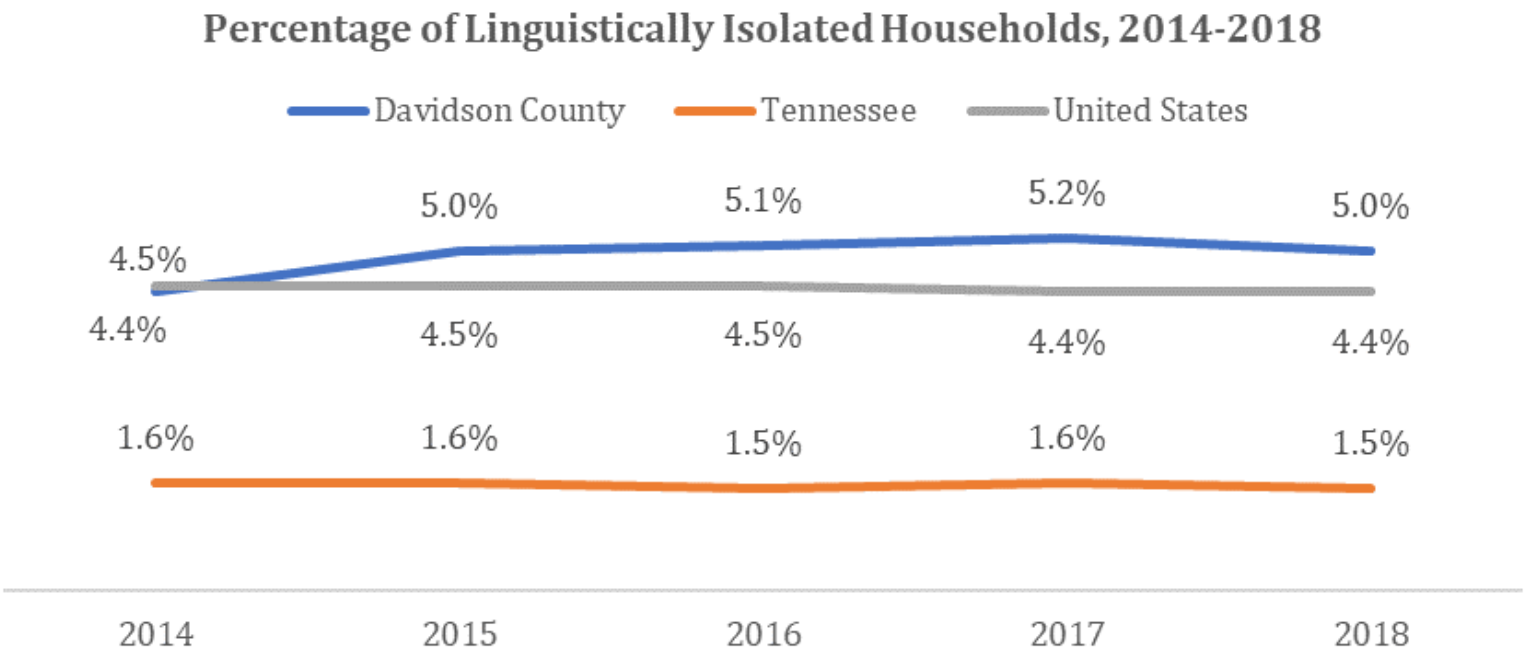
5.0% of households in 2018

State

1.5% of households in 2018

National

4.4% of households in 2018



[1] HealthyPasadena.org. (2014). Linguistic isolation. Retrieved from: http://www.healthypasadena.org/modules.php?op=mod-load&name=NS-Indicator&file=indicator&iid=8379607

S3 Educational Attainment

Academic achievement is a strong indicator for overall well-being and is a predictor and determinant of health outcomes. Studies have found relationships between level of education and various health risk factors, including smoking, drinking, diet and exercise, illegal drug use, household safety, use of preventive medical care, and care for hypertension and diabetes. People who have attained more education have lower morbidity and mortality rates and improved physical and mental health.

Data Description

This indicator shows the highest level of educational attainment for the population aged 25 years and older.

Data Source

U.S. Census Bureau. (2014–2018). US Census Bureau. American Community Survey 1–year estimates. Educational Attainment, Table S1501.

County

22.5% high school graduate or equivalent in 2018

42.3% bachelor's degree or higher in 2018

State

31.8% high school graduate or equivalent in 2018

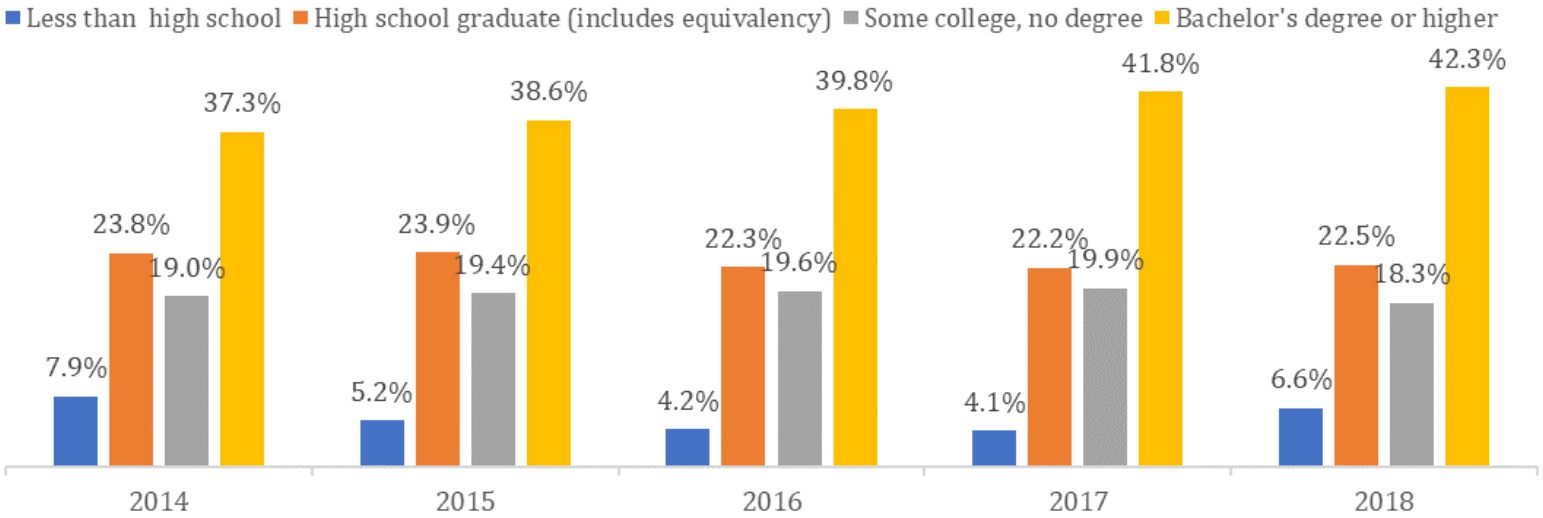
27.5% bachelor's degree or higher in 2018

National

26.5% high school graduate or equivalent in 2018

32.6% bachelor's degree or higher in 2018

Highest Educational Attainment Among Adults 25 Years and Older, Davidson County, 2014-2018



S4 Educational Attainment by Race

Racial/ethnic disparities in academic success may indicate disparities in overall well-being and are predictors and determinants of disparity in health outcomes. People who have attained more education have lower morbidity and mortality rates and improved physical and mental health.

Data Description

This indicator shows the highest level of educational attainment for the population aged 18 years and older by race/ethnicity.

Data Source

U.S. Census Bureau. (2015–2018). US Census Bureau. American Community Survey 1–year estimates. Educational

County

Non-Hispanic White

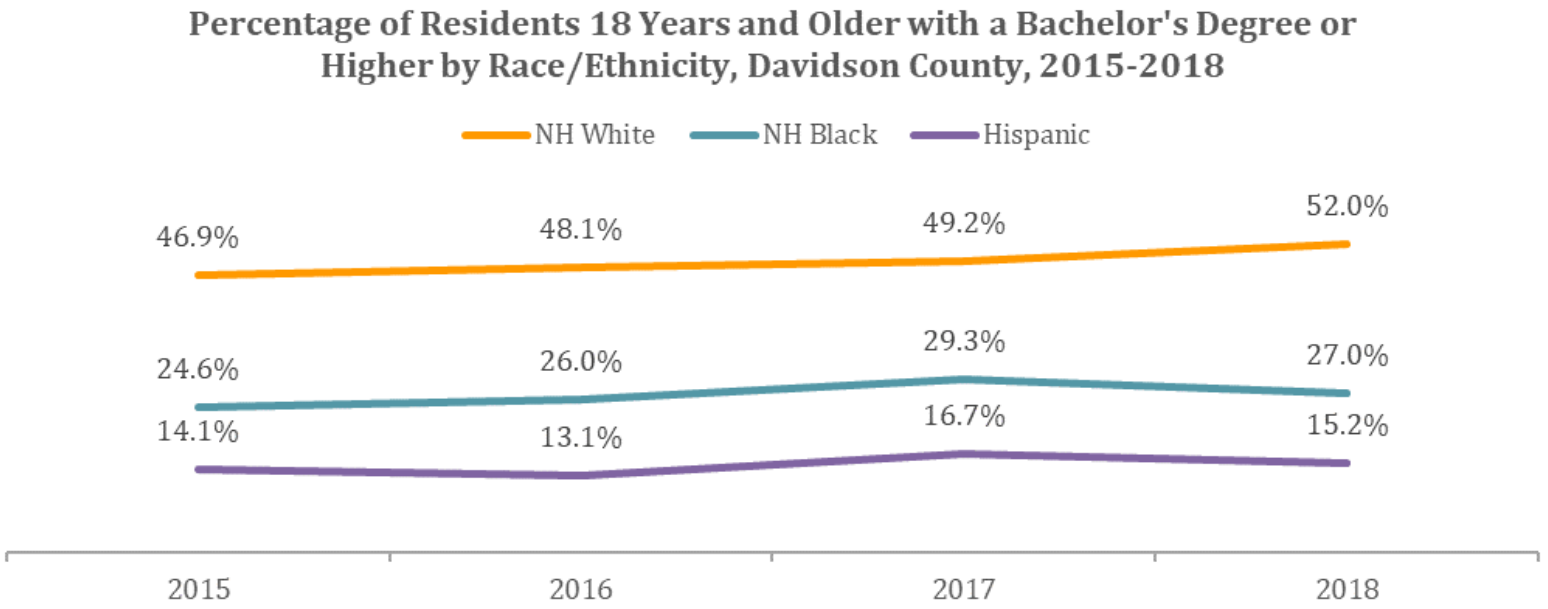
52.0% bachelor's degree or higher in 2018

Non-Hispanic Black

27.0% bachelor's degree or higher in 2018

Hispanic

15.2% bachelor's degree or higher in 2018



S5 Youth Educational Attainment

Academic success is a strong indicator for the overall well-being of youth and is a predictor and determinant of health outcomes. It is critical for educational attainment to be addressed early in a person's life.

Data Description

This indicator shows the highest level of educational attainment for the population aged 18 to 24 years.

Data Source

U.S. Census Bureau. (2014–2018). US Census Bureau. American Community Survey 1–year estimates. Educational Attainment, Table S1501.

County

27.8% high school graduate or equivalent in 2018

18.3% bachelor's degree or higher in 2018

State

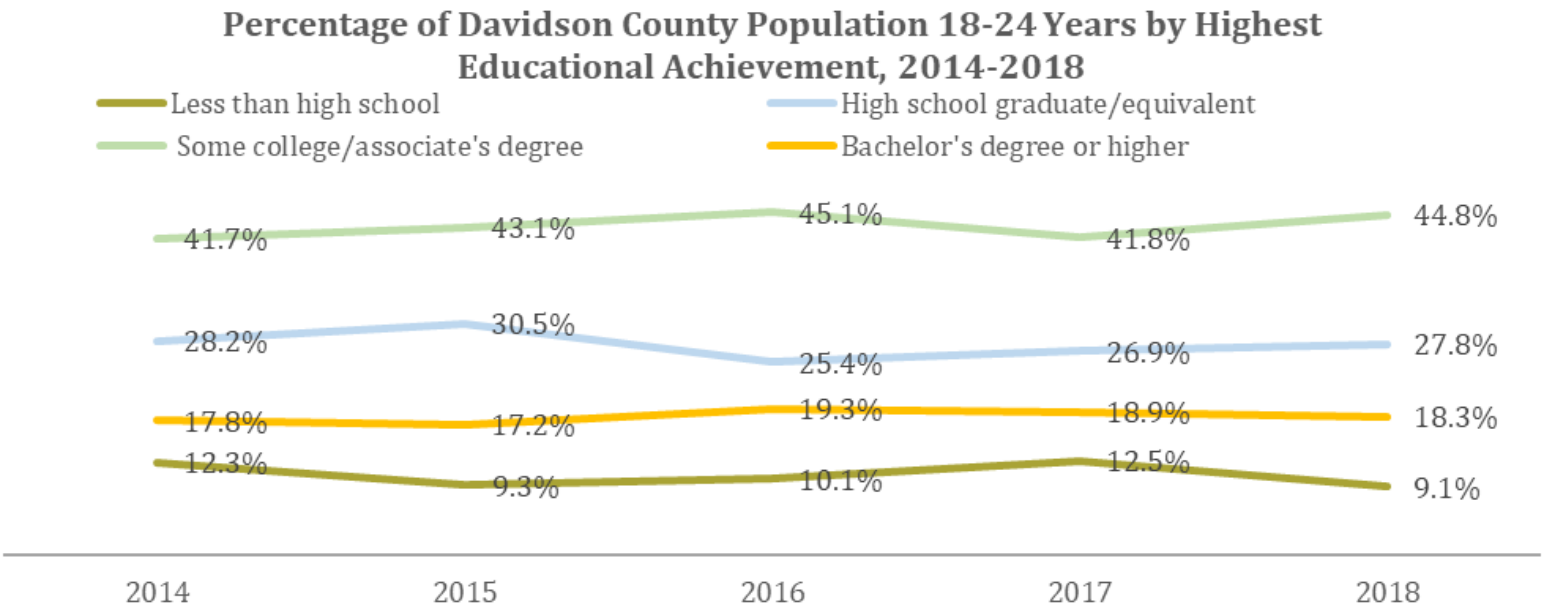
34.7% high school graduate or equivalent in 2018

10.2% bachelor's degree or higher in 2018

National

32.0% high school graduate or equivalent in 2018

11.6% bachelor's degree or higher in 2018



S6 High School Graduation

Individuals who do not finish high school are more likely than people who finish high school to lack the basic skills required to function in an increasingly complicated job market and society. Adults with limited education levels are more likely to be unemployed, on government assistance or involved in crime. The Healthy People 2020 national health target is to increase the proportion of students who graduate high school within four years of their first enrollment in 9th grade to 82.4%.

Data Description

This indicator shows the percentage of students who graduate high school within four years of their first enrollment in 9th grade.

Data Source

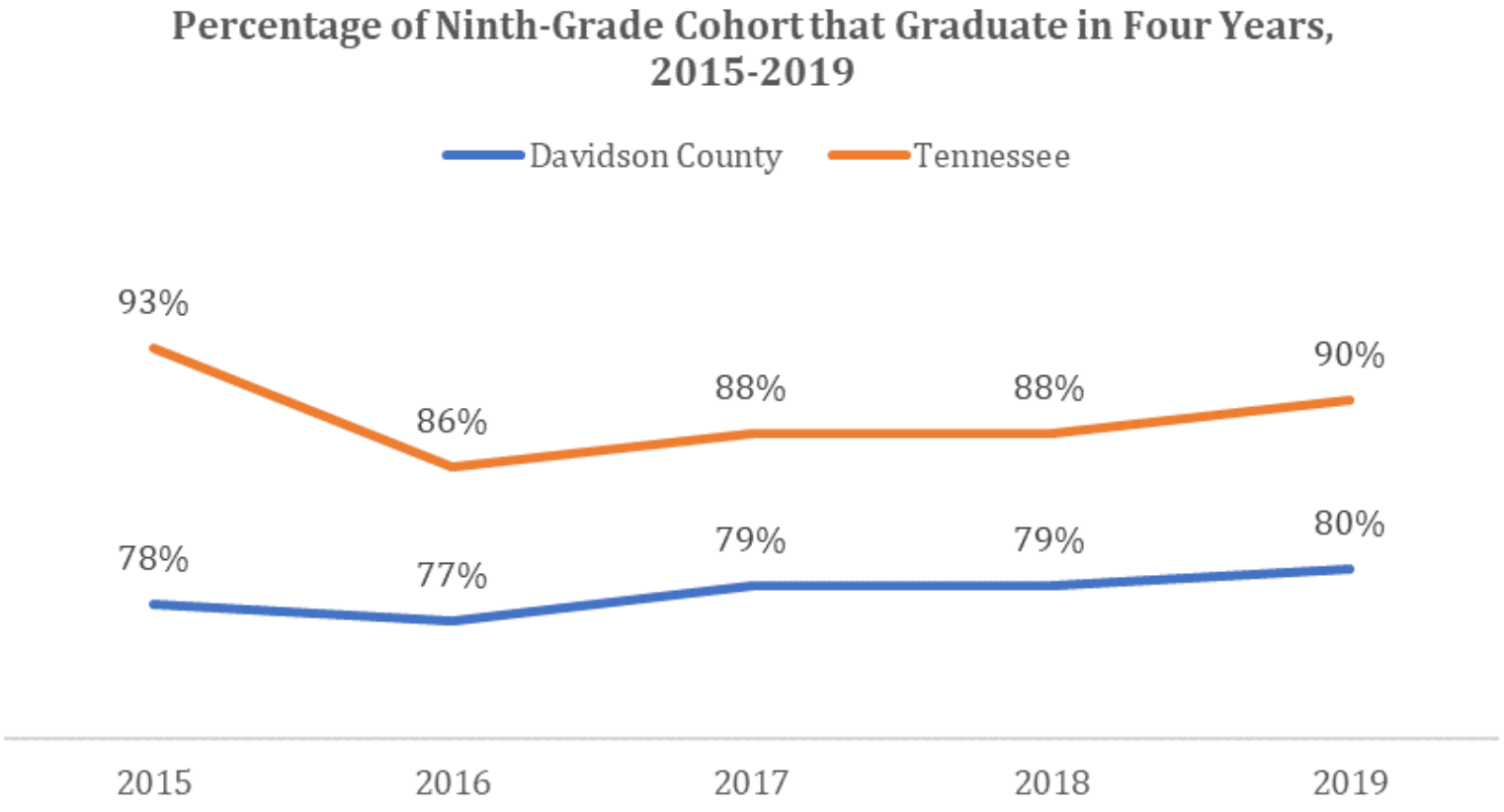
County Health Ranking and Roadmaps (2019). Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2019/rankings/davidson/county/outcomes/overall/snapshot

County

80% of ninth-grade cohort that graduates in 4 years in 2019

State

90% of ninth-grade cohort that graduates in 4 years in 2019



S7 Household Income

Income is a measure of the economic well-being of communities, households, and individuals. The most commonly used measure is median household income, which is more useful than individual measures of income since housing and other costs can be shared between household members.[1]

Data Description

This indicator shows the median household income, which is the total income for all people living at the same address, regardless of relationship or marital status.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Median Income in the Past 12 Months, Table S1903.

County

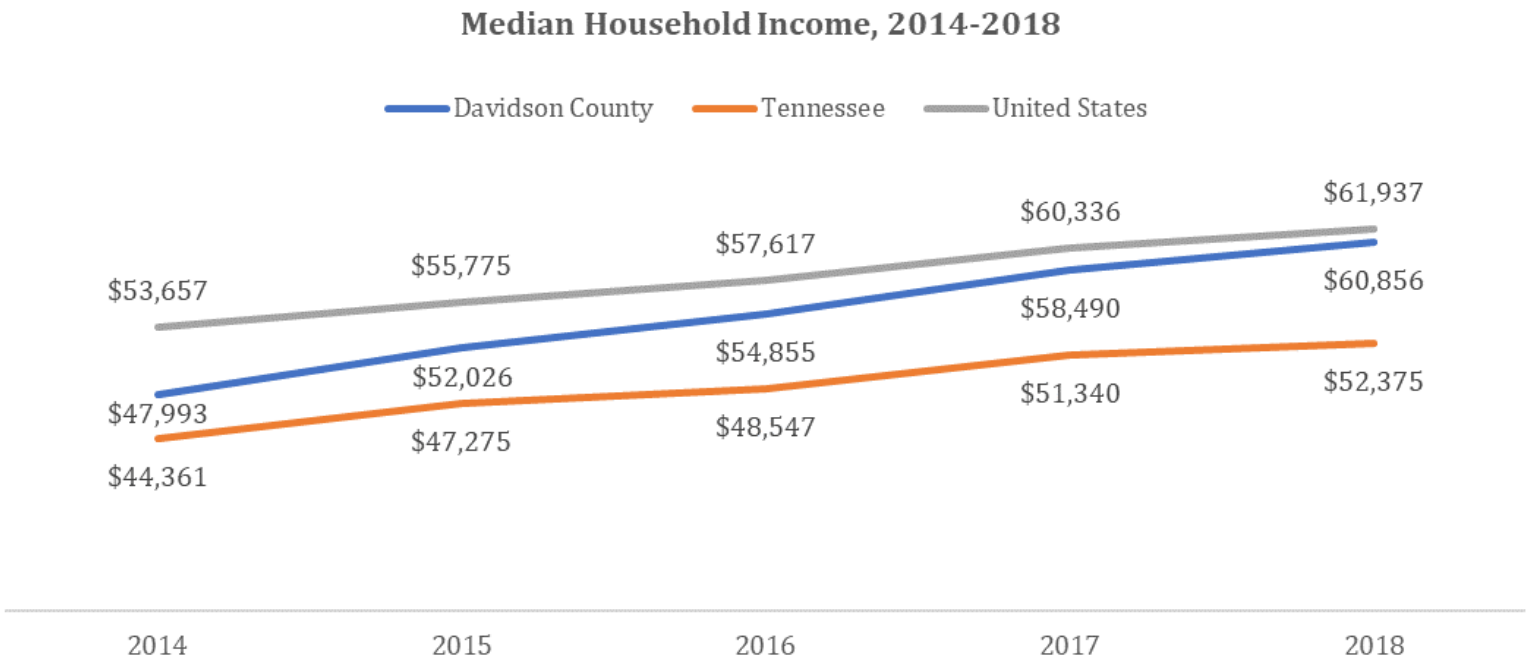
$60,856 median household income in 2018

State

$52,375 median household income in 2018

National

$61,937 median household income in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.11

S8 Household Income by Race

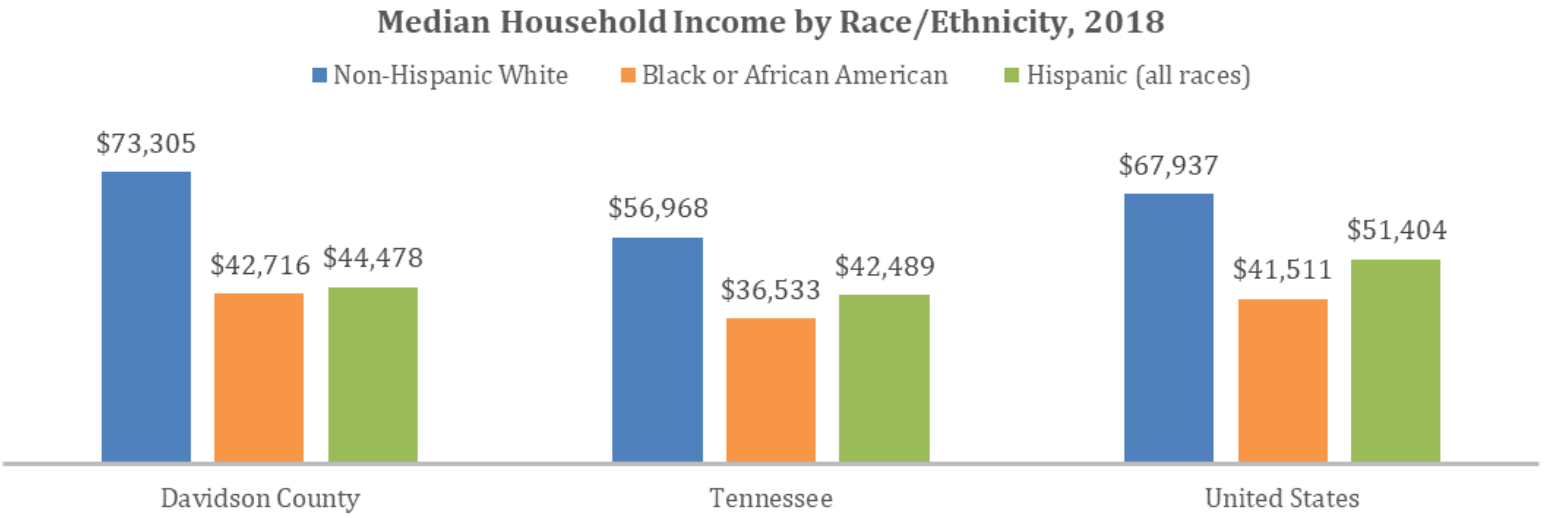
"Income is well-recognized to be associated with morbidity and premature mortality internationally and within the United States."[1] Racial/ethnic disparities in household income can reveal inequalities in the economic well-being and health outcomes of communities, households, and individuals.

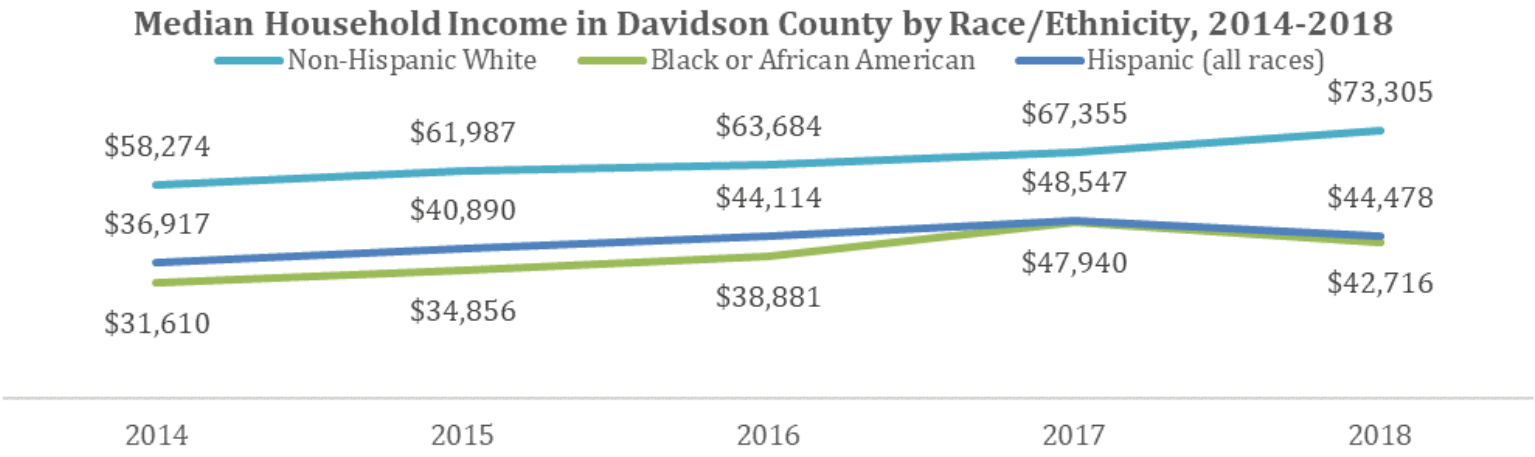
Data Description

This indicator shows the median household income in Davidson County by race, including Non-Hispanic White, Black or African American, and Hispanic. Median household income is the total income for all people living at the same address, regardless of relationship or marital status.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Median Income in the Past 12 Months, Table S1903.





[1] Cheng ER, Kindig DA. Disparities in premature mortality between high- and low-income US counties. Prev Chronic Dis 2012;9:110120. DOI: http://dx.doi.org/10.5888/pcd9.110120

S9 Income Distribution (Inequality)

Population health is diminished in societies where income inequality is greater. The GINI Index is the most commonly used measure of income inequality. It measures the extent to which the income distribution among a population is different from one where each proportion of the population earns the same proportion of the total income. The GINI Index has been used to measure health inequality by estimating the distribution of health risk, among populations or groups. [1]

Data Description

This indicator reports the GINI Index, which is a measure of the income distribution of an area's residents. The index ranges from 0 (complete equality) to 1 (complete inequality, where one person has all of the income and other others have none). So, the higher the index score, the higher the income inequality.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. GINI Index of Income Inequality, Table B19083.

County

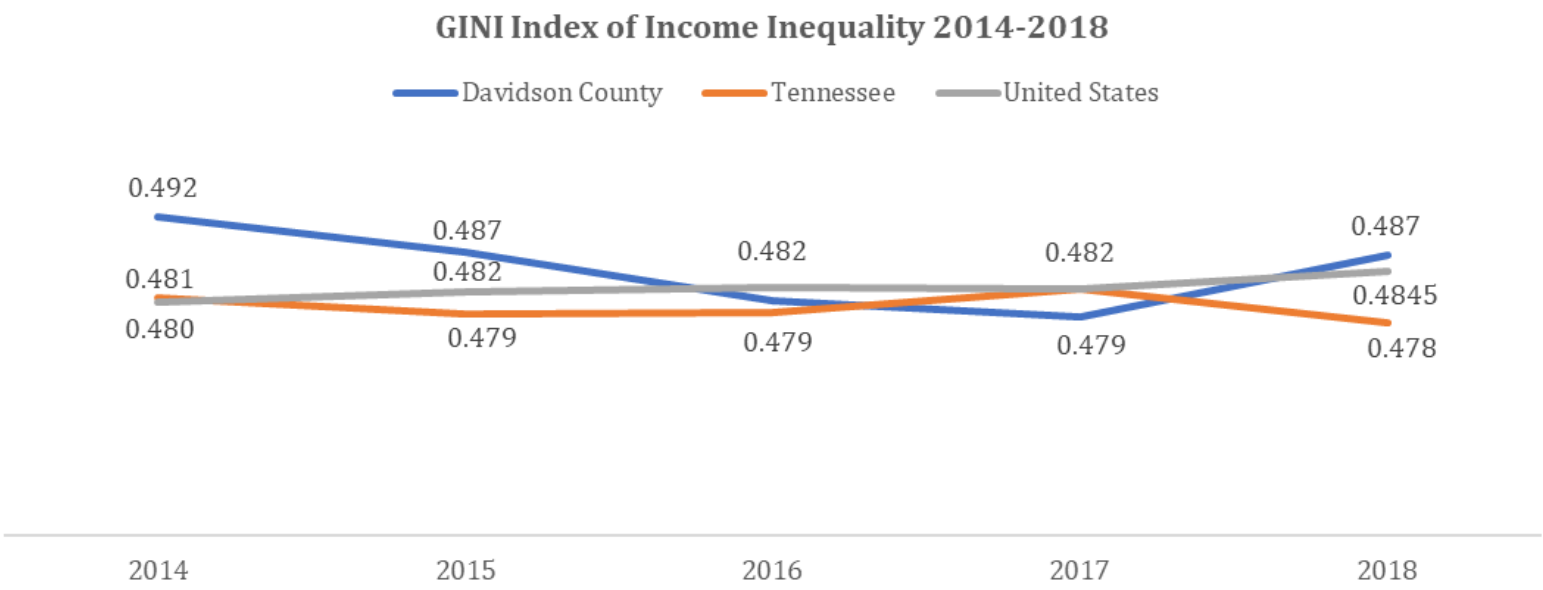
0.487 GINI Index score in 2018

State

0.478 GINI Index score in 2018

National

0.485 GINI Index score in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.14 .

S10 Poverty

The poverty level is set annually by the U.S. Census Bureau and varies by size of family and the ages of family members. High poverty is both a cause and a consequence of poor economic conditions, and serves as an indication that local employment opportunities are insufficient to provide for local residents. Poverty decreases buying power and tax revenue, which in turn negatively impacts local economies and health.[1]

Data Description

This indicator shows the percentage of people whose income in the past 12 months was below the poverty level.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.

County

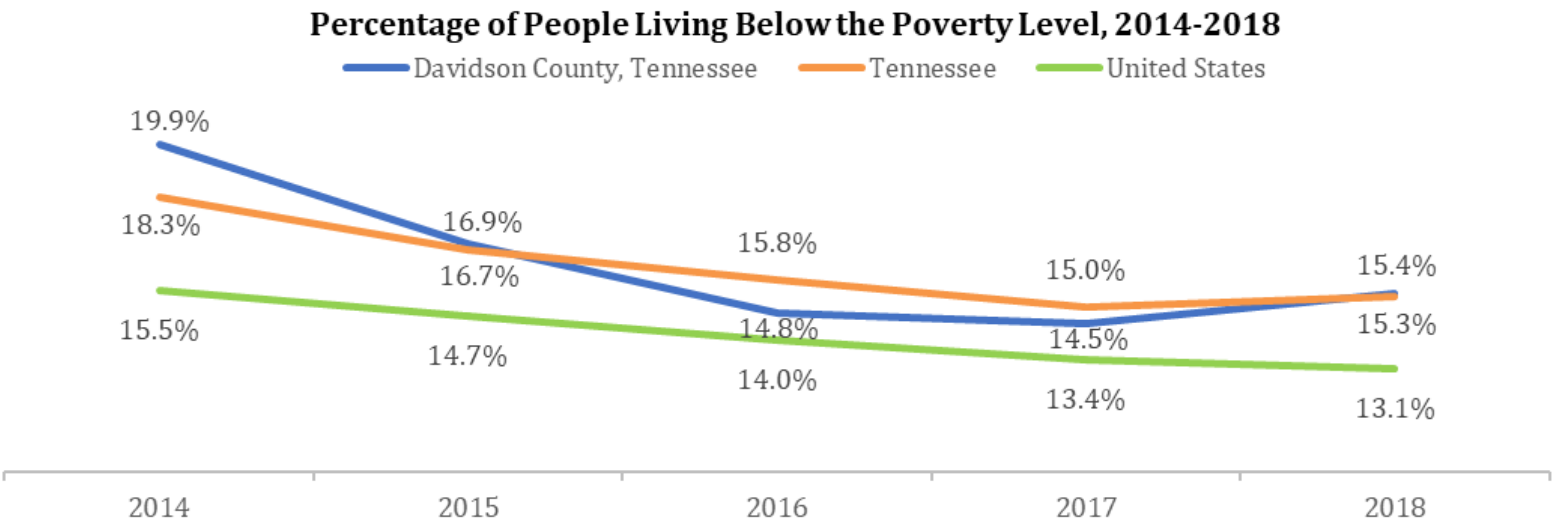
15.4% of residents lived below the poverty level in 2018

State

15.3% of residents lived below the poverty level in 2018

National

13.1% of residents lived below the poverty level in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.15 .

S11 Poverty by Age

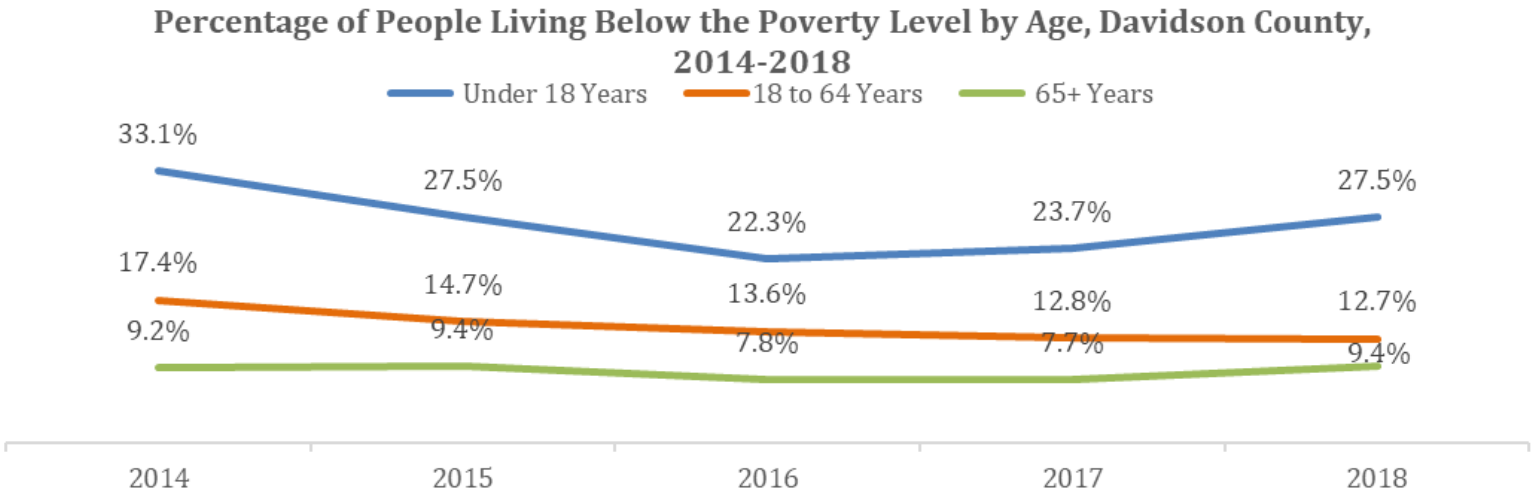
The poverty level is set annually by the U.S. Census Bureau and varies by family size and the ages of family members. High poverty is both a cause and a consequence of poor economic conditions and serves as an indication that local employment opportunities are insufficient to provide for local residents. Poverty decreases buying power and tax revenue, which in turn negatively impacts local economies and health.

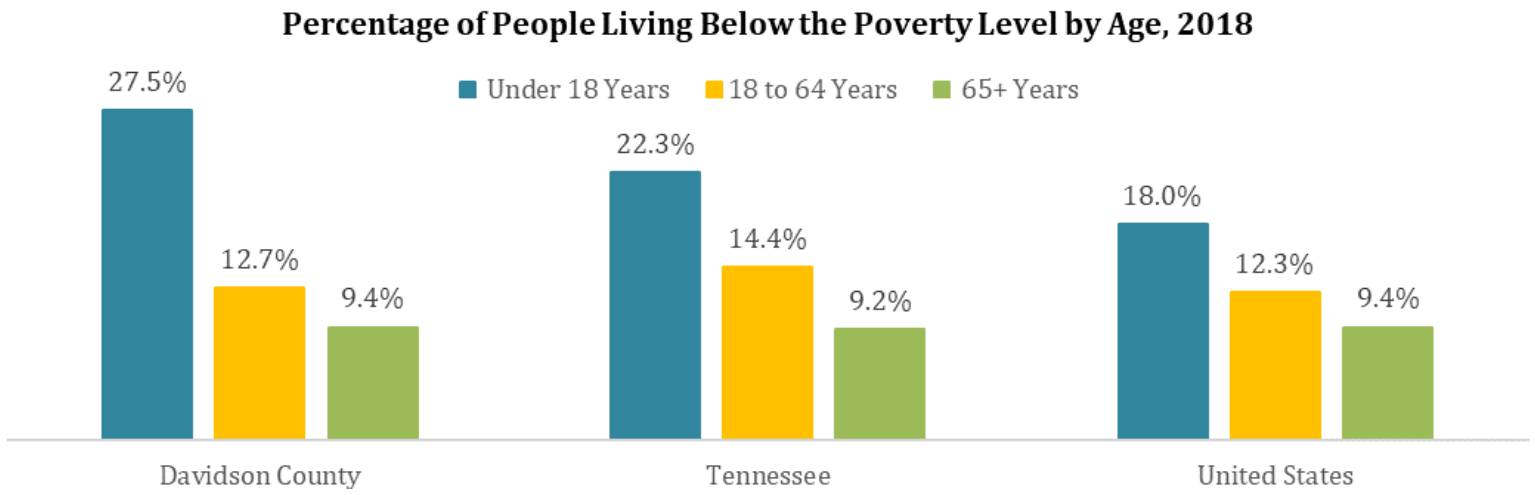
Data Description

This indicator shows the percentage of families and people, by age, whose household income in the past 12 months was below the poverty level.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.





S12 Poverty by Geography

Poverty impacts geographical areas as well as individuals and is not evenly distributed. Studies suggest that the presence of factors supportive of healthy communities such as low levels of air pollution, safe neighborhoods, meaningful working opportunities, the absence of illicit drugs, sidewalks, and the quality of public education are reduced or absent in areas with high concentrations of poverty.[1] Unhealthy communities, in turn, negatively impact the health of the individuals living in those areas.[2]

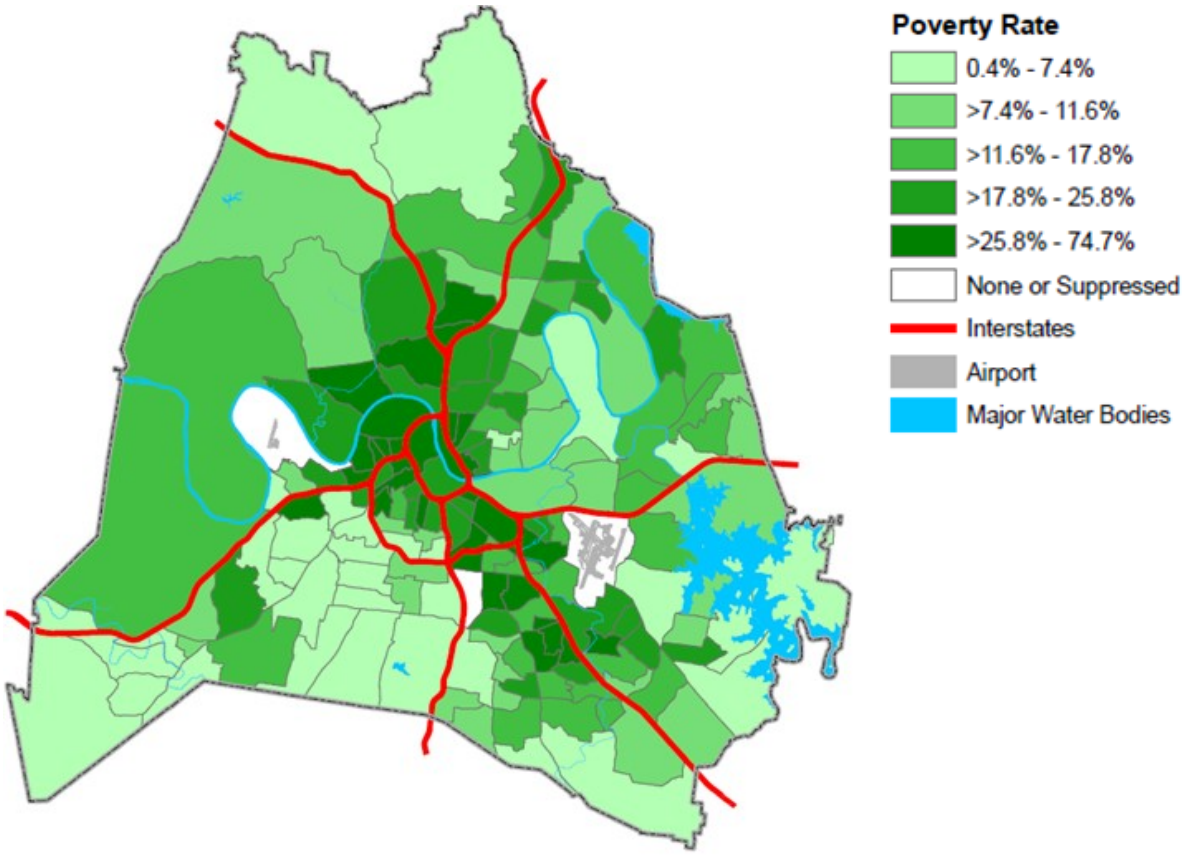
Data Description

This indicator shows poverty rates defined as the percentage of people whose income in the past 12 months was below the poverty level by census tract.

Data Source

U.S. Census Bureau. (2018). American Community Survey 2014–2018, 5–year esti-mates. Income in the past 12 months below poverty level, Table B17017e2; Geography layer from Metro Planning Department.

Poverty Rate by Census Tract, Davidson County, 2014-2018



[1] Seavey, John W., "How's your health? What's your zip code? Poverty and health" (2008). The University Dialogue. 42. https://scholars.unh.edu/discovery_ud/42

[2] Community Health Profile, Metro Nashville-Davidson County 2014, p.16 .

S13 Poverty by Race or Ethnicity

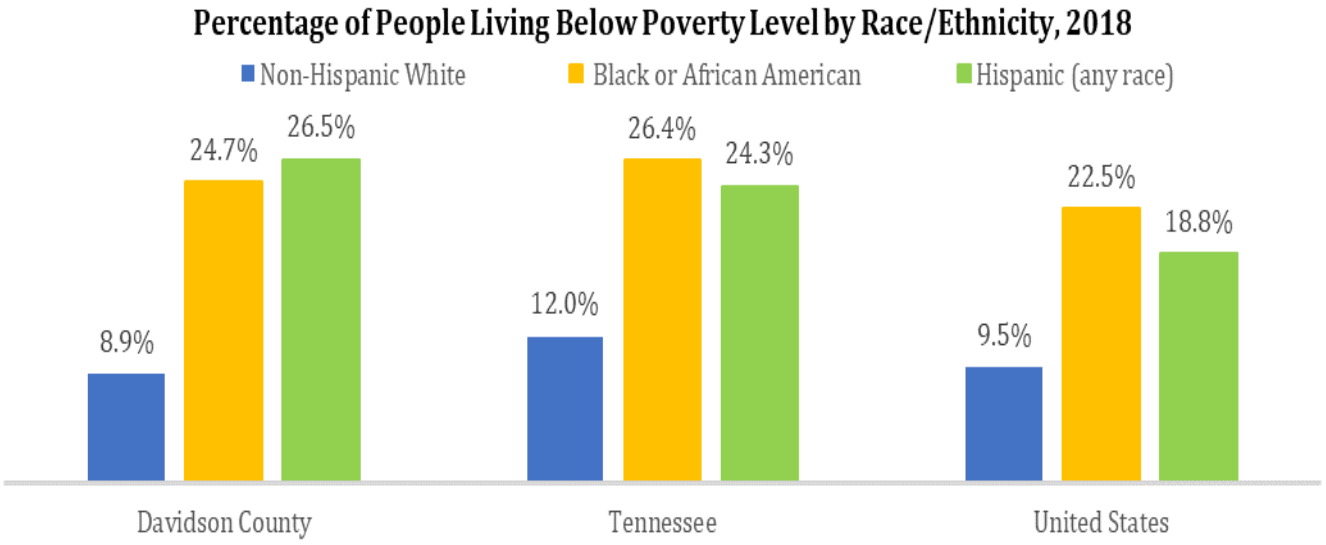
The likelihood someone will experience poverty in the United States varies by race and ethnicity. In a 2017 State of the Union report, the Stanford's Center on Poverty and Inequality notes "One in four blacks, one in four Native Americans and one in five Hispanics are classified as poor. By contrast, only 1 in 10 whites and 1 in 10 Asians are poor."[1] Such disparities can be both a cause and a consequence of racial and ethnic disparities in employment, wealth and health.

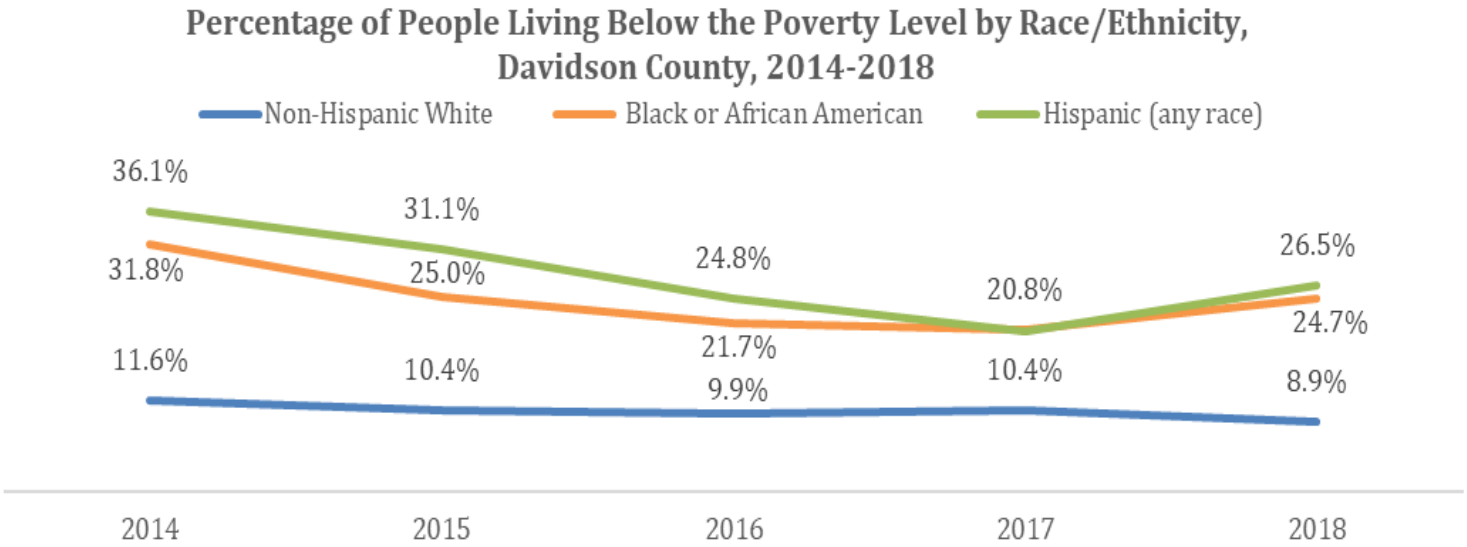
Data Description

This indicator shows the percentage of people whose income in the past 12 months was below the poverty level by race or ethnicity.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.





[1] https://news.stanford.edu/2017/06/16/report-finds-significant-racial-ethnic-disparities/

S14 Child Poverty

Family income has been shown to affect a child's well-being in numerous studies. Compared to their peers, children in poverty are more likely to have physical health problems like low birth weight or lead poisoning and are also more likely to have behavioral and emotional problems. Children in poverty also tend to exhibit cognitive difficulties, as shown in achievement test scores, and are less likely to complete basic education.

Data Description

This indicator shows the percentage of people under the age of 18 who are living below the federal poverty level.

Data Source

The Annie E. Casey Foundation, KIDS COUNT Data Center, https://datacenter.kidscount.org

County

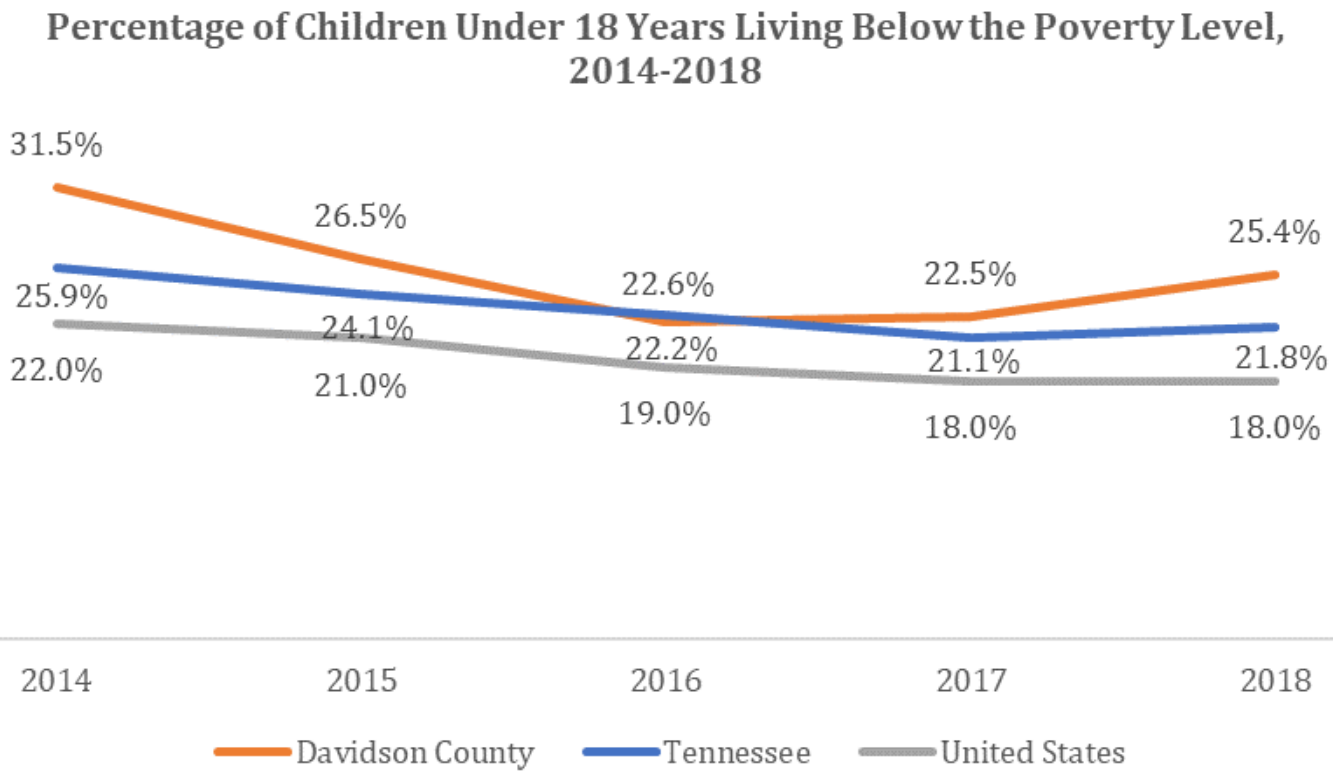
25.4% of children under the age of 18 living below the federal poverty level in 2018

State

21.8% of children under the age of 18 living below the federal poverty level in 2018

National

18.0% of children under the age of 18 living below the federal poverty level in 2018



S15 Student Free Lunch

The National School Lunch Program (NSLP) is a federally assisted meal program operating in public and nonprofit private schools and residential childcare institutions. Families who meet the income eligibility requirements or who receive Supplemental Nutritional Assistance Program (SNAP) benefits can apply through their children's school to receive free meals. The FLP ensures that students who may otherwise not have access to a nutritious meal are fed during the school day. This helps students remain focused and productive in school. Moreover, the lunches help students meet their basic nutritional requirements when their families may not be able to consistently provide a balanced and varied diet.

Data Description

This indicator shows the percentage of students who participated daily in the free or reduced-price school meals program during a school year.

Data Source

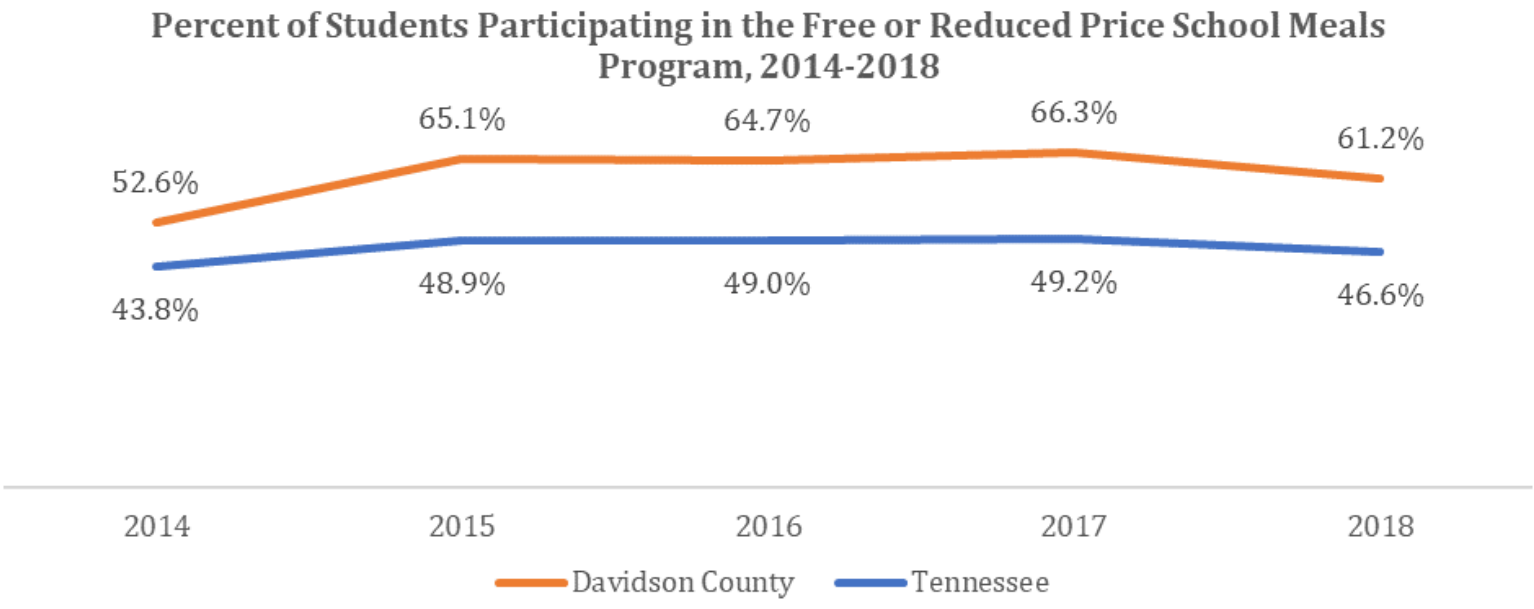
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org/data/tables/2979-free-reduced-price-school-lunch-participation?loc=44&loct=5#detailed/5/6438/true/37,871,870,573,869,36,868,867,133,38/any/10109.

County

61.2% of students received free or reduced-price school meals in 2018

State

46.6% of students received free or reduced-price school meals in 2018



S16 Cash Public Assistance

According to the Census Bureau, public assistance refers to either cash assistance or in-kind benefits to individuals and families from social welfare programs and social insurance programs. Benefits received from social welfare programs are usually based on low income means-tested eligibility criteria while social security benefits are usually based on eligibility criteria such as age, employment status, or being a veteran.[1]

Data Description

This indicator shows the mean cash assistance (in dollars) benefits in the past 12 months.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

$2,673 of mean cash benefits in 2018

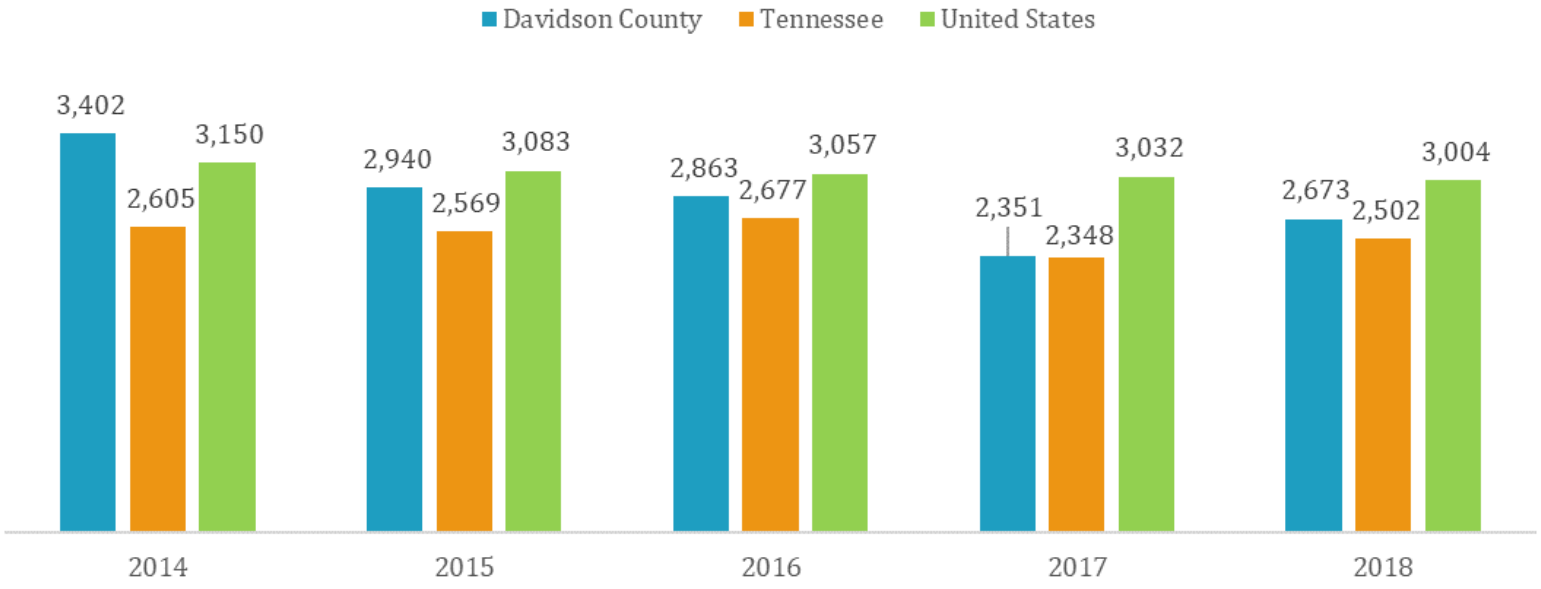
State

$2,502 of mean cash benefits in 2018

National

$3,004 of mean cash benefits in 2018

Mean Cash Public Cash Assistance (in dollars), 2014-20118



[1] https://www.census.gov/topics/income-poverty/public-assistance/about.html

S17 Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to low-income individuals and families. It is the largest program in the domestic hunger safety net and provides both health and economic benefits to communities.[1]

Data Description

This indicator shows the percentage of households participating in the Supplemental Nutrition Assistance Program (SNAP) in the past 12 months.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey

County

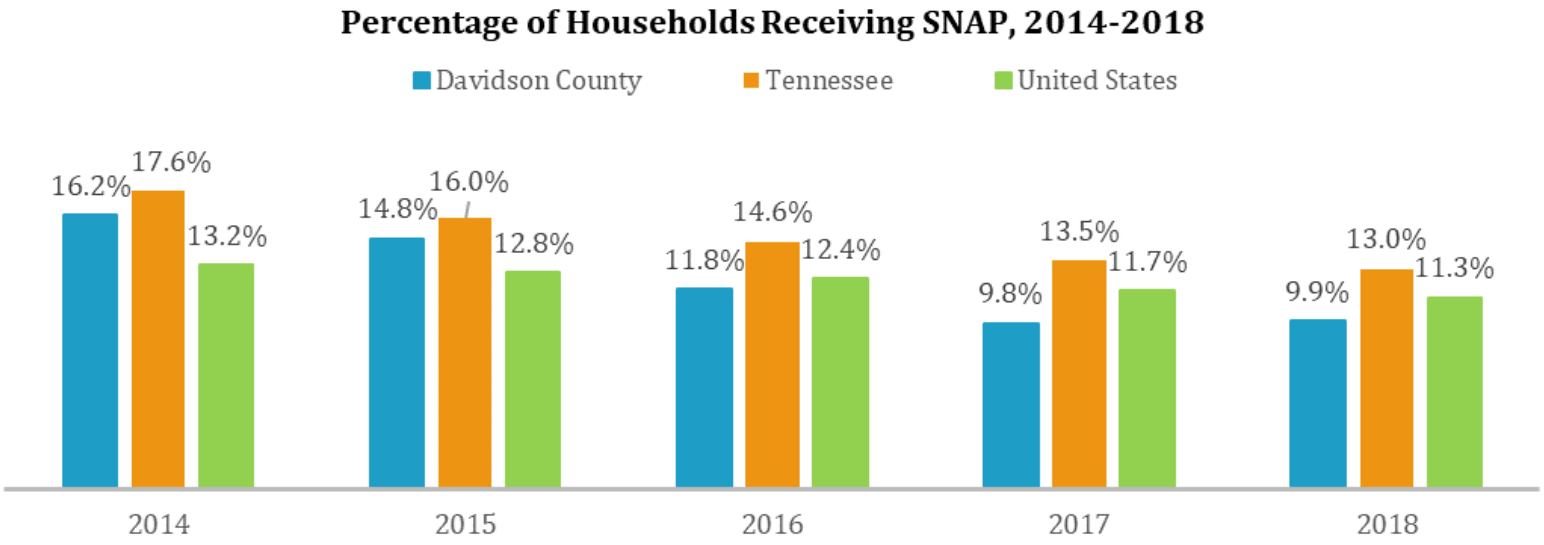
9.9% of households received SNAP benefits in 2018

State

13.0% of households received SNAP benefits in 2018

National

11.3% of households received SNAP benefits in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.22

S18 Temporary Assistance for Needy Families (TANF)

The purpose of the Temporary Assistance for Needy Families (TANF) program is to help needy families become self-sufficient. The four primary purposes of the program are to: 1) provide assistance to needy families so that children can be cared for in their own homes, 2) reduce the dependency of needy parents by promoting job preparation, work and marriage, 3) prevent and reduce the incidence of out-of-wedlock pregnancies, and 4)encourage the formation and maintenance of two-parent families. [1]

Data Description

This indicator shows the percentage of households receiving cash public assistance income (TANF) in the past 12 months.

Data Source

U.S. Census Bureau. (2006–2013). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

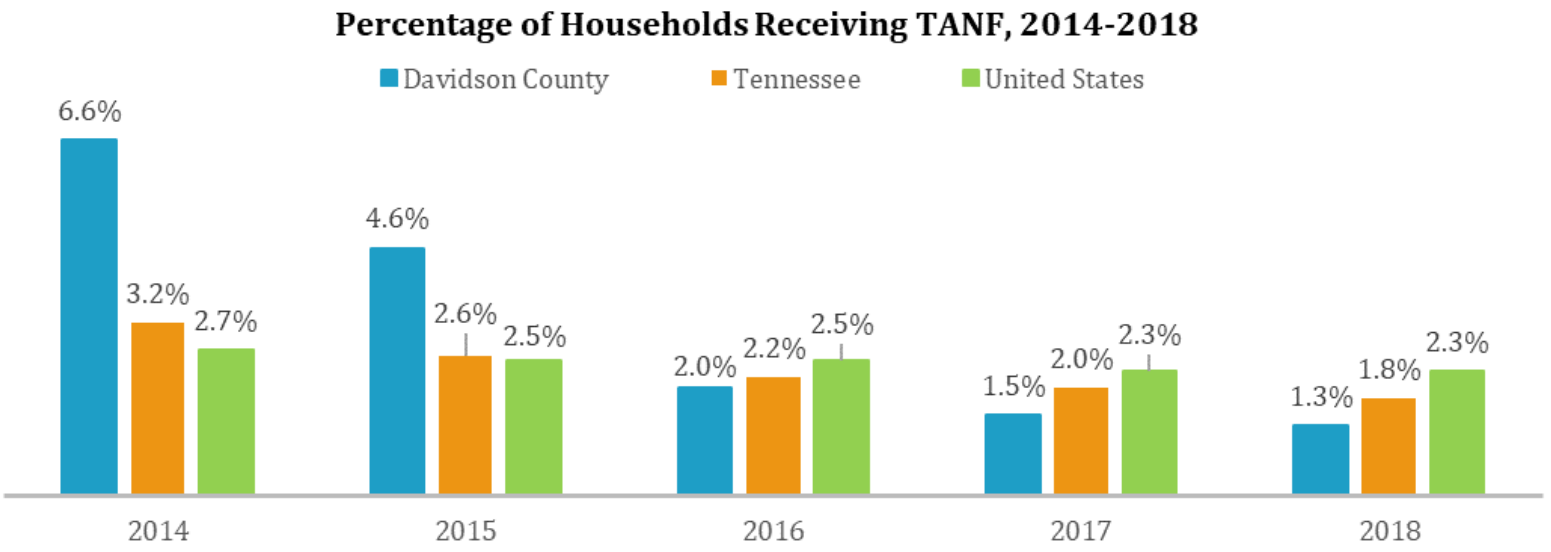
1.3% of households received TANF benefits in 2018

State

1.8% of households received TANF benefits in 2018

National

2.3% of households received TANF benefits in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.21

S19 Supplemental Security Income (SSI)

Supplemental Security Income (SSI) is a federal supplemental income program funded by general tax revenues (not Social Security taxes). It provides assistance to people who are aged, blind, or disabled who have little or no income, providing cash to meet basic needs such as food, clothing, and shelter. [1]

Data Description

This indicator shows the percentage of households receiving supplemental security income (SSI) in the past 12 months.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

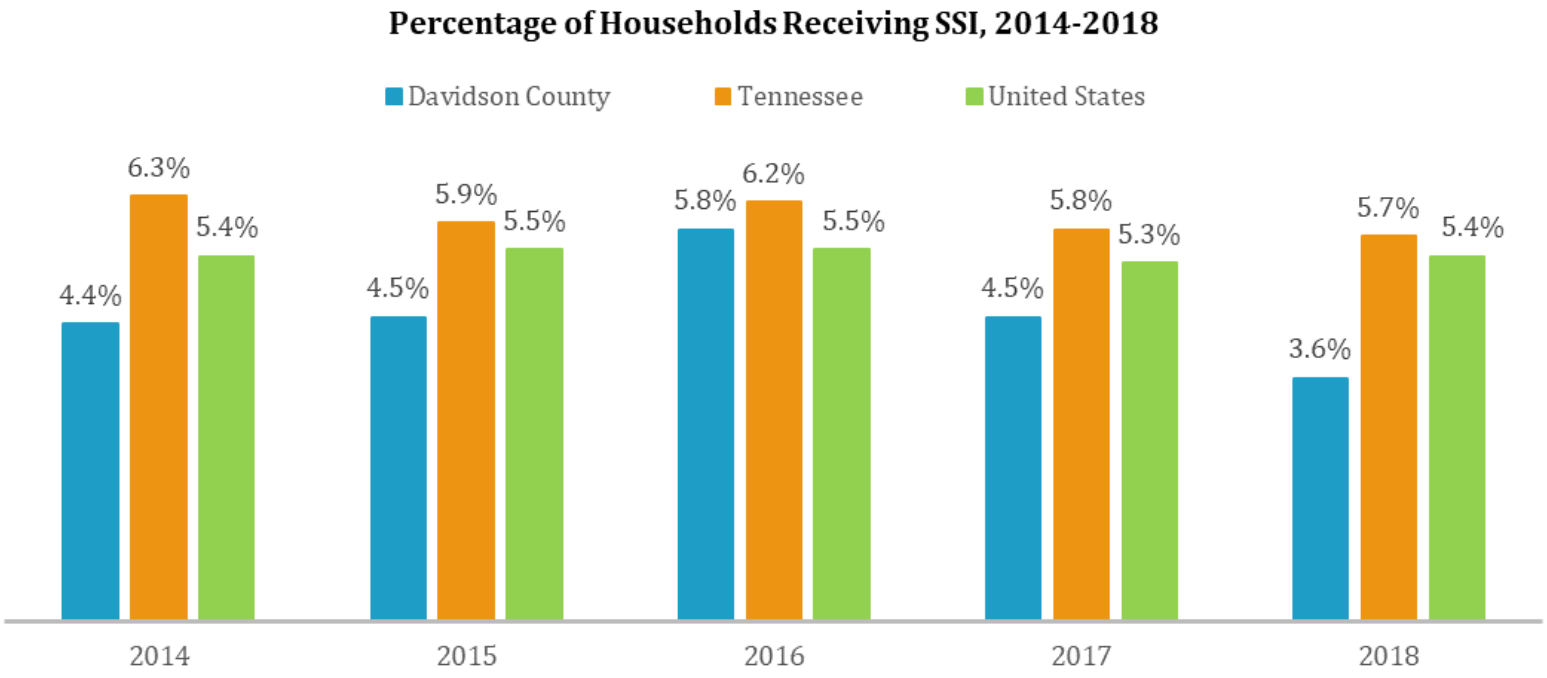
3.6% of households received SSI benefits in 2018

State

5.7% of households received SSI benefits in 2018

National

5.4% of households received SSI benefits in 2018



[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.23

S20 Employment Rate

The employment rate is an important indicator for the local economy as it shows the extent to which the working age population (ages 16 to 64 years) is actively engaged in gainful employment. Despite economic cycles, policies that improve employment opportunities and the employability of women and other disadvantaged groups (such as access to higher education and the availability of childcare) can improve the level and stability of the employment rate. A high employment rate correlates with higher economic growth, disposable incomes, purchasing power and economic output, which reduces economic strain, mental stress, and increases access to health care.

Data Description

This indicator shows the percentage of civilian noninstitutionalized working age adult residents (16 years and older) who were employed in the past 12 months.[1]

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

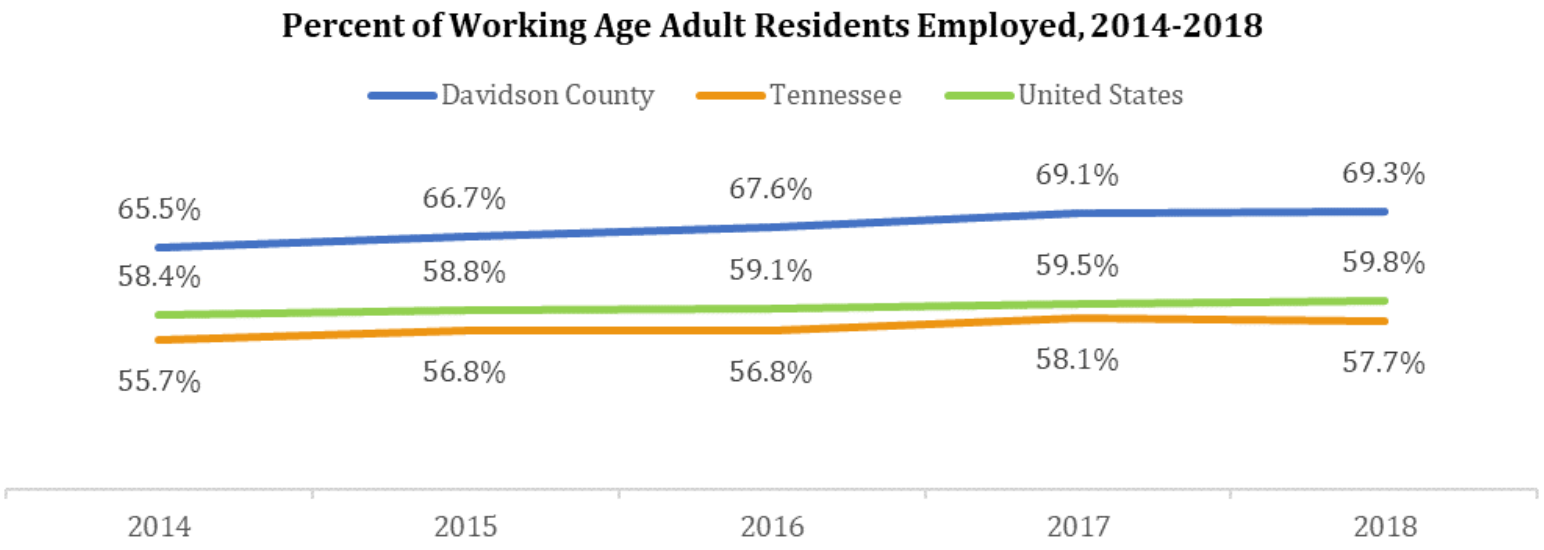
69.3% employed in 2018

State

57.7% employed in 2018

National

59.8% employed in 2018



[1] Excludes people whose only work is around the house; unpaid volunteers at nonprofit organizations; all institutionalized people; and people on active duty in the armed forces. https://www.census.gov/quickfacts/fact/note/US/LFE041218

S21 Job Growth

Job growth provides an indication of a community's economic productivity and trajectory, which impacts (and is impacted by) a community's health. Growth in the number of jobs in a community indicates more opportunities for work, a growing economy, and the desirability of the community as a place to live.

Data Description

This indicator shows the total employment (number of jobs) which includes wage and salary jobs and self-employment for Davidson County.

Data Source

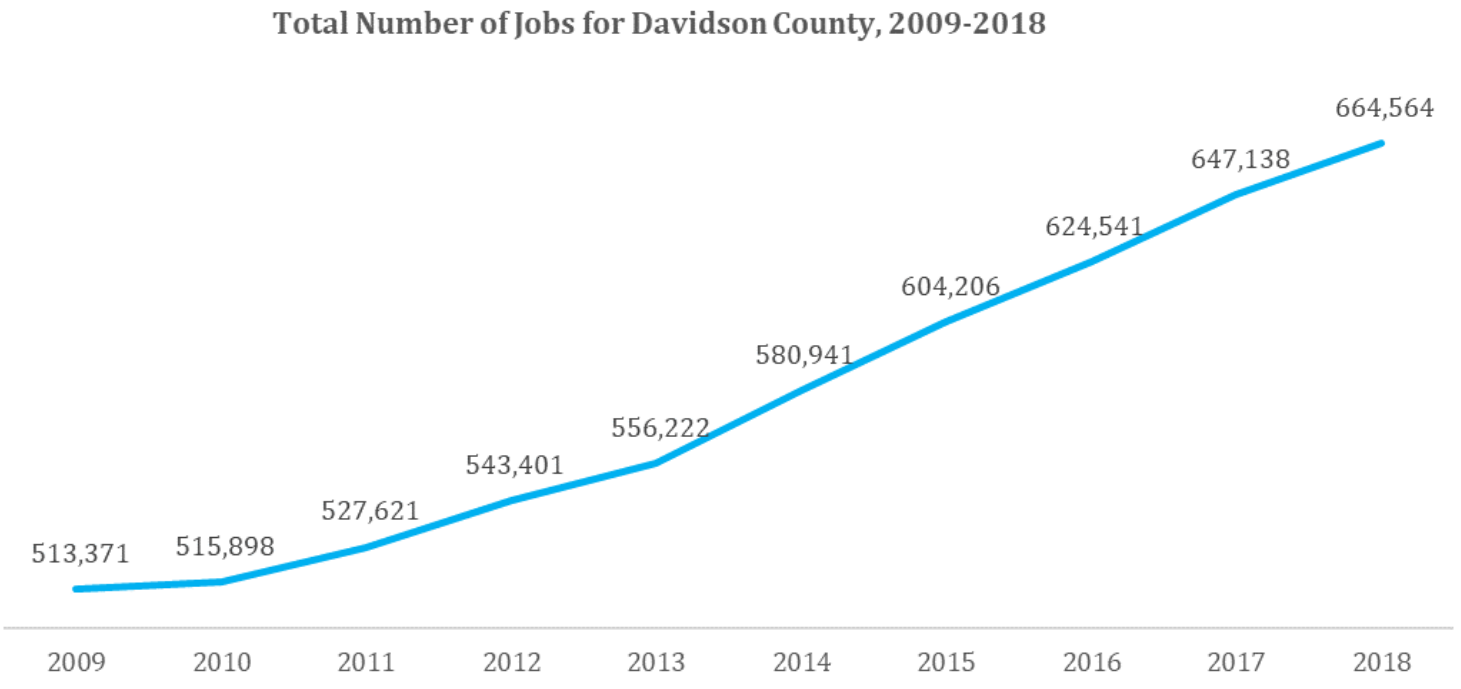
Bureau of Economic Analysis (2020). Total full-time and part-time employment, Table CAEMP25N.

County

664,564 total number of jobs in 2018

17,426 jobs added compared to the past year (2017)

29.5% increase in total number of jobs since 2009



S22 Unemployment

The unemployment rate is an important indicator for the local economy. A high unemployment rate has both individual and societal impacts. "When unemployment is high, some people become discouraged and stop looking for work; they are then excluded from the labor force." Individuals can experience severe economic strain, mental stress, and reduced access to healthcare. A high unemployment rate also strains financial support systems such as unemployment benefits and food assistance, which places a burden on the entire community.

Data Description

This indicator shows the percentage of the civilian labor force who were unemployed in the past 12 months.[1]

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

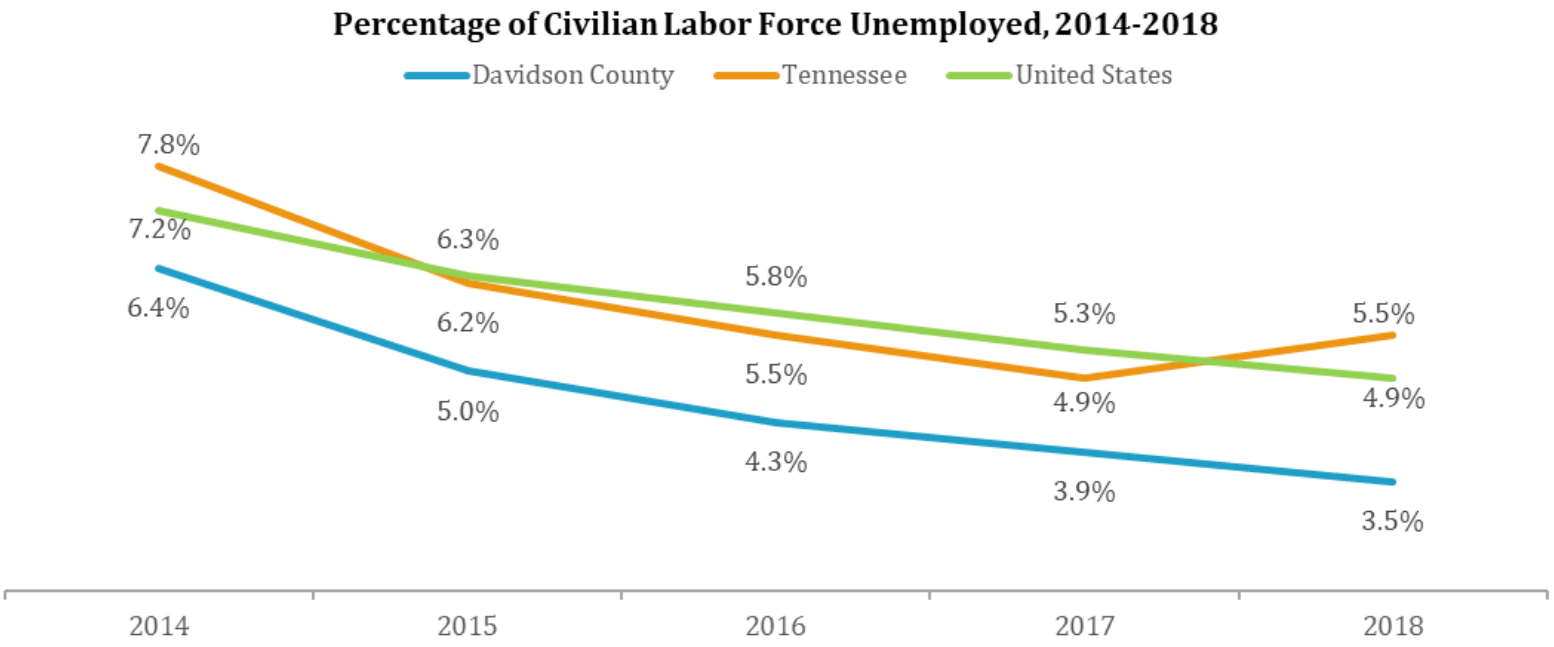
3.5% unemployed in 2018

State

5.5% unemployed in 2018

National

4.9% unemployed in 2018



[1] The Civilian labor force comprises people aged 16 years and older who are classified by the Bureau of Labor Statistics as either employed or unemployed. The unemployed are actively seeking work or are temporarily out of work due a brief illness or layoff and expect to return to their job. Excluded from the labor force are civilians aged 16 and older who are not available for work (e.g., students or some persons with disabilities) or have not searched for work for more than 12 months as well as those who want a job but have been discouraged from actively searching for work, or have stopped looking for work at the time of the Current Population Survey (CPS) of the Bureau of Labor Statistics.

S23 Unemployment by Race/Ethnicity

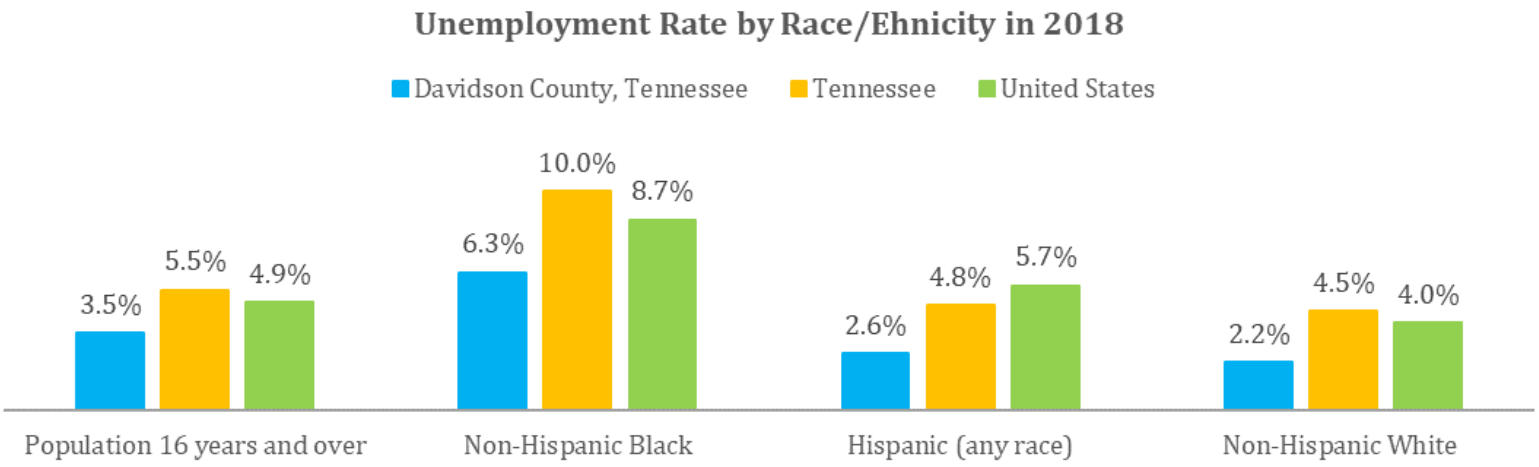
Racial/ethnic disparities in unemployment can indicate structural inequalities in employment prospects, job stability, and the ability to recover from recessions or benefit from improvements in the local job market. The health of a population group can be directly enhanced by employment opportunities that provide health insurance coverage, paid sick leave, and parental leave, in addition to safe, stable, and equitably rewarding work conditions (HealthyPeople2020.gov.)[1]

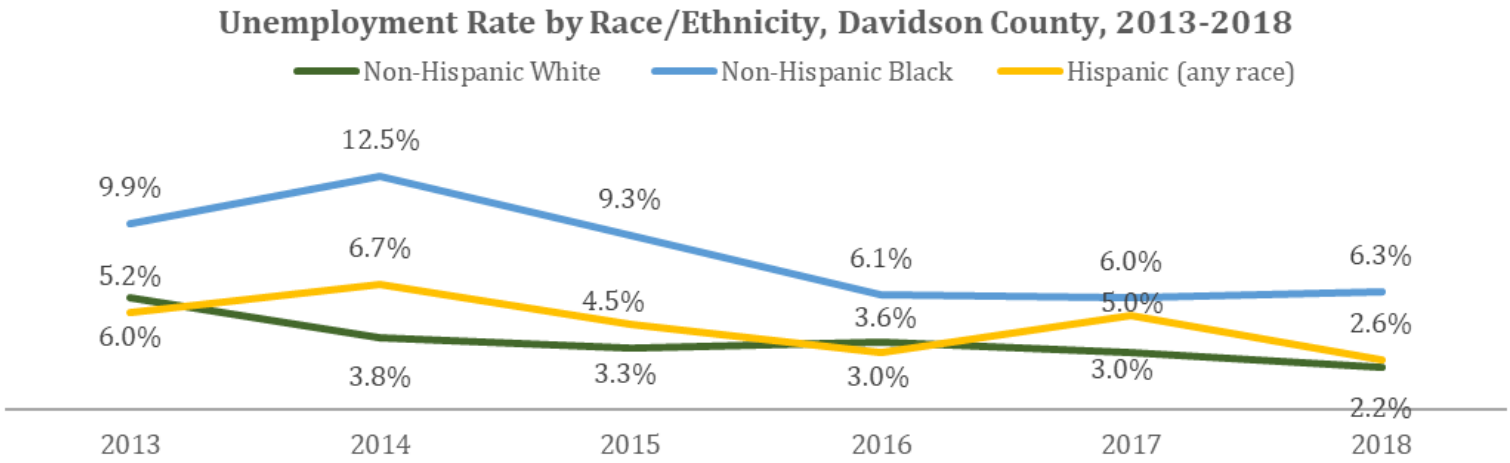
Data Description

This indicator shows the percentage of the civilian labor force who were unemployed in the past 12 months by race/ethnicity.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.





[1] Community Health Profile, Metro Nashville-Davidson County 2014, p.19

S24 Unemployment by Geography

The geographic distribution of the unemployment rate can indicate structural inequities in job markets, and the geographic clustering of the local population by socio-economic status and health outcomes.

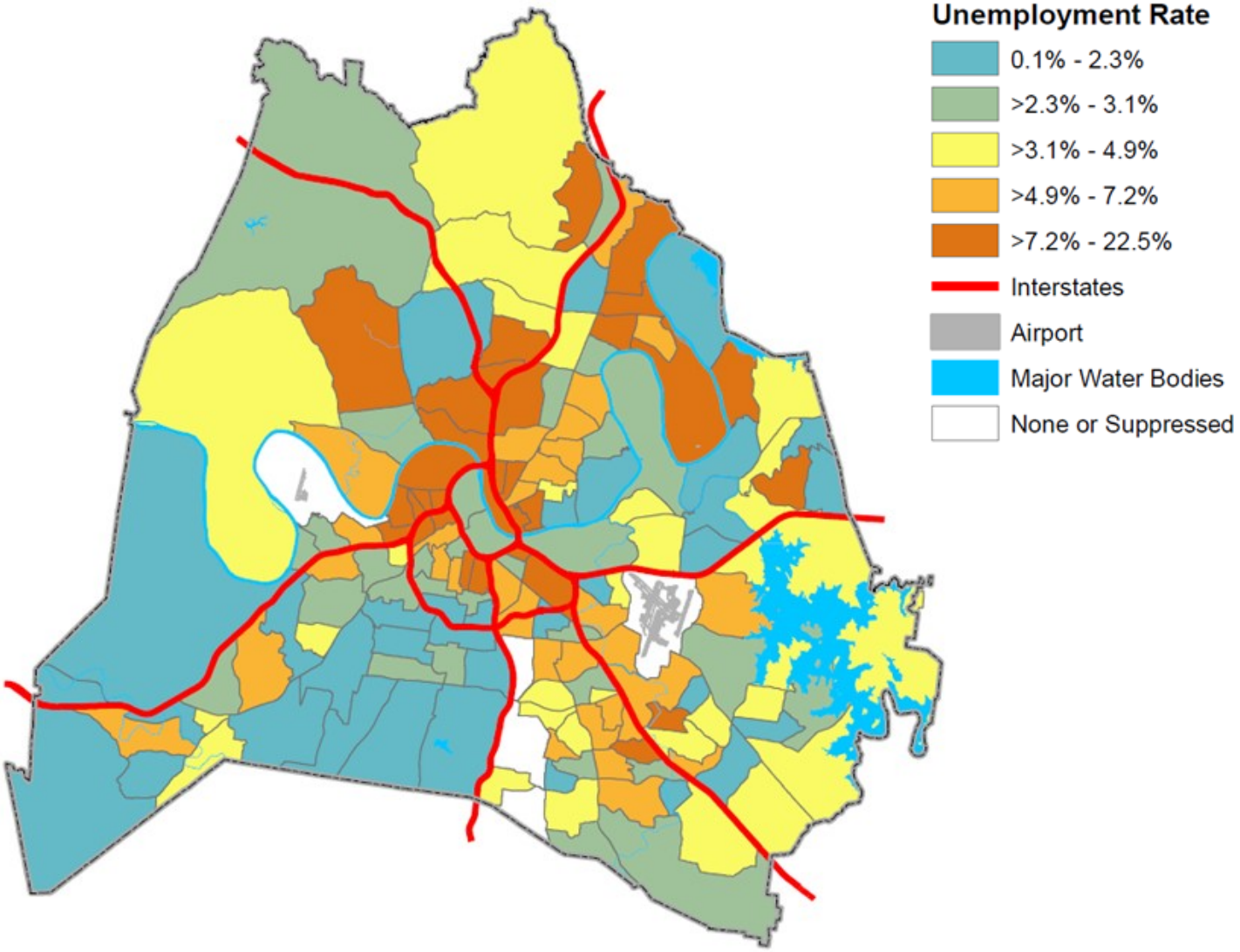
Data Description

This indicator shows the percentage of the civilian labor force who were unemployed in the past 12 months by census tract.

Data Source

U.S. Census Bureau. (2018). American Community Survey 5–year estimates. Selected Economic Characteristics; Table S2301. Geography layer from Metro Planning Department.

Unemployment Rate by Census Tract, Davidson County, 2014-2018



S25 Employment and Poverty

Examining the rate of poverty among both the employed and unemployed can highlight poor conditions of employment in the local job market. This can serve to emphasize that the working poor are often inadequately compensated for their labor. They often have fewer employment choices, take positions with job insecurity and harmful work conditions, or have multiple jobs to pay for essentials (Health People 2020). Policies that improve job tenure and stability, and support wage growth can reduce the risk of poverty in the labor force.

Data Description

This indicator shows the percentage of civilian labor force aged 16 years and over living below the poverty line by employment status in the past 12 months.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table S1701.

County

7.9% of employed workers lived below the poverty line in 2018

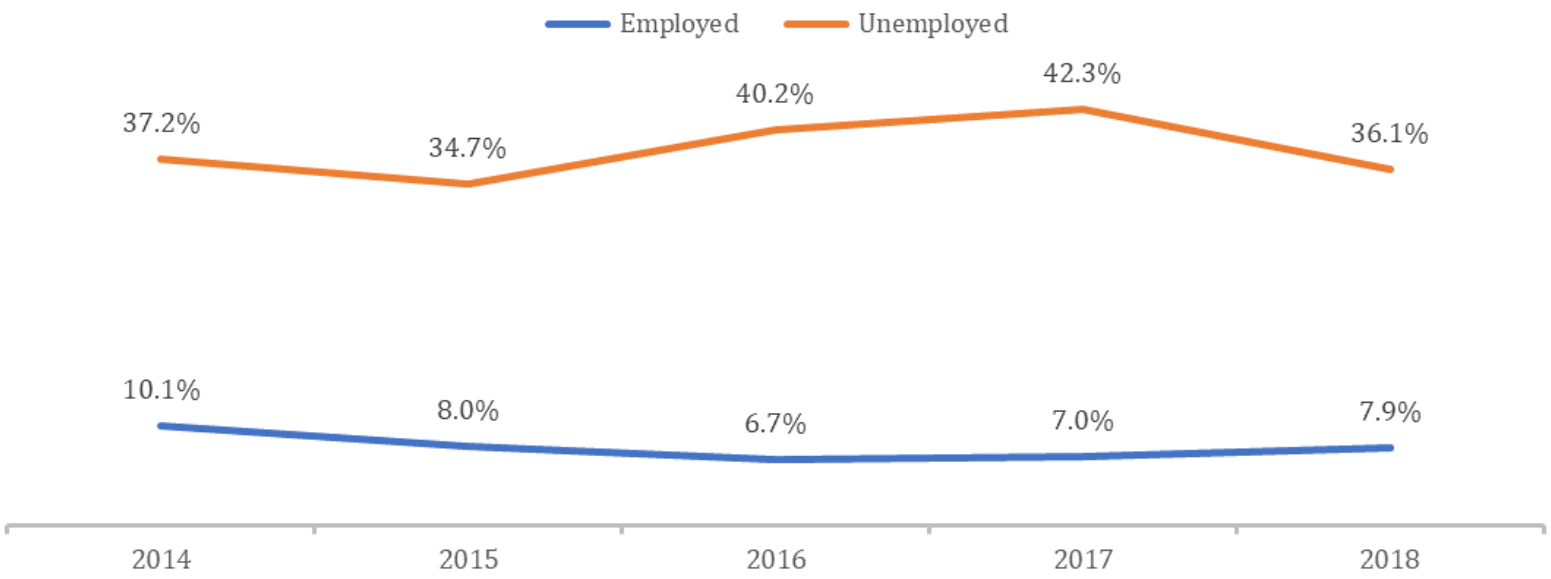
State

7.1% of employed workers lived below the poverty line in 2018

National

6.0% of employed workers lived below the poverty line in 2018

Percentage of Civilian Labor Force 16 Years and Older Living Below the Poverty Line by Employment Status, Davidson County, 2014-2018



S26 Youths Not Employed or in School

Youths who are neither employed nor enrolled in school are sometimes referred to as "idle teens" or "disconnected youth." As individuals who are not productive social participants through either work or education, these youth are at risk of poor social, economic, and health outcomes.

Data Description

This indicator shows the percentage of youths between age 16 and 19 who are not enrolled in school (full- or part-time) and not employed (full- or part-time.)

Data Source

National Kids Count Data Center. (2020). Teens ages 16 to 19 not attending school and not working. Retrieved from: https://datacenter.kidscount.org/data/tables/9292-youth-not-attending-school-and-not-working-by-age-group#detailed/2/44/false/37,871,870,573,869,36,868,867,133,38/4121,4122,4123/18400

County

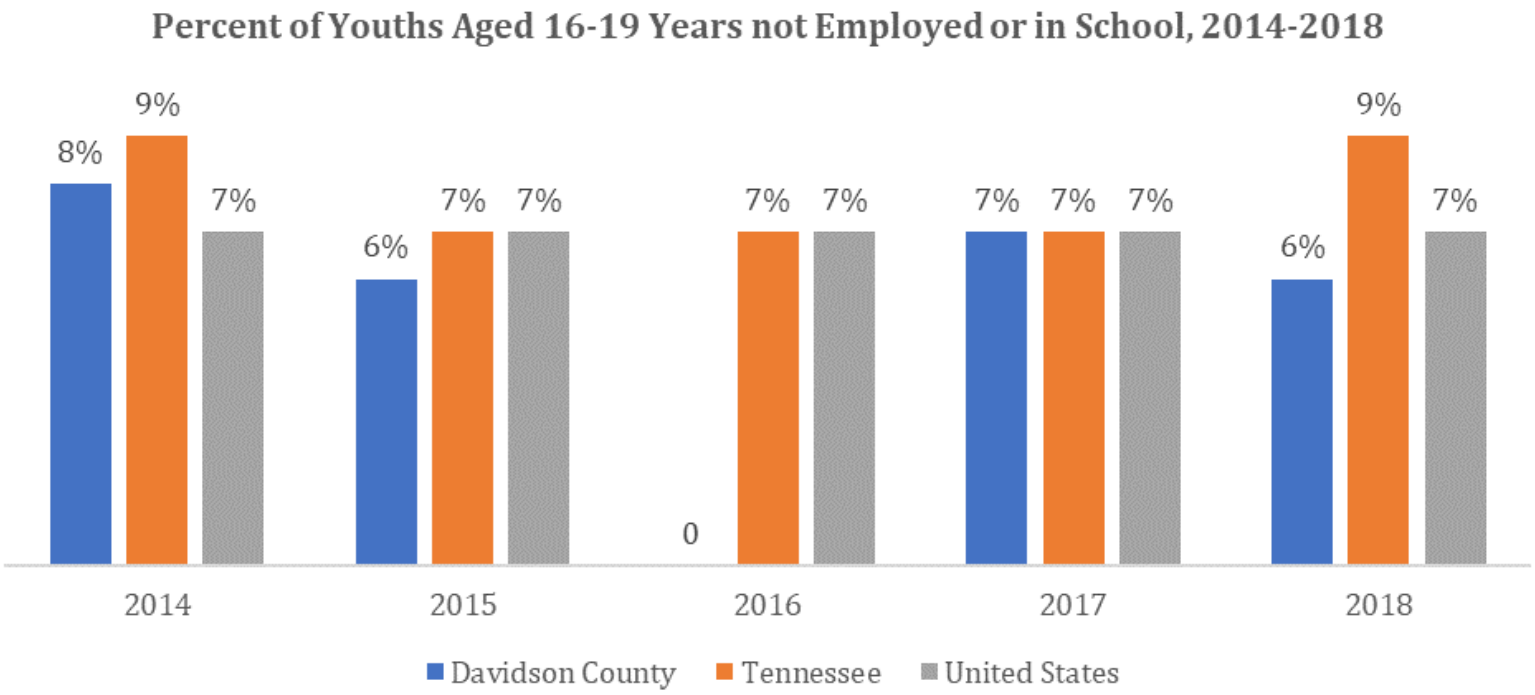
6% of youths not employed or in school in 2018

State

9% of youths not employed or in school in 2018

National

7% of youths not employed or in school in 2018



S27 Housing Occupancy

Housing occupancy is an indicator of the proportion of occupied housing units. Awareness of the level of occupancy helps to shape targeted housing strategy and policy.

Data Description

This indicator shows the percentage of owner-occupied and renter-occupied units that were occupied/not occupied in the past 12 months overall and by census tract in Davidson County.

Data Sources

U.S. Census Bureau (2014-2018). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04. Geography layer from Metro Planning Department.

County

88.7% housing units occupied in 2018

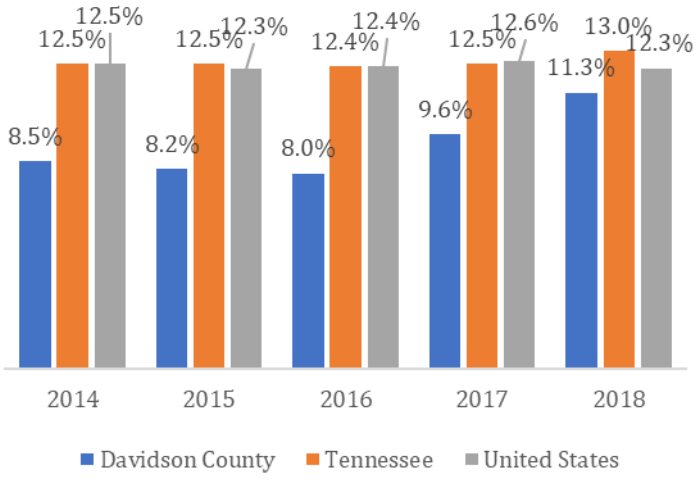
State

87.0% housing units occupied in 2018

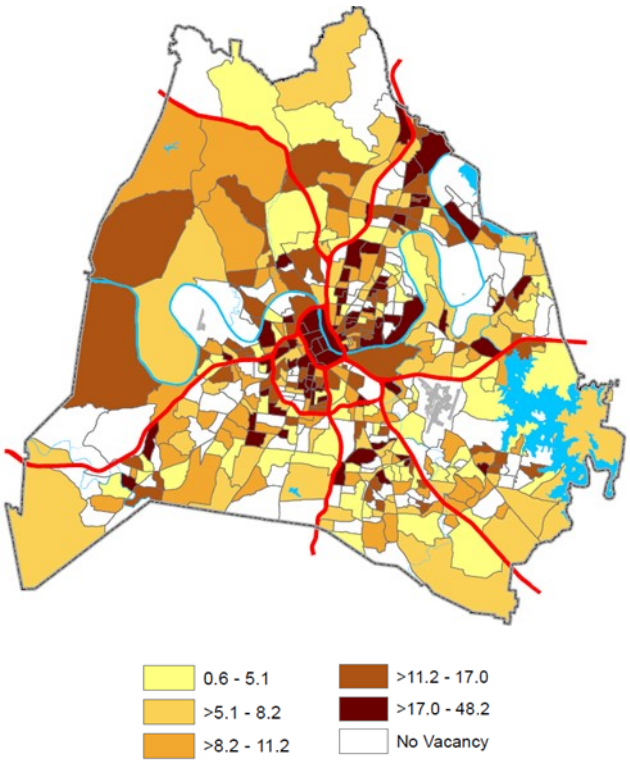
National

87.7% housing units occupied in 2018

Percentage of Housing Units Vacant, 2014-2018



Percentage of Housing Units Vacant by Census Tract, Davidson County, 2014-2018



S28 Household Size

Average household size can reflect personal or cultural preferences or economic choices. A mismatch between household size and the size (square footage and number of bedrooms) of the dwelling can indicate a lack of adequate housing or unmet housing need for either larger or smaller homes. Anticipating changes in the size and composition of households is important for many housing-related issues and associated policies, including the needs of elderly single-person households, intergenerational housing options, and housing types to meet all life cycles.[1]

Data Description

This indicator shows average household size for owner-occupied and renter-occupied units defined as the average number of persons per household.

Data Source

U.S. Census Bureau (2018). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04.

County

2.46 persons for an owner-occupied unit in 2018

2.26 persons per renter-occupied unit in 2018

State

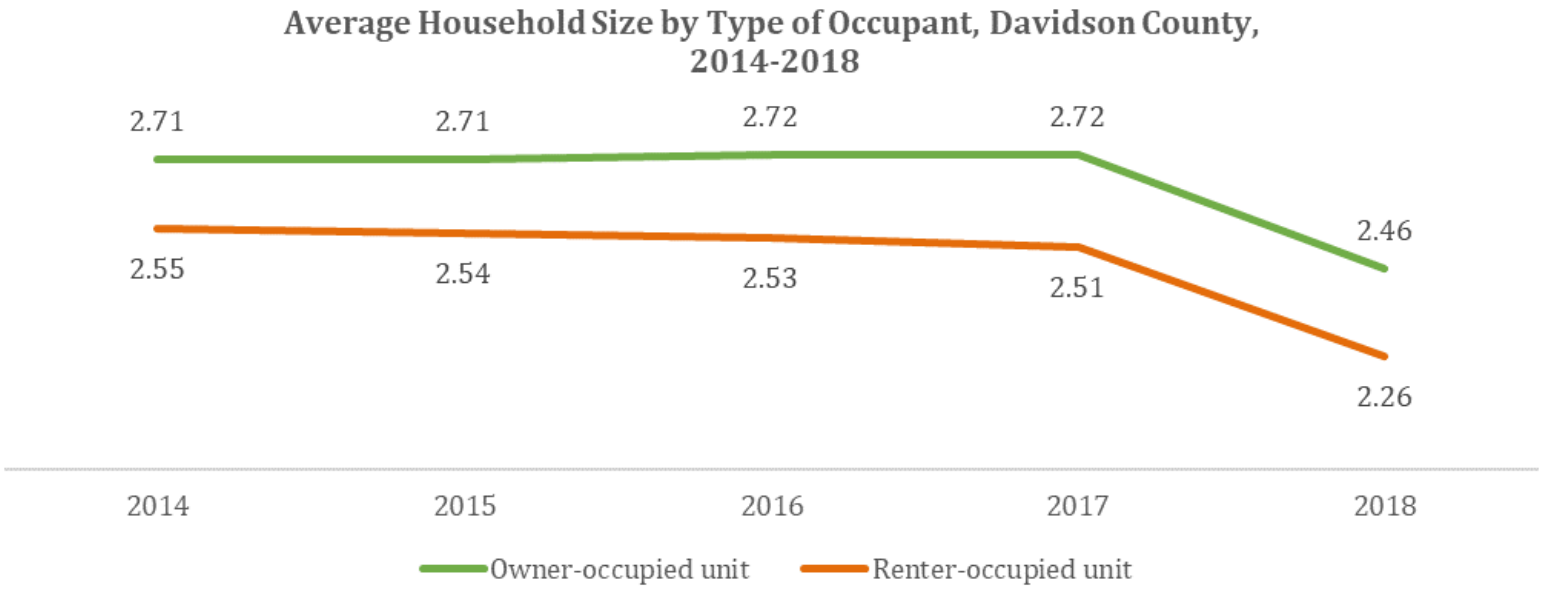
2.71 persons per owner-occupied unit in 2018

2.48 persons per renter-occupied unit in 2018

National

2.61 persons per owner-occupied unit in 2018

2.41 persons per renter-occupied unit in 2018



[1] Housing Data Hub. Retrieved from: https://gpphousing.imspdx.org/average-household-size

S29 Housing Values

Home values can have both positive and negative impacts on a community's health. For homeowners, rising home values can lead to greater equity in one's home, but also increase property taxes which can be detrimental to individuals living on a fixed income. For renters, home value increases may result in properties commanding higher rents, increasing their housing costs, and reducing money left for other expenses.

Data Description

This indicator shows the estimated median home value (in dollars.)

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04.

County

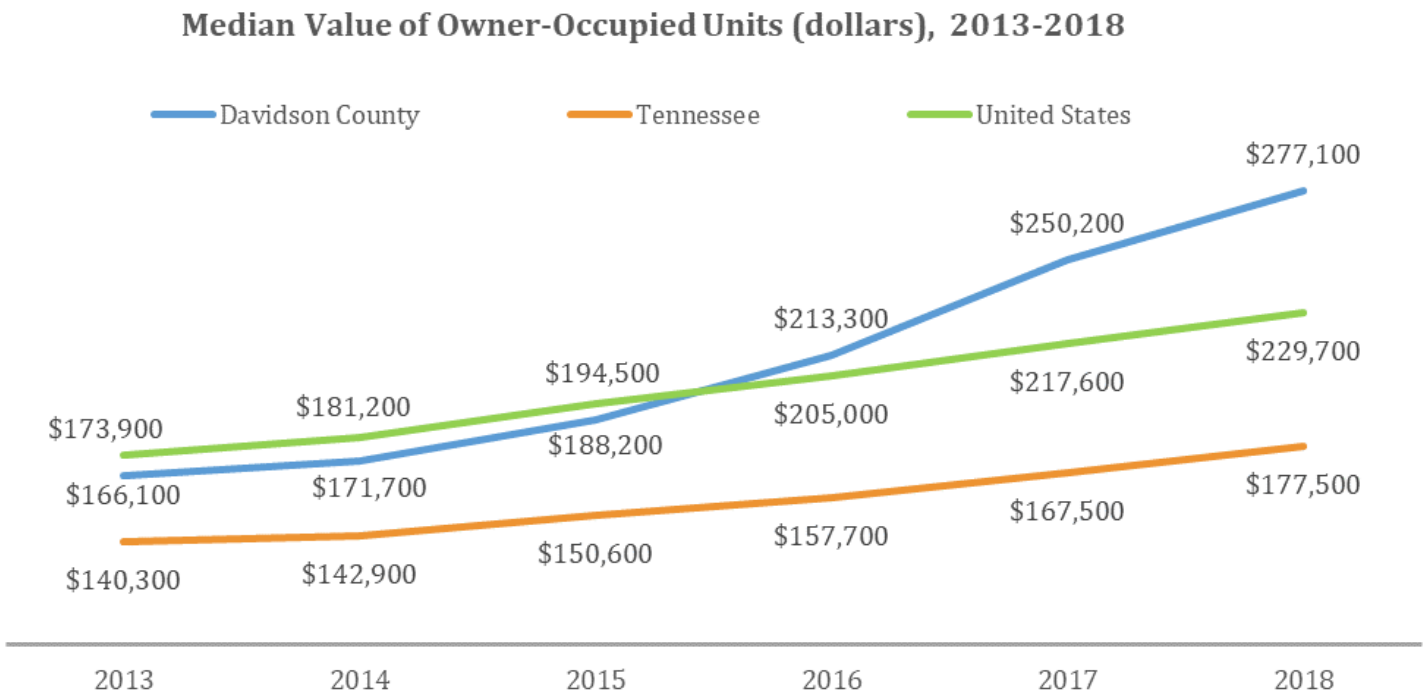
$277,100 median home value in 2018

State

$177,500 median home value in 2018

National

$229,700 median home value in 2018



S30 Median Household Gross Rent

Gross rent provides information on the monthly housing cost expenses for renters. Gross rent is the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else.) [1]

Data Description

This indicator shows the median household gross rent (in dollars.)

Data Source

U.S. Census Bureau (2014-2018). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04

County

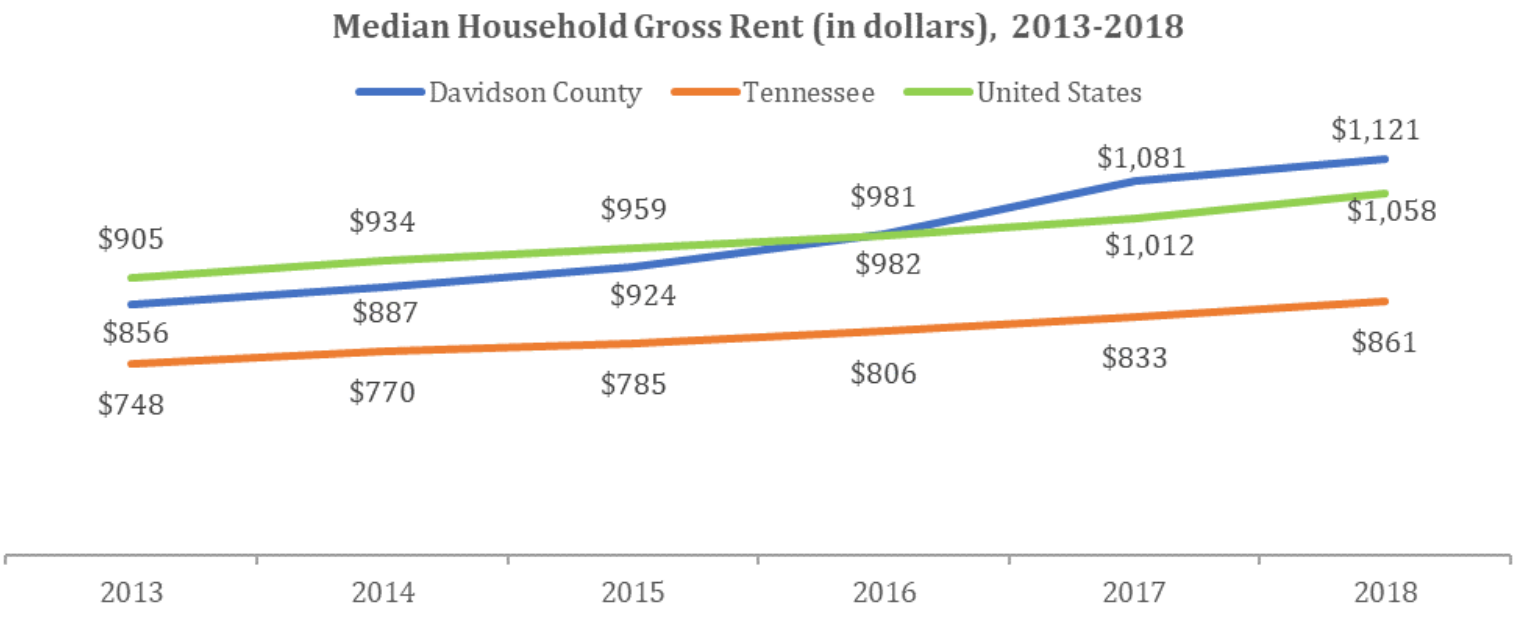
$1,121 median household gross rent in 2018

State

$861 median household gross rent in 2018

National

$1,058 median household gross rent in 2018



[1] U.S. Department of Health and Human Services. (2007). The effects of marriage on health: A synthesis of recent research evidence. ASPE research brief. Retrieved from: http://aspe.hhs.gov/hsp/07/marriageonhealth/index.htm

S31 Fair Market Rent

Fair Market Rent (FMR) serves as an indicator of the affordability of housing in an area. When FMR increases without an increase in income, housing becomes less affordable, particularly for lower-income workers. When households spend a greater percentage of their income on housing, less money is available for other needs, including food, healthcare, and other basic necessities. Further, rising housing costs can displace renters and result in less stable home environments that place additional stress on families.

Data Description

This indicator shows the Fair Market Rent (FMR) for a 2-bedroom unit. FMR is the price for which a property would rent if it were currently available to lease. FMRs are determined by the U.S. Department of Housing and Urban Development (HUD) Office of Policy Development and Research based on a number of factors, including local economic conditions and housing demand.

Data Source

U.S. National Low-Income Housing Coalition (2020). Fair Market Rents. Retrieved from: https://nlihc.org/

County

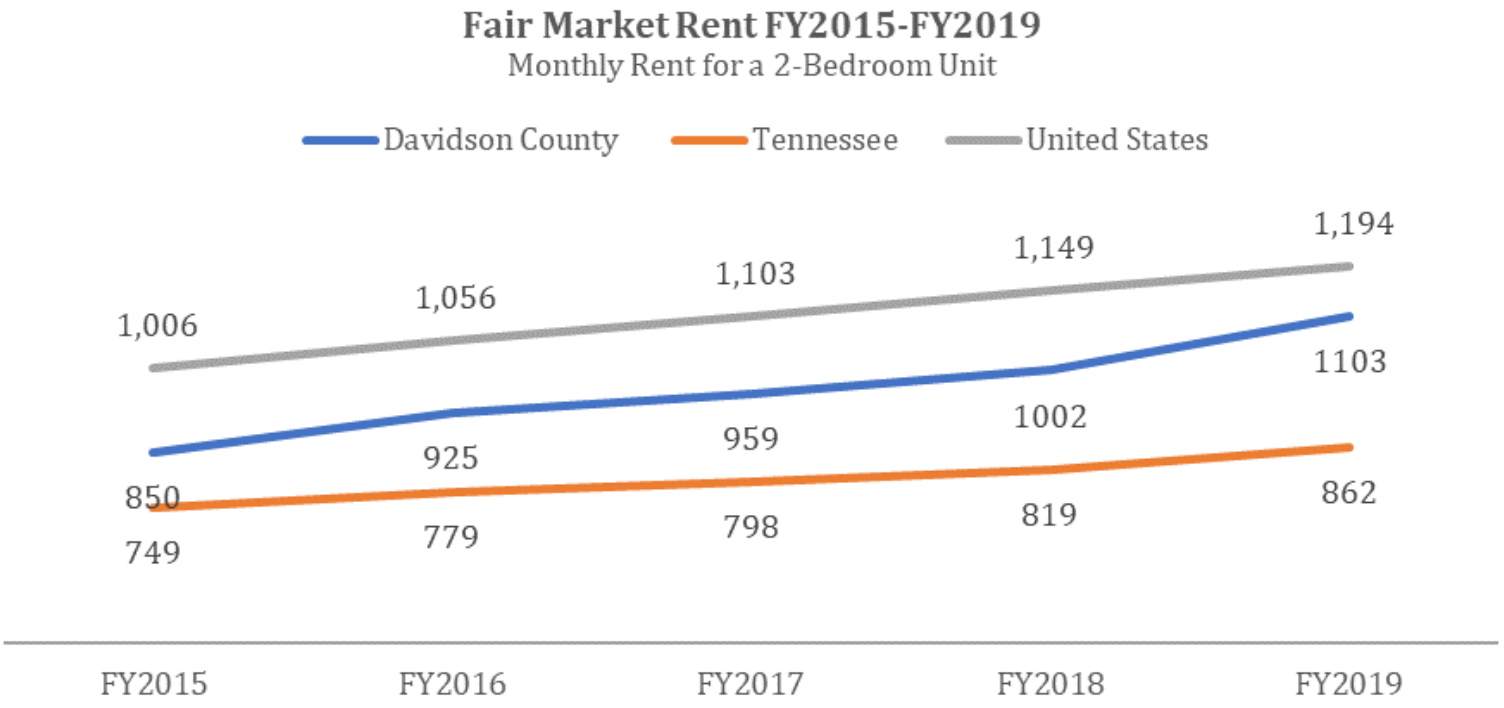
$1,103/month FMR in FY2019

State

$862/month FMR in FY2019

National

$1,194/month FMR in FY2019



S32 Housing Wage Needed to Afford Fair Market Rent

The Housing Wage demonstrates the gap between wages and rents across the country and reveals the growing disparity that low-income renters face. A full-time minimum-wage worker is considered housing cost burdened if she or he cannot afford an apartment without spending more than 30% of his or her income on housing. When households spend a greater percentage of their income on housing, less money is available for other necessities, including food, healthcare, and other basic necessities. Further, rising housing costs can displace renters and result in less stable home environments that place additional stress on families.

Data Description

This indicator shows the Housing Wage, which is the hourly wage a full-time worker must earn to afford a 2-bedroom apartment at Fair Market Rent (FMR) without spending more than 30% of income on rent. FMR is the price for which a property would rent if it were currently available to lease. FMRs are determined by the U.S. Department of Housing and Urban Development (HUD) Office of Policy Development and Research based on several factors, including local economic conditions and housing demand.

Data Source

U.S. National Low-Income Housing Coalition (2020). Fair Market Rents. Retrieved from: https://nlihc.org/

County

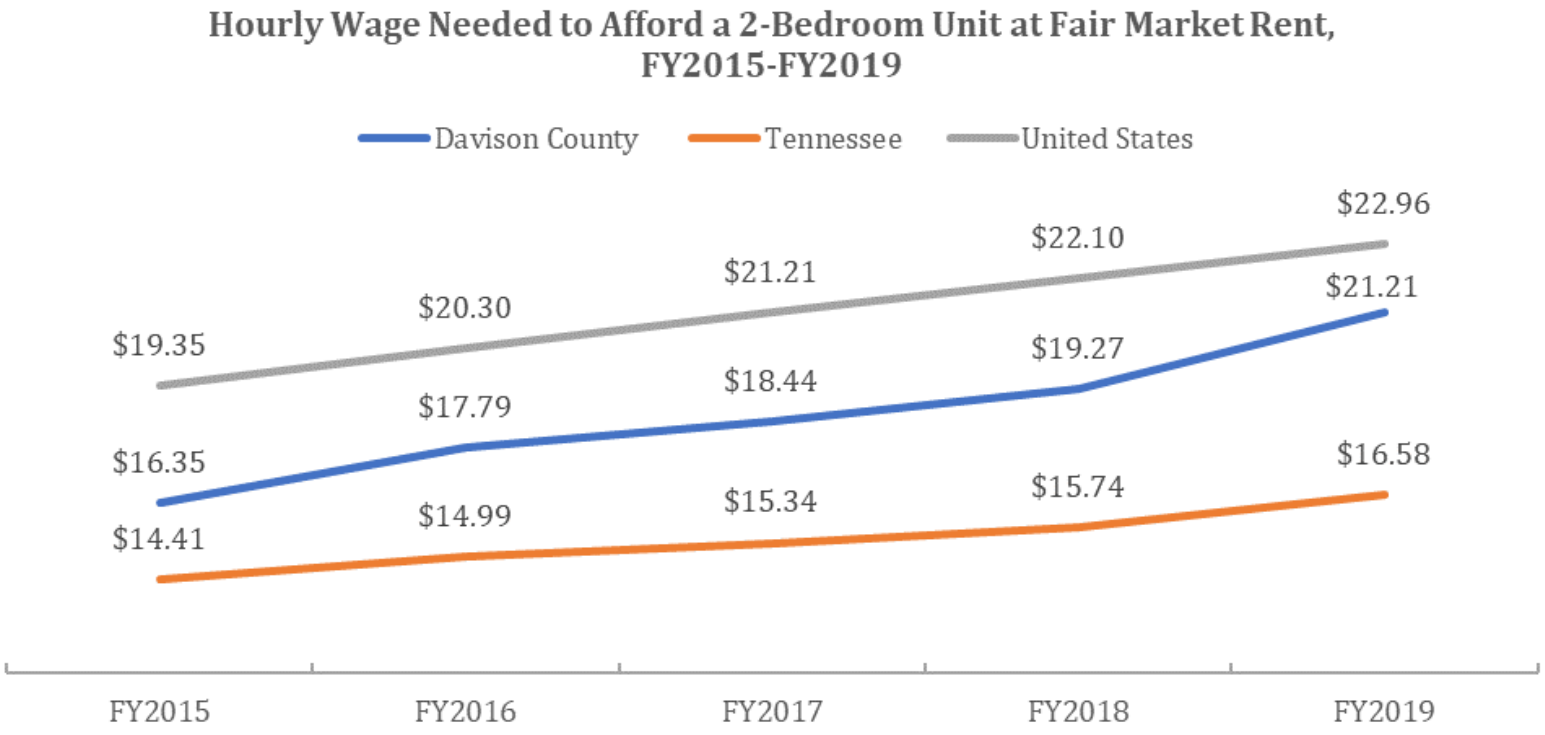
$21.21/hr in FY2019

State

$16.58/hr in FY2019

National

$22.96/hr in FY2019



S33 Cost-Burdened Renters

Households that spend more than 30% of their income on housing costs are considered *cost burdened*. Spending more than 30% of income on housing leaves less income for other expenses, including food, healthcare, and other basic necessities.

Data Description

This indicator shows the percentage of renter households that are cost-burdened, defined as spending more than 30% of their income on housing.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Gross Rent as a Percentage of Household Income, Selected Housing Characteristics, DP04.

County

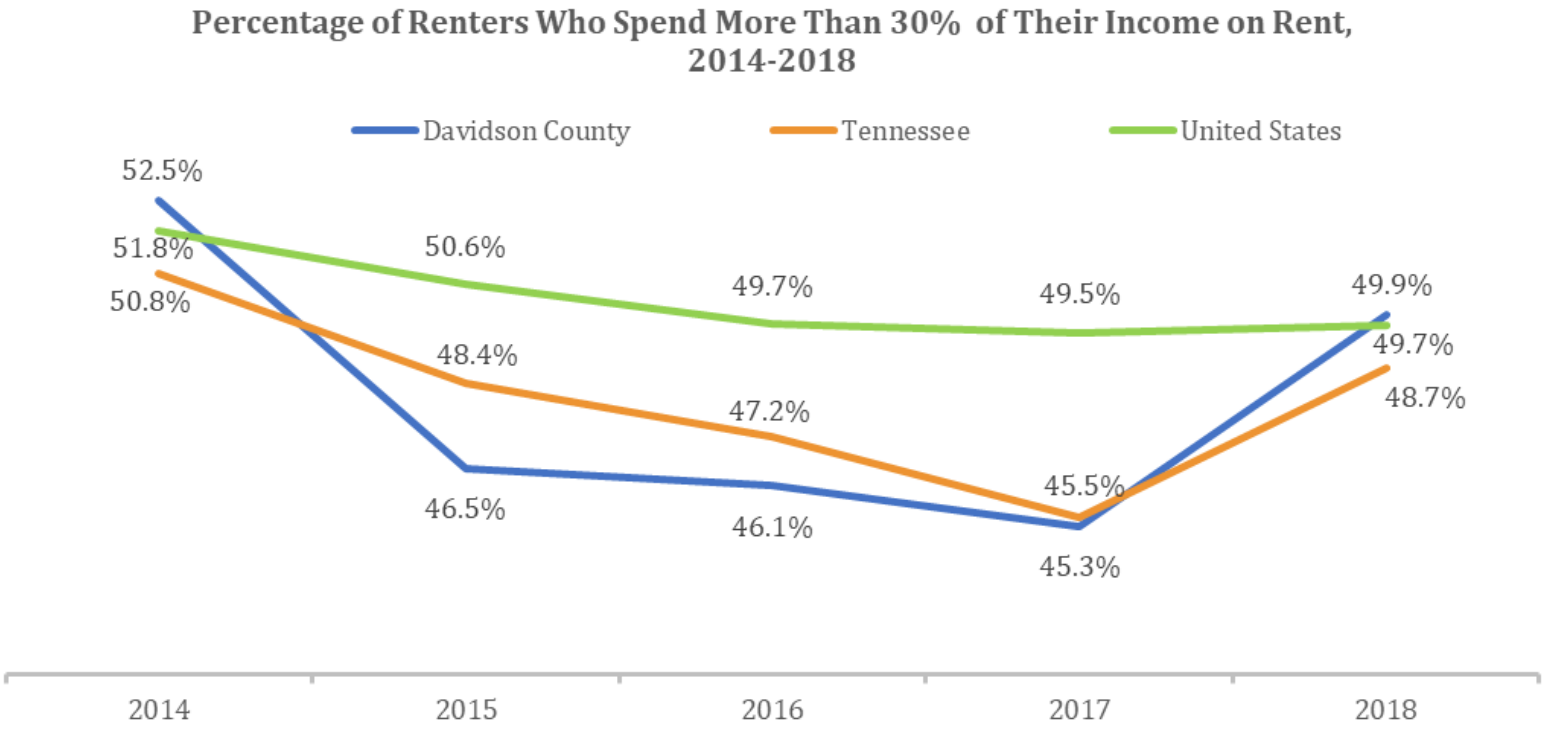
49.9% of renters were cost-burdened in 2018

State

48.7% of renters were cost-burdened in 2018

National

49.7% of renters were cost-burdened in 2018



S34 Building Permits

Building permits are written authorizations issued by a city or county to construct a project. They are required for most construction or remodeling projects, in order to ensure the safety of the work and to protect the health, safety and welfare of residents.

Data Description

This indicator shows the number of building permits by types issued each year in Davidson County from 2010 to 2019.

Data Source

Geography layer from Metro Planning Department.

County

5,985 permits of residential buildings in 2019

279 permits of commercial building in 2019

Types of Building Permits Issued, Davidson County, 2010-2019

Year Issued	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Building Commercial - Addition	3	7	7	10	12	12	21	36	12	14
Building Commercial - New	16	23	29	26	34	37	60	102	92	139
Building Commercial - Rehab	2	17	18	10	19	61	100	104	92	91
Building Commercial - Shell	3	1	1	2	4	16	24	29	39	35
All Commercial	**24**	**48**	**55**	**48**	**69**	**126**	**205**	**271**	**235**	**279**
Building Residential - Addition	51	70	79	115	591	1,016	1,016	1,041	1,083	1,130
Building Residential - New	850	866	1,150	1,629	2,466	3,785	3,793	3,670	3,510	3,826
Building Residential - Rehab	97	121	171	188	829	1,107	1,116	1,119	1,165	1,029
Building Residential - Shell	0	0	3	6	13	8	27	7	2	0
All Residential	**998**	**1,057**	**1,403**	**1,938**	**3,899**	**5,916**	**5,952**	**5,837**	**5,760**	**5,985**
Total	**1,022**	**1,105**	**1,458**	**1,986**	**3,968**	**6,042**	**6,157**	**6,108**	**5,995**	**6,264**

S35 Household Structure

Household structure impacts individual health outcomes. Married people are generally healthier than unmarried people.[1] Children who grow up in single-parent households typically have fewer resources compared to those in two-parent households. In single-parent households, both adults and children are at a higher risk for adverse health effects than those from two-parent households, including emotional and behavioral problems.[2]

Data Description

This indicator shows the number of households by household type, average household size, and average family size in Davidson County., using U.S. Census Bureau standard definitions.

Data Source

U.S. Census Bureau. (2014, 2018). American Community Survey, 1–year estimates. Selected Social Characteristics in the United States, Table DP02.

Household Structure in Davidson County in 2014 and 2018

	2014	2018
Total households	**267,952**	**283,445**
Family households (families)	153,161	159,825
With own children under 18 years	71,904	68,429
Married-couple family	101,831	108,872
With own children under 18 years	42,318	41,700
Male householder, no wife present, family	10,573	12,156
With own children under 18 years	4,754	5,454
Female householder, no husband present, family	40,757	38,797
With own children under 18 years	24,832	21,275
Nonfamily households	114,791	123,620
Householder living alone	90,351	90,200
65 years and over	23,019	25,896
Households with one or more people under 18 years	79,610	77,449
Households with one or more people 65 years and over	54,592	63,369
Average household size	2.41	2.37
Average family size	3.14	3.03

[1]U.S. Department of Health and Human Services. (2007). The effects of marriage on health: A synthesis of recent research evidence. ASPE research brief. Retrieved from: http://aspe.hhs.gov/hsp/07/marriageonhealth/index.htm

[2] HealthyNashville.org. (2014). Single-parent households. Retrieved from: http://www.healthynashville.org/modules.php?op=mod-load&name=NS-Indicator&file=indicator&iid=8413191

Social Determinants of Health Inequity

2021 Community Health Profile
Metro Public Health Department

Social determinants of health (SDOH) are conditions and environments in which people live, and include the social, economic, and physical environments, all of which can have a significant influence on health and well-being. The social environment refers to patterns of social engagement and feelings of security and well-being, which can be affected by the places where people interact and live. The economic environment refers to the availability of resources that can enhance the quality of life, and the physical environment refers to the conditions of the neighborhoods, schools, workplaces, and other material surroundings. Examples of SDOH include safe and affordable housing, access to education, public safety, availability of healthy foods, access to health care services, social norms and attitudes, and opportunities for recreational and leisure-time activities.[1]

The conditions in which people live explain in part why some people are healthier than others, and why public health and its partners are striving to create social, physical, and economic environments that promote good health for all. Addressing social determinants of health is not only important for improving overall health, but also for reducing health disparities that are often linked to social and economic disadvantages.

Section Highlights

- The county's violent crime rate declined from 1,191 victims/100,000 residents in 2014 to 1,149 victims/100,000 in 2018. (Indicator SD1)
- The percentage of children in single family households declined from 42.5% in 2014 to 39.7% in 2017 and increased to 43.4% in 2018. Between 2014 and 2018 this percentage was consistently higher for TN and the U.S. (Indicator SD2)
- The number of people experiencing homelessness increased by 9.3% from 2,154 in 2015 to 2,356 in 2016 and then declined by 15.7% to 1,986 in 2019. (Indicator SD4).
- In 2018, 1.6% of Davidson County workers used public transportation, 0.1% biked and 2.9% walked to work. On average they spent 24.5 minutes daily commuting to work. (Indicators SD7-SD8)
- In 2015, 21.9% of Davidson County residents had low access to healthy food. (Indicator SD9)
- In 2017, 30% of children who were food insecure were likely also ineligible to receive public assistance. (Indicator SD16)
- 33% Davidson County residents lived within 0.5 mile of a park in 2019. (Indicator SD19)

[1] Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed June 12, 2020. Available from: https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health.

SD1 Violent Crime Rate

A violent crime is one in which the offender threatens or uses violent force upon a victim. In addition to physical harm, violence has negative impacts on communities that include reducing productivity, decreasing property values, and disrupting social services.

Data Description

This indicator shows the violent crime rate defined as the number of violent crime victims per 100,000 population. Violent crimes include homicide, forcible rape, robbery, and aggravated assault.

Data Source

Tennessee Bureau of Investigation (2019). Crime in Tennessee.
Retrieved from: https://www.tn.gov/content/tn/tbi/divisions/cjis-division/recent-publications.html

United Health Foundation (2019). America's Health Rankings.
Retrieved from: https://www.americashealthrankings.org/explore/annual/measure/Crime/state/ALL

U.S. Department of Justice (2019). Criminal Victimization. Bureau of Justice Statistics Bulletin.
Retrieved from: https://www.bjs.gov/index.cfm?ty=pbse&sid=6

County

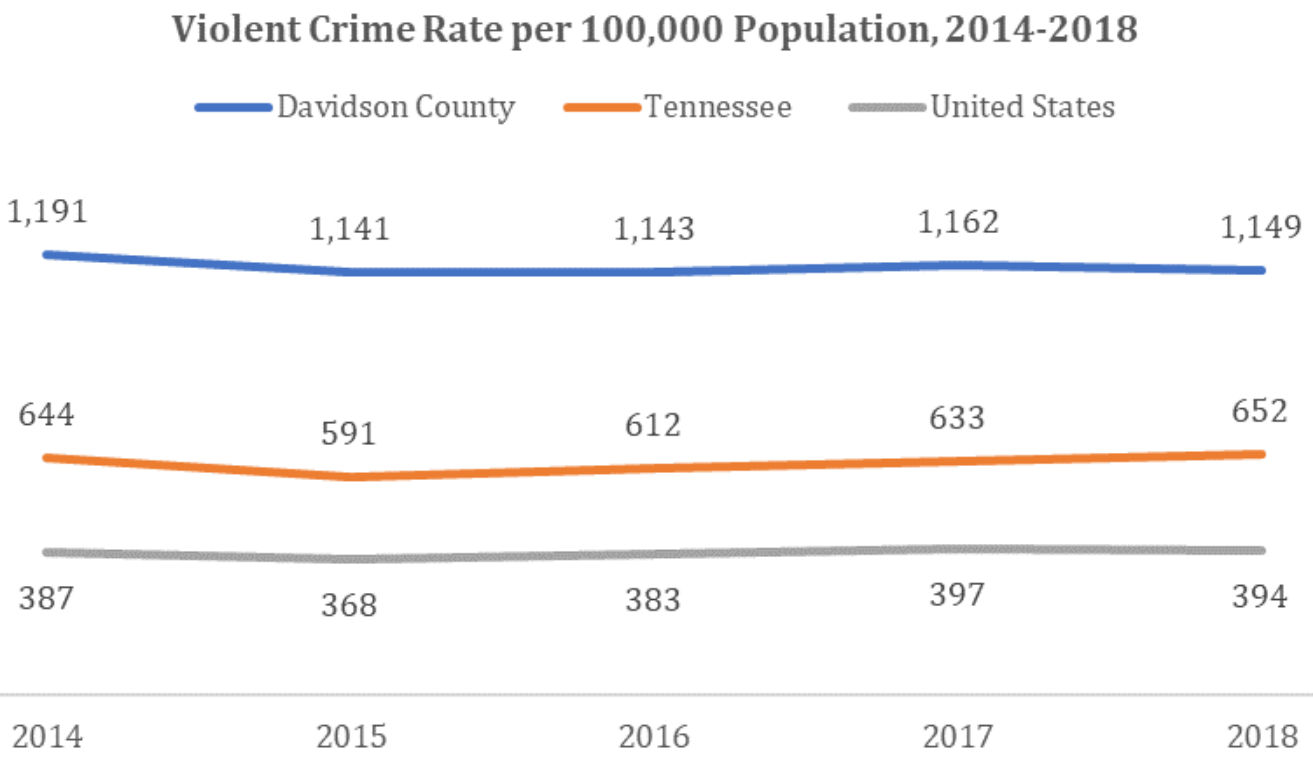
1,149/100,000 in 2018

State

652/100,000 in 2018

National

394/100,000 in 2018



SD2 Children in Single-Parent Households

Adults and children in single-parent households are at a higher risk for adverse health effects, such as emotional and behavioral problems, compared to their peers. Children in such households are more likely to develop depression, smoke, and abuse alcohol and other substances. Consequently, these children experience increased risk of morbidity and mortality of all causes. Similarly, single parents suffer from lower perceived health and higher risk of mortality.

Data Description

This indicator shows the percentage of children under 18 years living in single-parent households. Single-parent households include cohabitating couples, but do not include children living with married stepparents or living in group quarters.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Age of Own Children Under 18 Years in Families and Subfamilies by Living Arrangements by Employment Status of Parents, Table C23008.

County

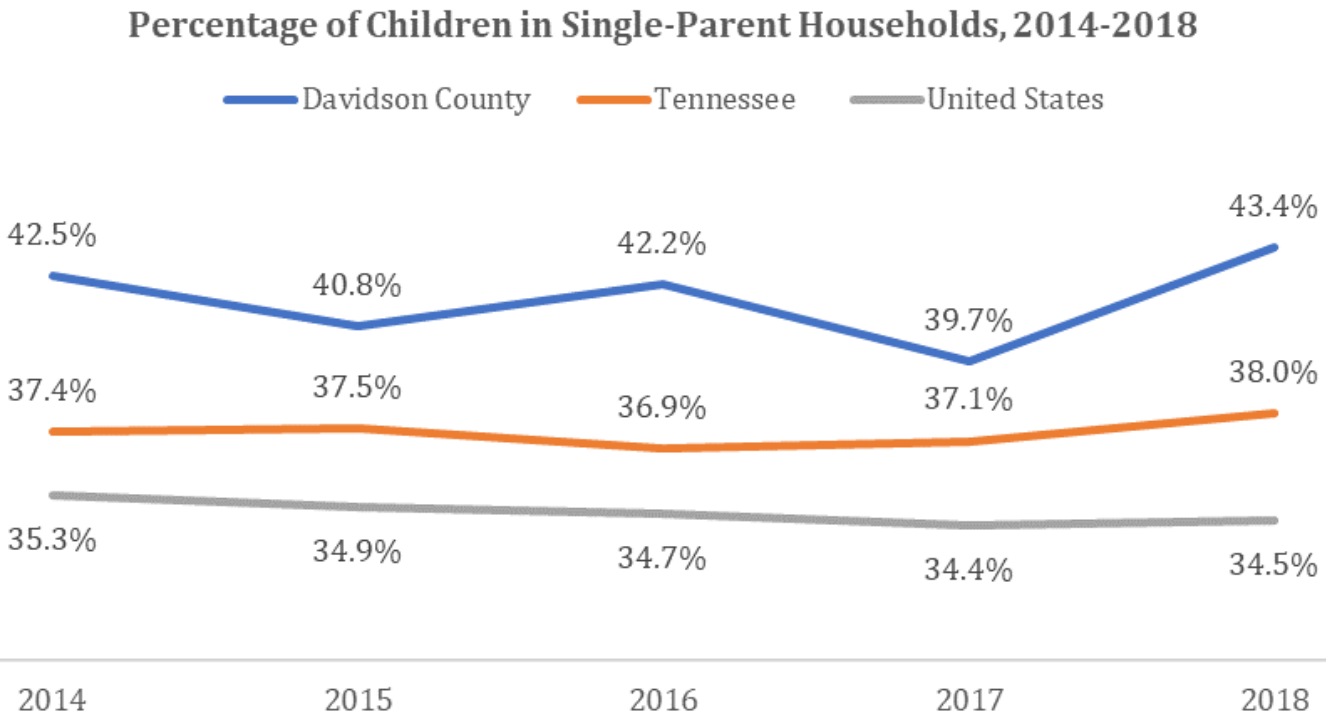
43.4% of children in 2018

State

38.0% of children in 2018

National

34.5% of children in 2018



SD3 Grandparents Raising Grandchildren

When grandparents take on the responsibility for raising their own grandchildren it is typically unplanned and out of necessity because the parents are unable or unwilling to care for their children. Grandparents may face financial, health, housing, or work challenges that impede their ability to effectively care for their grandchildren, and may require additional supports, resources, and services.

Data Description

This indicator reports the percentage of grandparents responsible for raising their own grandchildren.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey, 1–year estimates. Selected Social Characteristics in the United States, Table DP02.

County

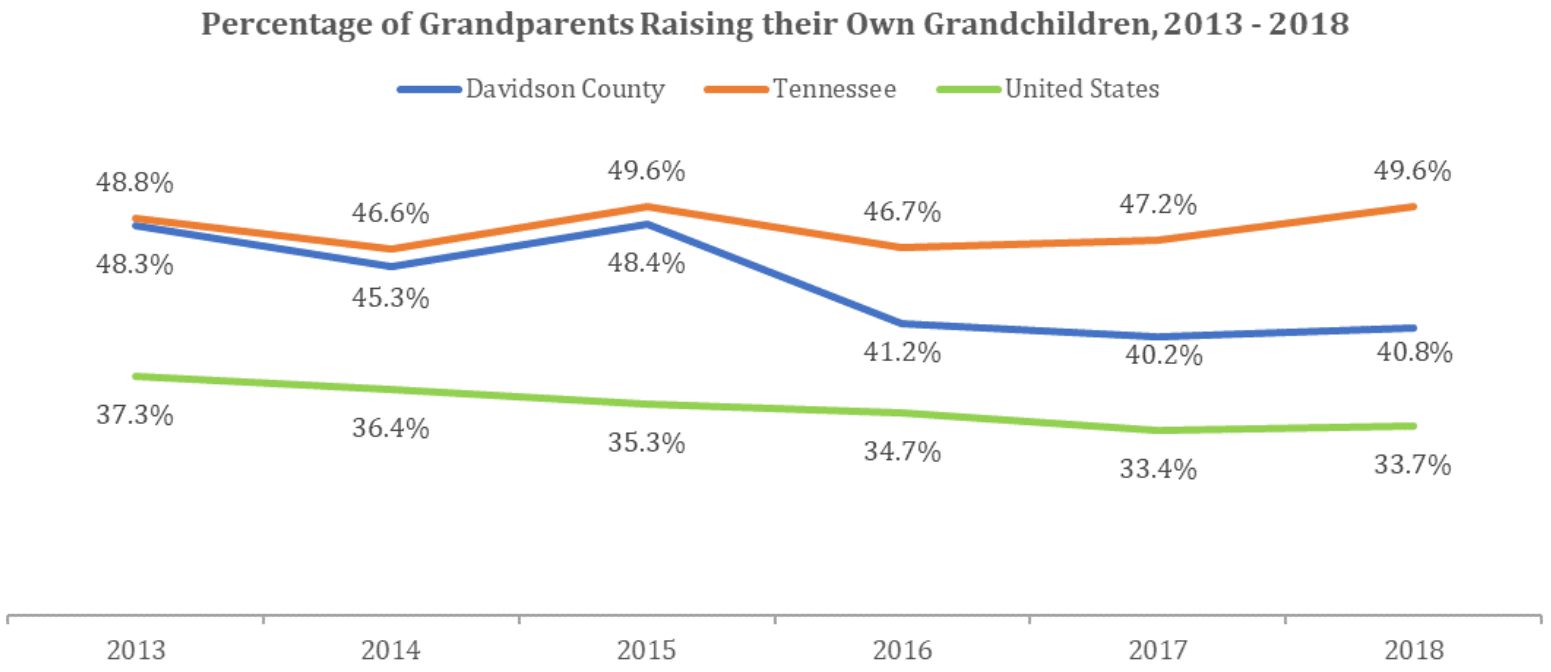
40.8% of grandparents in 2018

State

49.6% of grandparents in 2018

National

33.7% of grandparents in 2018



SD4 Homelessness

Homelessness is associated with poor health. People experiencing homelessness are 3 to 6 times more likely to become ill, and 3 to 4 times more likely to die. They also have difficulty with basic hygiene, first aid, and good nutrition, as well as treating chronic or long-term conditions. Homelessness can also make accessing health care more difficult. The average life expectancy of the homeless population is estimated between 42 and 52 years, compared to 78 years in the general population. According to the National Coalition for the Homeless, housing is the first form of treatment for homeless people with medical problems.[1]

Data Description

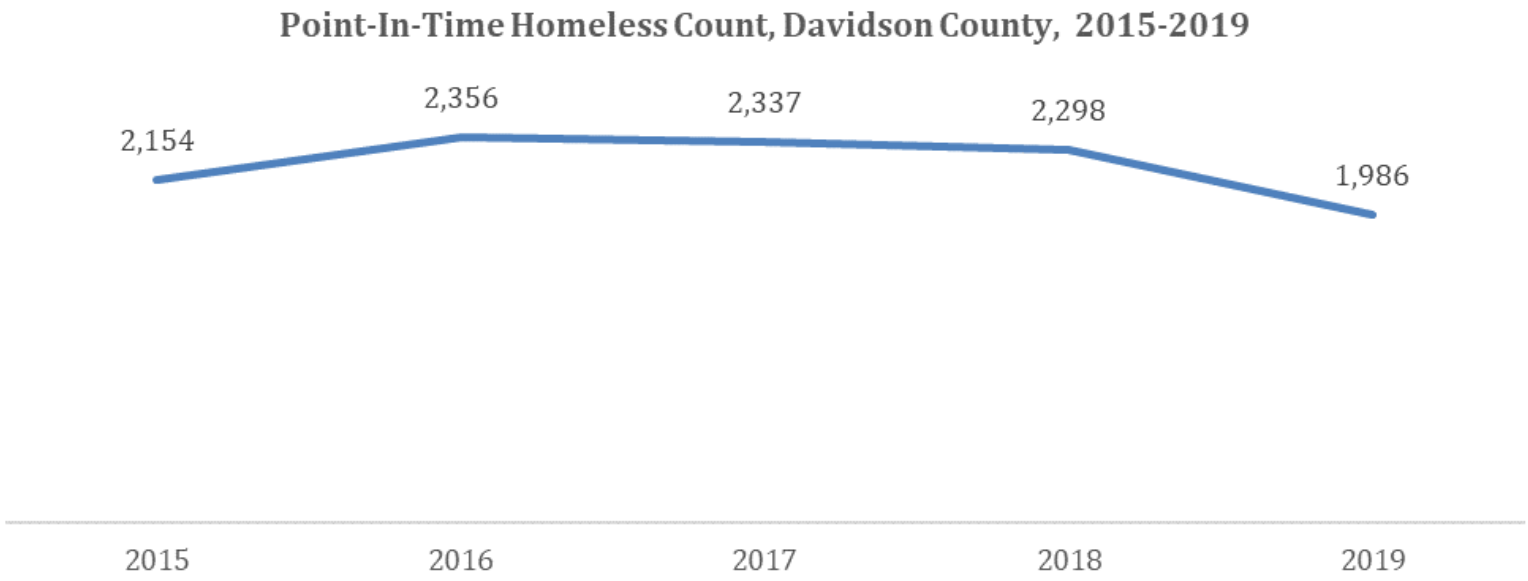
This indicator shows the total number of people experiencing homelessness, both on the street and in shelters, at a single point-in-time in January. Larger municipalities are required by the U.S. Department of Housing and Urban Development to conduct an annual point-in-time count. Volunteers scan the streets for an outdoor count and collect data from local shelters during the same night. A point-in time count should be considered a conservative estimate of the number of people experiencing homelessness annually, as it does not capture the total number of persons who experience homelessness at some time in a given year.

Data Source

Metro Government of Nashville and Davidson County, Tennessee (2020). About Homelessness. Retrieved from: http://www.nashville.gov/Social-Services/Homelessness-Commission/About-Homelessness.aspx

County

1,986 people homeless in 2019



[1] National Coalition for the Homeless. (2009). Health care and the homeless. http://www.nationalhomeless.org/factsheets/health.html

SD5 Availability of Public Transportation

Public transportation provides an alternative to driving, particularly for people without access to a car. Public transportation benefits the environment by reducing gas consumption, air pollution, and traffic congestion. It also provides opportunities for social interaction and walking or biking to and from transit stops.

Data Description

This indicator shows bus routes in Davidson County and the percentage of people living within ¼ mile of a transit stop. It represents only geographic distance to transit stops, and does not reflect the quality and condition of those stops, nor the frequency of buses at those stops, which are also important aspects of transit access.

Data Source

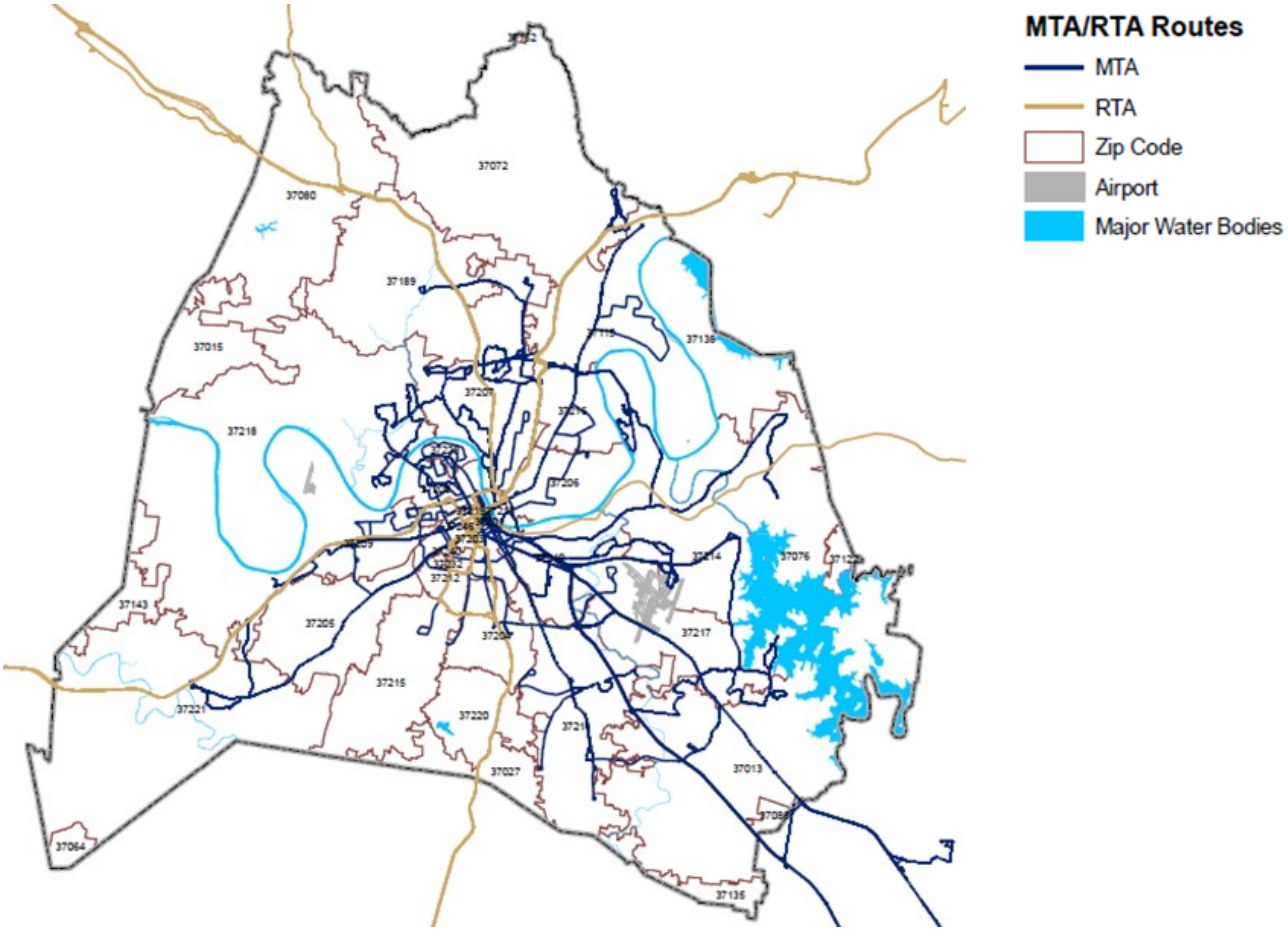
Geography layer from Metro Planning Department. Percentage calculated in ArcGIS using residential properties and Metro Transit Authority Bus Stops layers from Metro Planning Department.

County

47 WeGo Bus Lines

37% of residents live within 1/4 mile of a transit stop

Nashville Metro Transit Authority Bus Lines



SD6 Households without a Vehicle

While some households choose not to own a private automobile, others do not have a vehicle due to other reasons, including the high cost of ownership. Not having access to a vehicle can sometimes result in economic disadvantages. It is important to improve transportation accessibility for these households. Reliable transportation provides access to jobs, goods, services, social events, and healthcare.

Data Description

This indicator shows the percentage of households without access to a private vehicle in the past 12 months.

Data Source

U.S. Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Housing Characteristics, Table DP04.

County

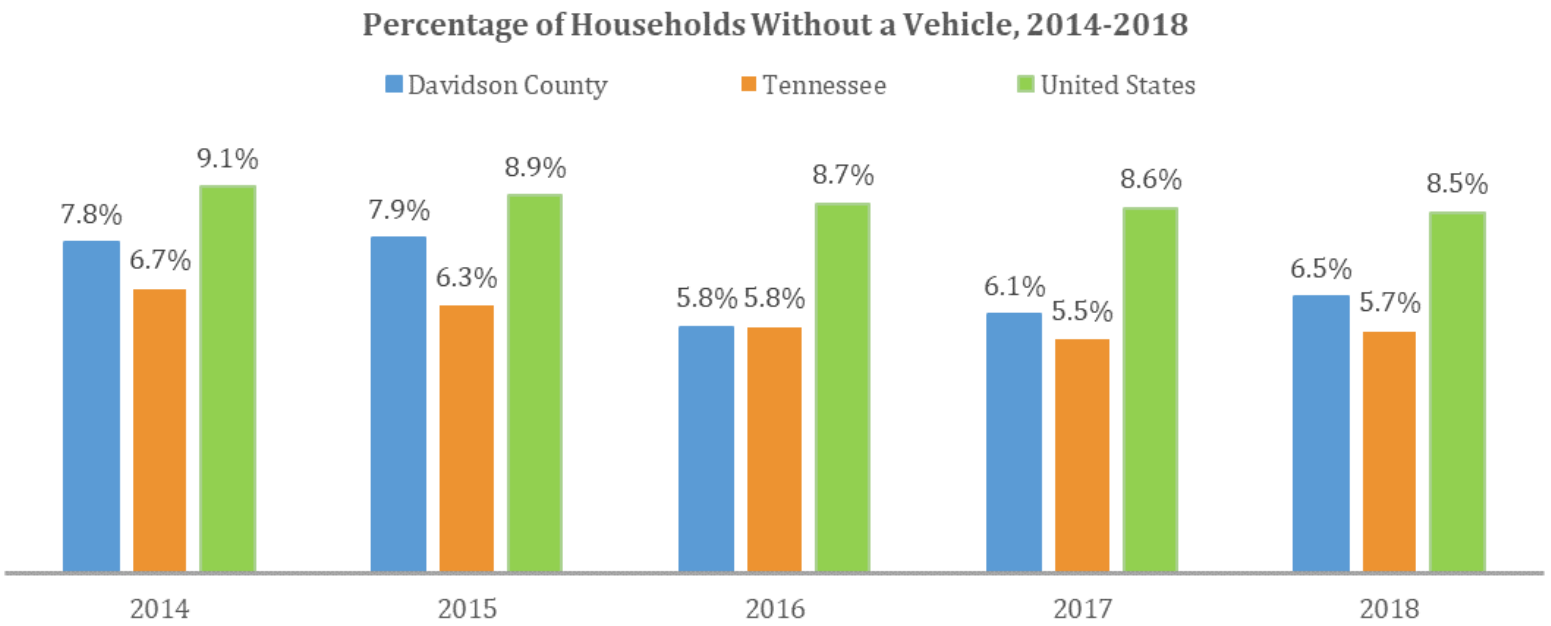
6.5% without access to a vehicle in 2018

State

5.7% without access to a vehicle in 2018

National

8.5% without access to a vehicle in 2018



SD7 Public Transportation to Work

Public transportation provides an alternative to driving to work and is, particularly important for people without access to a car. Public transportation benefits the environment by reducing gas consumption, air pollution, and traffic congestion. It also provides opportunities for social interaction and walking or biking to and from transit stops.

Data Description

This indicator shows the percentage of workers aged 16 years and over who commute to work by type of transportation.

Data Source

U.S Census Bureau. (2014–2018). American Community Survey 1-yr estimates. Selected Economic Characteristics; Table DP03. Means of Transport to Work; Tables B08101.

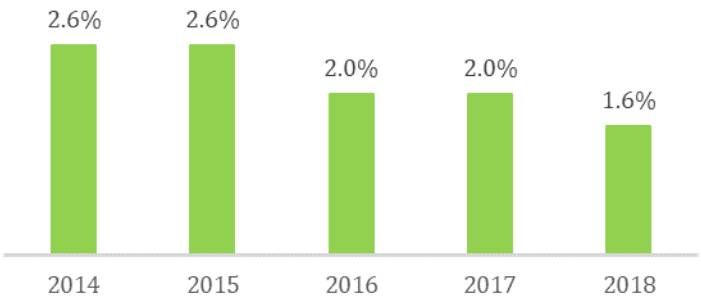
County

1.6% of workers took public transportation to work in 2018

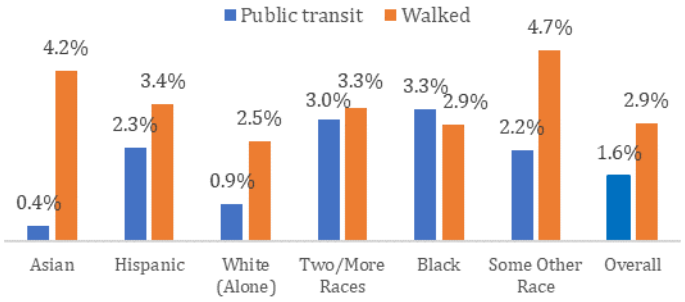
Benchmark

5.5% Healthy People 2020 Target

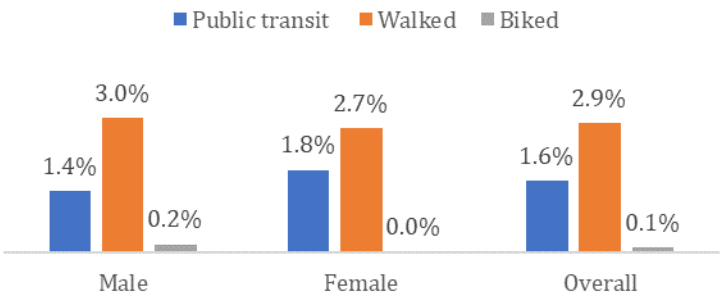
Percentage of Workers Who Took Public Transit to Work, Davidson County, 2014-2018



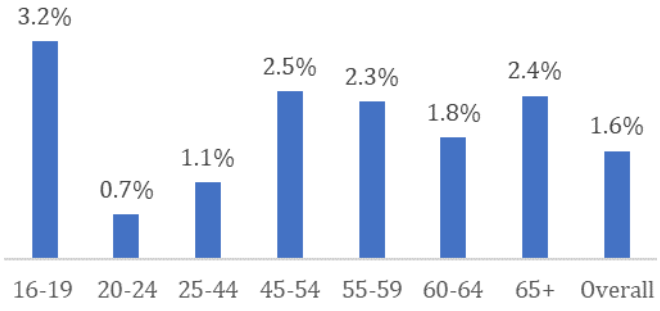
Percentage of Workers Who Walked or Took Public Transit to Work by Race, Davidson County, 2018



Percentage of Workers Who Walked, Biked or Took Public Transit to Work by Sex, Davidson County, 2018



Percentage of Workers Who Took Public Transit to Work by Age, Davidson County, 2018



SD8 Daily Commuting Time

Travel time to work refers to the total number of minutes that it usually took the person to get from home to work each day during the reference week. The elapsed time includes time spent waiting for public transportation, picking up passengers in carpools, and time spent in other activities related to getting to work.[1]

Data Description

This indicator shows the mean travel time (in minutes) to work by workers aged 16 years and over who commute to work.

Data Source

U.S Census Bureau. (2014–2018). American Community Survey 1-yr estimates. Selected Economic Characteristics; Table DP03.

County

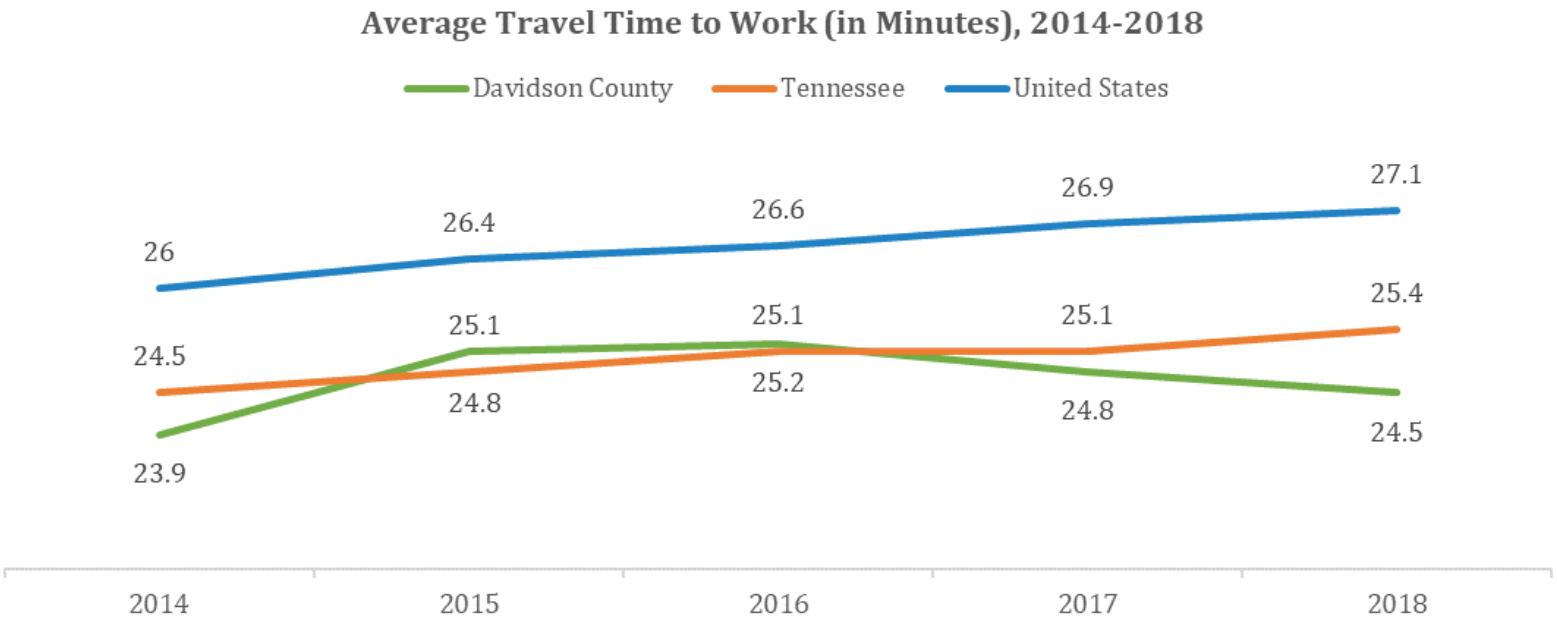
24.5 minutes average time to work in 2018

State

25.4 minutes average time to work in 2018

National

27.1 minutes average time to work in 2018



[1] US Census Bureau. https://www.census.gov/quickfacts/fact/note/US/LFE305218 Accessed 1/23/2020

SD9 Access to Healthy Food

The accessibility, availability, and affordability of healthy and varied food options in the community increase the likelihood that residents will have a balanced and nutritious diet. A diet composed of nutritious foods, in combination with an active lifestyle, can reduce the incidence of heart disease, cancer, and diabetes, and is essential to maintain a healthy body weight and prevent obesity. Low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus are more likely to consume foods which are readily available at convenience stores and fast-food outlets.

Data Description

This indicator shows the percentage of the population with low access to healthy food defined as living more than one mile from a supermarket or large grocery store if in an urban area, or more than 10 miles from a supermarket or large grocery store if in a rural area.

Data Source

U.S. Department of Agriculture (2017). Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx

County

21.9% of the population with low access to healthy food in 2015

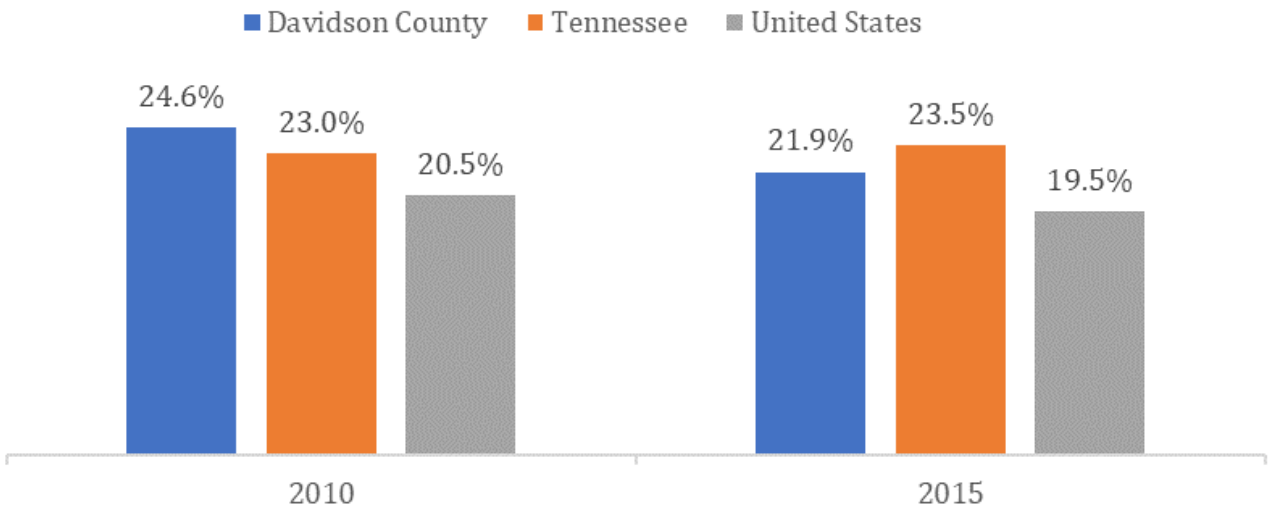
State

23.5% of the population with low access to healthy food in 2015

National

19.5% of the population with low access to healthy food in 2015

Percentage of Population with Low Access to Healthy Food, 2010 and 2015



SD10 Access to Healthy Food among Low-Income Population

Low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast food outlets.

Data Description

This indicator shows the percentage of low-income population that are living more than one mile from a supermarket or a large grocery store if in an urban area, and more than 10 miles from a supermarket or large grocery store if in a rural area.[26]

Data Source

U.S. Department of Agriculture (2017). Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx

County

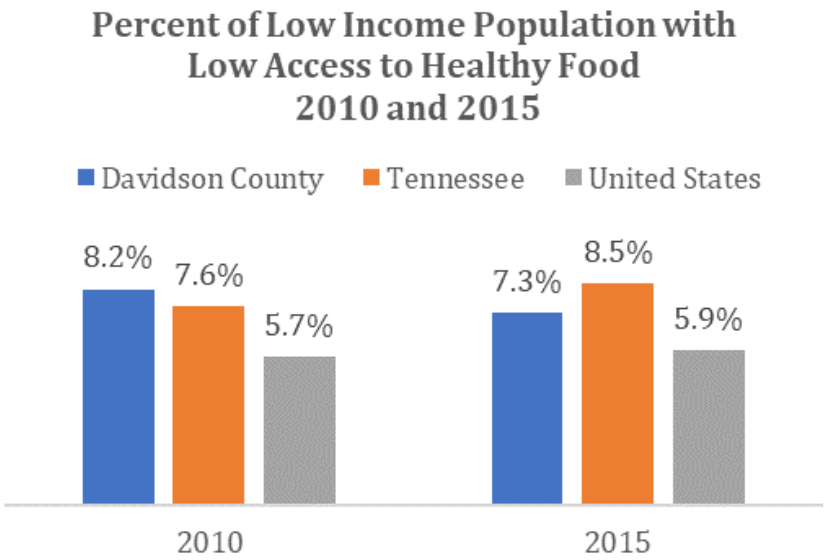
7.3% of population with low access to healthy food in 2015

State

8.5% of population with low access to healthy food in 2015

National

5.9% of population with low access to healthy food in 2015



[26] Food Environment Atlas Data Documentation. Retrieved from: https://www.ers.usda.gov/webdocs/DataFiles/80526/archived_documentation_August2015.pdf?v=0

SD11 Access to Healthy Food by Geography

The accessibility, availability, and affordability of healthy is not evenly distributed across geographies. Low-income and underserved areas often have limited numbers of stores that sell healthy foods. People living farther away from grocery stores are less likely to access healthy food options on a regular basis and thus more likely to consume foods which are readily available at convenience stores and fast-food outlets.

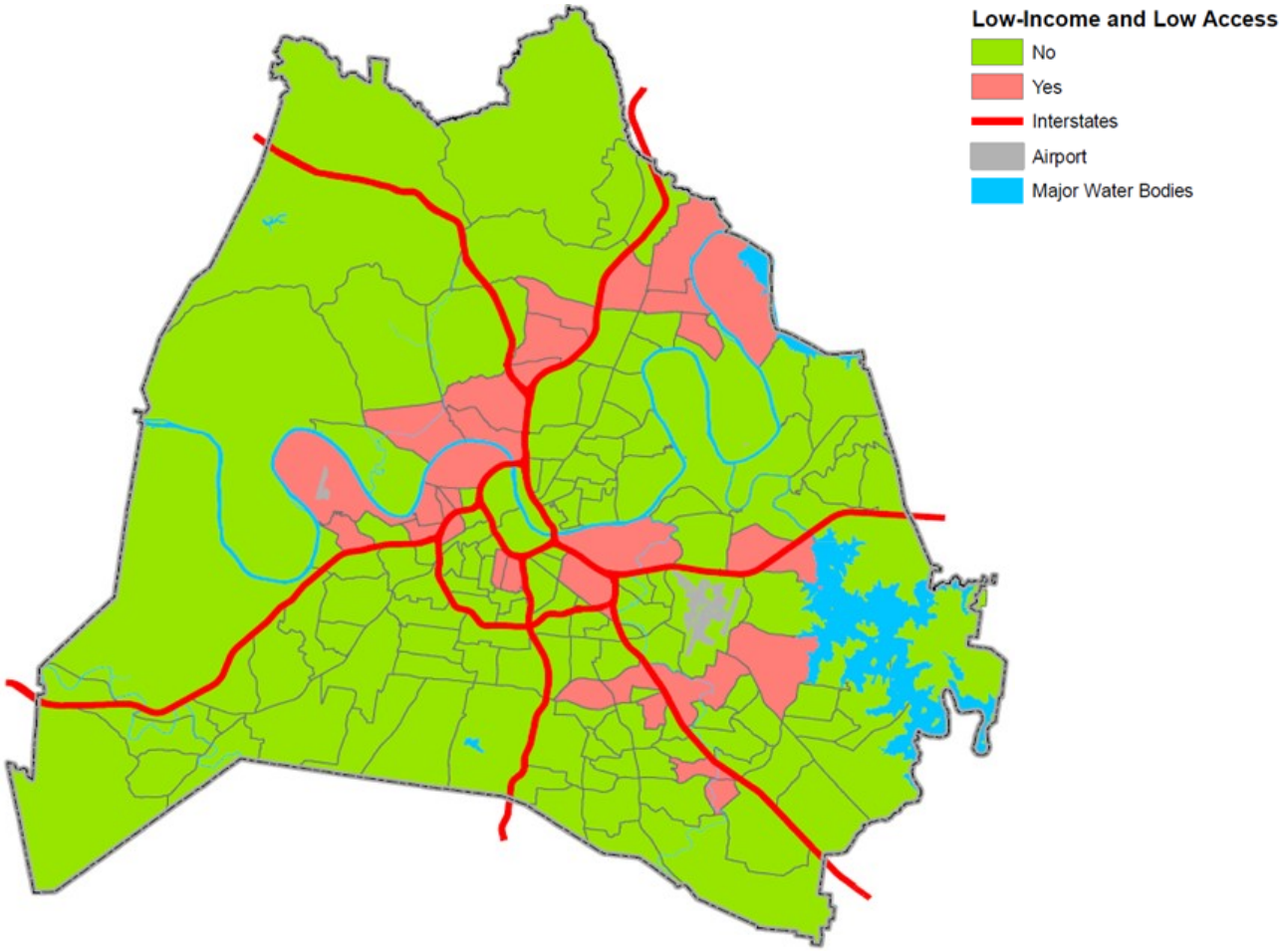
Data Description

This indicator shows the distribution of census tracts with low-income and low-access to healthy food, defined as those having at least 500 or 33% of low income people with low access to healthy food (i.e., living more than one mile from a supercenter store or a large grocery store if in an urban area, and more than 10 miles from a supermarket or large grocery store if in a rural area).

Data Source

U.S. Department of Agriculture (2017). Food Environment Atlas https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.
Geography layer from Metro Planning Department.

Census Tracts with Low-Income and Low-Access to Healthy Food, Davidson County, 2015



SD12 Farmers Market Density

Farmers markets are retail outlets in which two or more vendors sell agricultural products directly to customers through a common marketing channel. These include sales from roadside stands, farmers markets, pick-your-own, door- to- door, etc. It does not include sales of craft items or processed products, such as jellies, sausages, and hams. Farmers markets provide a way for a community to buy fresh and affordable products while supporting local farmers, and often emphasize good nutrition and encourage consumers to cook healthier meals and maintain good eating habits. A diet comprised of nutritious foods, in combination with an active lifestyle, can reduce the incidence of heart disease, cancer and diabetes and is essential to maintain a healthy body weight and prevent obesity.

Data Description

This indicator shows the number of farmers markets per 1,000 residents.

Data Source

U.S. Department of Agriculture (2017). Food Environment Atlas. Retrieved from: https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

CDC Wonder. Retrieved from: https://wonder.cdc.gov/bridged-race-population.html.

County

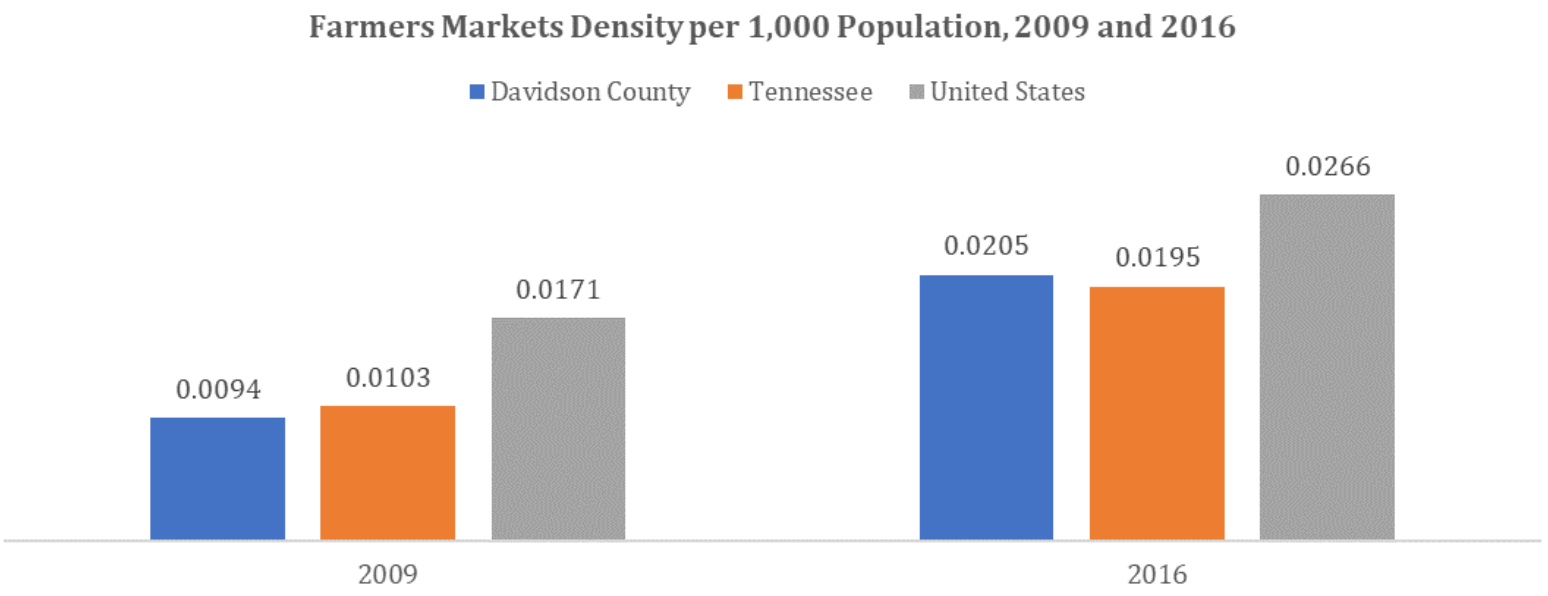
0.0205 Farmers Markets per 1,000 population in 2016

State

0.0195 Farmers Markets per 1,000 population in 2016

National

0.0266 Farmers Markets per 1,000 population in 2016



SD13 Grocery Store Density

There are strong correlations between the density of grocery stores in a neighborhood and the nutrition and diet of its residents. The availability and affordability of healthy and varied food options in the community increases the likelihood that residents will have a balanced and nutritious diet. Low-income and under-served communities often have limited access to stores that sell healthy food, especially high-quality fruits and vegetables. Moreover, rural communities often have a high number of convenience stores, where healthy and fresh foods are less available than in larger, retail food markets.[1]

Data Description

This indicator presents the number of supermarkets and grocery stores per 1,000 residents.

Data Source

U.S. Department of Agriculture (2017). Food Environment Atlas. Retrieved from: https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx.

CDC Wonder. Retrieved from: https://wonder.cdc.gov/bridged-race-population.html.

County

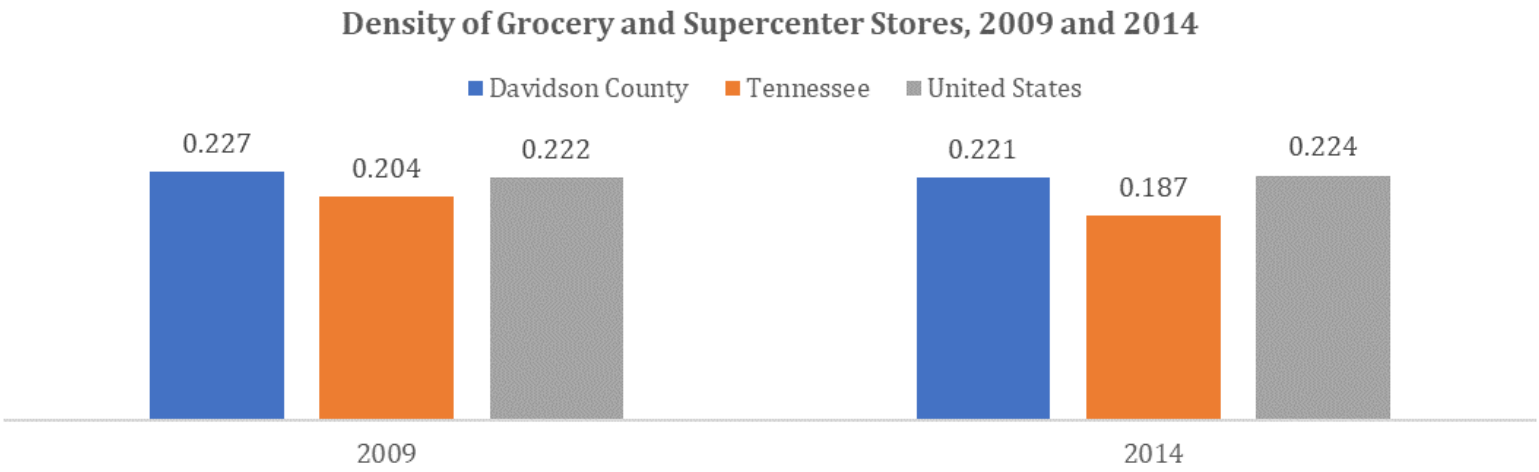
0.221 Grocery and Supercenter stores per 1,000 population in 2014

State

0.187 Grocery and Supercenter stores per 1,000 population in 2014

National

0.224 Grocery and Supercenter stores per 1,000 population in 2014



[1] Healthy Nashville: Grocery Store Density.
Retrieved from: http://www.healthynashville.org

SD14 Food Insecurity

Food insecurity is an economic and social indicator of the health of a community. The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways.

Data Description

This indicator shows the percentage of individuals living with food insecurity.

Data Source

Healthy Nashville website http://www.healthynashville.org/. Accessed March 03, 2020.

Feeding America (2020). Food insecurity in the United States. Retrieved from https://map.feedingamerica.org/county/2015/overall

County

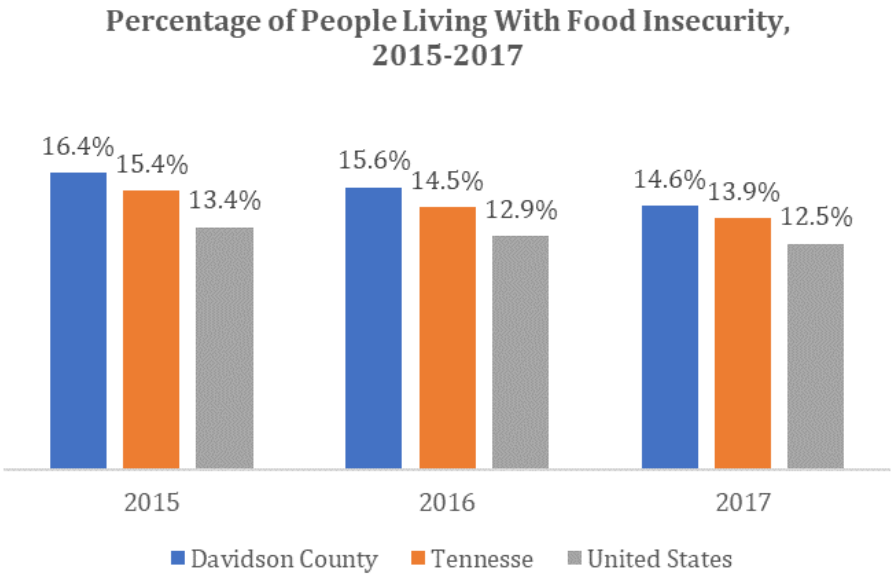
14.6% of food insecure people in 2017

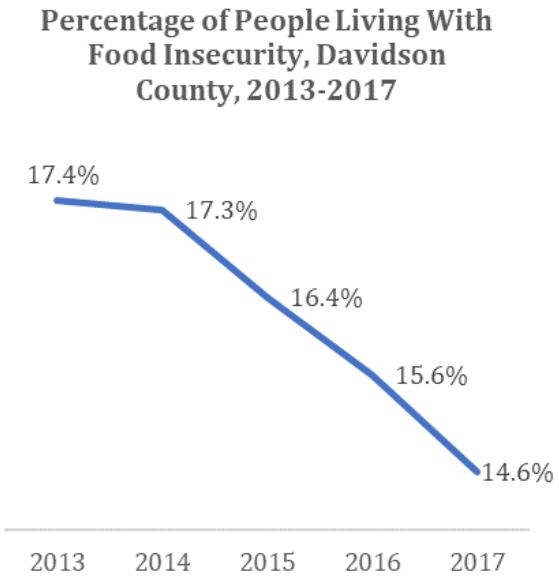
State

13.9% of food insecure people in 2017

National

12.5% of food insecure people in 2017





SD15 Child Food Insecurity

The U.S. Department of Agriculture (USDA) defines food insecurity as limited or uncertain availability of nutritionally adequate foods or uncertain ability to acquire these foods in socially acceptable ways. Children exposed to food insecurity are of concern given the implications scarce food resources pose to a child's health and development. Children who are food insecure are more likely to be hospitalized and may be at higher risk for developing chronic diseases such as obesity, anemia, and asthma. In addition, food-insecure children may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety, and bullying.[1]

Data Description

This indicator shows the percentage of children (under 18 years of age) living in households that experienced food insecurity at some point during the year.

Data Source

Healthy Nashville (2020).
Retrieved from: http://www.healthynashville.org/
Feeding America (2020). Child Food insecurity in the United States. Retrieved from: https://map.feedingamerica.org/

County

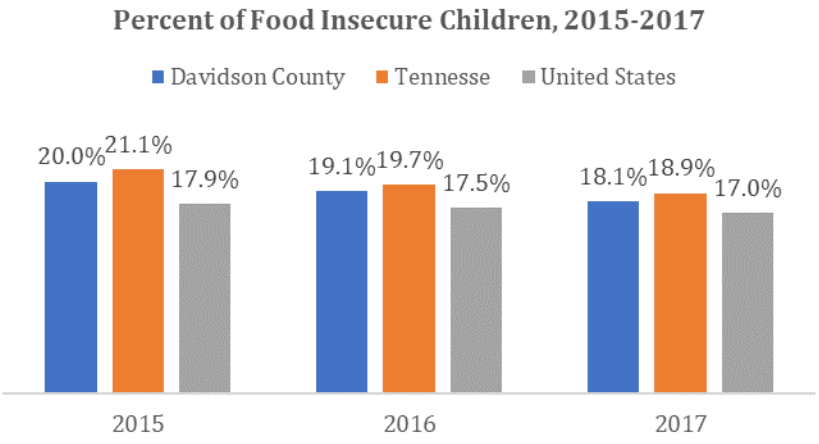
18.1% of food insecure children in 2017

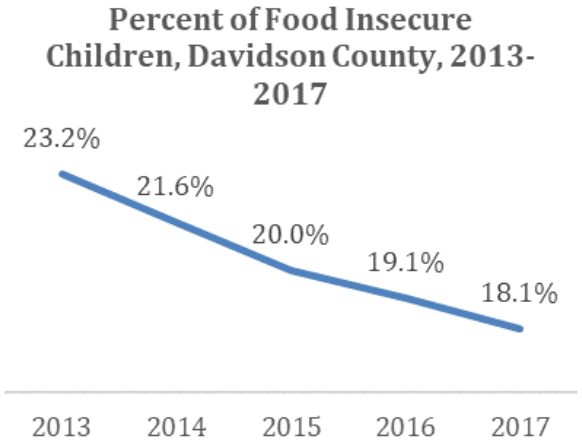
State

18.9% of food insecure children in 2017

National

17.0% of food insecure children in 2017





[1] Healthy Nashville: Child Food Insecurity.
Retrieved from: www.healthynashville.org

SD16 Food Insecure Children Likely Ineligible for Assistance

Food insecure children likely ineligible for assistance are those from families in need of public support, but facing challenges maintaining consistent enrollment or not qualifying for federal assistance.[1] Children who are food insecure are more likely to be hospitalized and may be at higher risk for developing chronic diseases such as obesity as a result in lower quality diet, anemia and asthma. In addition, food-insecure children may also be at higher risk for behavioral and social issues including fighting, hyperactivity, anxiety and bullying.

Data Description

This indicator shows the percentage of food insecure children who are likely ineligible for assistance.

Data Source

Healthy Nashville (2020).
Retrieved from: http://www.healthynashville.org/
Feeding America (2020). Child Food insecurity in the United States.
Retrieved from: https://map.feedingamerica.org/

County

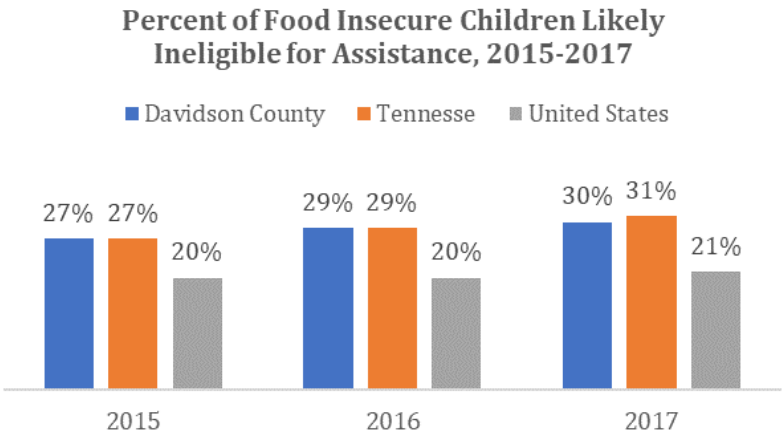
30% food insecure children likely ineligible for assistance in 2017

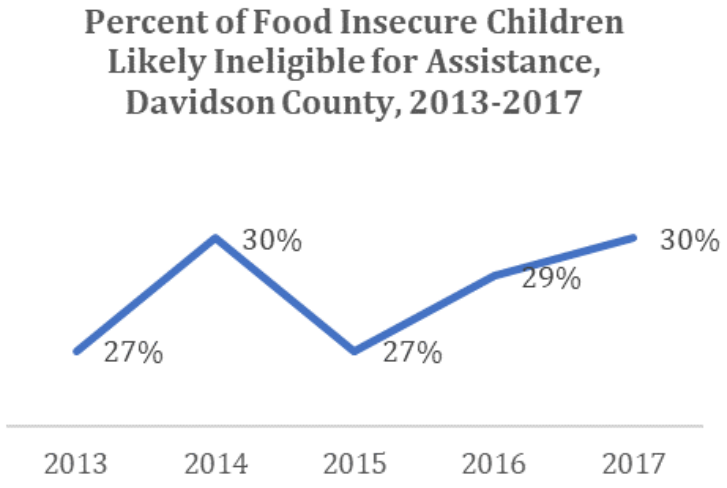
State

31% food insecure children likely ineligible for assistance in 2017

National

21% food insecure children likely ineligible for assistance in 2017





[1] Feeding America. Child Food Insecurity, 2018.
Retrieved from: www.feedingamerica.org

SD17 Fast Food Establishments

Fast food is often high in fat and calories and lacking in recommended nutrients. Frequent consumption of these foods and an insufficient consumption of fresh fruits and vegetables increases the risk of overweight and obesity. Individuals who are overweight or obese are at increased risk for serious health conditions, including coronary heart disease, type 2 diabetes, multiple cancers, hypertension, stroke, premature death and other chronic conditions. Fast food outlets are more common in low-income neighborhoods, and studies suggest that they strongly contribute to the high incidence of obesity and obesity-related health problems in these communities.[1]

Data Description

This indicator shows the number of fast food restaurants per 1,000 population. These include limited-service establishments where people pay before eating.

Data Source

U.S. Department of Agriculture (2017).
Food Environment Atlas
https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads.aspx

County

93 fast food establishments per 1,000 population in 2014

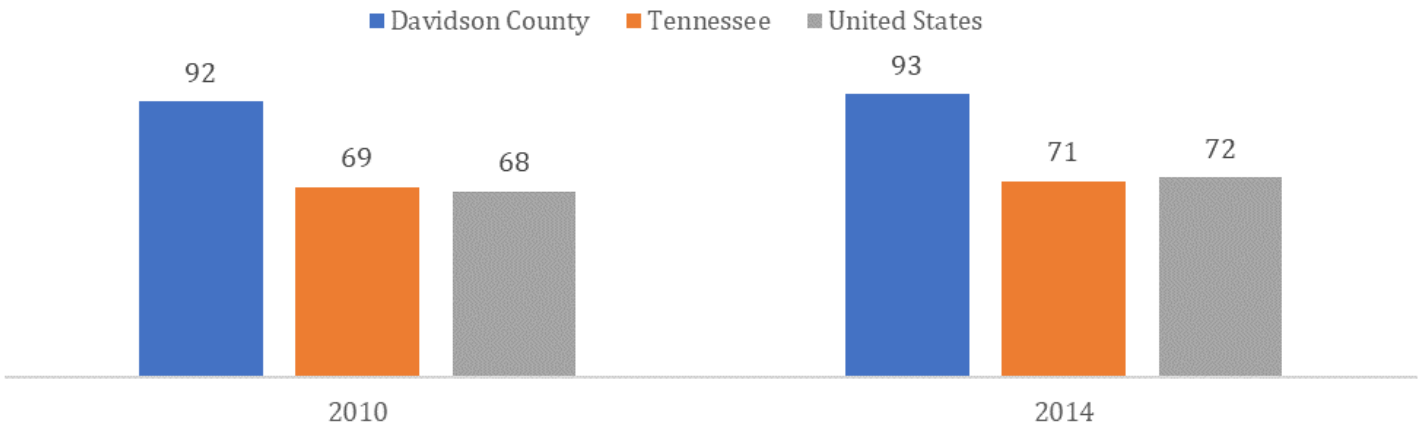
State

71 fast food establishments per 1,000 population in 2014

National

72 fast food establishments per 1,000 population in 2014

Number of Fast Food Establishments per 1,000 Population, 2010 and 2014



[1] Healthy Nashville: Fast food Establishment.
Retrieved from: www.healthynashville.org

SD18 Parks and Green Spaces

The availability of parks provides opportunities for outdoor recreation and physical activity, walking, social interaction, and community gatherings. Physical activity, social interaction, and exposure to nature can have a positive impact on both the physical and mental health of residents. [1]

Data Description

This indicator shows the number of parks and green spaces and the total area.

Data Source

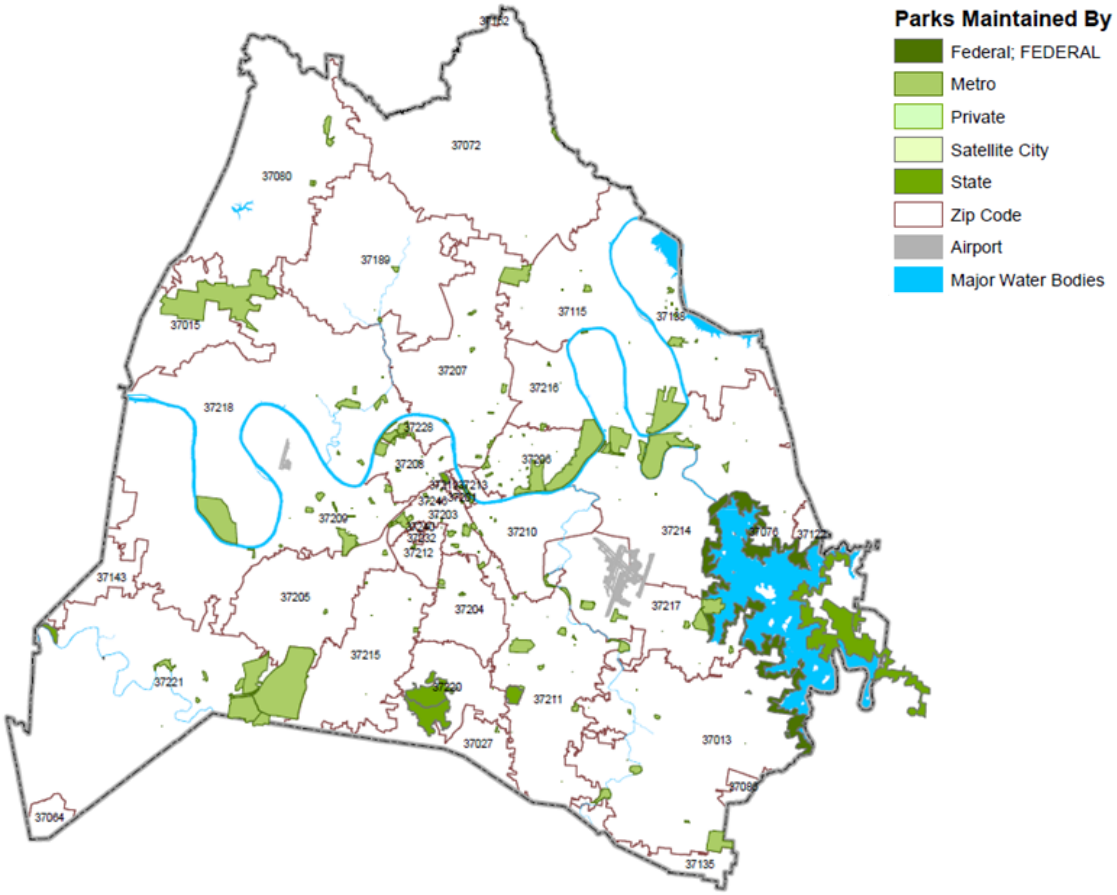
Geography layer from Metro Planning Department.

County

172 parks and green spaces as of 2019

12,921.11 acres of space as of 2019

Park and Green Spaces, Davidson County, 2019



[1] Centers for Disease Prevention and Control: Environmental Public Health Tracking.
Retrieved from: https://ephtracking.cdc.gov/InfoByLocation/

SD19 Distance from a Park

Parks provide opportunities for outdoor recreation and physical activity, walking, social interaction, and community gatherings. Physical activity, social interaction, and exposure to nature have a positive impact on both the physical and mental health of residents.[1] Having access to places for physical activity, such as parks and trails, encourages community residents to participate in physical activity. The closer you live to a park, the more likely you are to walk or bike to those places and use the park for exercise.[2]

Data Description

This indicator shows the percentage of residents who live within ½ mile of the boundary of a park. The number of people within a ½ mile of a park was determined at the census block level, aggregated to the county level, then divided by the total number of county residents.

Data Source

Centers for Disease Control and Prevention. (2019). National Environmental Public Health Tracking Network. Retrieved from: https://ephtracking.cdc.gov/InfoByLocation/

Metro Planning Department (2020) – Computation by Jennifer Higgs using GIS Network Analyst

County

33% of residents within 1/2 mile of a park in 2019 (Nashville Metro Planning Department)

State

25% of residents within 1/2 mile of a park in 2015 (Center for Disease Control and Prevention)

[1] Centers for Disease Prevention and Control: Environmental Public Health Tracking.
Retrieved from: https://ephtracking.cdc.gov/InfoByLocation/

[2] Centers for Disease Prevention and Control: Parks, Trails and Health.
Retrieved from: https://www.cdc.gov/healthyplaces/healthtopics/parks.htm

Environment

2021 Community Health Profile
Metro Public Health Department

The environment plays a pivotal role in the health of communities. Clean air and water can help prevent morbidity and premature death. The Environmental Protection Agency (EPA) estimates that the Clean Air Act Amendments will prevent over 230,000 early deaths in 2020.[1] Reductions in ambient particulate matter in the air will also prevent 200,000 heart attacks, 2,400,000 asthma exacerbations, 5,400,000 missed school days, and 17,000,000 lost workdays. Clean water protections ensure local water supplies remain free of harmful industrial chemicals and waste, and water treatment plants adequately monitor and treat the water that is available for use by residents and businesses in the area.

Section Highlights

- In 2018 the fourth-highest daily maximum 8-hour concentration of ozone in Davidson County was 0.068 ppm and was below 0.070 ppm, which is the standard, 3-year average air quality standard set by the EPA. (Indicator E1).
- The annual PM2.5 mean concentration of particulate matter was 9.4 ug/m^3 in 2018, which met the standard of not exceeding the National Ambient Air Quality Standard of 12 ug/m^3 (Indicator E2).
- The amount of Volatile Organic Compounds (VOCs) released into the air per year declined from 17,026 tons in 2012 to 14,328 tons in 2016 (Indicator E6).
- In 2019, no water system in Davidson County received a health-based violation. In that year, all public water systems were in compliance with public health standards (Indicator E7).

[1] United States Environmental Protection Agency (2011). Benefits and Costs of The Clean Air Act 1990-2020, the Second Prospective Study. Accessed June 11, 2020. Available at https://www.epa.gov/clean-air-act-overview/benefits-and-costs-clean-air-act-1990-2020-second-prospective-study.

Environment

E1 Ozone Levels

Ozone is an extremely reactive gas that is the primary ingredient of smog air pollution and very harmful to breathe. Ozone reacts chemically with lung tissue, and damages crops, trees, and other matter.

Data Description

This indicator shows the annual fourth-highest daily maximum 8-hour concentration of ozone, 3 year average.

Data Source

U.S. Environmental Protection Agency. (2019). Air Quality System.
Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

0.068 ppm average over past three years as of 2018

Benchmark

0.070 ppm National Ambient Air Quality Standard

E2 Particulate Matter: PM 2.5 (Annual)

Particle pollution refers to the amount of particulate matter in the atmosphere and includes a mixture of solid and liquid droplets. The smaller the particles are, the more hazardous to human health. Particles less than 2.5 micrometers (PM2.5) are of concern because they can enter the lungs and adversely affect health by causing asthma or cardiovascular problems.

Data Description

This indicator shows the annual PM2.5 mean concentration, 3 year average.

Data Source

U.S. Environmental Protection Agency (2019). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

9.4 ug/m^3 annual average over past 3 years as of 2018

Benchmark

12 ug/m^3 National Ambient Air Quality Standard

E3 Particulate Matter: PM 2.5 (24-hour)

Particle pollution refers to the amount of particulate matter in the atmosphere and includes a mixture of solid and liquid droplets. The smaller the particles are, the more hazardous to human health. Particles less than 2.5 micrometers (PM2.5) are of concern because they can enter the lungs and adversely affect health by causing asthma, lung cancer, or cardiovascular problems.

Data Description

This indicator shows the 24-hour PM2.5 98th percentile concentration, 3 year average.

Data Source

U.S. Environmental Protection Agency (2019). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

State

18.3 ug/m^3 daily 98th percentile concentration, averaged over the past 3 years as of 2018

Benchmark

35 ug/m^3 National Ambient Air Quality Standard

E4 Particulate Matter: PM10 (Annual)

Particle pollution refers to the amount of particulate matter in the atmosphere and includes a mixture of solid and liquid droplets. The smaller the particles are, the more hazardous to human health. PM10 refers to particles that are 2.5 to 10 micrometers in diameter and are somewhat larger than the more harmful PM2.5 particles (2.5 micrometers in diameter). PM10 may adversely affect health by contributing to asthma, lung cancer, or cardiovascular problems.

Data Description

This indicator shows the number of times the PM10 threshold was exceeded in the past 3 years. The threshold is not to be exceeded more than once per year on average over 3 years.

Data Source

U.S. Environmental Protection Agency (2019). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

0 exceedances in the past 3 years as of 2018

Benchmark

150 ug/m^3 concentration not to be exceeded, National Ambient Air Quality Standard

E5 Particulate Matter: PM10 (24-hour)

Particle pollution refers to the amount of particulate matter in the atmosphere and includes a mixture of solid and liquid droplets. The smaller the particles are, the more hazardous to human health. PM10 refers to particles that are 2.5 to 10 micrometers in diameter and are somewhat larger than the more harmful PM2.5 particles (2.5 micrometers in diameter). PM10 may adversely affect health by contributing to asthma, lung cancer, or cardiovascular problems.

Data Description

This indicator shows the second highest PM10 concentration in a 24-hour period, averaged over the past 3 years.

Data Source

U.S. Environmental Protection Agency (2019). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

36.3 ug/m^3 daily average over the past 3 years as of 2018

Benchmark

50.0 ug/m^3

E6 Release of Volatile Organic Compounds (VOCs)

Volatile Organic Compounds (VOCs) include a variety of chemicals that are emitted as gases from certain solids or liquids. They are released into the air mostly during the manufacture or use of everyday products and materials. They are regulated by the EPA mainly due to their ability to create photochemical smog under certain conditions. VOCs can have both short- and long-term adverse health effects and can produce symptoms such as eye and respiratory tract irritation, headaches, dizziness, visual disorders, and memory impairment. Some VOCs may cause cancer in humans.

Data Description

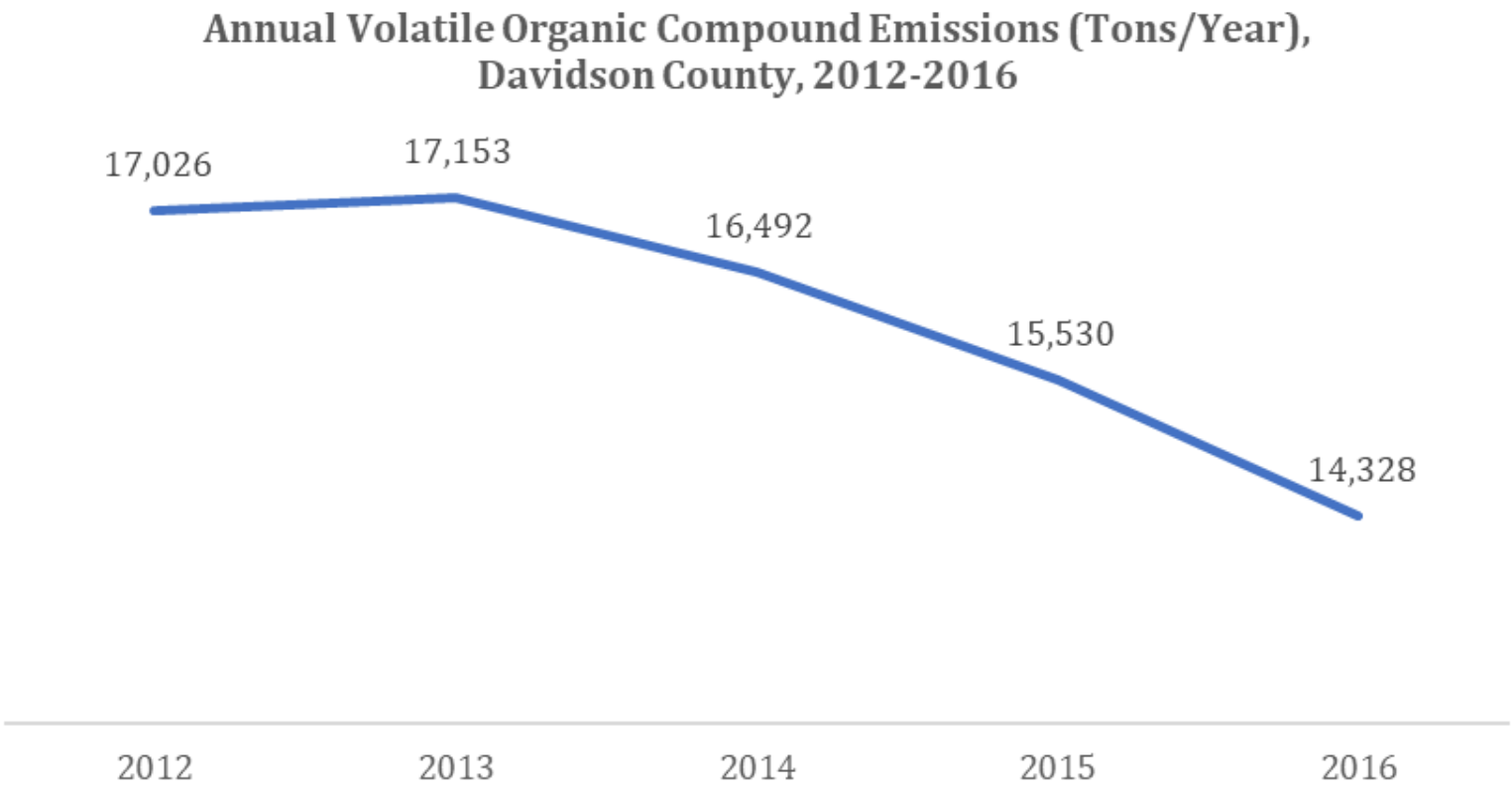
This indicator shows the amount of Volatile Organic Compounds (VOCs) released into the air.

Data Source

TN Pollution Control Division (2016).
Annual Report 2016: https://www.nashville.gov/Portals/0/SiteContent/Health/PDFs/Air/2016AnnualReportRev.pdf

County

14,328 tons released in 2016



E7 Drinking Water Violations

Public drinking water systems can transmit microorganisms, chemicals, and other contaminants which can increase residents' risk of exposure to waterborne diseases, cancer, birth defects, and other serious health concerns. Research suggests that 1.1 million people each year become sick due to contaminated drinking water in the U.S.[1] The Safe Drinking Water Information System (SDWIS) provides information about violations of the Environmental Protection Agency's drinking water regulations. These regulations establish maximum contaminant levels for approximately 90 contaminants and indicators; a violation occurs when a maximum contaminant level is exceeded or when drinking water is not treated properly.[2]

Data Description

This indicator shows the percentage of the population who get water from public water systems that have received at least one health-based violation.

Data Source

County Health Rankings and Road Map (2019). Physical. Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2019/rankings/davidson/county/outcomes/overall/snapshot

County

0% of residents get their water from a system that had received a health-based violation in 2019

State

0% of residents get their water from a system that had received a health-based violation in 2019

[1] County Health Rankings and Roadmaps. (2014). Drinking water safety. Retrieved from: http://www.countyhealthrankings.org/ app/ tennessee/2013/measure/factors/124/description

[2] Community Health Profiles. (2014). Drinking Water Violation – Metro-Nashville Davidson County

Access to Health Care

2021 Community Health Profile
Metro Public Health Department

According to Healthy People 2020, "access to comprehensive, quality health care services is important for promoting and maintaining health, preventing and managing disease, reducing unnecessary disability and premature death, and achieving health equity".[1] Health access has four equally important components: insurance coverage which allows entry into the health care system, availability which ensures sufficient numbers of providers in a geographical area, timeliness which ensures that a health need can be addressed when the need is recognized, and accessibility which ensures capable, qualified, and culturally competent providers with whom a patient can develop trust.

Lack of access to health care can result in unmet health needs, delays in receiving appropriate care, financial burdens, preventable hospitalizations, and failure to obtain health screenings and preventive services. In addition, the Healthy People 2020 Midcourse Review indicates that significant disparities exist in access to care by nearly every demographic: sex, age, race and ethnicity, education, geography, and insurance coverage.[2]

Public health departments, in partnership with local hospitals and health care providers, can advocate for policies that improve health care infrastructure, expand service capacity, improve care coordination, reduce costs, and eliminate disparities.

Section Highlights

- In Davidson County in 2017, there was 1 primary care provider for every 1,060 residents; 1 dentist for every 1,296 residents; and 1 mental health provider for every 310 residents. These provider-to-resident ratios were higher than the state estimates. (Indicator A1)
- In 2018, 12.3% of Davidson County residents did not have health insurance, down from 14.9% in 2014. Between this period, the county's uninsured rate was consistently higher than for the State and United States. (Indicator A2)
- In 2018, 92.5% of Non-Hispanic Whites had insurance coverage compared to 87.7% of Non-Hispanic Blacks and 62.2% of Hispanics. (Indicator A4)
- In 2019 within Davidson County, there were 6 areas with a shortage of primary care providers, 6 areas with a shortage of dental health professionals, and 7 areas with a shortage of mental health professionals. (Indicator A6)

[1] Healthy People 2020. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed June 11, 2020. Available from: https://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services.

[2] Healthy People 2020 Midcourse Review. Washington, DC: U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Accessed June 11, 2020. Available from: https://www.cdc.gov/nchs/healthy_people/hp2020/hp2020_midcourse_review.htm

Access to Health Care

A1 Health Care Providers Available for the Population

Access to health care requires not only financial support but also availability of providers. While high rates of specialist physicians have been shown to be associated with higher utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and referrals to specialty care.[1]

Data Description

This indicator represents the number of individuals served by one provider, though it is acknowledged that the population is not equally distributed across providers.

Data Source

County Health Rankings and Roadmaps (2019). Data 2017. Retrieved from: https://www.countyhealthrankings.org

County

1,060:1 population per primary care physician in 2017

1,296:1 population per dentist in 2017

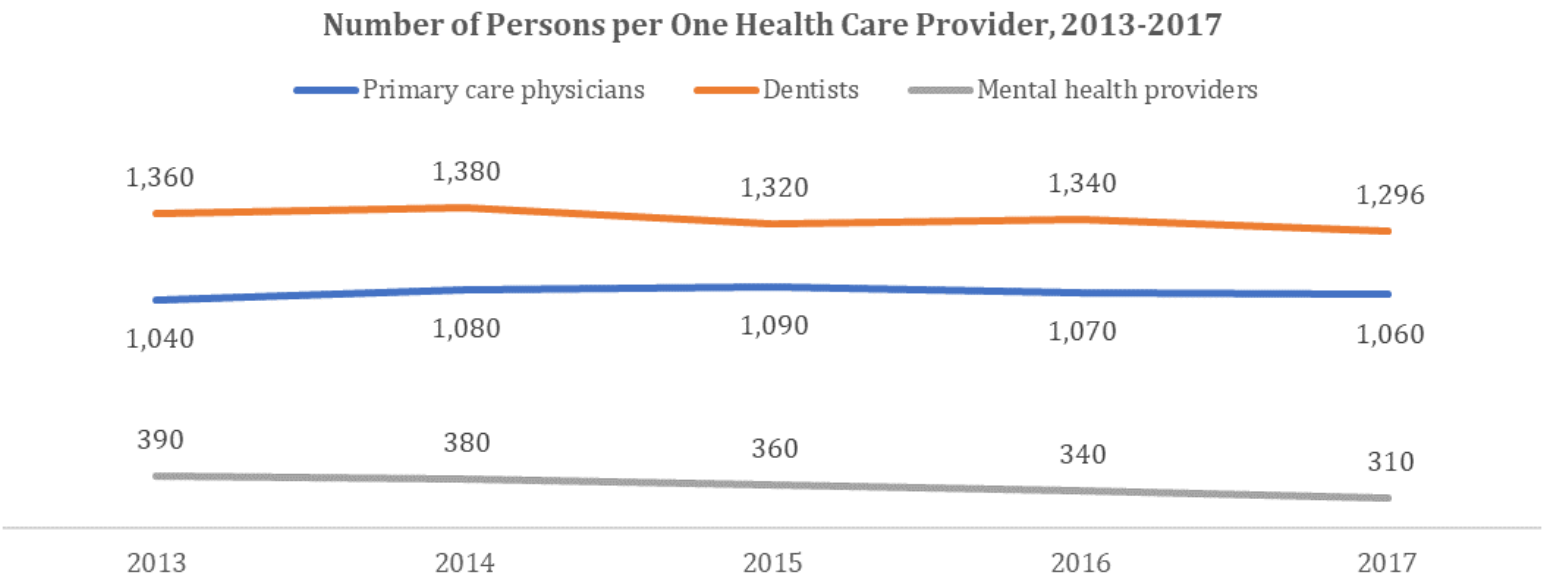
310:1 population per mental health provider in 2017

State

1,030:1 population per primary care physician in 2017

1,240:1 population per dentist in 2017

290:1 population per mental health provider in 2017



[1] https://www.countyhealthrankings.org/app/tennessee/2020/measure/factors/4/description

A2 Uninsured Rate

When adults and children do not have health insurance, they are less likely to receive clinical preventive healthcare services, leading to the increased risk of death from trauma and acute conditions such as heart attacks and strokes. Further, it restricts their ability to access needed medications and cancer screenings. Once adults acquire health insurance these negative health impacts of being uninsured are often mitigated. Children benefit greatly from health insurance, as well. They have greater access to care, including monitoring of the child's development and early detection of serious health conditions, immunizations that prevent future illness, prescription medications, dental care, asthma care, and access to specialists.[1]

Data Description

This indicator shows the percentage of the civilian noninstitutionalized population without health insurance coverage in the past year.

Data Source

U.S Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03

County

12.3% uninsured in 2018

State

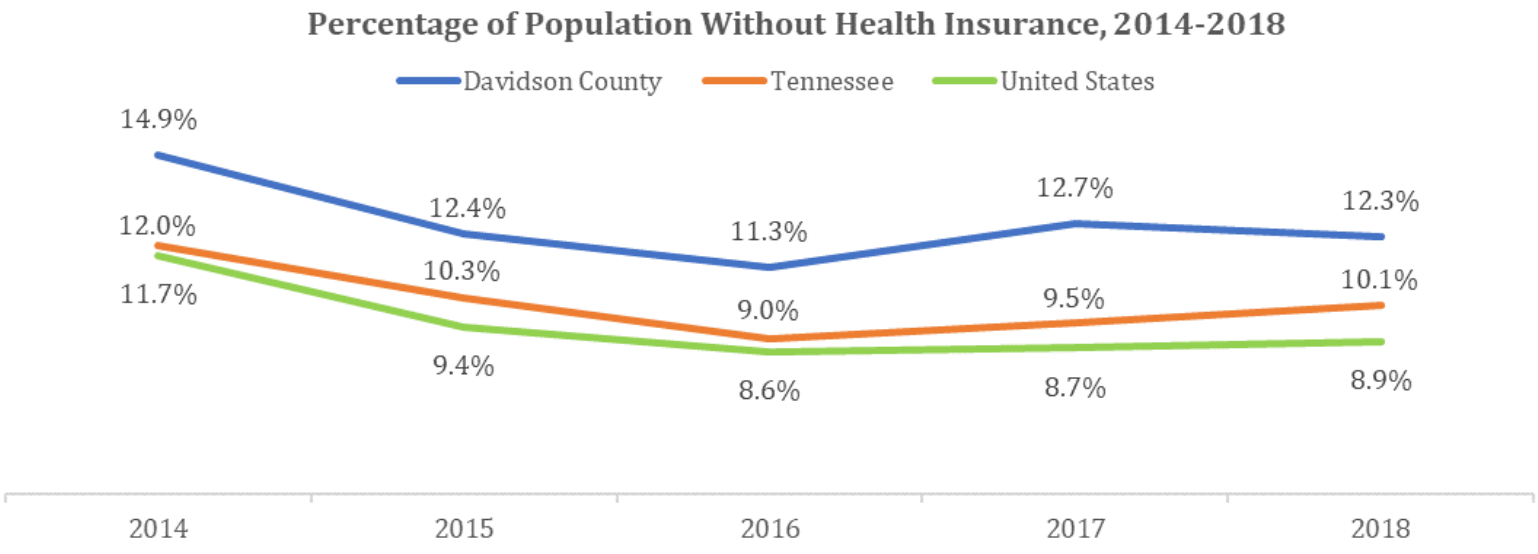
10.1% uninsured in 2018.

National

8.9% uninsured in 2018.

Benchmark

0 Healthy People 2020 target



[1] 2014 Community Health Profile, Page 110

A3 Uninsured Rates by Age

Stratifying uninsured rates by age can reveal the instability of coverage over the life span. When people do not have health insurance, they are less likely to receive clinical preventive healthcare services, and often delay or forgo visits with healthcare providers which increases their risk of premature death from trauma and acute conditions, such as heart attacks and strokes among adults. Children forgo essential early health monitoring, miss opportunities for the early detection of serious health conditions, immunizations that prevent future illness, prescription medications, early dental or asthma care, and access to specialists. Once adults and children acquire health insurance these negative health impacts of being uninsured are often mitigated. [1]

Data Description

This indicator shows the percentage of the civilian noninstitutionalized population without health insurance coverage in the past year by age and employment status.

Data Source

U.S Census Bureau. (2014–2018). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03

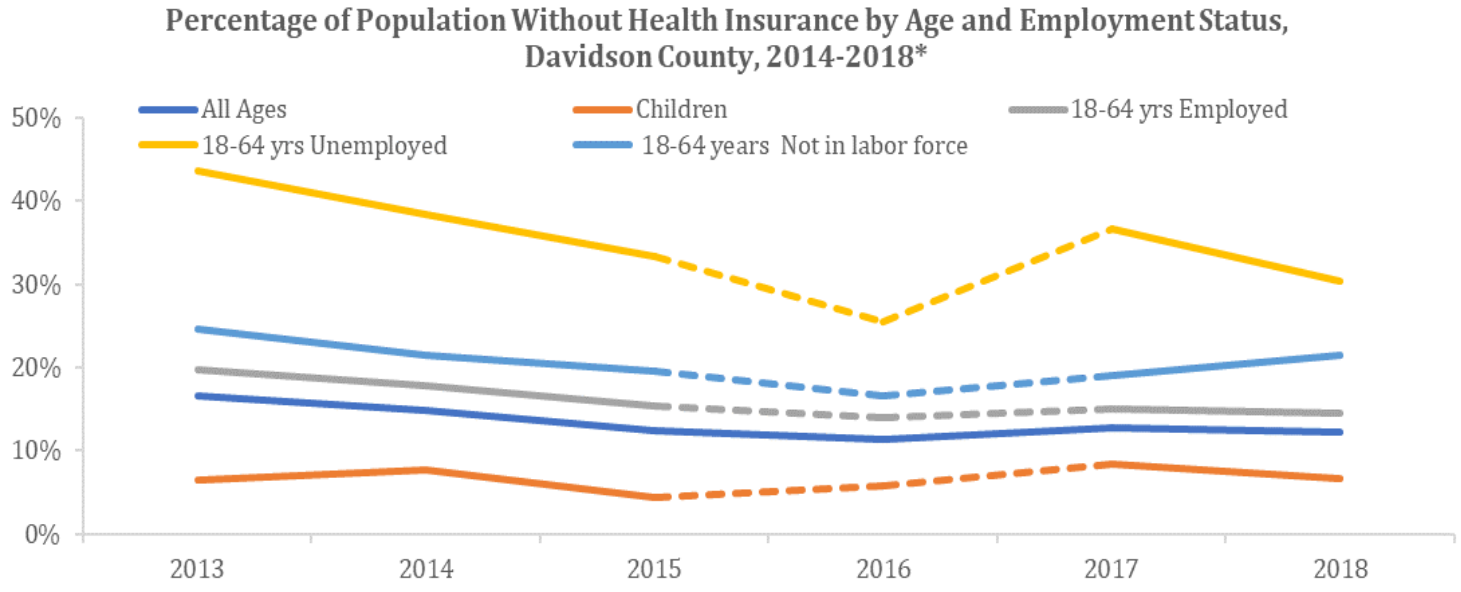
County

6.7% of children uninsured in 2018

14.5% of employed adults uninsured in 2018

30.4% of unemployed adults uninsured in 2018

21.4% of adults not in the labor force uninsured in 2018



* In the 2017 and 2018 DP03 tables the Census Bureau changed the age group for "children" from under 18 to under 19 years,. The trend lines are broken to indicate this shift and should be interpreted with caution as estimates may not be comparable across the transition.

[1] 2014 Community Health Profile, Page 111

A4 Insured Rates by Race/Ethnicity (adults)

Health insurance coverage enables people to access affordable medical care and protects them financially from unexpected health care costs (Healthy People 2020.)[1] Minority racial/ethnic populations are more likely to lose health insurance coverage, particularly during the transition from childhood to adulthood.[2] Stratifying the insured rate by race/ethnicity, particularly among adults, helps to track progress towards eliminating racial/ethnic disparities in healthcare access and utilization.

Data Description

This indicator shows the percentage of adults aged 18–64 years that had any type of health insurance coverage in the past year by race/ethnicity.

Data Source

U.S Census Bureau. (2014–2018). American Community Survey 1–year estimates.
Health Insurance Coverage Status; Table S2701

County

83.9% of adults had insurance in 2018

State

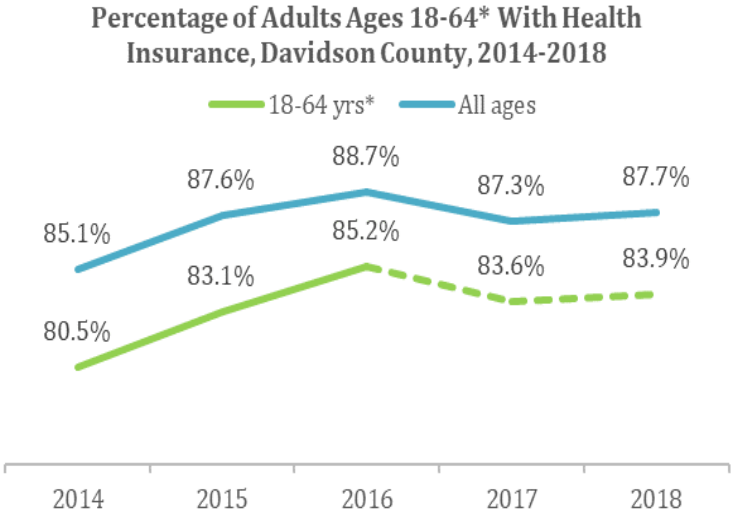
85.3% of adults had insurance in 2018

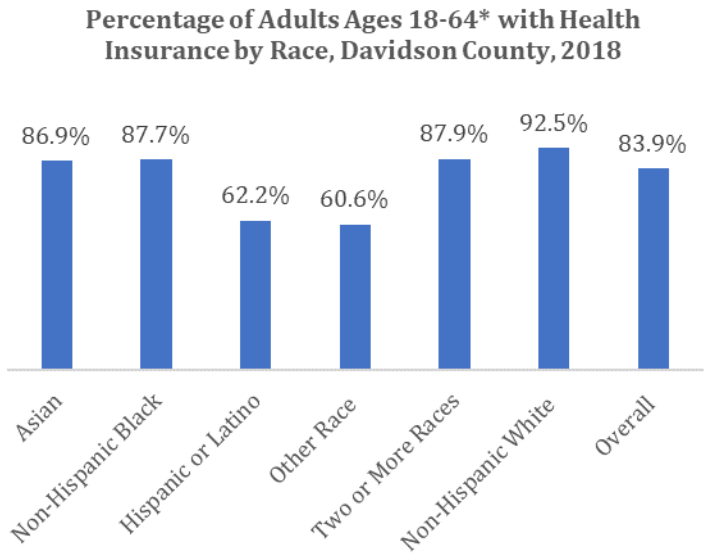
National

87.5% of adults had insurance in 2018

Benchmark

100% Healthy People 2020 Target





*The age range for census table S2701 changed in 2017 from 18 to 64 years to 19 to 64 years, hence the break in the series. Therefore, the trend should be interpreted with caution as estimates may not be comparable across the transition.

[1] https://www.healthypeople.gov/node/3966/data_details

[2] Sohn H. Racial and Ethnic Disparities in Health Insurance Coverage: Dynamics of Gaining and Losing Coverage over the Life-Course. Popul Res Policy Rev. 2017;36(2):181-201. doi:10.1007/s11113-016-9416-y

A5 Uninsured Rates by Geography

When people do not have health insurance, they are less likely to receive clinical preventive healthcare services. Without insurance to cover expensive healthcare costs, people often delay or forgo visits with healthcare providers which increases their risk of morbidity and premature death. The geographic distribution of health insurance coverage can account for geographic disparities in healthcare access and outcomes.

Data Description

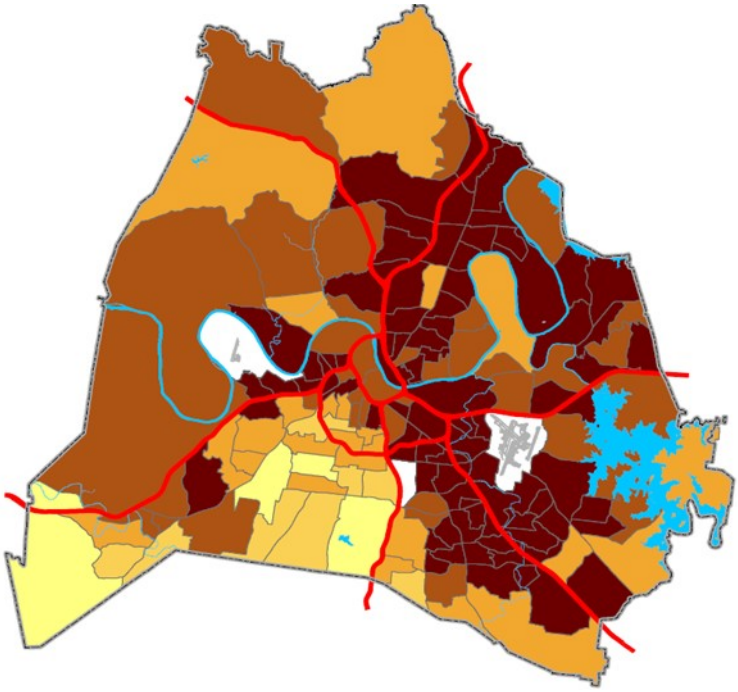
This indicator shows the percentage of adults (19-64 years) and children (under 19 years) without health insurance coverage by census tract.

Data Source

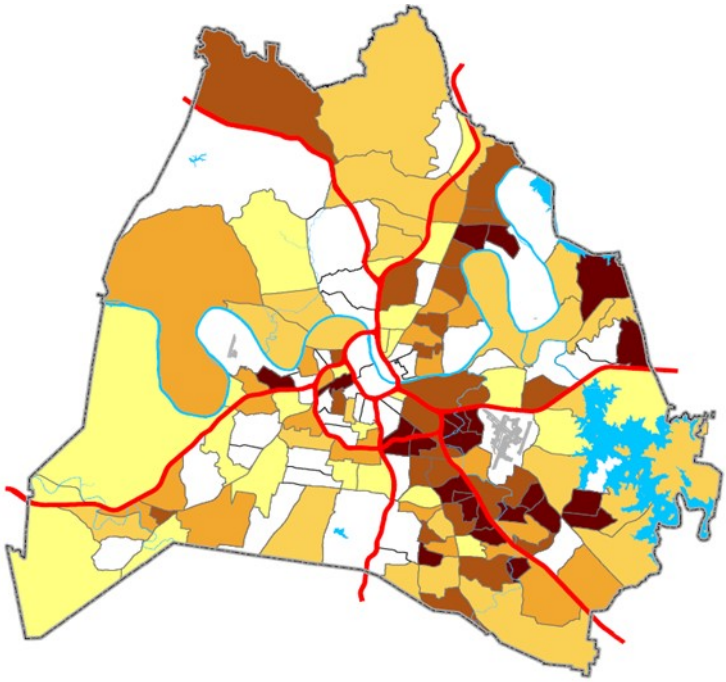
U.S Census Bureau. (2018). American Community Survey 5–year estimates. Health Insurance Coverage Status; Table S2701.

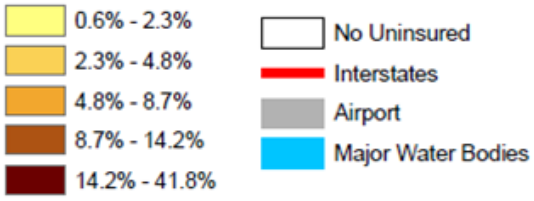
Percentage of Uninsured Population by Census Tract, Davidson County, 2014-2018

Ages 19 to 64 years



Ages under 19 years





A6 Health Professional Shortage Areas

Health Professional Shortage Areas (HPSAs) are designations that indicate health care provider shortages in primary care, dental health, or mental health. These shortages may be geographic-, population-, or facility-based. The Health Resources and Services Administration (HRSA) also designates Medically Underserved Areas (MUAs) and Medically Underserved Populations (MUPs). These areas have a shortage of health professionals or have population groups who face economic, cultural or linguistic barriers to healthcare. The Federal government uses HPSAs, MUAs and MUPs to determine eligibility for several government programs.[1]

Data Description

This indicator shows the number of Health Professional Shortage Areas (HPSAs) by healthcare type.

Data Source

The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services (http://data.hrsa.gov).

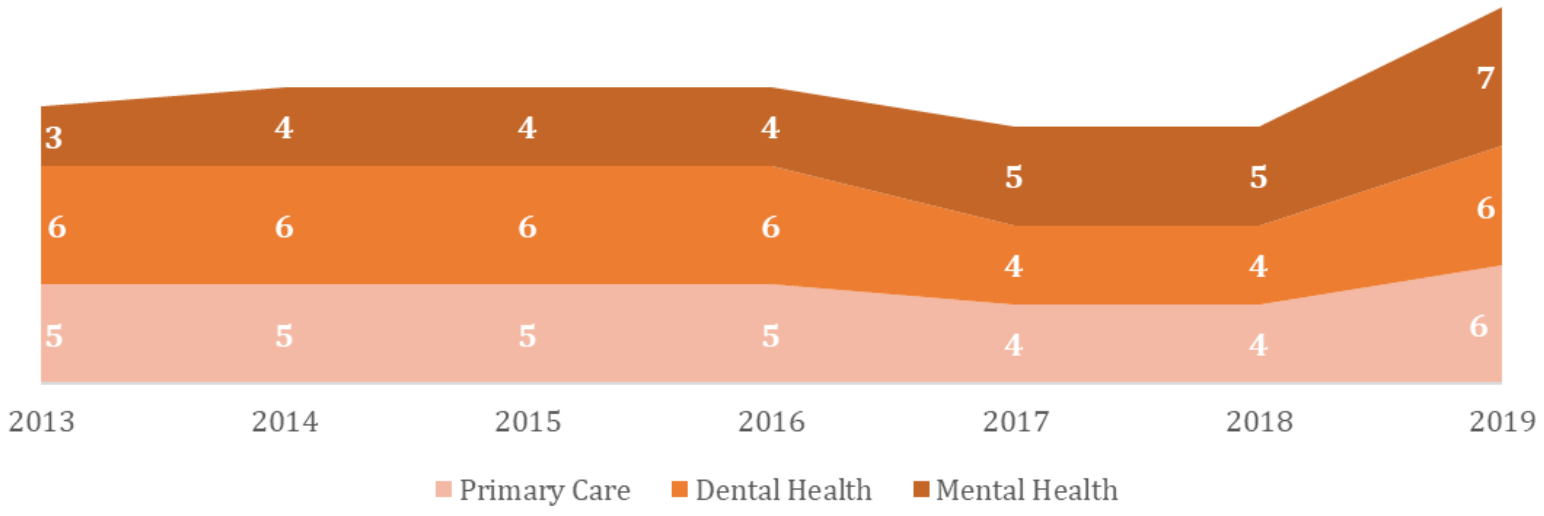
County

6 areas with a shortage of primary care professionals in 2019

6 areas with a shortage of dental health professionals in 2019

7 areas with a shortage of mental health professionals in 2019

Number of Health Professional Shortage Areas (HPSAs) by Healthcare Type, Davidson County, 2013-2019



[1] The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, http://data.hrsa.gov

Behavioral Risk Factors

2021 Community Health Profile
Metro Public Health Department

Lifestyle habits can promote or negatively impact health. Established lifestyle risks to health (referred to as behavioral risk factors) include physical inactivity, smoking, excessive alcohol use, unhealthy diets, limited use of available health care or primary prevention services, and behaviors that do not promote safety or prevent injury.[1]

These factors account for a considerable burden of disease.[2,3] While lifestyles might be associated with individuals' choices and preferences, such choices are often determined by the environmental and community contexts in which people live, work, and play.

Understanding the extent and distribution of behavioral risk factors helps inform policy and program decision making so that limited public health resources can be deployed in ways that maximize population health outcomes and reduce health inequities.

Section Highlights

- Smoking rates among Davidson County adult residents declined from 23.2% in 2014 to 20% in 2017. These rates were higher than the national target of 12%. (Indicator B1)
- In 2016, 23% of Davidson County adults (20 years and older) were physically inactive, down from 26% in 2011. (Indicator B6)
- The percent of overweight or obese children in public schools increased from 35.6% in 2014 to 36.9% in 2015 and remained relatively stable through 2018. (Indicator B7)
- The percentage of Davidson County adults who have routine health check-ups declined from 73.8% in 2014 to 68.6% in 2016 then increased to 71.9% in 2017. (Indicator B9)
- Cholesterol screening rates among adults increased from74.6% in 2015 to 79.6% in 2017, mirroring the increase at the national level and exceeding the state rate of 77.7% (Indicator B10). Screening rates for colorectal, breast and cervical cancers also increased (Indicators B11-B13).
- Binge drinking among adults increased from 13.1% in 2014 to 15.4% in 2017. (Indicator B14)
- The Davidson County death rate from alcohol-related motor vehicle crashes declined from 1.75 per 100,000 residents in 2014 to 1.44 per 100,000 residents in 2018. (Indicator B16)

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[1] Linardakis M, Papadaki A, Smpokos E, Micheli K, Vozikaki M, Philalithis A. Association of Behavioral Risk Factors for Chronic Diseases With Physical and Mental Health in European Adults Aged 50 Years or Older, 2004–2005. *Prev Chronic Dis* 2015;12:150134. DOI: http://dx.doi.org/10.5888/pcd12.150134external icon. Accessed on 4/3/2010 at https://www.cdc.gov/pcd/issues/2015/15_0134.htm

[2] Institute of Medicine (US) Committee on Health and Behavior: Research, Practice, and Policy. Health and Behavior: The Interplay of Biological, Behavioral, and Societal Influences. Washington (DC): National Academies Press (US); 2001. 3, Behavioral Risk Factors. Available from: https://www.ncbi.nlm.nih.gov/books/NBK43744/

[3] https://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf

Behavioral Risk Factors

B1 Adult Smoking Rate

Behavioral Risk Factors

Tobacco is the agent most responsible for avoidable illness and death in America today. According to the Centers for Disease Control and Prevention, tobacco use causes premature death to almost half a million Americans each year, and it contributes to profound disability and pain in many others.[1] The World Health Organization states that approximately one-third of all tobacco users in this country will die prematurely because of their dependence on tobacco.[2] Areas with a high smoking prevalence will also have greater exposure to secondhand smoke for non-smokers, which can cause or exacerbate a wide range of adverse health effects such as cancer, respiratory infections, and asthma.

Data Description

This indicator shows the percentage of adult residents aged 18 years and older who currently smoke cigarettes.

Data Source

Centers for Disease Control and Prevention (2020). 500 Cities: Local Data for Better Health.

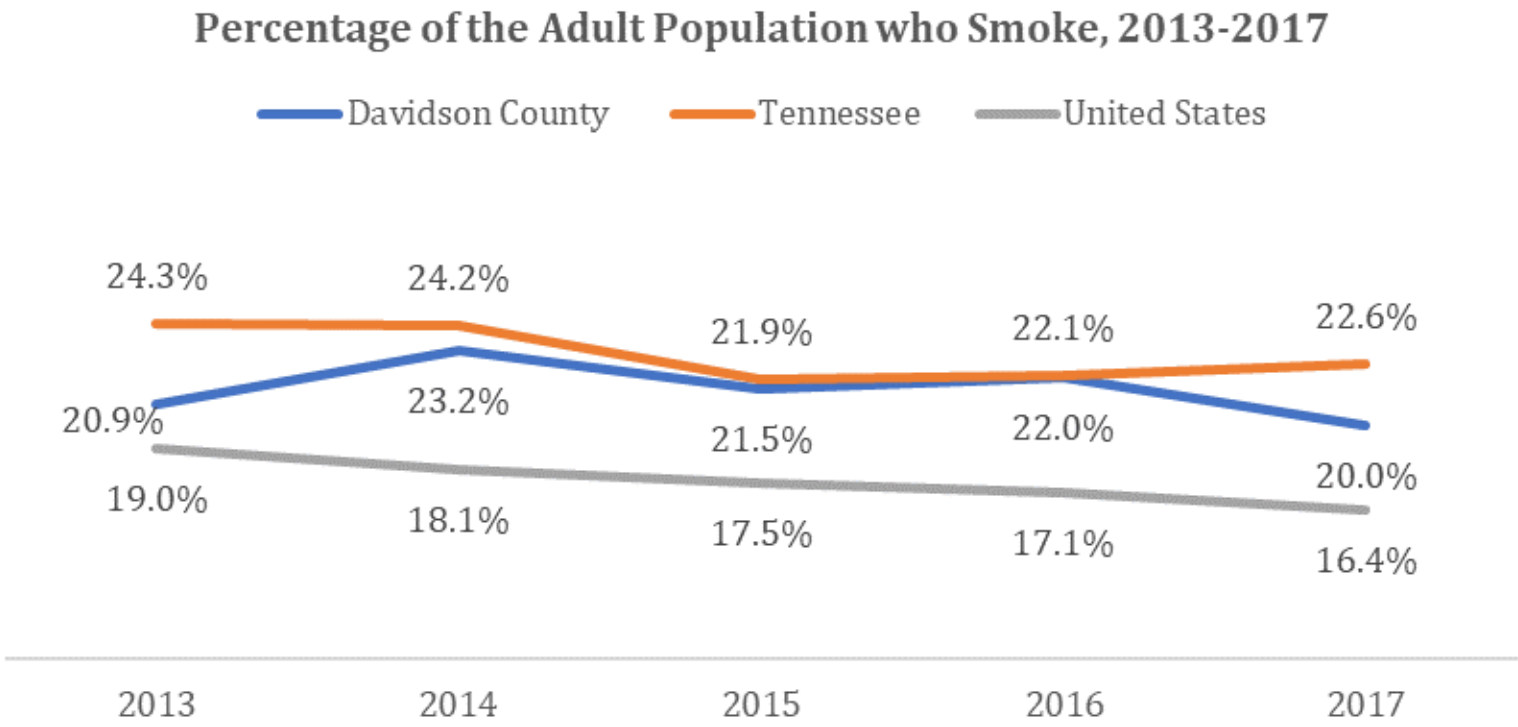
Centers for Disease Control and Prevention (2020). BRFS Prevalence and Trends Data.

County
20.0% smoking rate in 2017

State
22.6% smoking rate in 2017

National
16.4% smoking rate in 2017

Benchmark
12.0% Health People 2020 Target



[1] Center for Disease Prevention and Control. Tobacco-Related Mortality.
Retrieved from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/index.htm
[2] World Health Organization. Tobacco: Key Facts.
Retrieved from: https://www.who.int/news-room/fact-sheets/detail/tobacco

B2 E-Cigarette Use among Adults

E-cigarettes have the potential to benefit adult smokers who are not pregnant if used as a complete substitute for regular cigarettes and other smoked tobacco products. However, e-cigarettes are not safe for youth, young adults, pregnant women, as well as adults who do not currently use tobacco products. While e-cigarettes have the potential to benefit some people and harm others, there remains much to learn about whether e-cigarettes' possible role in helping adults quit smoking. [1]

Data Description

This indicator shows the percentage of adults aged 18 years and older who were current users of e-cigarettes.

Data Source

Nashville Metro Public Health Department (2019). Nashville Community Health and Well-being Survey. Retrieved from: https://www.nashville.gov/Health-Department/Data-and-Publications/Community-Health-Survey.aspx

Centers for Disease Control and Prevention (2020): Prevalence and Trends Data. Retrieved from:https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByLocation&irbLocationType=MMSA&islLocation=&islClass=&islTopic=&islYear=

County

4.7% of adults were current e-cigarette users in 2018-2019

State

5.9% of adults were current e-cigarette users in 2017

National

4.6% of adults were current e-cigarette users in 2017

[1] Centers for Disease Prevention and Control (2020). About Electronic Cigarettes (E-Cigarettes). Retrieved from: https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html

B3 Smokers Quitting Attempt

People who stop smoking at an early age greatly reduce their risk for disease and premature death. Some benefits include lowering risk for lung and other types of cancer and reducing risk for coronary heart disease, stroke, and infertility. There are several effective treatments and medications that can increase the chances of successful cessation including: counseling, clinical interventions, behavioral cessation therapies, nicotine replacement products, and other non-nicotine medications.

Data Description

This indicator shows the percentage of adult smokers aged 18 years and older who stopped smoking one day or longer in the past year because they were trying to quit smoking.

Data Source

Nashville Metro Public Health Department. (2019). Nashville Community Health and Well-being Survey.
Retrieved from: https://www.nashville.gov/Health-Department/Data-and-Publications/Community-Health-Survey.aspx

Centers for Disease Control and Prevention. Chronic Disease Indicators, Tobacco.
Retrieved from: https://nccd.cdc.gov/cdi/rdPage.aspx?rdReport=DPH_CDI.ExploreByLocation&rdRequestForwarding=Form

County

48% of smokers tried to quit in 2018-2019

State

57% of smokers tried to quit in 2018

National

56.6% of smokers tried to quit in 2018

Benchmark

80% Healthy People 2020 Target

B4 Teen Smokers

Those who begin smoking at a young age are more likely to have a long-term addiction to nicotine than people who start smoking later in life. This puts them at greater risk for smoking-related illness and death. Tobacco use results in over 480,000 deaths annually in the U.S.[1] The proportion of teens reporting smoking has declined substantially, and this decline has surpassed the Healthy People 2020 target.

Data Description

This indicator shows the percentage of high school students in grades 9-12 who reported having smoked a cigarette on at least 1 of the previous 30 days. County data are for 2019, while state and national data are for 2017.

Data Source

Nashville Metro Public Health Department (2019). 2019 Nashville Youth Risk Behavior Survey.

Centers for Disease Control and Prevention (2020). Chronic Disease Indicators.
Retrieved from: https://nccd.cdc.gov/cdi/rdPage.aspx?rdReport=DPH_CDI.ExploreByLocation&rdRequestForwarding=Form

County

4.7% of high school students smoked in 2019

State

9.4% of high school students smoked in 2017

National

8.8% of high school students smoked in 2017

State

16.0% Healthy People 2020 Target

[1] Centers for Disease Control and Prevention (2019). Tobacco-Related Mortality .
Retrieved from:
https://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/tobacco_related_mortality/index.htm

B5 Adult Obesity Rate

Adult obesity indicates poor diet and limited physical activity among adults. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status .[1]

Data Description

This indicator shows the percentage of the adult population aged 20 and older who are obese, (body mass index (BMI) ≥30 kg/m2). The measure is calculated using self-reported height and weight through the Behavioral Risk Factor Surveillance System (BRFSS). County level estimates are generated from 3 years of BRFSS data using modeling techniques. Multi-year trends should be interpreted with caution due to the limitations of modeling techniques and modifications in the BRFSS methodology beginning in 2015. [1]

Data Source

County Health Rankings and Roadmaps (2019). Tennessee. Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/11/description?sort=sc-0

CDC Interactive Diabetes Atlas. Retrieved from: https://www.cdc.gov/diabetes/data/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fdiabetes%2Fdata%2Fcountydata%2Fcountydataindicators.html

County

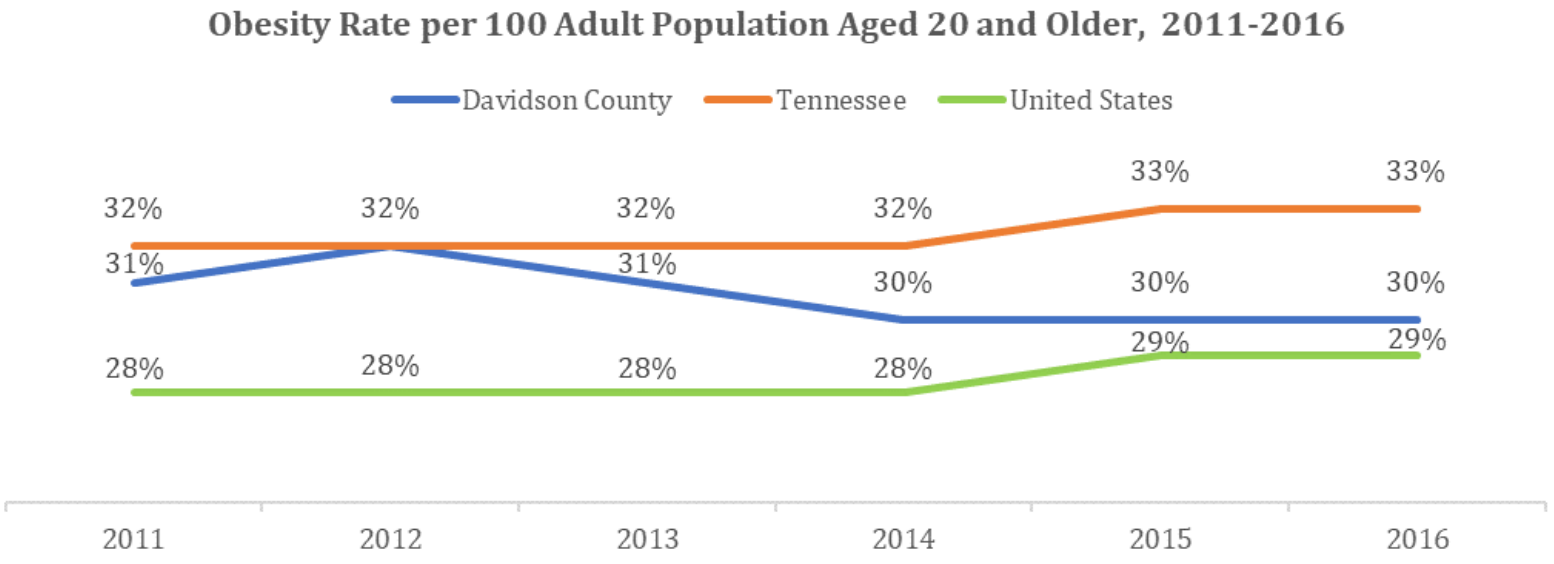
30% adults obese in 2016

State

33% adults obese in 2016

National

29% adults obese in 2016



[1] CountyHealthRankings.org. https://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/11/data?sort=sc-0

B6 Physical Inactivity Rate

Physical inactivity or reductions in physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. At the county level, physical inactivity increases health care expenditures for circulatory system diseases .[1]

Data Description

This indicator presents the percentage of the adult population (aged 20 and older) not receiving any physical activity or exercise outside of their regular jobs in the previous 30-day period, based on self-report data from the Behavioral Risk Factor Surveillance System (BRFSS). [1] Multi-year trends should be interpreted with caution due to the limitations of modeling techniques and modifications in the BRFSS methodology beginning in 2015.

Data Source

County Health Rankings and Roadmaps (2019). Tennessee. Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/70/description
CDC Interactive Diabetes Atlas. Retrieved from: https://www.cdc.gov/diabetes/data/index.html?

County

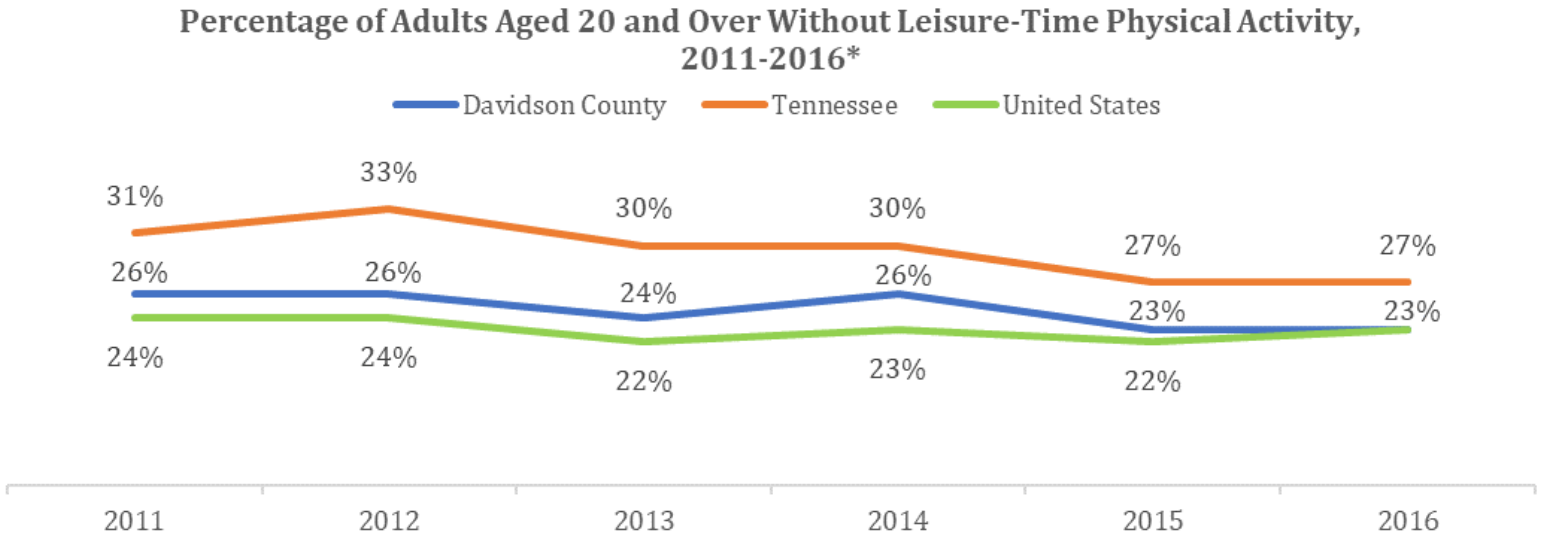
23% no leisure-time physical activity, 2016

State

27% no leisure-time physical activity, 2016

National

23% no leisure-time physical activity, 2016



*The trend should be interpreted with caution due to modification of the BRFSS methodology beginning in 2015

[1] County Health Rankings & Roadmaps: Physical Inactivity.
Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/70/description

B7 Child Overweight/Obesity Rate

Childhood obesity is associated with a higher chance of premature death and disability in adulthood. Overweight and obese children are more likely to stay obese into adulthood and to develop noncommunicable diseases (NCDs) like diabetes and cardiovascular disease at a younger age. For most NCDs resulting from obesity, the risks depend partly on the age of onset and on the duration of obesity. Obese children and adolescents suffer from both short-term and long-term health consequences .[1]

Data Description

This indicator represents the percentage of public-school students (kindergarten, 2nd, 4th, 6th, 8th grades, and high school) who are overweight or obese. Overweight/obesity is defined as a body mass index (BMI) greater than or equal to the 85th percentile for children of the same age and sex. BMI is calculated as the individual's body mass in kilograms divided by the square of their height in meters. Rate is the percent of students under study.

Data Source

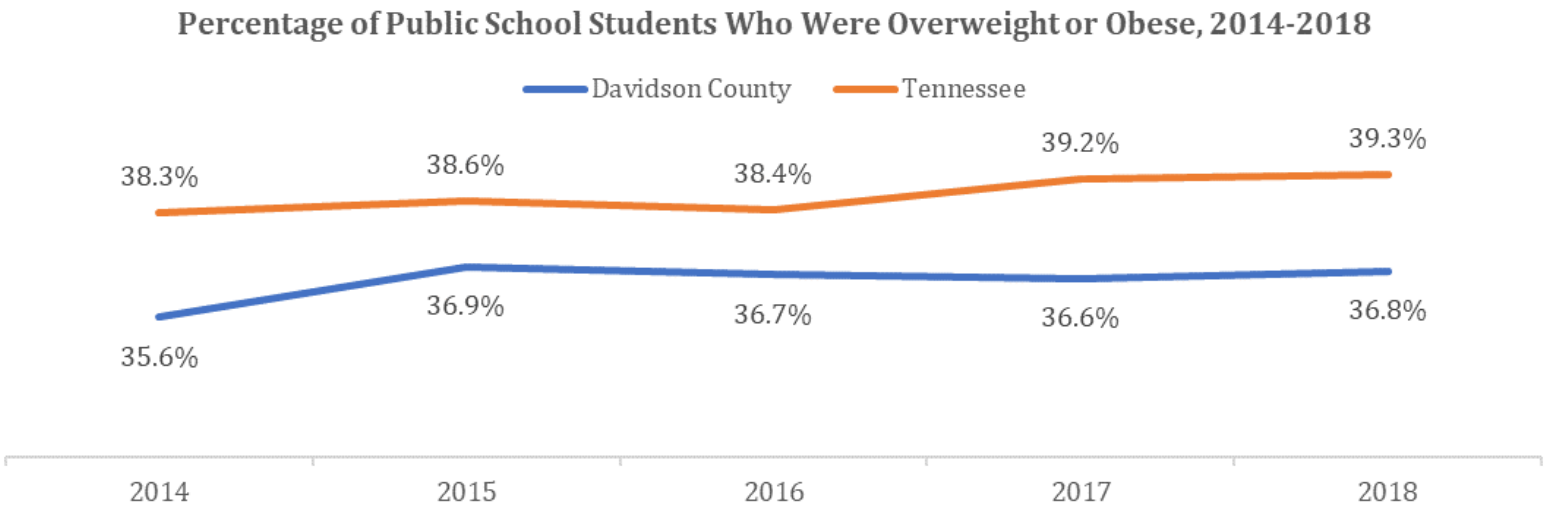
Kids Count Data Center (2020).
Retrieved from: https://datacenter.kidscount.org/data/tables/8705

County

36.8% of public school children in 2018

State

39.3% of public school children in 2018



[1] World Health Organization (2020). Why does childhood overweight and obesity matter?
Retrieved from: https://www.who.int/dietphysicalactivity/childhood_consequences/en/

B8 Insufficient Sleep

Sleep is an important part of a healthy lifestyle. It plays a key role in maintaining proper growth and repair of the body, learning, memory, emotional resilience, problem solving, decision making, and emotional control. A lack of sleep can have serious negative effects on health. Ongoing sleep deficiency has been linked to chronic health conditions including heart disease, kidney disease, high blood pressure, and stroke, and psychiatric disorders such as depression and anxiety, risky behavior, and suicide. Furthermore, a lack of sleep can also impact the health of others. Sleepiness, especially while driving, can lead to motor vehicle crashes and put the lives of others in jeopardy.

Data Description

This indicator shows the percentage of adults aged ≥18 years sleeping less than 7 hours in a 24-hour period on average.

Data Source

America's Health Ranking (2019). 2019 Annual Report: Insufficient Sleep in Tennessee.
Retrieved from: https://www.americashealthrankings.org/explore/annual/measure/sleep/state/TN?edition-year=2019

County

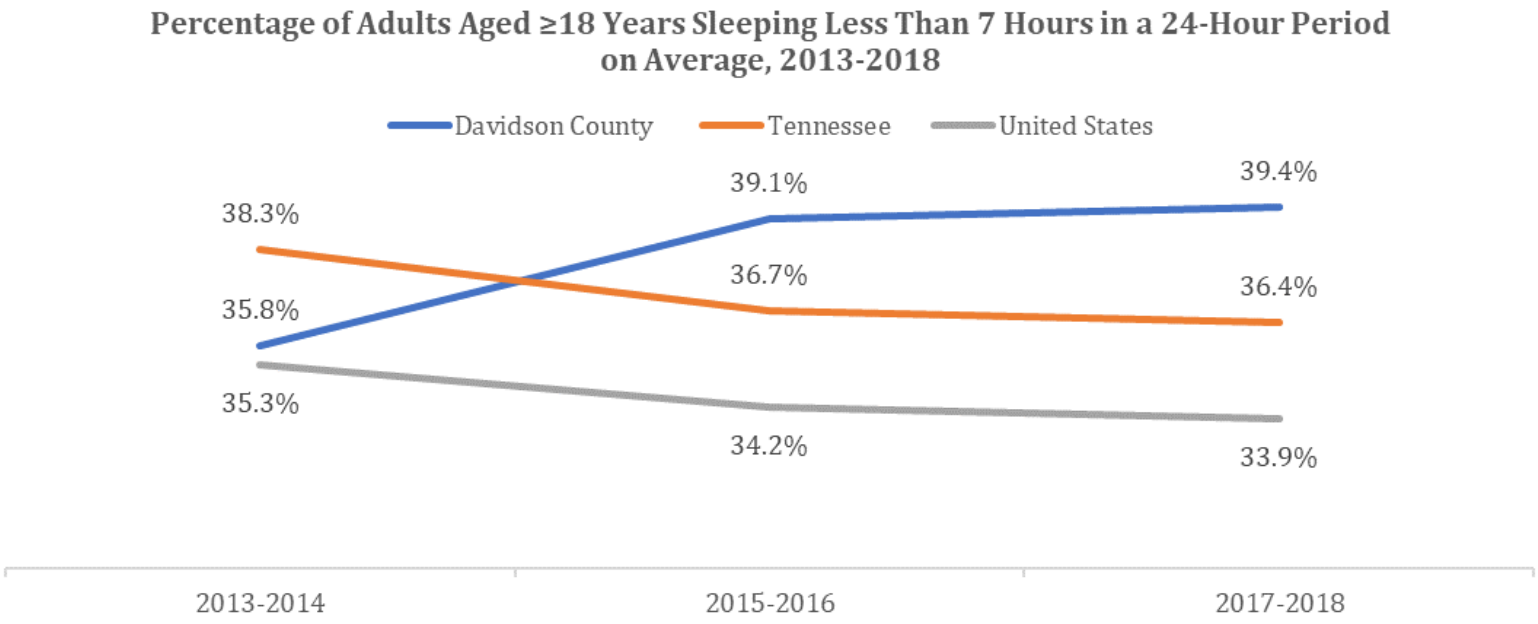
39.4% of adults in 2017-2018

State

36.4% of adults in 2017-2018

National

33.9% of adults in 2017-2018



B9 Health Check-Up

Regular health exams and tests can help find problems early, when the chances for treatment and cure are better. By receiving the recommended health services, screenings, and treatments, people can improve their chances for living a longer, healthier life. Age, health, family history, lifestyle choices (i.e. diet, physical activity, smoking), and other important factors impact what and how often a person might need healthcare .[1]

Data Description

This indicator shows the percentage of adults aged ≥18 years who visited a doctor for routine check-ups within the past year.

Data Source

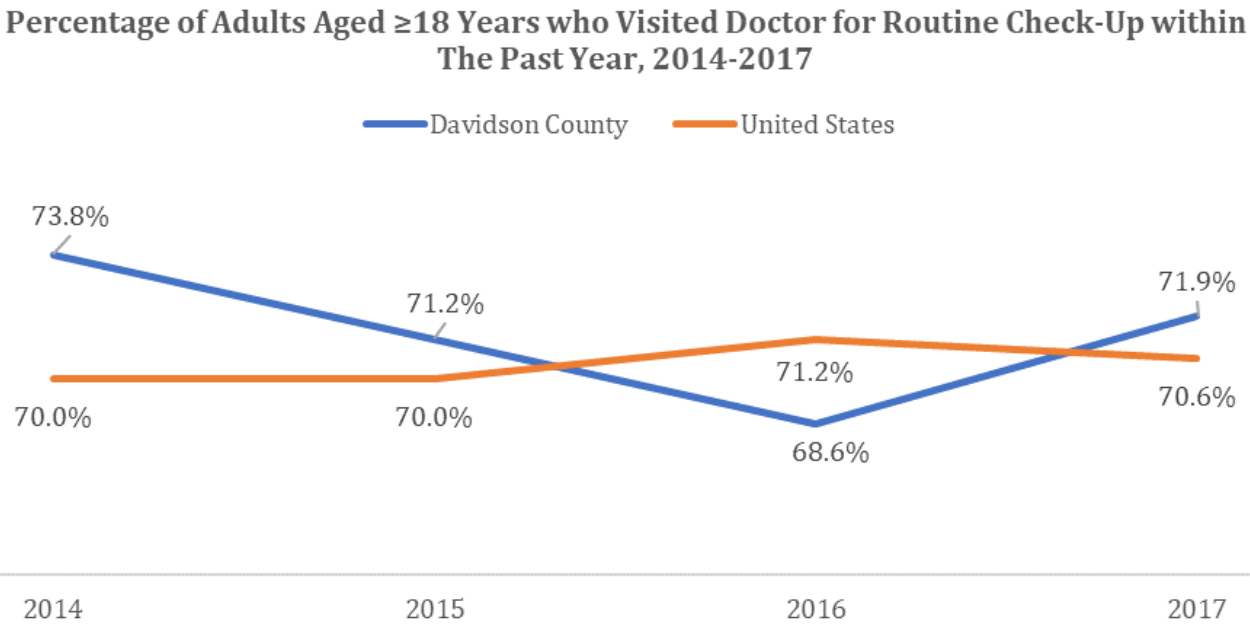
Centers for Disease Control and Prevention (2020). 500 Cities Project: Local Data for Better Health.
Retrieved from: http://www.cdc.gov/500cities/

County

71.9% of adults visited a doctor for routine check-up in 2017

National

70.6% of adults visited a doctor for routine check-up in 2017



[1] Centers for Disease Control and Prevention. Why Check-Ups Are Important.

B10 Cholesterol Screening

High blood cholesterol is a major risk factor for heart disease. Studies show that higher blood cholesterol levels increase the risks for developing heart disease or having a heart attack. Heart disease is the number one killer of men and women in the United States. High blood cholesterol does not cause symptoms, so regular screening is important. Lowering cholesterol levels lessens the risk for developing heart disease and reduces the chance of having a heart attack. Lowering high cholesterol levels is important for people of all ages, and for both men and women.

Data Description

This indicator shows the percentage of adults aged ≥ 18 years who have had their blood cholesterol checked in the past 5 years.

Data Source

Centers for Disease Control and Prevention (2020). 500 Cities Project: Local Data for Better Health. Retrieved from: https://www.cdc.gov/500cities/

County

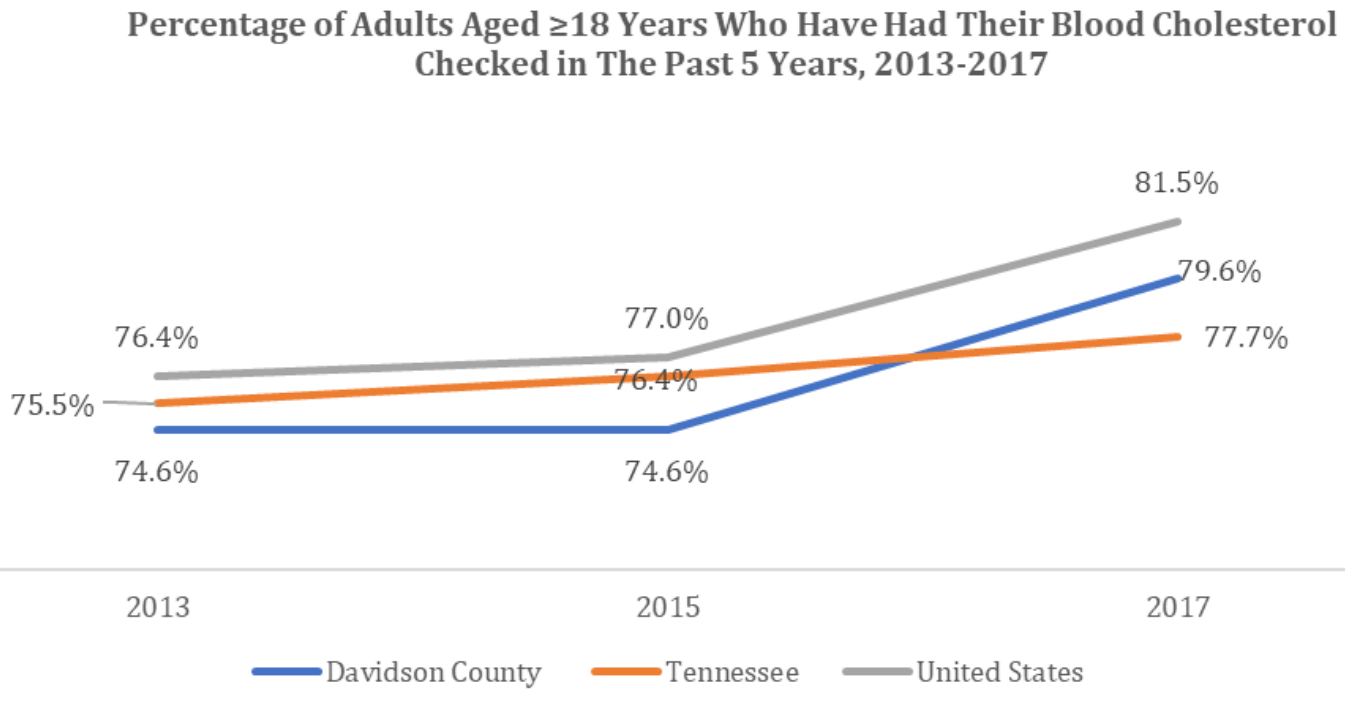
79.6% cholesterol screening rate, 2017

National

81.5% cholesterol screening rate, 2017

Benchmark

82.1% Healthy People 2020 Target



B11 Colorectal Cancer Screening

According to the Centers for Disease Control and Prevention (CDC), colorectal cancer -- cancer of the colon or rectum-- is one of the most commonly diagnosed cancers and is the second leading cause of cancer death in the United States. The CDC estimates that if all adults aged 50 or older had regular screening tests for colon cancer, as many as 60% of the deaths from colorectal cancer could be prevented.[1] The US Preventive Service Task Force recommends that screening begin at age 50 and continue until age 75; however, testing may need to begin earlier or be more frequent if colorectal cancer runs in the family, or if there is a previous diagnosis of inflammatory bowel disease. Speak with a doctor about when to begin screening and how often to be tested.

Data Description

This indicator shows the percentage of men aged 50-75 years who have had a fecal occult blood test, sigmoidoscopy, or colonoscopy in the past two years.

Data Source

Centers for Disease Control and Prevention (2020). 500 Cities: Local Data for Better Health.
Retrieved from: https://nccd.cdc.gov/500_Cities/rdPage.aspx?rdReport=DPH_500_Cities.ComparisonReport&Locations=4752006

County

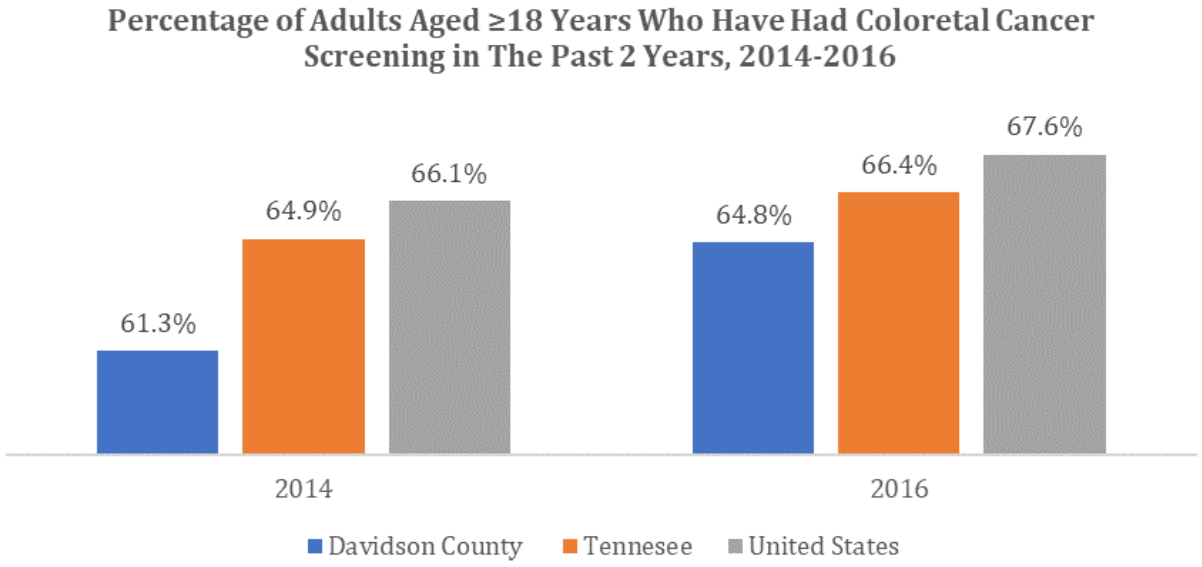
64.8% colorectal screening rate as of 2016

State

66.4% colorectal screening rate as of 2016

National

67.6% colorectal screening rate as of 2016



[1] Center for Disease Prevention and Control: Colorectal Cancer Statistics. Retrieved from: https://www.cdc.gov/cancer/colorectal/statistics/

B12 Breast Cancer Screening

A mammogram is an X-ray of the breast that can be used to detect changes in breast tissue such as tumors and calcifications. The test may be done for screening or diagnostic purposes. A positive screening mammogram leads to further testing to determine if cancer is present. Mammograms may also be used to evaluate known cases of breast cancer. Though mammograms do not detect all cases of breast cancer, they have been shown to increase early detection, thus reducing mortality. The Centers for Disease Control and Prevention provides low-income, uninsured, and underserved women access to free or low-cost mammograms through the National Breast and Cervical Cancer Early Detection Program (NBCCEDP).

Data Description

This indicator shows the percentage of women aged 50-74 years who have had a mammogram in the past 2 years.

Data Source

Centers for Disease Control and Prevention (2020). 500 Cities: Local Data for Better Health. Retrieved from: https://www.cdc.gov/500cities/

Centers for Disease Control and Prevention (2020). BRFSS Prevalence & Trends Data. Retrieved from: https://www.cdc.gov/brfss/brfssprevalence/index.html

County

80.3% screening rate as of 2016

State

77.1% screening rate as of 2016

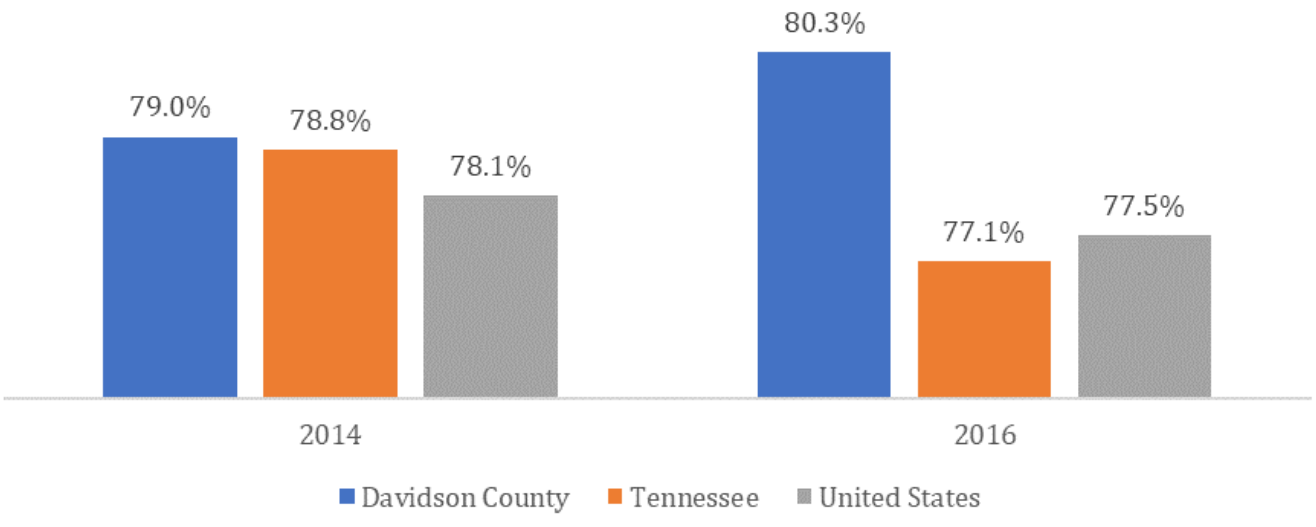
National

77.5% screening rate as of 2016

Benchmark

81.1% Healthy People 2020 Target

Percentage of Women Aged 50-74 Years Who Have Had a Mammogram in The Past 2 Years, 2014-2016



B13 Cervical Cancer Screening

A Pap smear tests for early signs of cervical cancer. Cervical cancer is a common type of cancer which has a high cure rate if detected early. The American College of Obstetricians and Gynecologists recommends that women under 30 should have a Pap smear every 2 years, and for those over 30, the frequency of testing depends on age and health history.

Data Description

This indicator shows the percentage of women aged 21-65 years who have had a Pap smear in the past three years or at a recommended interval.

Data Source

Centers for Disease Control and Prevention (2020). 500 Cities: Local Data for Better Health. Retrieved from: https://www.cdc.gov/500cities/

Centers for Disease Control and Prevention (2020). BRFSS Prevalence & Trends Data. Retrieved from: https://www.cdc.gov/brfss/

County

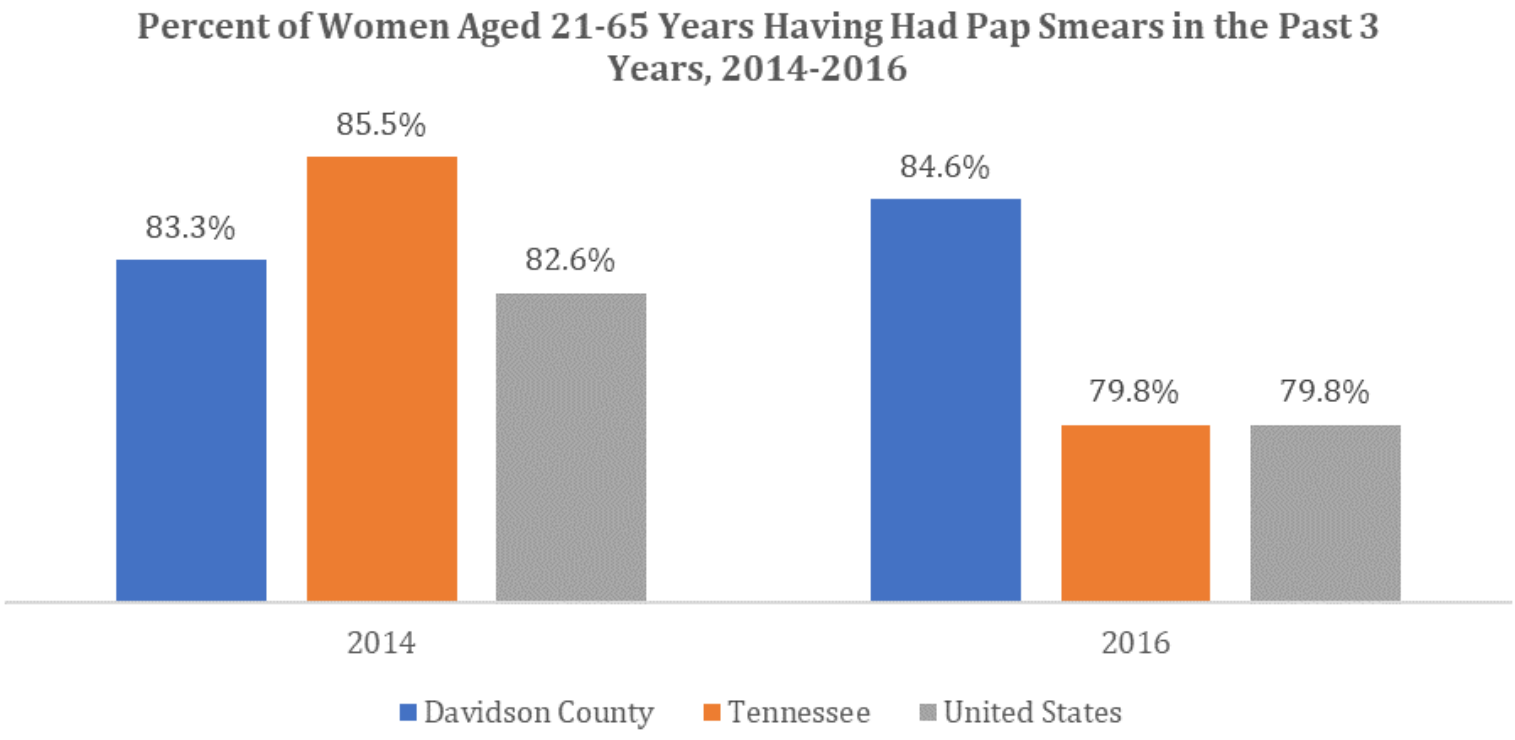
84.6% cervical cancer screening rate 2016

State

79.8% cervical cancer screening rate 2016

National

79.8% cervical cancer screening rate 2016



B14 Adult Binge Drinking

Binge drinking is excessive consumption of alcohol, which can be dangerous and lead to a loss of sensory perception and blackouts. Binge drinkers are 14 times more likely to report alcohol-impaired driving than non- binge drinkers.[1] Alcohol abuse is also associated with a variety of negative health and safety outcomes. Men are twice as likely to binge drink as women.

Data Description

This indicator shows the percentage of adults age ≥ 18 years who reported binge drinking at least once during the past 30 days. Male binge drinking is defined as five or more drinks on one occasion, and female binge drinking is four or more drinks on one occasion.

Data Source

Centers for Disease Prevention and Control (2019). 500 Cities Project: Local Data for Better Health.
Retrieved from: https://nccd.cdc.gov/500_Cities/rdPage.aspx?rdReport=DPH_500_Cities.ComparisonReport&Locations=4752006

County

15.4% of adults engaged in binge drinking, 2017

State

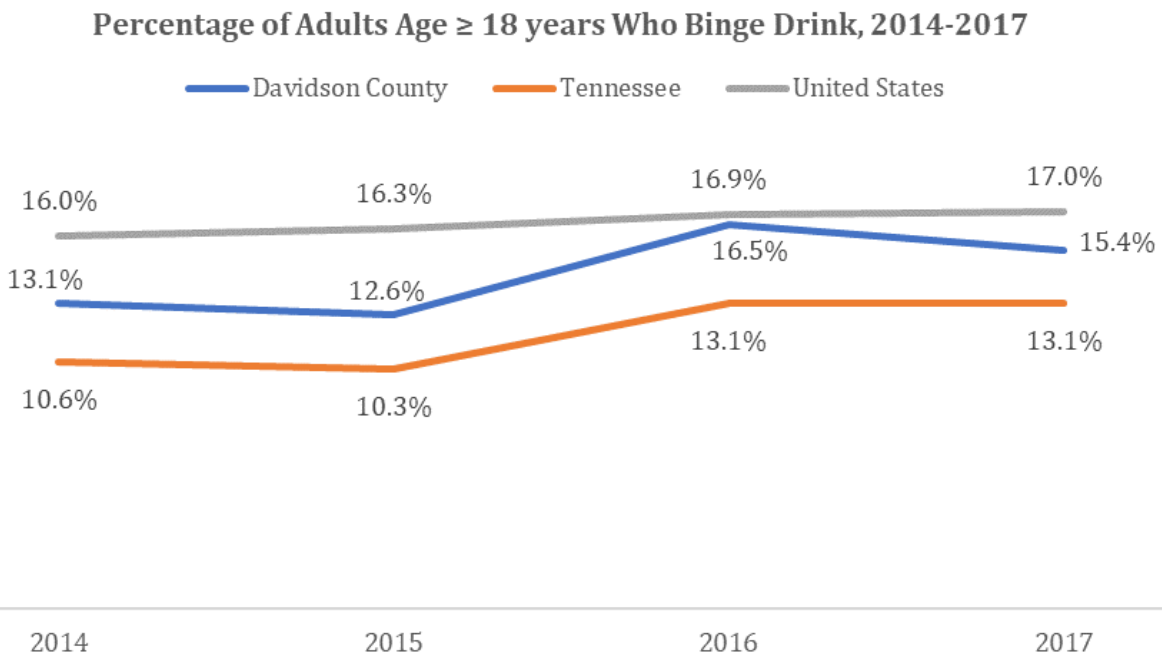
13.1% of adults engaged in binge drinking, 2017

National

17.0% of adults engaged in binge drinking, 2017

Benchmark

24.4% Healthy People 2020 Target



[1] Bernosky-Smith KA, Shannon EE, Roth AJ, Liguori A. Alcohol effects on simulated driving in frequent and infrequent binge drinkers. Hum Psychopharmacol. 2011;26(3):216-223

B15 Treatment for Alcohol Abuse

The harmful use of alcohol is an important and substantial risk to health worldwide. It is a leading risk factor in the global burden of disease among developed and developing countries.[1] Alcohol consumption carries short-term health risks, such as unintentional injury, violence, risky sexual behaviors, and pregnancy complications as well as longer-term risks such as heart disease, cancer, weakened immune system, and depression and anxiety.[2]

Data Description

This indicator shows the percentage of admissions to any substance abuse treatment program funded by the Tennessee Department of Mental Health & Substance Abuse Services in which alcohol is listed as a substance of abuse.

Data Source

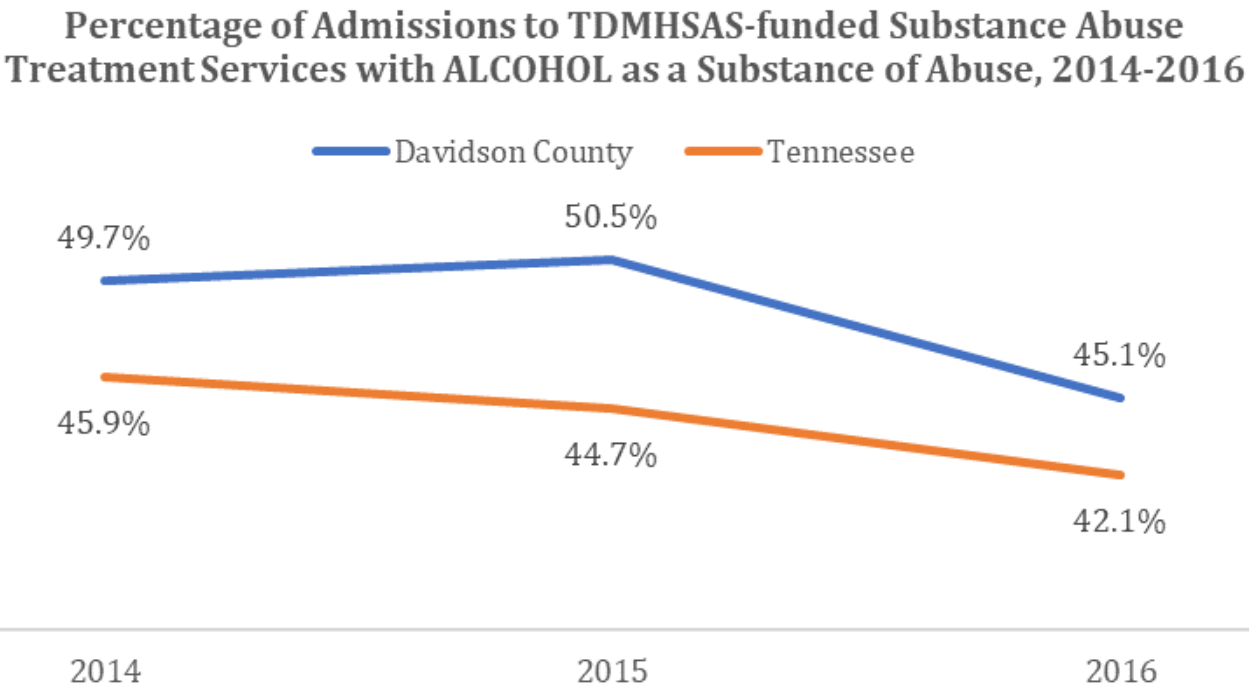
Tennessee Department of Mental Health & Substance Abuse Services (2017). 2017 Tennessee Behavioral Health County and Region Services Data Book Chart 20, page 40. Retrieved from: https://www.tn.gov/content/dam/tn/mentalhealth/documents/DPRF_BH_county_region_service_data_book_9-

County

45.9% of admissions to TDMHSAS-funded substance abuse treatment services with ALCOHOL as a substance of abuse in 2016

State

42.1% of admissions to TDMHSAS-funded substance abuse treatment services with ALCOHOL as a substance of abuse in 2016



[1] WHO (2020). Public health problems caused by harmful use of alcohol. Retrieved from: https://www.who.int/nmh/a5818/en/

[2] Alcohol Use and Your Health, Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, https://www.cdc.gov/alcoholportal/ accessed on March 24, 2021

B16 Motor Vehicle Crash Deaths with Alcohol Involvement

In 2012, nearly one-third of all traffic-related deaths in the United States were caused by alcohol-impaired crashes.[1] Alcohol-related fatalities in the U.S. cost over $59 billion annually.[2]

Data Description

This indicator shows the rate per 100,000 population of all motor vehicle crash deaths where a driver was alcohol impaired. Alcohol impairment is defined as having a Blood Alcohol Content (BAC) of 0.08 or higher.

Data Source

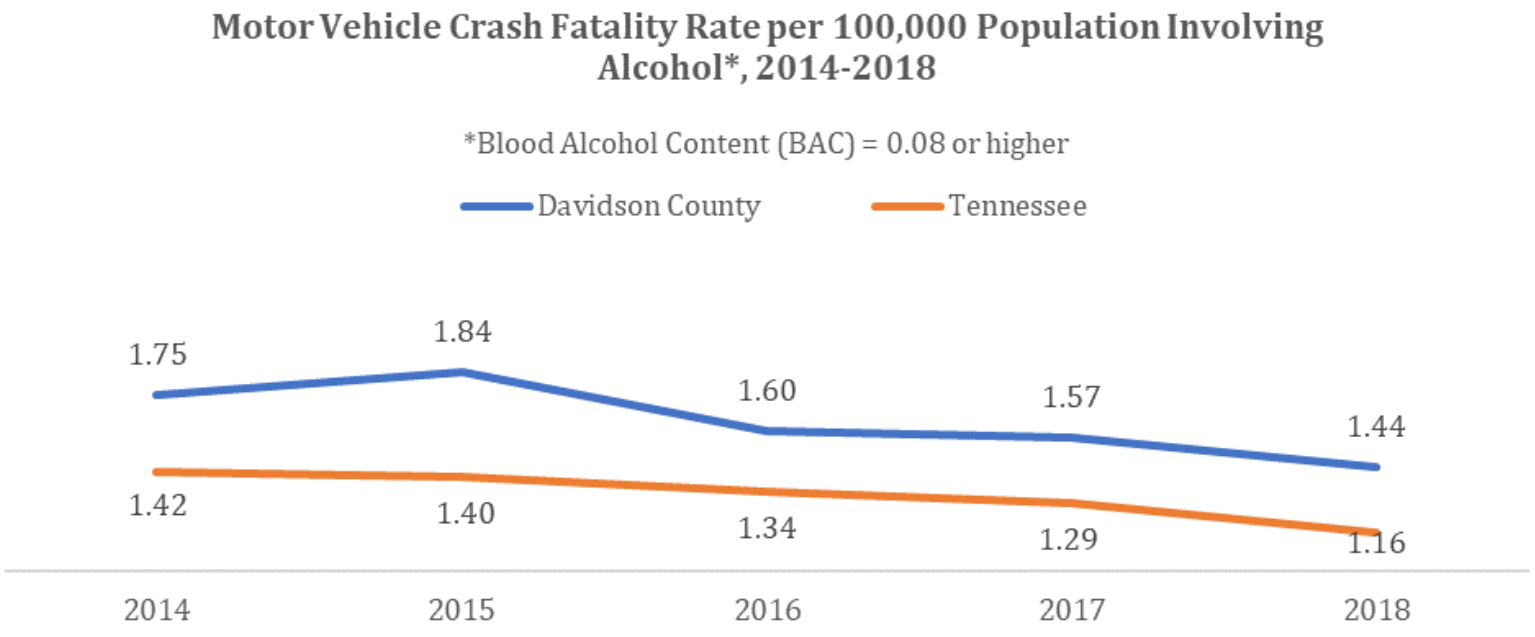
Tennessee Department of Safety and Homeland Security (2019). Tennessee Traffic Crash Data: County Rankings and Statistics by Emphasis Area 2014–2018. Retrieved from: https://www.tn.gov/content/dam/tn/safety/documents/CountyCrashRankings.pdf

County

1.44/100,000 motor vehicle crash fatality rate involving alcohol in 2018

State

1.16/100,000 motor vehicle crash fatality rate involving alcohol in 2018



[1] National Highway Traffic Safety Administration. (2014). Traffic safety facts 2012: Alcohol-impaired driving. U.S. Department of Transportation, Washington D.C. Retrieved from: https://www-nrd.nhtsa.dot.gov/Pubs/811870.pdf

[2] Blincoe, L., Miller, T.A., Zaloshnja, E., & Lawrence, B.A. (2014). The economic impact of motor vehicle crashes. National Highway Traffic Safety Administration, U.S. Department of Transportation. Washington D.C.

B17 Pedestrians Injured in Crashes

Behavioral Risk Factors

Pedestrian safety is a public health concern. Adequate pedestrian infrastructure, such as crosswalks, crossing signals, sidewalks, bus shelters, and other pedestrian-oriented infrastructure can create a safer environment for pedestrians and reduce the risk of injury and death.

Data Description

This indicator reports the rate per 100,000 population of pedestrians injured in crashes involving a vehicle and a pedestrian.

Data Source

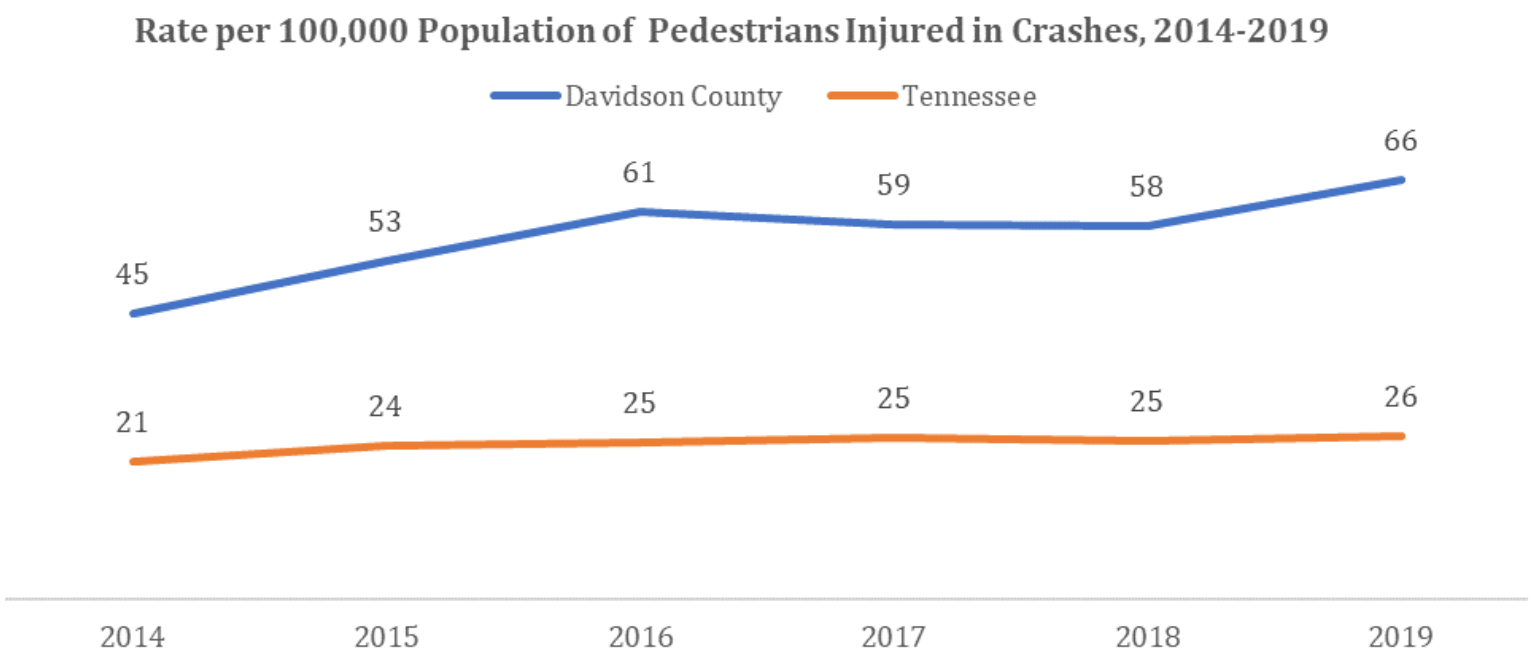
Tennessee Department of Safety & Homeland Security (2020). Pedestrians and Other Pedestrians Involved in Tennessee Traffic Crashes by Year and County 2007 – 2019. Retrieved from: https://www.tn.gov/content/dam/tn/safety/documents/Pedestrians.pdf

County

65/100,000 pedestrians injured in crashes involving a vehicle and a pedestrian in 2019

State

25/100,000 pedestrians injured in crashes involving a vehicle and a pedestrian in 2019



B18 Recreation and Fitness Facilities

Behavioral Risk Factors

Fitness and recreation centers (defined by North American Industry Classification System (NAICS) code 713940) are establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.[1]

Data Description

This indicator reports the number of Recreation and Fitness Facilities per 100,000 population.

Data Source

CARES Engagement Network. Health Indicators Report. Retrieved from: https://engagementnetwork.org/assessment/chna_report/

County

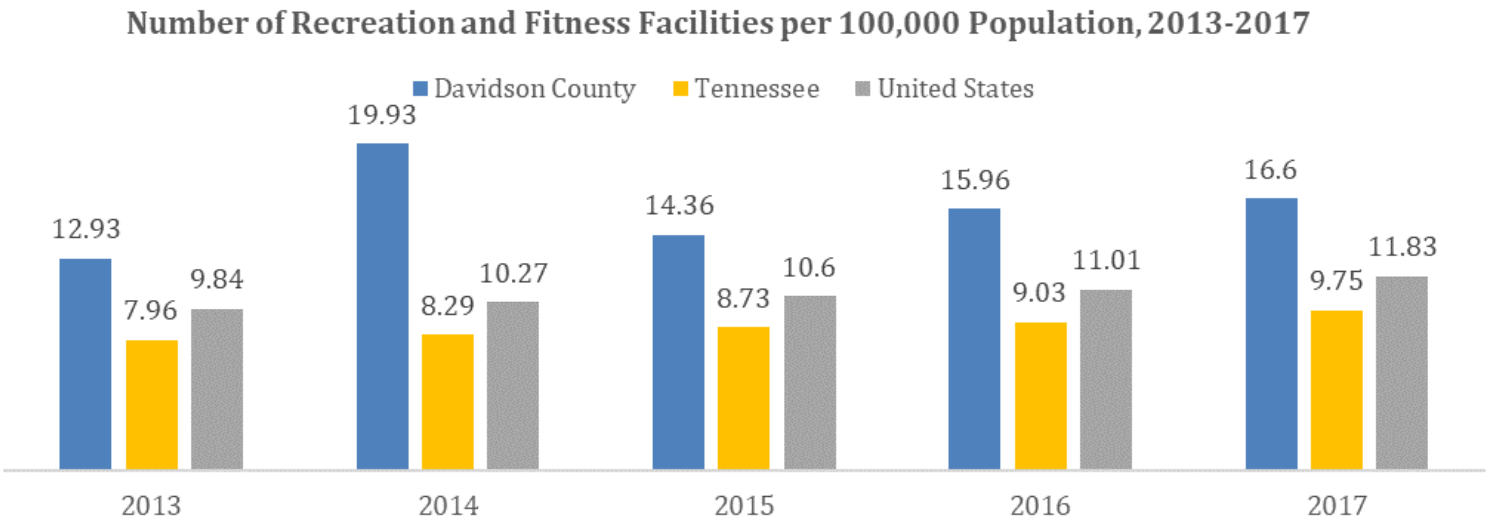
16.6 per 100,000 population in 2017

State

9.75 per 100,000 population in 2017

Nation

11.83 per 100,000 population in 2017



[1] Food Environment Atlas Data Documentation.
Retrieved from: https://www.ers.usda.gov/webdocs/DataFiles/80526/archived_documentation_August2015.pdf?v=0

Mental Health and Social Risk Factors

2021 Community Health Profile
Metro Public Health Department

According to the World Health Organization, "mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."[1]

Everyone's mental wellbeing can be influenced by the social contexts in which we live, work, and play throughout the life course. This includes stressors related to family structures and household living conditions, socio-economic factors like poverty, access to education and employment, and the availability of mental health and substance use treatments and services.

Equally important are factors that promote positive psychological wellbeing such as a lack of social or geopolitical conflicts, stable economic conditions, and unrestricted access to basic commodities and services.[2]

Section Highlights

- The percentage of adults who reported that their mental health was not good for 14 or more days in the past 30 days in Davidson County was relatively stable between 2014 and 2017, ranging from a low of 13.8% to a high of 14.3%. (Indicator M1)
- On average the number of mentally unhealthy days reported by adults increased from 2.7 in 2015 to 4.4 in 2016 and then stabilized through 2019. (Indicator M3)
- About 1 in 10 adults in Davidson County report 4 or more adverse childhood experiences, compared to 16% across the state and 17% nationally. (Indicator M5)
- The opioid prescription rate in Davidson County declined and was consistently lower than the state rate between 2014 (931 vs. 1,251 per 100,000 population) and 2019 (550 vs. 786 per 100,000 population). (Indictor M6)
- Drug overdose deaths in Davidson County rose from 18.5 per 100,000 population in 2014 to 33.4 per 100,000 population in 2018, mirroring the state trend. (Indicator M7)
- Rates of admissions into substance abuse treatment declined between 2014 and 2016 (from 13.7 to 13.0 per 1,000 residents living in poverty). (Indicator M8)
- The rate of domestic violence declined 24% between 2014 (18.53 victims per 1,000 residents) and 2018 (14.06 victims per 1,000 residents). (Indicator M9)

[1] https://www.who.int/mental_health/mhgap/risks_to_mental_health_EN_27_08_12.pdf Accessed on 4/3/2020

[2] Alegría M, NeMoyer A, Falgàs Bagué I, Wang Y, Alvarez K. Social Determinants of Mental Health: Where We Are and Where We Need to Go. *Curr Psychiatry Rep*. 2018;20(11):95. Published 2018 Sep 17. doi:10.1007/s11920-018-0969-9. Accessed on 4/3/2020 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6181118/

Mental Health and Social Risk Factors

M1 Adult Poor Mental Health

Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Persistent mental/emotional health problems should be evaluated and treated by a qualified professional.

Data Description

This indicator shows the percentage of adults who stated their mental health was not good for 14 or more days in the past 30 days.

Data Source

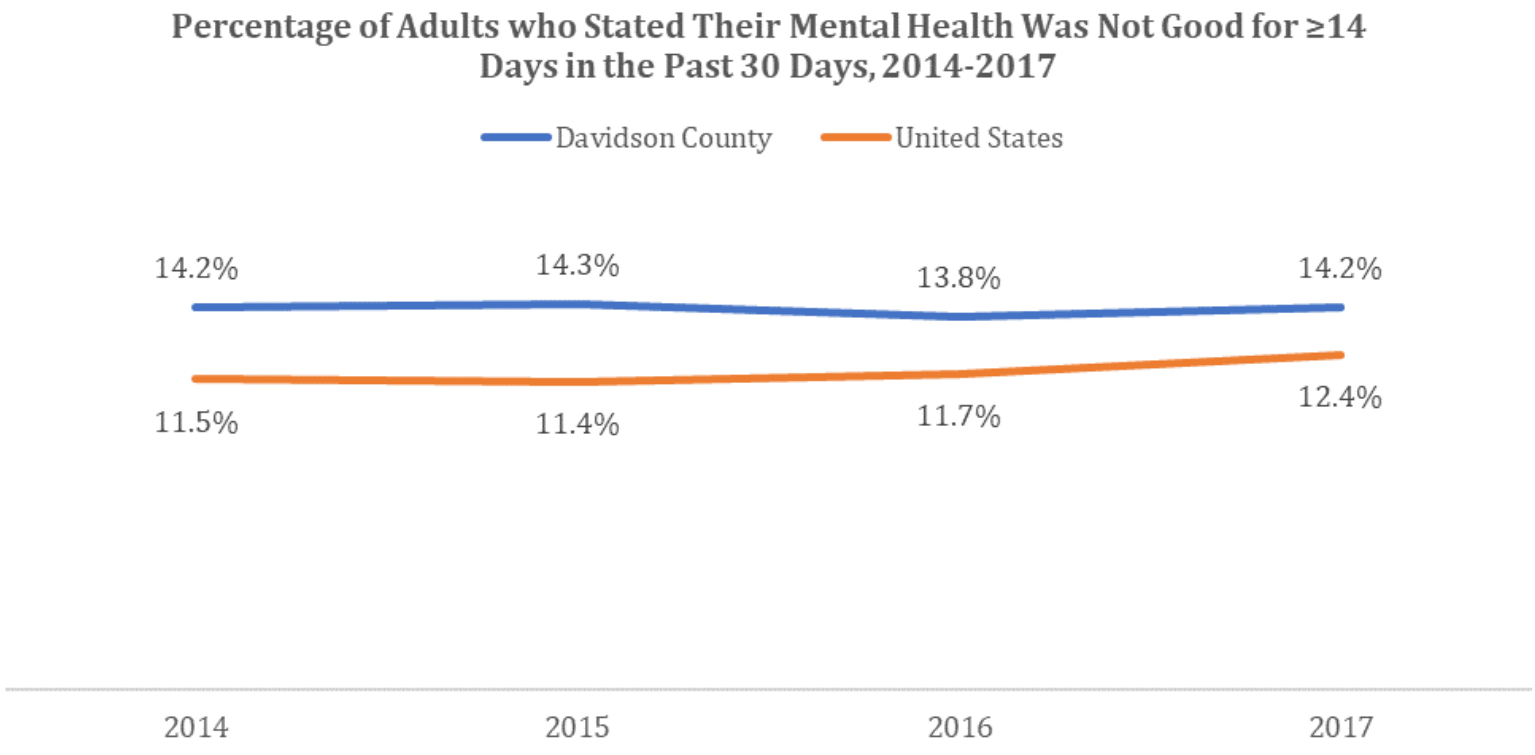
Centers for Disease Prevention and Control (2019). 500 Cities Project: Local Data for Better Health. Retrieved from:https://nccd.cdc.gov/500_Cities/rdPage.aspx?rdReport=DPH_500_Cities.ComparisonReport&Locations=4752006

County

14.2% adults who stated their mental health was not good for 14 or more days in the past 30 days in 2017

National

12.4% adults who stated their mental health was not good for 14 or more days in the past 30 days in 2017



M2 Adult Mental Illness

According to the National Institute of Mental Health, mental health disorders are the leading cause of disability in the U.S., accounting for 25% of all years of life lost to disability and premature mortality.[1] In the 2012 Grassroots Community Survey conducted by Metro Social Services in Davidson County, mental health and substance abuse treatment was identified as the fourth greatest need in the health category.[2]

Data Description

This indicator shows the percentage of adults aged ≥18 years who reported having any mental illness in the past year.

Data Source

Substance Abuse and Mental Health Services Administration (2020). National Survey on Drug and Mental Health. Retrieved from: https://www.datafiles.samhsa.gov/study-series/national-survey-drug-use-and-health-nsduh-nid13517

County

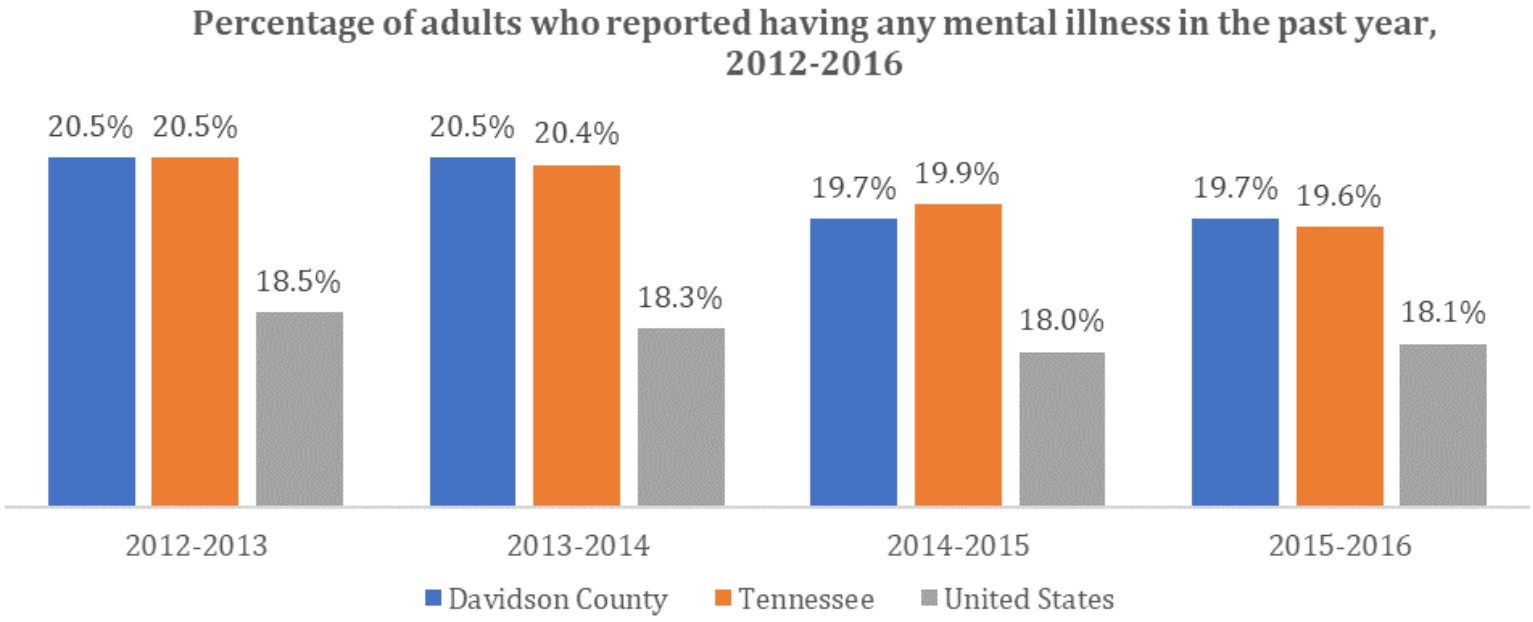
19.7% adults with mental illness in 2015-2016

State

19.6% adults with mental illness in 2015-2016

National

18.1% adults with mental illness in 2015-2016



[1] National Institute of Mental Health. (2008) National Institute of Mental Health strategic plan. Bethesda, MD. Retrieved from: https://www.nimh.nih.gov/about/strategic-planning-reports/index.shtml

[2] Metro Social Services. (2012). Community Needs Evaluation: 2012 Update. Nashville, TN. Retrieved from: http://howsnashville. org/wp-content/uploads/2013/02/mss_community_needs_2012.pdf

M3 Adult Poor Mental Health Days

Psychological distress can affect all aspects of our lives. It is important to recognize and address potential psychological issues before they become critical. Persistent mental/emotional health problems should be evaluated and treated by a qualified professional.

Data Description

This indicator shows the average number of mentally unhealthy days reported in the past 30 days.

Data Source

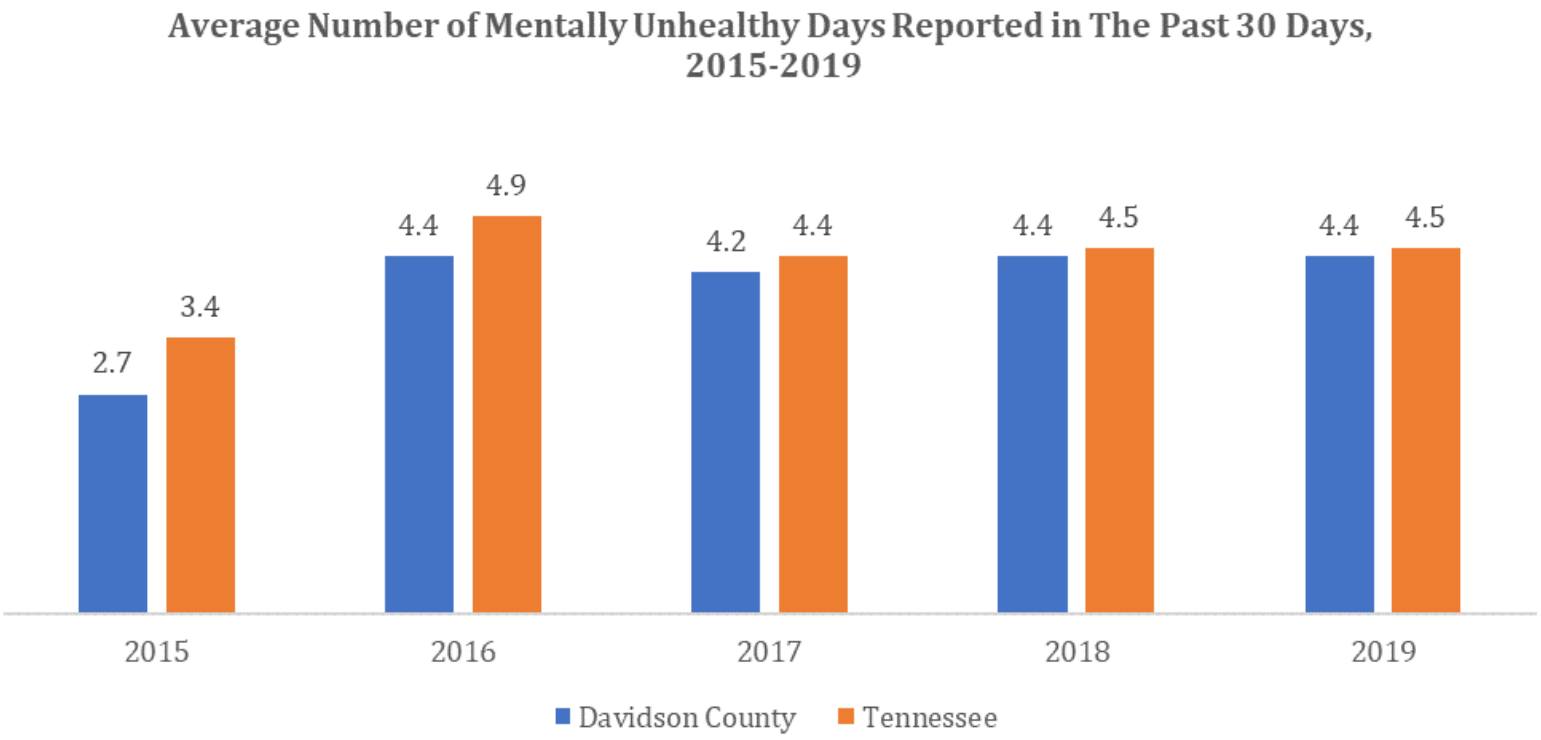
County Health Rankings and Road Maps (2019). Tennessee. Retrieved from:https://www.countyhealthrankings.org/app/tennessee/2019/rankings/davidson/county/outcomes/overall/snapshot

County

4.4 mentally unhealthy days reported in the past 30 days, 2019

State

4.5 mentally unhealthy days reported in the past 30 days, 2019



M4 Suicide Attempts

Suicide is a leading cause of death in the United States, presenting a major, preventable public health problem. More than 33,000 people kill themselves each year according to the Centers for Disease Control and Prevention, but suicide deaths only account for part of the problem.[1] An estimated 25 attempted suicides occur per every suicide death, and those who survive suicide may have serious injuries, in addition to having depression and other mental problems. Other repercussions of suicide include the combined medical and lost work costs on the community, totaling over $30 billion for all suicides in a year, and the emotional toll on family and friends.

Data Description

This indicator shows the rate of emergency department (ED) visits for self-harm/suicide attempts per 10,000 population aged 10-24.

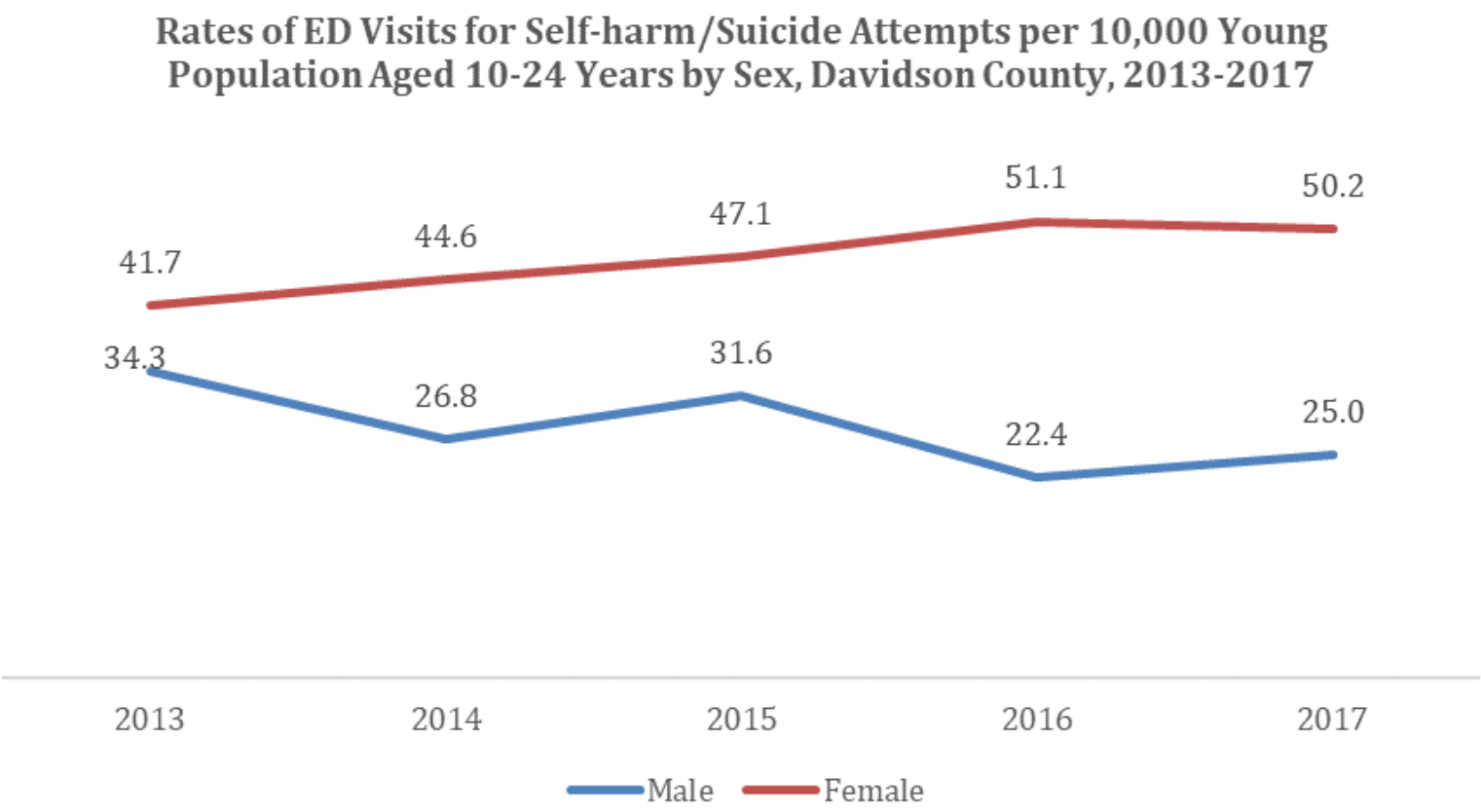
Data Source

Tennessee Department of Health. Hospital Discharge System Data, 2013-2017.

County

50.2/10,000 suicide attempts rate among young females in 2017

25.0/10,000 suicide attempts rate among young males in 2017



[1] DC Health Matters: Age-Adjusted Death Rate due to Suicide. Retrieved from: http://www.dchealthmatters.org/indicators/index/view?indicatorId=120&localeId=130951

M5 Adult Adverse Child Experiences (ACEs)

Adverse Childhood Experiences (ACEs) are potentially traumatic events that occur in childhood. ACEs can include violence, abuse, and growing up in a family with mental health or substance use problems. Toxic stress from ACEs can change brain development and affect how the body responds to stress. ACEs are linked to chronic health problems, mental illness, and substance misuse in adulthood. They can lead to educational underachievement and poor employment outcomes.[1]

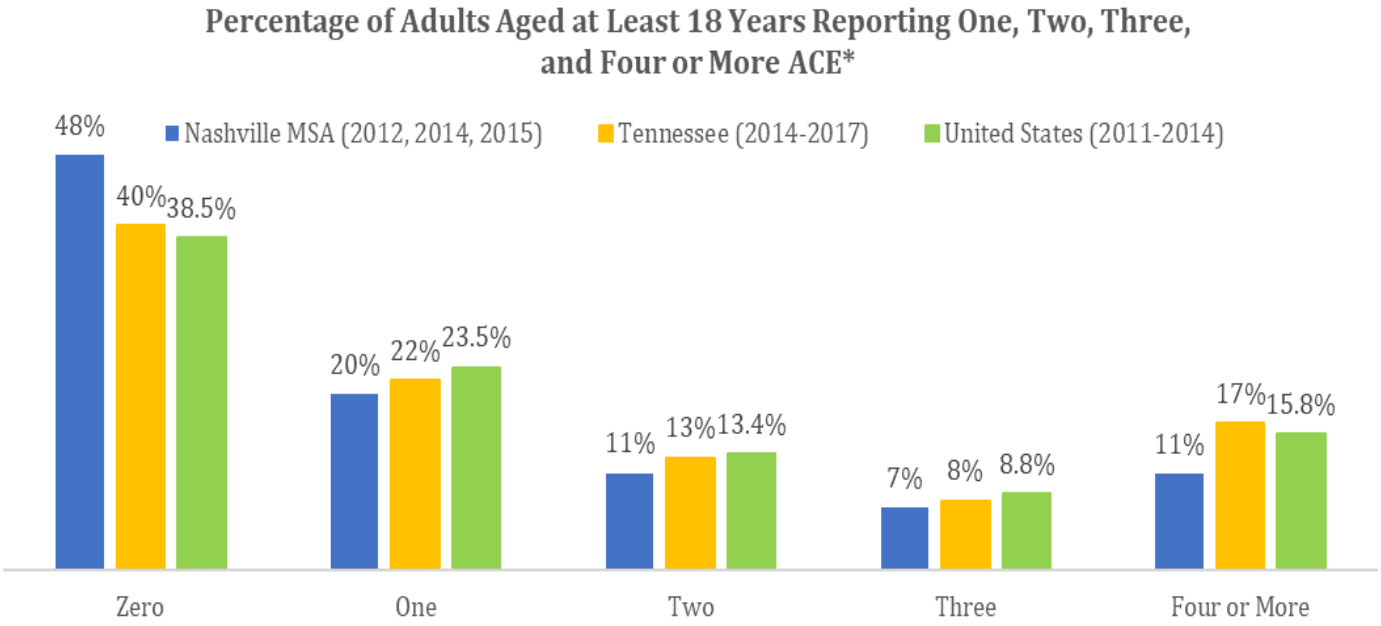
Data Description

This indicator shows the percentage of adults aged 18 years or older reporting at least 1 ACE. The ACE score is the total number of ACEs reported by an individual in response to the ACE questionnaire. Often the higher the ACE score the greater the negative health impacts of toxic stress.[2]

Data Source

Merrick MT, Ford DC, Ports K A, Guinn AS. (2018). Prevalence of Adverse Childhood Experiences From the 2011-2014 Behavioral Risk Factor Surveillance System in 23 States. JAMA Pediatrics, 172(11), 1038-1044.

Tennessee Department of Health (2014-2017). Behavior Risk Factor Surveillance Survey (BRFSS). The Sycamore Institute. The Economic Cost of ACEs in Tennessee. Research Report, February 1, 2019.



* Due to differences in the time frames for the data sources, geographic differences should be interpreted with caution as estimates may not be comparable across the transitions. Nashville MSA refers to the Nashville-Davidson-Murfreesboro-Franklin Metropolitan Statistical Area (MSA) which is centered in Nashville and includes 13 surrounding counties in Middle Tennessee. The smallest geographic unit for which ACEs are publicly available is the Nashville MSA.

[1] https://www.cdc.gov/vitalsigns/aces/index.html

[2] Jones CM, Merrick MT, Houry DE. Identifying and Preventing Adverse Childhood Experiences: Implications for Clinical Practice. JAMA. 2020;323(1):25–26. doi:10.1001/jama.2019.18499

M6 Opioid Prescribing Rates

Prescription opioids are often used to treat chronic and acute pain and, when used appropriately, can be an important component of treatment. However, serious risks are associated with their use, and it is essential to carefully consider both the risks and benefits of using prescription opioids. Risks include misuse, opioid use disorder (addiction), overdoses, and death.

Data Description

This indicator shows the rate of filled opioid pain prescriptions per 1,000 population.

Data Source

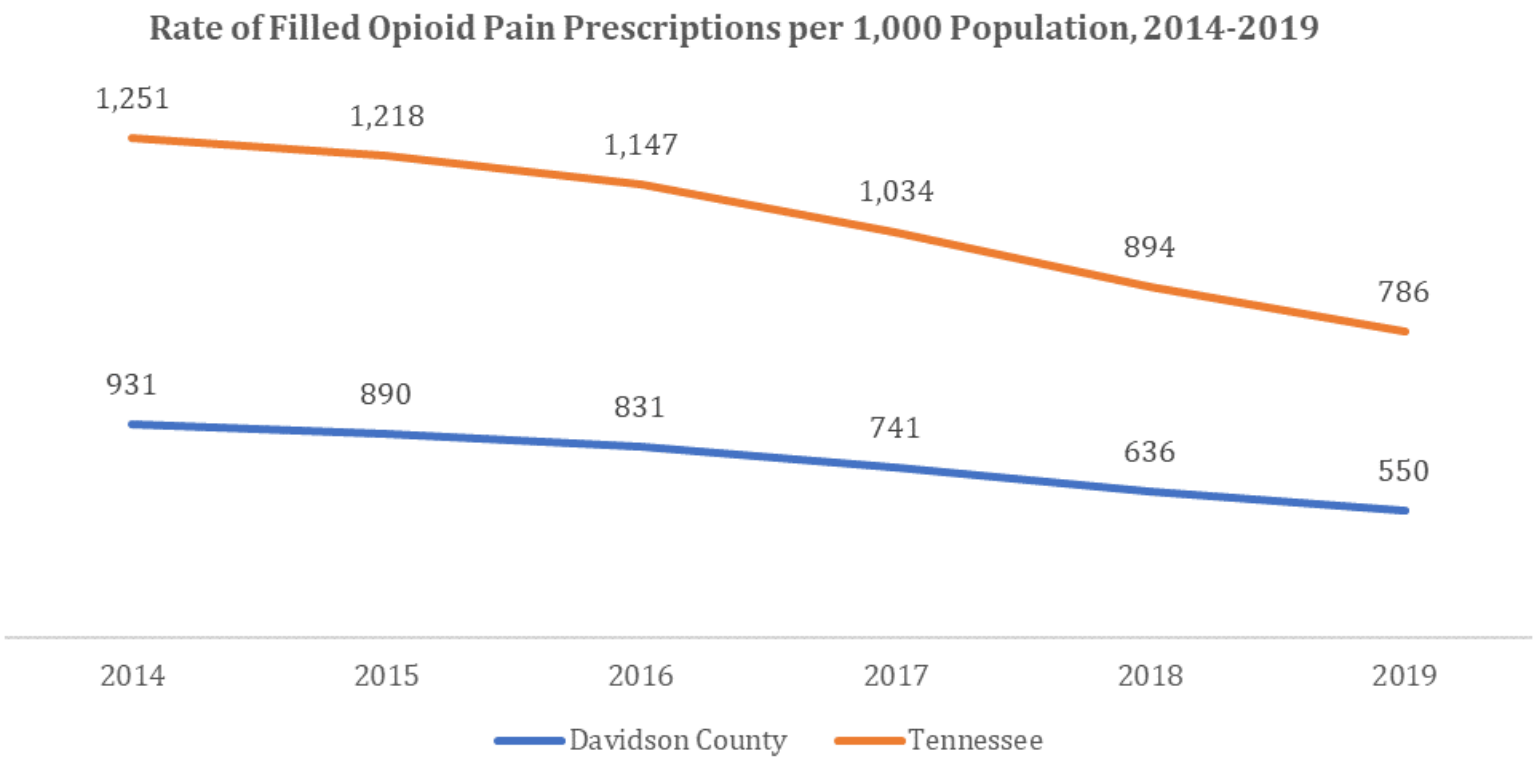
Tennessee Department of Health (2019). Tennessee Drug Overdose Data (Numerator).
Retrieved from: https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html
U.S. Census Bureau (2014-2019). American Community Health Survey, 1-year estimates. Total Population (Denominator).

County

550/1,000 rate of filled opioids for pain prescriptions in 2019

State

786/1,000 rate of filled opioids for pain prescriptions in 2019



M7 Drug Overdose Deaths

Drug overdose is the leading cause of injury-related deaths in the United States, with over 100 people that die from drug overdose every day. The death rate due to drug overdose has been increasing over the last few decades. Most deaths due to pharmaceutical overdose involve opioid analgesics (prescription painkillers). Those who die from drug overdose are more likely to be male, Caucasian, or between the ages of 45 and 49. Although most drug overdose deaths are accidental, they may also be intentional or of undetermined intent.[1]

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to drug overdose.

Data Source

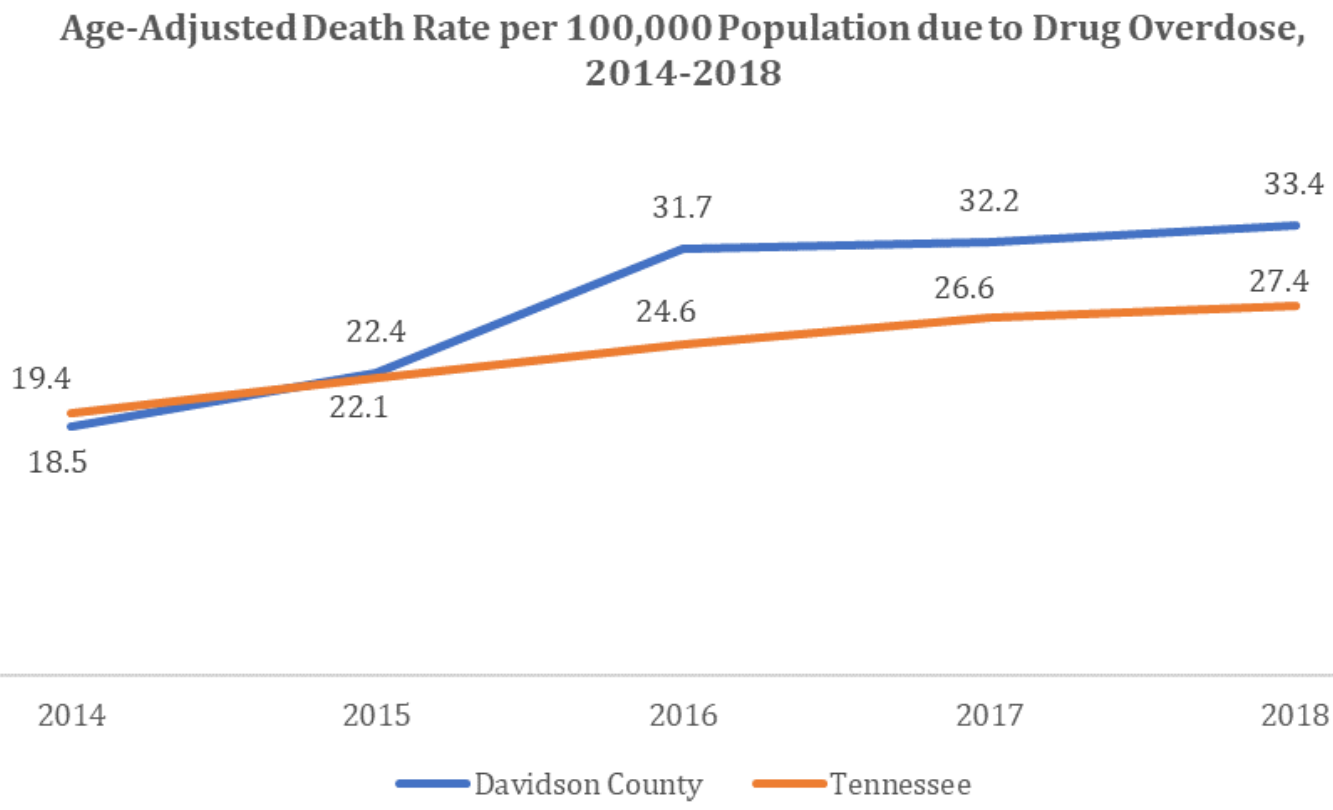
Tennessee Department of Health (2019). Fatal Overdose Data. Retrieved from: https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html

County

33.4/100,000 age-adjusted death rate due to drug overdose in 2018

State

27.4/100,000 age-adjusted death rate due to drug overdose in 2018



[1] Center for Disease Control and Prevention. America's Drug Overdose Epidemic: Data to Action. Retrieved from: https://www.cdc.gov/injury/features/prescription-drug-overdose/index.html

M8 Substance Abuse Treatment

Substance abuse has a major impact on individuals, families, and communities. The effects of substance abuse are cumulative, significantly contributing to costly social, physical, mental, and public health problems. These highlight the importance of increasing prevention efforts and improving access to treatment for substance abuse and co-occurring disorders.

Data Description

This indicator shows the rate of substance abuse treatment admissions per 1,000 population living in poverty.

Data Source

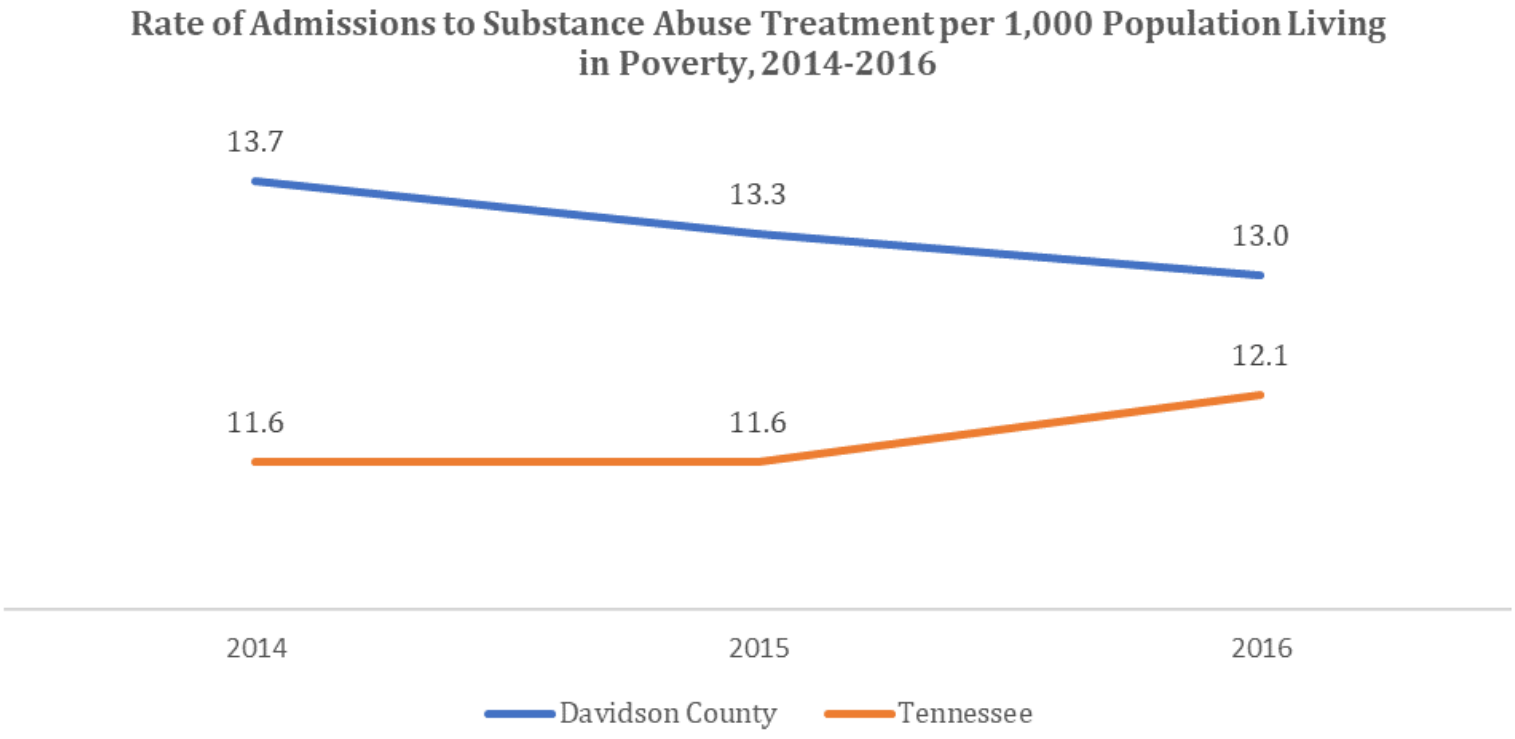
TN Department of Health & Substance Abuse Services (2017). 2017 Tennessee Behavioral Health County and Region Services Data Book.
Retrieved from: https://www.tn.gov/content/dam/tn/mentalhealth/documents/DPRF_BH_county_region_service_data_book_9-2017_FINAL.pdf

County

13.0/1,000 rate of substance abuse treatment admissions in 2016

State

12.1/1,000 rate of substance abuse treatment admissions in 2016



M9 Domestic Abuse

Domestic abuse, or intimate partner violence, is a preventable public health problem. It includes physical, sexual, or psychological harm inflicted by a current or former partner or spouse.[1] From 2003 to 2012, domestic violence accounted for 21% of all violent crime in the U.S. Most domestic violence victims were females (76%.)[2]

Data Description

This indicator shows the number of victims and rate of domestic violence defined as the number of victims per 1,000 residents.

Data Source

Tennessee Bureau of Investigation (2019). TBI Annual Report. Retrieved from: https://www.tn.gov/content/tn/tbi/divisions/cjis-division/recent-publications.html

U.S. Census Bureau (2014-2019). American Community Health Survey, 1-year estimates. Total Population

County

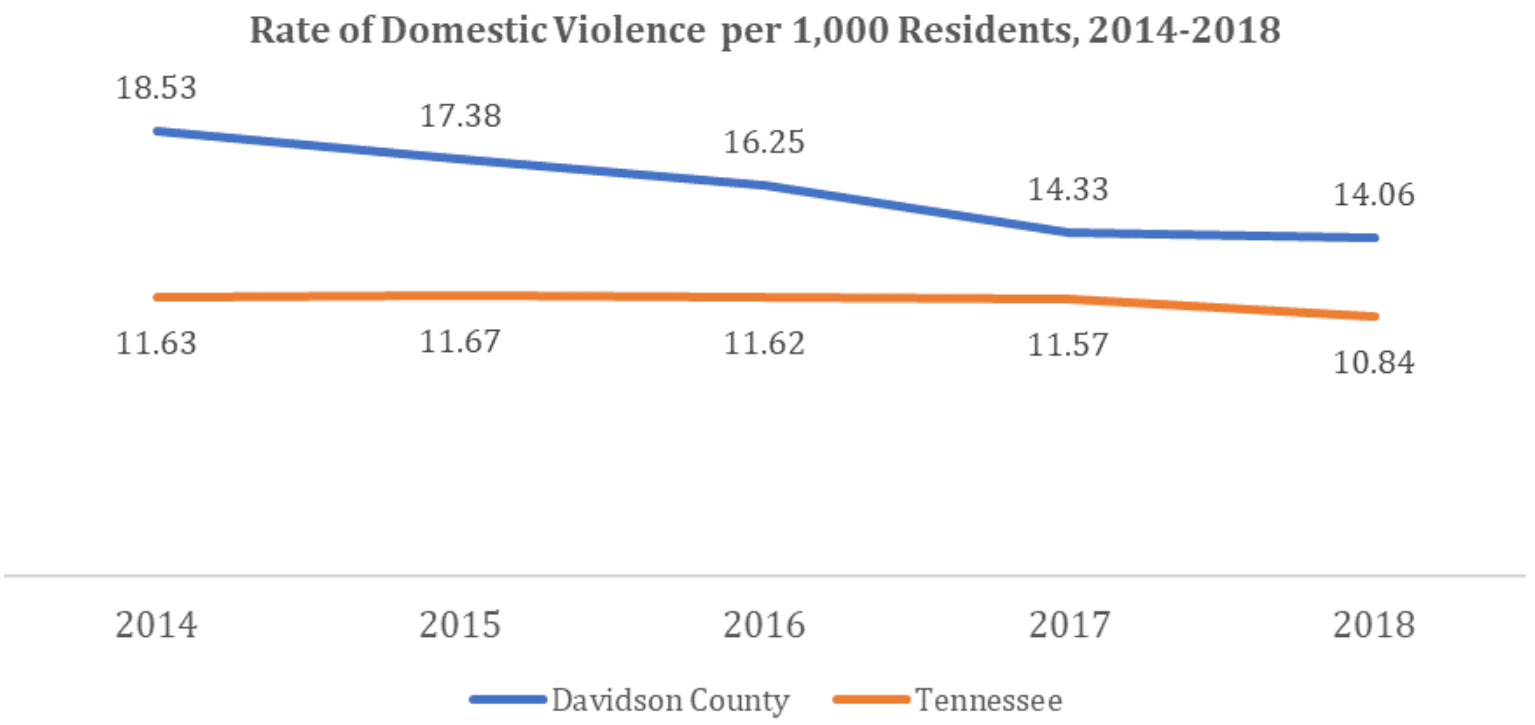
9,741 domestic violence victims in 2018

14.06/1,000 domestic violence rate in 2018

State

73,408 domestic violence victims in 2018

10.84/1,000 domestic violence rate in 2018



[1] Centers for Disease Control and Prevention. (2014). Intimate partner violence. Retrieved from: http://www.cdc.gov/violenceprevention/intimatepartnerviolence/

[2] Morgan, R.E.. & Truman, J.L. (2014). Nonfatal domestic violence, 2003–2012. Bureau of Justice Statistics. Special Report, April 2014. Retrieved from: https://www.bjs.gov/content/pub/pdf/ndv0312.pdf

Maternal and Child Health

2021 Community Health Profile
Metro Public Health Department

Improving the well-being of mothers, infants, and children is an important public health goal for the United States. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system.

The objectives of Maternal, Infant, and Child Health programs are to address a wide range of socioeconomic conditions, health behaviors, and health system factors that directly or indirectly affect the health, wellness, and quality of life of women, children, and families.[1]

This section focuses on women's and infant health before, during, and after pregnancy and childbirth as well as the health of children aged 1 to 17 years. It includes indicators on morbidity, mortality and related factors such as complications of pregnancy, immunization, child abuse and neglect, and hospitalizations for common childhood illnesses like asthma. Health promotion can help improve birth outcomes and prevent premature deaths, avoidable illnesses and disability for both mothers and children.

Section Highlights

- Rates of infant mortality, low birthweight, and preterm births are higher for Black or African American than for White residents. (Indicators C1–C3)
- In Davidson County, 28.5% of women experienced at least one medical risk factor during pregnancy in 2018, compared to 30.2% for the State and 31.3% nationally. (Indicator C5)
- The percentage of women who smoked during pregnancy in Davidson County declined from 8.2% in 2014 to 5.5% in 2018, which is higher than the national target of Healthy People 2020. (1.4%). (Indicator C6)
- Child abuse and neglect rates were relatively stable between 2014 and 2018 ranging between 4.2 and 4.4 per 1,000 children. These rates were below those for the State during this period. (Indicator C8)
- Hospitalizations for asthma among children (1-17 years) declined from 137 to 94 per 100,000 children between 2013 and 2015 (mirroring the state trend), then rose to 115 per 100,000 children in 2016 and declined to 81 per 100,000 in 2017. (Indicator C13)

[1] Office of Disease Prevention and Health Promotion (2020). Maternal, Infant, and Child Health. Retrieved from: https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health

Maternal and Child Health

C1 Infant Mortality

The infant mortality rate continues to be one of the most widely used indicators of the overall health status of a community. The leading causes of death among infants are birth defects, preterm delivery, low birth weight, and maternal complications during pregnancy.

Data Description

This indicator shows the mortality rate per 1,000 live births for infants within their first year of life.

Data Source

The Annie E. Casey Foundation, KIDS COUNT Data Center, https://datacenter.kidscount.org

County

7.1/1,000 infant deaths in 2018

State

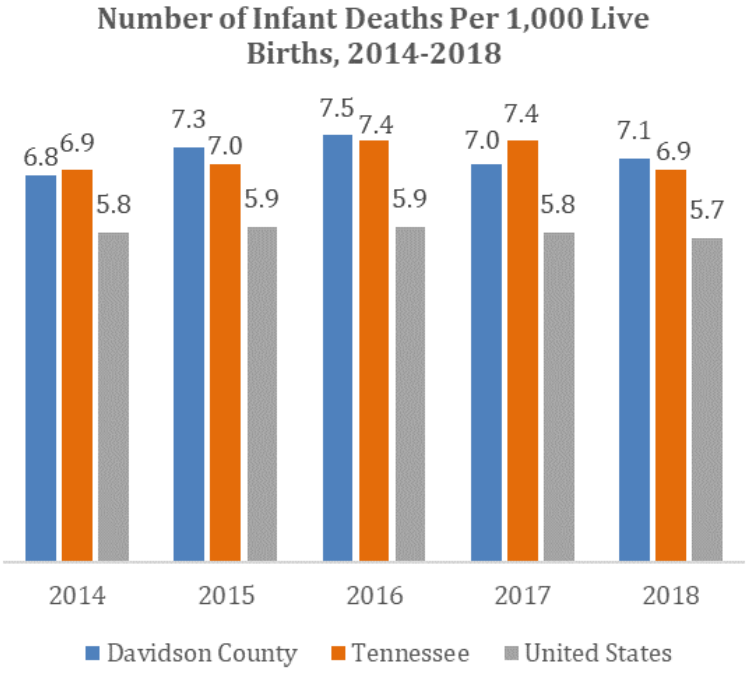
6.9/1,000 infant deaths in 2018

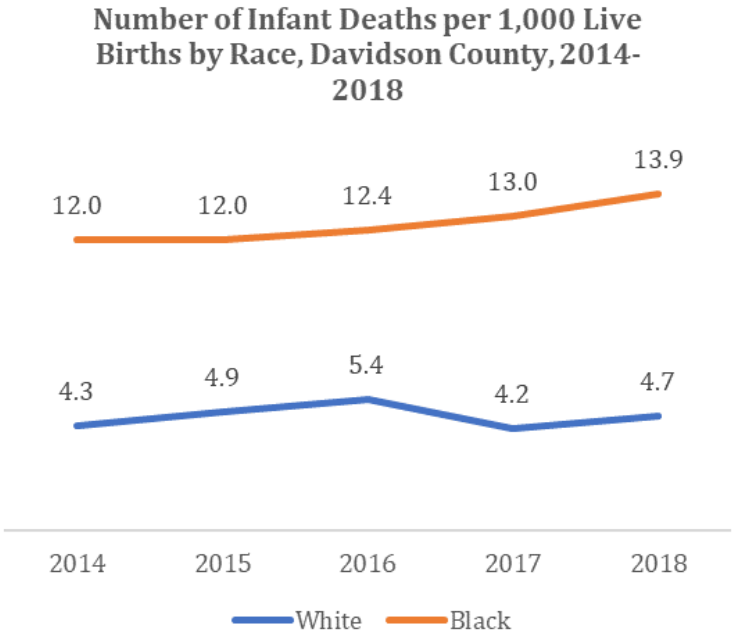
National

5.7/1,000 infant deaths in 2018

Benchmark

6.0/1,000 Healthy People 2020 target





C2 Low Birth Weight

Babies born with a low birth weight are more likely than babies of normal weight to have health problems and require specialized medical care. Low birth weight is typically caused by premature birth and fetal growth restriction, both of which are influenced by a mother's health and genetics. Mothers can help prevent giving birth to low birth weight babies through adequate prenatal care, vitamin supplementation during pregnancy, quitting smoking, and avoiding drinking alcohol and using drugs.

Data Description

This indicator shows the percentage of low birth weight infants per total live births (< 2,500 grams or 5 pounds 8 ounces.)

Data Source

The Annie E. Casey Foundation, KIDS COUNT Data Center, https://datacenter.kidscount.org

County

9.2% of infants born in 2018

State

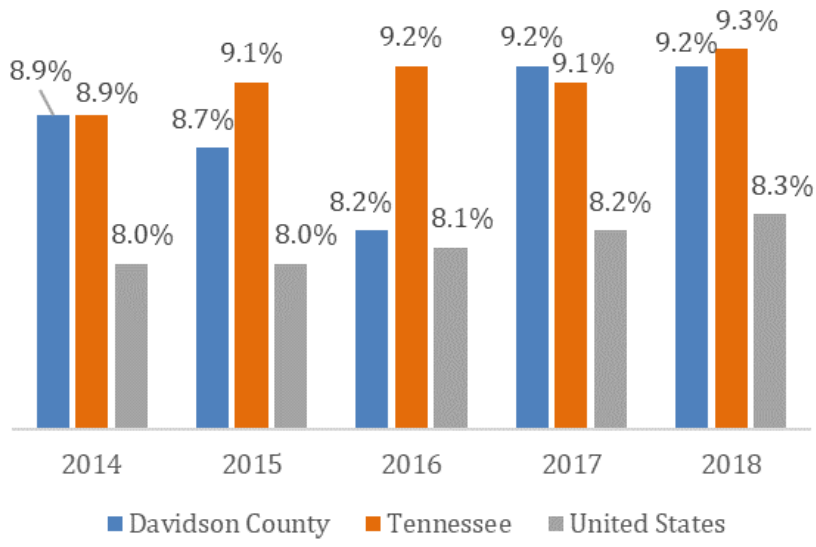
9.3% of infants born in 2018

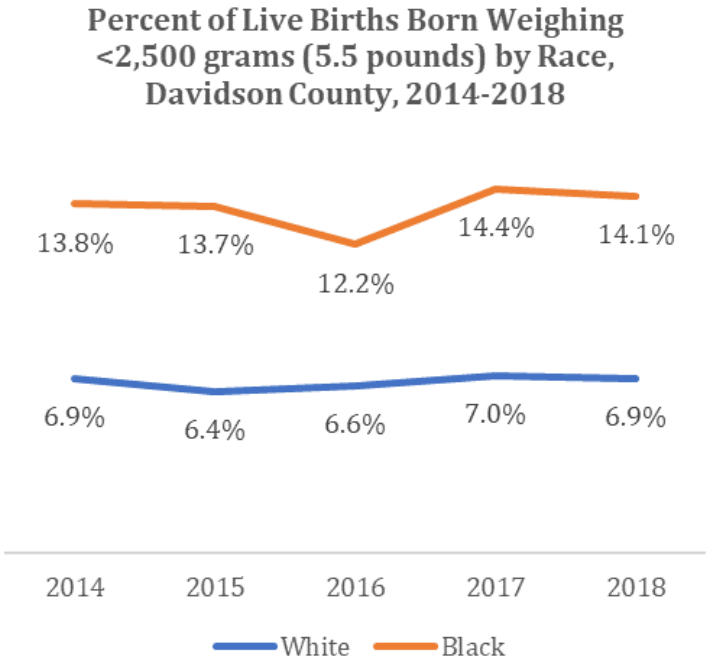
National

8.3% of infants born in 2018

Benchmark

7.8% Healthy People 2020 target





C3 Preterm Births

Preterm birth (birth at <37 weeks gestation) is the leading cause of under-5 child mortality. It is associated with adverse lifelong health consequences.[1] Preterm delivery can be prevented through improving nutrition and wellbeing of all women of childbearing age, spacing pregnancies, improved pregnancy care including the optimum treatment of chronic diseases and counseling about risk factors such as alcohol and tobacco use, and interventions such as antenatal steroids when appropriate.[2]

Data Description

This indicator shows the percentage of births with less than 37 weeks of completed gestation. Gestational age of a newborn is measured using the obstetric estimate of gestation at delivery (OE).

Data Source

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data on CDC WONDER Online Database, for years 2007-2018 available September 2019.

County

10.4% of infants born preterm in 2018

State

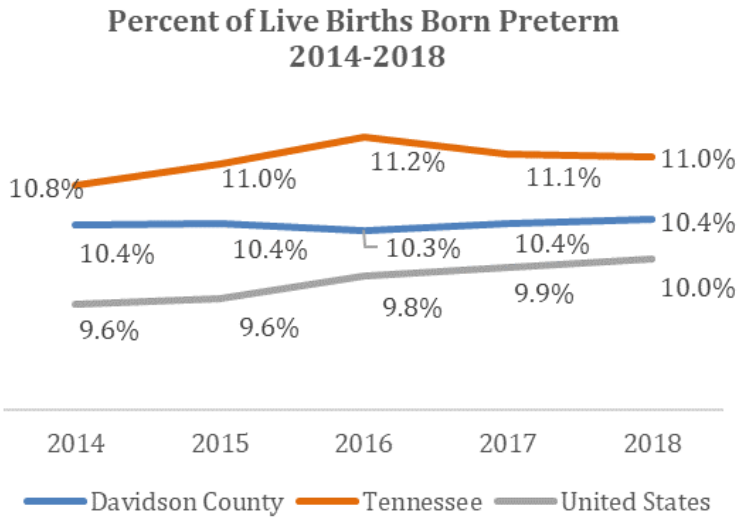
11.0% of infants born preterm in 2018

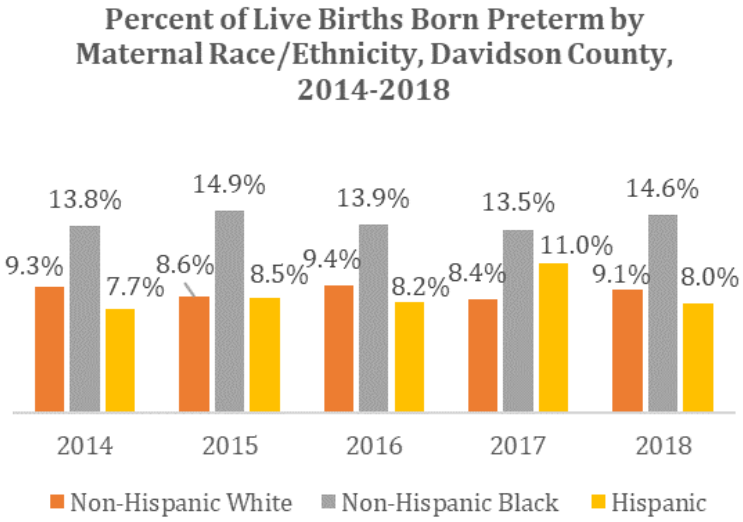
National

10.0% of infants born preterm in 2018

Benchmark

11.4% Healthy People 2020 target





[1] Centers for Disease Control and Prevention (2019). Preterm Birth.
Retrieved from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm

[2] The unfished agenda of preterm births. Lancet Editorial, 2016, 388, 2323

C4 Prenatal Care

Early and adequate prenatal care is important for the health of both the fetus and the mother. It enables effective management of any chronic health issues and provides appropriate medical interventions to treat complications for both mother and baby. Early and regular prenatal care can also inform mothers about a wide range of health topics including nutrition, exercise, avoidance of substances, and planning for the time after the infant comes home.

Data Description

This indicator shows the percentage of live births where the mother received adequate prenatal care based on the Kessner index.

Data Source

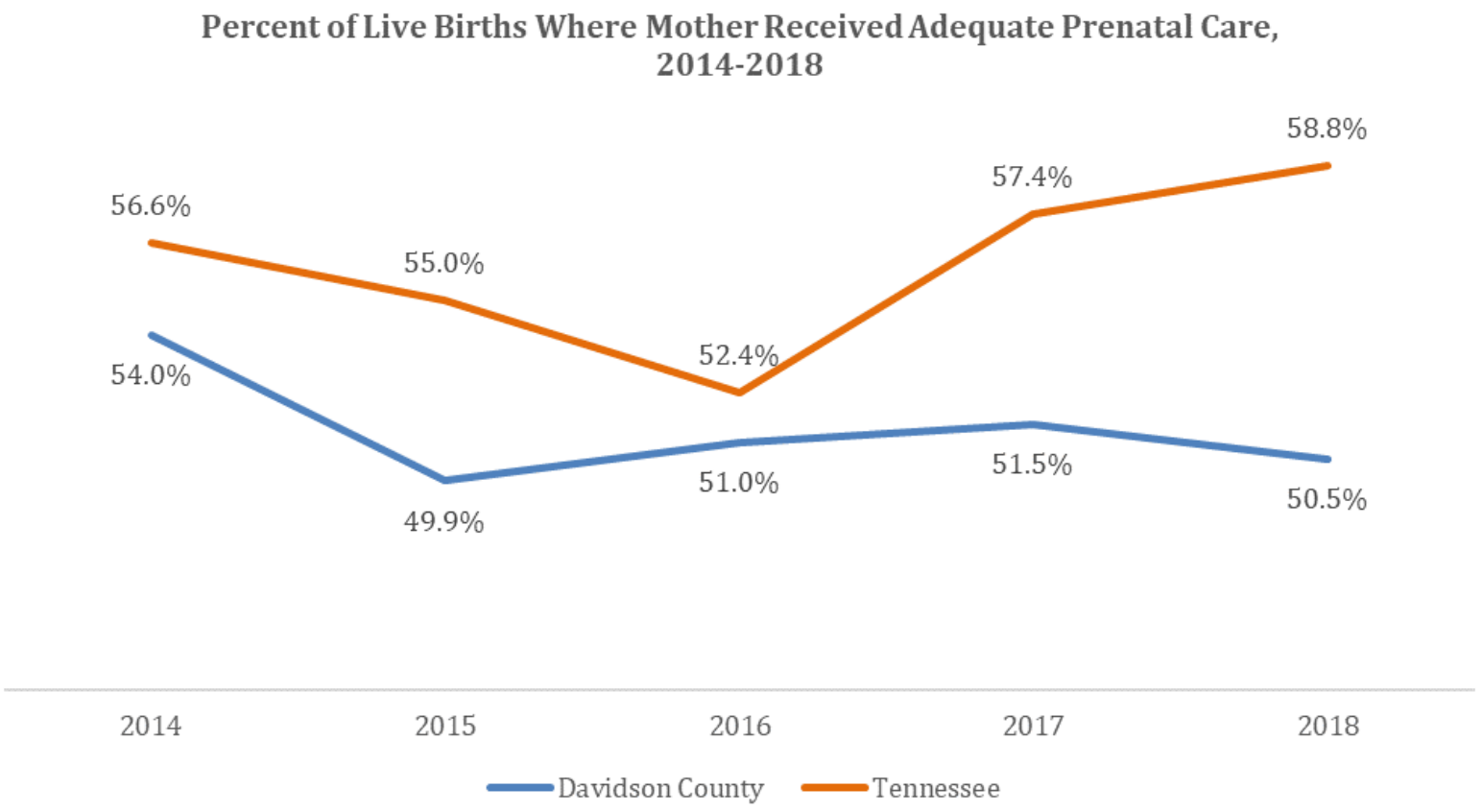
The Annie E. Casey Foundation, KIDS COUNT Data Center, https://datacenter.kidscount.org.

County

50.5% of mothers receive adequate prenatal care in 2018

State

58.8% of mothers receive adequate prenatal care in 2018



C5 Medical Risk Factors during Pregnancy

The health of an infant is greatly influenced by the health of the mother. Early detection and management of medical risk factors of the mother during pregnancy are important for improving the health of the mother and preventing poor birth outcomes.

Data Description

This indicator shows the percentage of women who experienced at least one of the following risk factors during pregnancy: diabetes (pre-pregnancy or gestational), hypertension (pre-pregnancy or gestational), pre-eclampsia, a history of preterm birth, a previous cesarean delivery, or infertility treatment.

Data Source

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data on CDC WONDER Online Database, for years 2016-2018 (expanded), available September 2019.

County

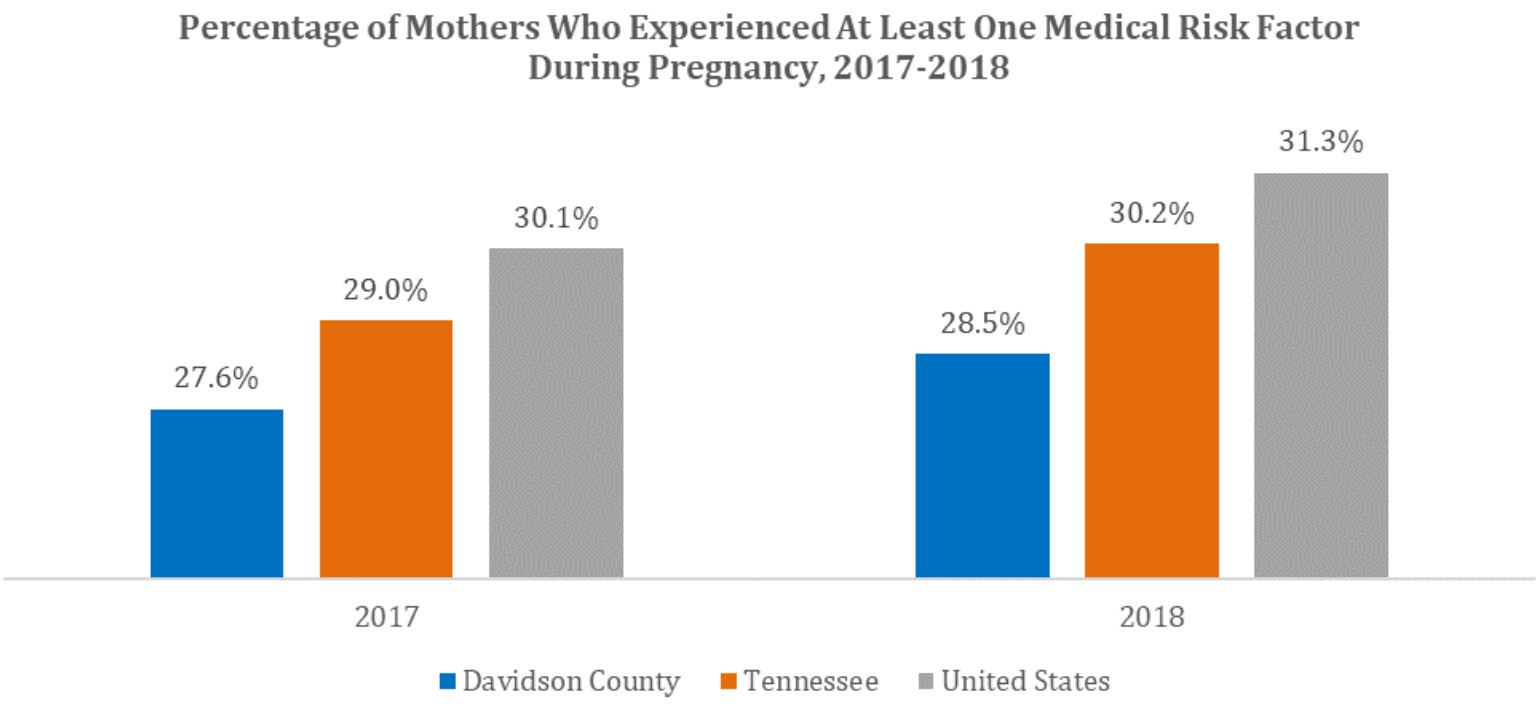
28.5% of mothers experienced at least one medical risk factor during pregnancy in 2018

State

30.2% of mothers experienced at least one medical risk factor during pregnancy in 2018

National

31.3% of mothers experienced at least one medical risk factor during pregnancy in 2018



C6 Smoking During Pregnancy

A baby born to a mother who smoked during her pregnancy is more likely to have less developed lungs and a lower birth weight and is more likely to be born prematurely. Even after a baby is born, secondhand smoking can contribute to SIDS (Sudden Infant Death Syndrome), asthma onset, and stunted growth.[1]

Data Description

This indicator shows the percentage of births that were to mothers who smoked and/or used tobacco during pregnancy.

Data Source

The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org.

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data on CDC WONDER Online Database, for years 2007-2018 available September 2019.

County

5.5% of pregnant mothers smoked in 2018

State

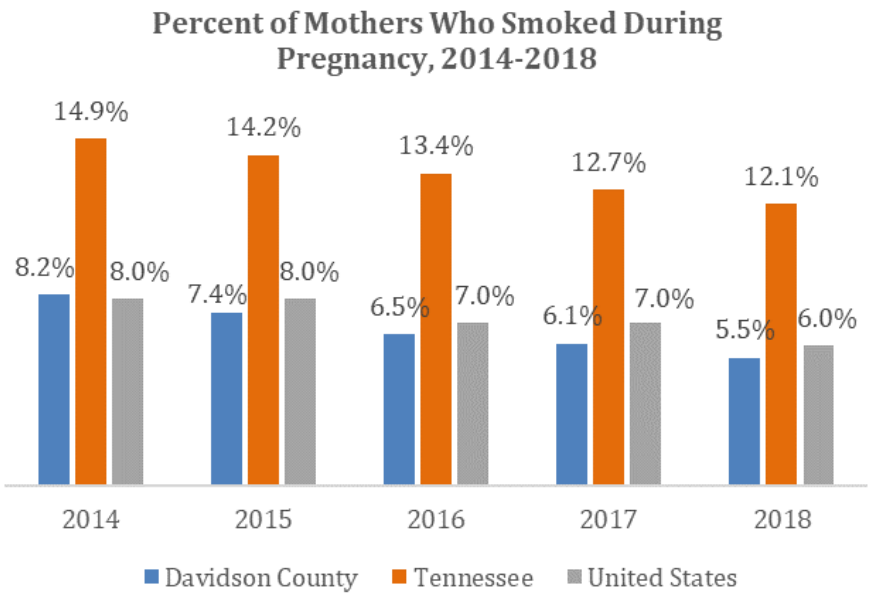
12.1% of pregnant mothers smoked in 2018

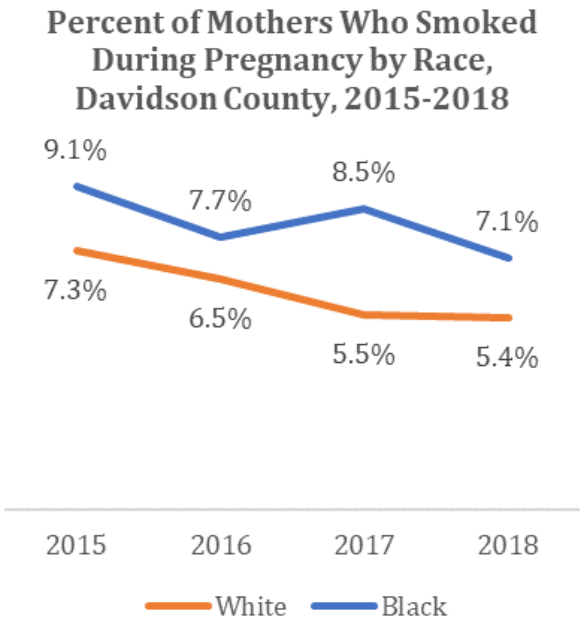
National

6.5% of pregnant mothers smoked in 2018

Benchmark

1.4% Healthy People 2020 target





[1] Centers for Disease Control and Prevention (2018). Smoking During Pregnancy. Retrieved from https://www.cdc.gov/tobacco/basic_information/health_effects/pregnancy/index.htm

C7 Teen Pregnancy

Teen pregnancy and childbearing bring substantial social and economic costs through immediate and long-term impacts on teen parents and their children. Teen pregnancy and birth are significant contributors to high school dropout rates among girls, and the children of teenage mothers are more likely to have health problems and lower school achievement.[1] Responsible sexual behavior among teens reduces unintended pregnancies and sexually transmitted infections and protects the physical and social health of teens.

Data Description

This indicator shows the teen pregnancy rate per 1,000 females aged 15 to 17 years.

Data Source

The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org.

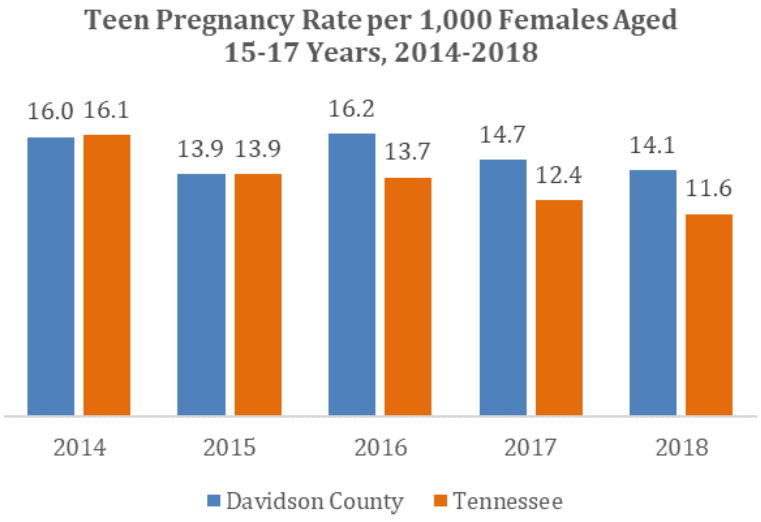
Race data: Tennessee Department of Vital Statistics, Tennessee Department of Health.
Retrieved from: https://www.tn.gov/health/health-program-areas/statistics/health-data/pregnancy-statistics.html

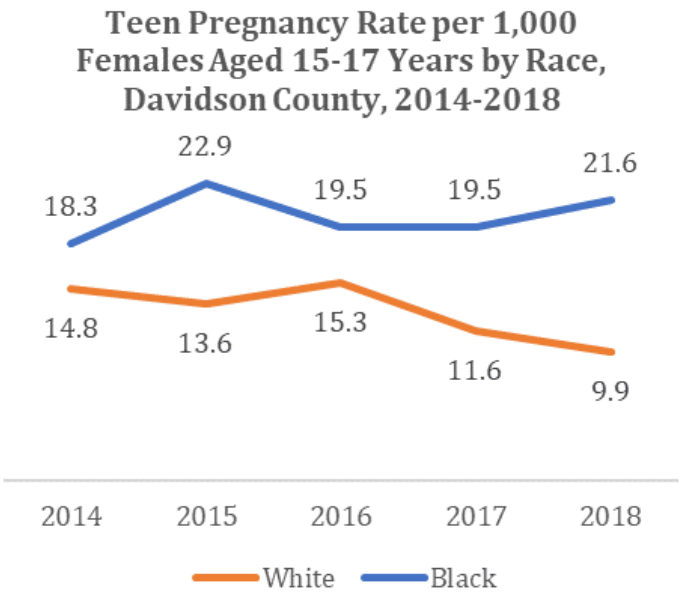
County

14.1/1,000 teen pregnancy rate in 2018

State

11.6/1,000 teen pregnancy rate in 2018





[1] Centers for Disease Control and Prevention (2019). *About Teen Pregnancy*. Retrieved from https://www.cdc.gov/teenpregnancy/about/index.htm.

C8 Child Abuse and Neglect

There are several types of child abuse including physical, sexual, and emotional abuse. Child abuse and neglect can have enduring physical, intellectual, and psychological repercussions throughout life, potentially damaging a child's sense of self, ability to have healthy relationships, and ability to function at home, at work, and at school.

Data Description

This indicator shows the rate of child abuse and neglect per 1,000 children under the age of 18 years for which sufficient evidence exists. This number represents the unduplicated counts of child abuse and neglect cases within a calendar year.

Data Source

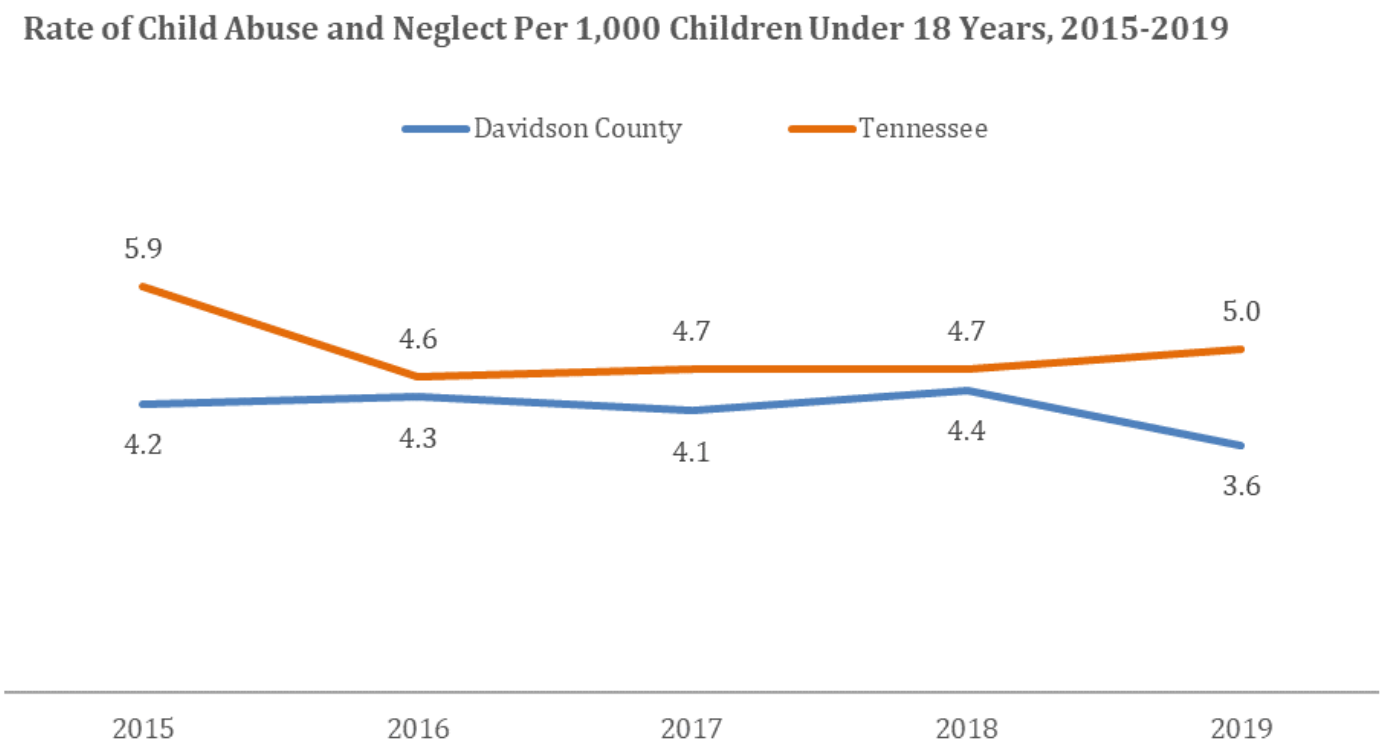
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org.

County

3.6/1,000 child abuse and neglect rate in 2019

State

5.0/1,000 child abuse and neglect rate in 2019



C9 Childhood Immunization

Timely childhood immunizations and vaccines are important in protecting children against many diseases. The recommended routine vaccinations for children by 24 months are: 4 doses of diphtheria, tetanus, and pertussis vaccine (DTaP); 3 doses of inactivated poliovirus vaccine (IPV); 1 dose of measles, mumps, and rubella vaccine (MMR); 3 or 4 doses of *Hemophilus influenzae* type b vaccine (Hib); 3 doses of Hepatitis B vaccine (HBV); 1 dose of varicella vaccine (VAR); and 4 doses of pneumococcal vaccine (PCV13.)[1]

Data Description

This indicator shows the percentage of 24-month old children with on-time immunizations.

Data Source

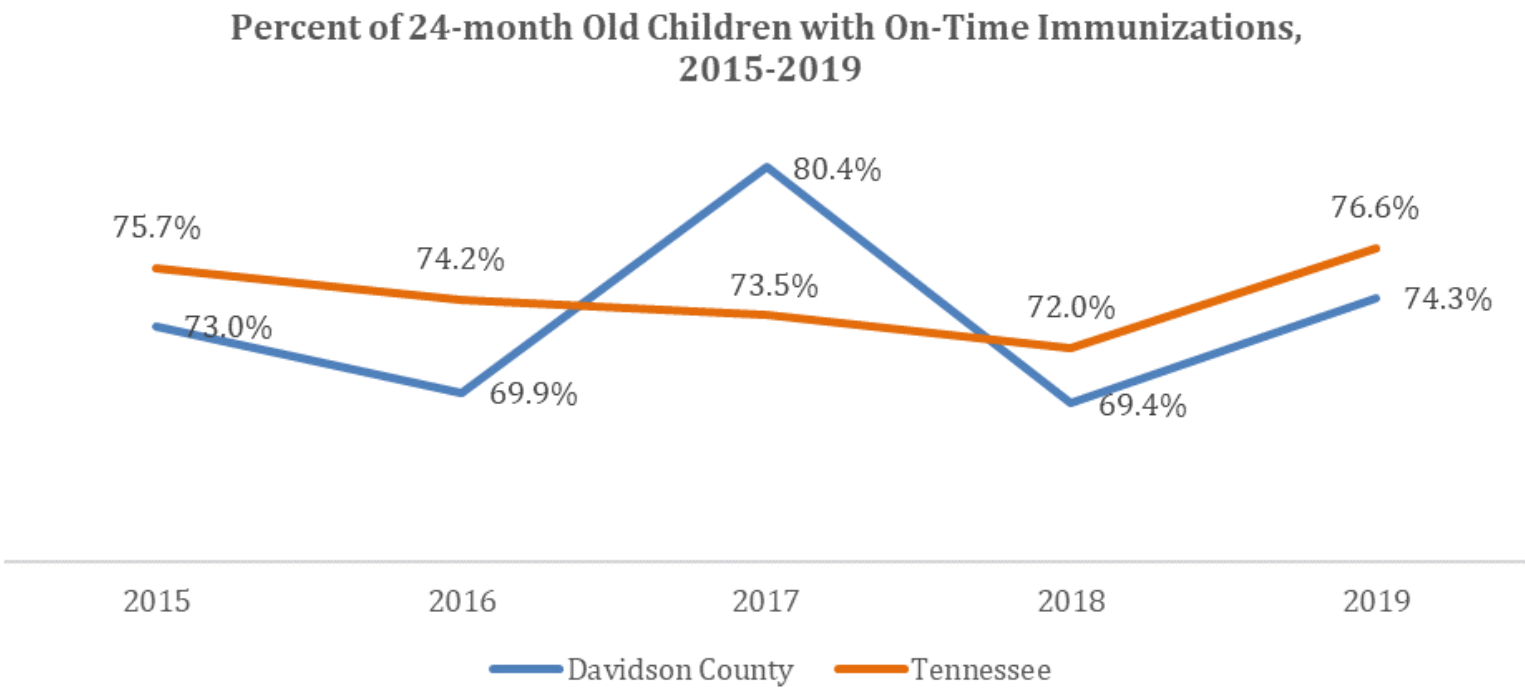
Tennessee Immunization Program, Tennessee Department of Health.
Retrieved from: https://www.tn.gov/health/ceds-weeklyreports.html

County

74.3% of children with on-time immunizations by 24-months old in 2019

State

76.6% of children with on-time immunizations by 24-months old in 2019



[1] Tennessee Immunization Program, Tennessee Department of Health (2019). *Results of the 2018 Immunization Status Survey of 24 Month Old Children in Tennessee*.
Retrieved from https://www.tn.gov/content/dam/tn/health/documents/annual-reports/2018-Annual-Imm-24-Month-Old-Survey.pdf.

C10 Lead Poisoning Screening for Children

Maternal and Child Health

Lead poisoning occurs when lead builds up in the body, often over months or years. Even small amounts of lead can cause serious health problems. Children younger than 6 years are especially vulnerable to lead poisoning, which can severely affect mental and physical development. At very high levels, lead poisoning can be fatal.[1] Since lead poisoning builds slowly over time without obvious symptoms, screening is an important public health activity.

Data Description

This indicator shows the percentage of children under the age of 6 who were screened for elevated blood lead levels.

Data Source

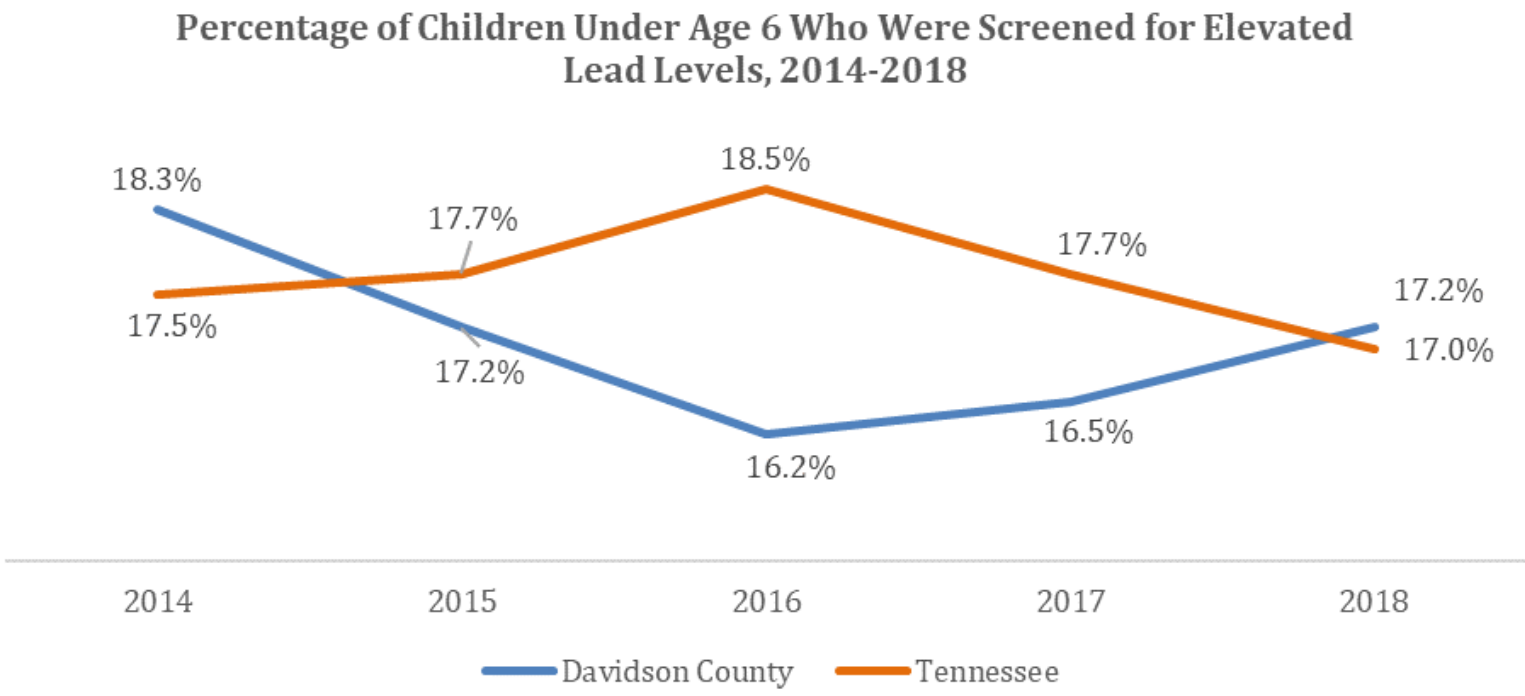
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org/data/tables/9269-children-under-age-6-screened-for-lead-poisoning?loc=44&loct=5%23detailed/5/6438/true/37,871,870,573,869,36/any/18339#detailed/5/6438/true/37,871,870,573,869,36/any/18338,18339

County

17.2% of children under age 6 were screened in 2018

State

17.0% of children under age 6 were screened in 2018



[1] Centers for Disease Control and Prevention (2020). *Health Effects of Lead Exposure*. Retrieved from https://www.cdc.gov/nceh/lead/prevention/health-effects.htm.

C11 Breastfeeding Initiation

Breast milk is widely acknowledged to be the most complete form of nutrition for most infants, providing a range of benefits for their health, growth, immunity, and development. Breastfeeding benefits mothers as well. Mothers who breastfeed have lower risks of high blood pressure, type 2 diabetes, ovarian cancer, and breast cancer[1].

Data Description

This indicator shows the percentage of infants in Davidson County who were ever breastfed.

Data Source

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data on CDC WONDER Online Database, for years 2016-2018 (expanded), available September 2019.

County

77.6% of infants ever breastfed in 2018

State

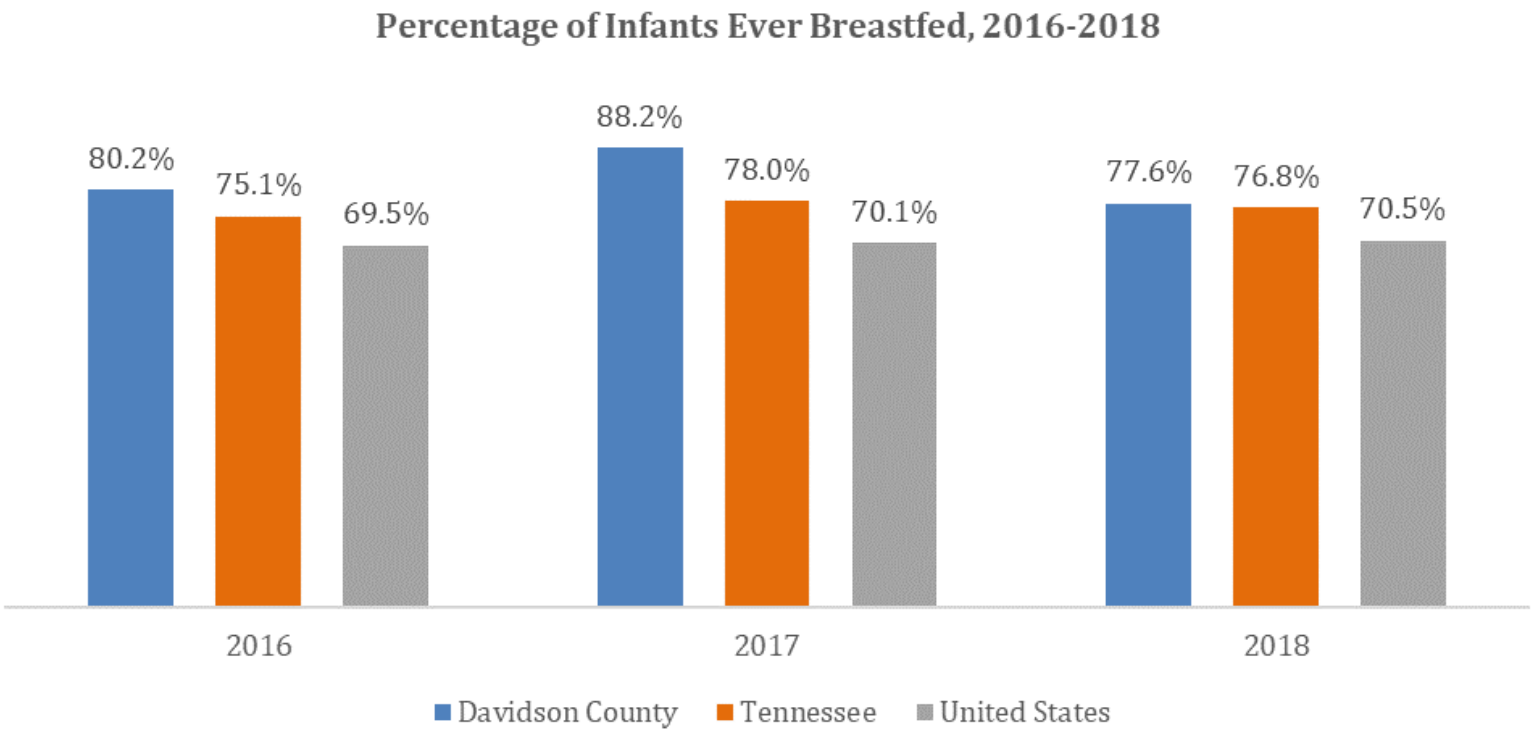
76.8% of infants ever breastfed in 2018

National

70.5% of infants ever breastfed in 2018

Benchmark

81.9% Healthy People 2020 target



[1] Centers for Disease Control and Prevention (2019). *About Breastfeeding: Why it Matters*. Retrieved from https://www.cdc.gov/breastfeeding/about-breastfeeding/why-it-matters.html.

C12 Infants with Neonatal Abstinence Syndrome

Neonatal Abstinence Syndrome (NAS) is a condition in which a baby has withdrawal symptoms after being exposed to certain substances including opioids. Many times, the baby is exposed when the mother uses substances such as medications or illicit drugs during pregnancy; after the baby is born and no longer exposed, the baby goes through withdrawal. Infants with NAS stay in the hospital longer than other babies and they may have serious medical and social problems.[1]

Data Description

This indicator shows the rate of babies born with clinical signs of NAS per 1,000 live births.

Data Source

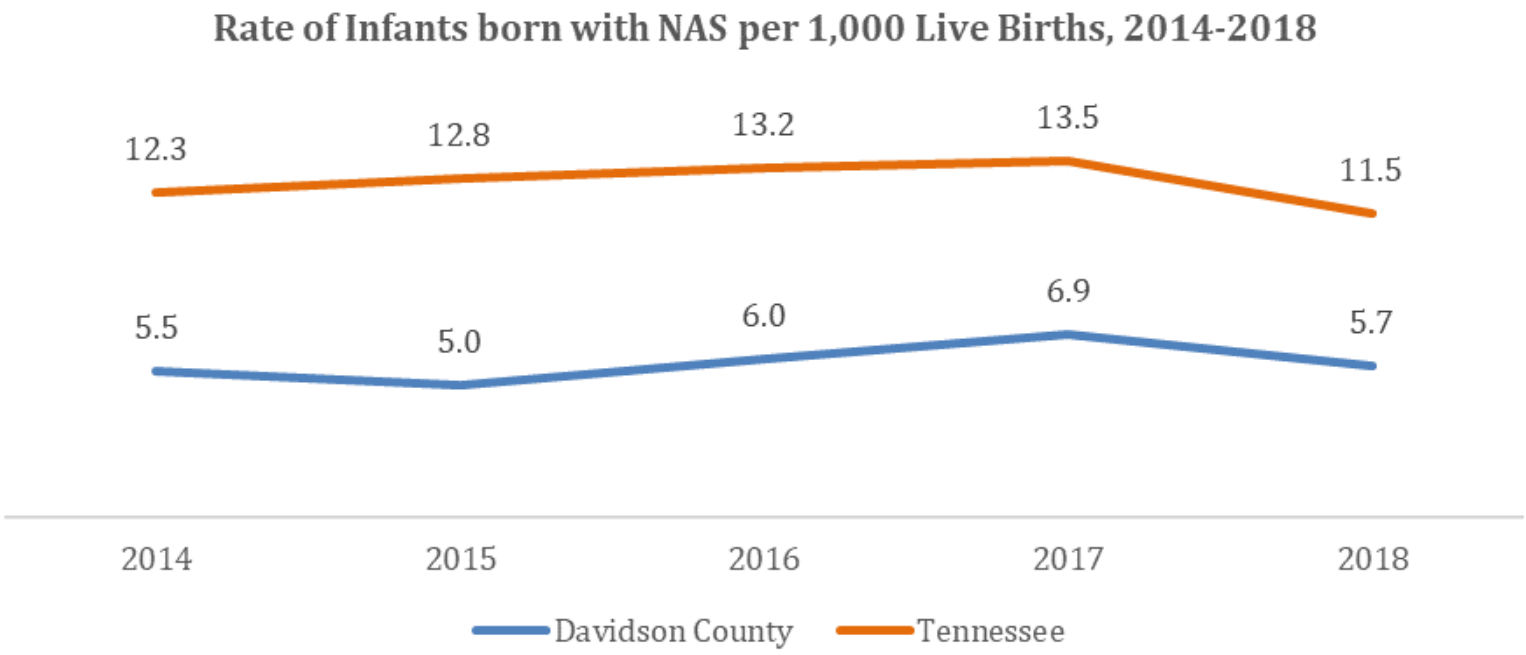
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org/data/tables/8288-children-with-neonatal-abstinence-syndrome?loc=44&loct=5%23detailed/5/6438/true/37,871,870,573,869,36/any/16848#detailed/5/6438/true/37,871,870,573,869,36/any/16847,16848

County

5.7/1,000 rate of NAS in 2018

State

11.5/1,000 rate of NAS in 2018



[1] Centers for Disease Control and Prevention (2019). *Basics About Opioid Use During Pregnancy*. Retrieved from https://www.cdc.gov/pregnancy/opioids/basics.html.

C13 Hospitalization for Asthma among Children

According to the Centers for Disease Control and Prevention (CDC), hospitalizations due to asthma could be reduced if asthma is managed according to established guidelines. Effective management includes control of exposure to factors that trigger exacerbations, adequate pharmacological management, continual monitoring of the disease, and patient education in asthma care.[1]

Data Description

This indicator presents the rate of hospitalization for asthma per 100,000 children aged 1 to17 years.

Data Source

Tennessee Department of Health, Hospital Discharge Data System.

Tennessee Department of Health (2019). Childhood Asthma in Tennessee, 2007-2016. Division of Population Health Assessment, Nashville, Tennessee.

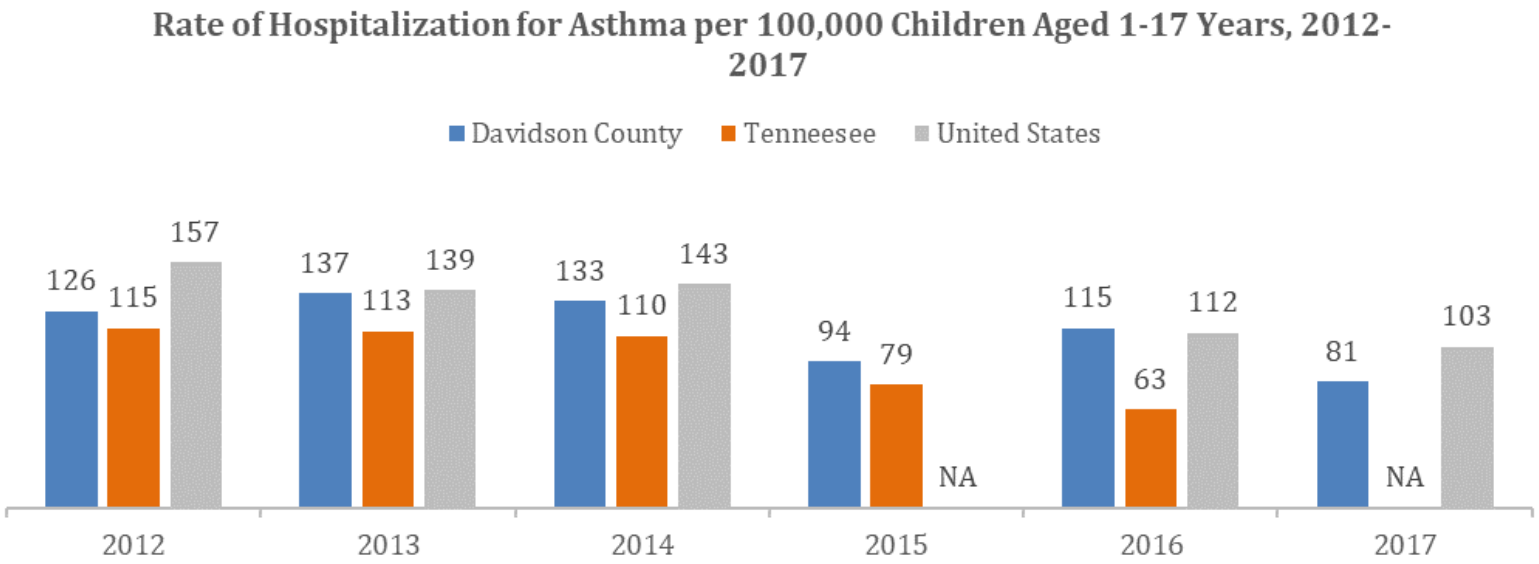
Centers for Disease Prevention and Control. Asthma-Related Healthcare Use.
Retrieved from: https://www.cdc.gov/asthma/national-surveillance-data/healthcare-use.htm on 2/21/20

County

81.0/100,000 children hospitalized for asthma in 2017

National

103.0/100,000 children hospitalized for asthma in 2017



[1] Centers for Disease Prevention and Control: Indicator Definition.
Retrieved from: https://www.cdc.gov/cdi/definitions/asthma.html#AST3_1

C14 Regulated Childcare Enrollment

Maternal and Child Health

Regulation of childcare agencies ensures the health, safety, and well-being of children while in the care of trained staff. Specific policies and procedures outline the responsibilities of a childcare agency, and regulatory agencies enforce these rules by licensing and inspecting childcare facilities.[1]

Data Description

This indicator shows the number of children enrolled in regulated childcare monitored by the Tennessee Department of Human Services.

Data Source

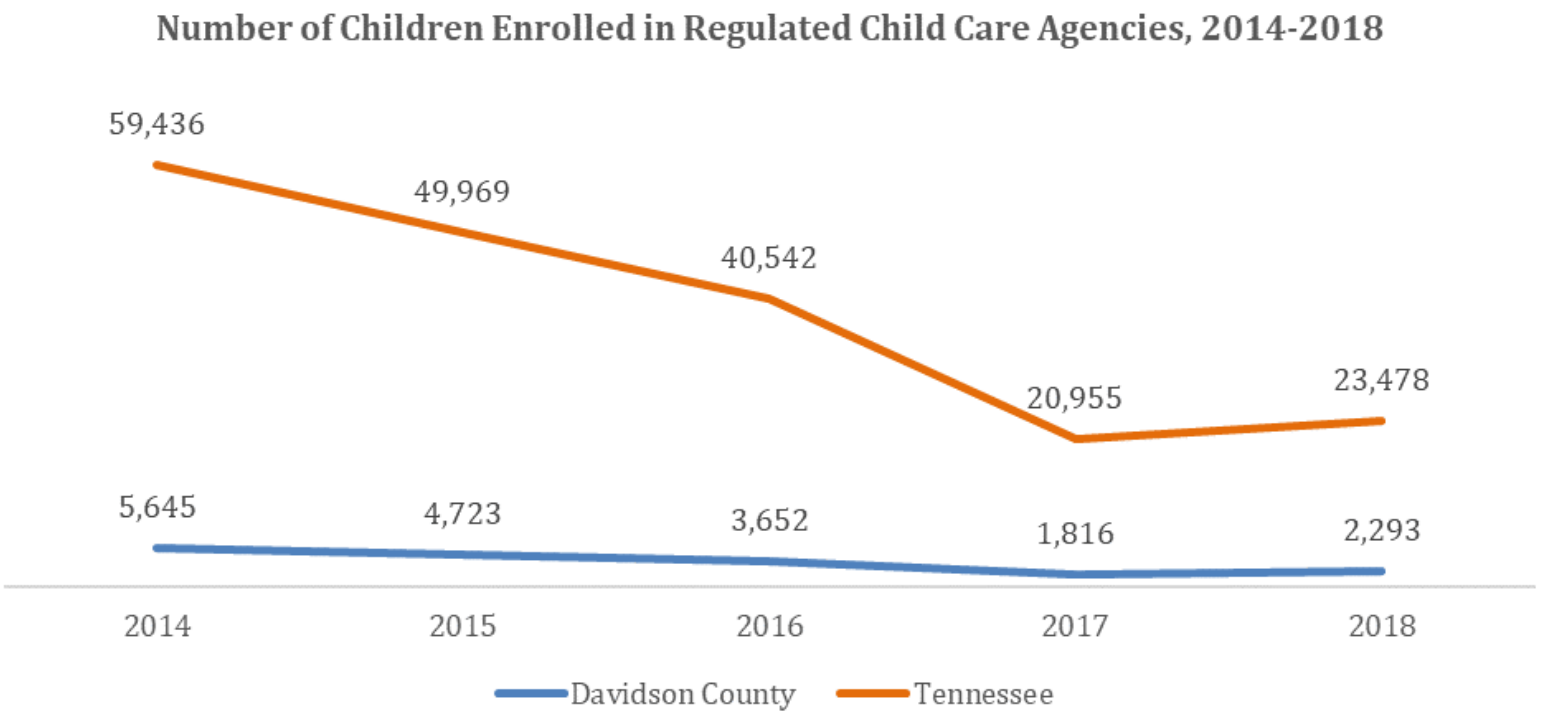
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org/data/tables/8800-enrollment-to-regulated-child-care?loc=44&loct=5#detailed/5/6438/true/37,871,870,573,869,36/any/17639

County

2,293 children enrolled in regulated childcare in 2018

State

23,478 children enrolled in regulated childcare in 2018



[1] Tennessee Department of Human Services (n.d.). *Child Care Rules and Regulations*. Retrieved from https://www.tn.gov/humanservices/for-families/child-care-services/child-care-rules-and-regulations.html.

Death, Illness, and Injury

2021 Community Health Profile
Metro Public Health Department

This section focuses on physical wellbeing, which has been defined as feeling very healthy and full of vitality and, is critical to overall community wellbeing.[1] It includes indicators of population health, non-communicable diseases, injury, death, and preventable hospitalizations. Trends in the distribution of the leading causes of premature death and disability are highlighted.

Health promotion can help prevent premature death, and avoidable illnesses and disability, particularly among vulnerable populations. Such reductions increase prospects for longer and healthier lives.

Section Highlights

- Life expectancy at birth in Davidson County was unchanged between 2015 and 2018 (77 years) and was 11-12 months higher than the State average.
  As expected, in Davidson County, females had greater life expectancy at birth than males, and that difference was relatively stable. (Indicator L1)

- Heart disease and cancer together represented over 60% of all deaths in Davidson County in 2018, and are the two leading causes of death. This is especially pronounced among males and African American residents. (Indicators L7 – L9)

- In Davidson County, deaths due to accidental injury increased from 56.4 per 100,000 residents in 2014 to 70.8 per 100,000 in 2018. (Indicator L10)

- Hospitalizations for diabetes among adults increased between 2013 and 2017 for all age groups. Rates among Non-Hispanic Blacks were 2.7 times higher than among Non-Hispanic Whites in 2013 (492 vs. 176 per 100,000). The disparity remained unchanged through 2017. (Indicator L6)

- Between 2014 and 2018 the death rate due to unintentional poisoning almost doubled from 17.1 to 33.4 per 100,000. The homicide death rate also increased from 6.9 to 13.1 per 100,000. (Indicators L13-L14)

- HIV/AIDS deaths declined from 3.6 per 100,000 in 2014 to 2.6 per 100,000 in 2018. Although county rates were higher, the trend mirrored that of the state and the nation. (Indicator L28)

[1] CDC: Health-Related Quality of Life (HRQOL). https://www.cdc.gov/hrqol/wellbeing.htm

Death, Illness and Injury

L1 Life Expectancy

Life expectancy is a common and important population health outcome measure that allows us to compare data across various populations of different sizes. [1]

Data Description

This indicator shows the three-year rolling average life expectancy at birth in years. Life expectancy measures the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population.

Data Source

County Health Rankings and Road Maps (2020). Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2020/measure/outcomes/147/data

Centers for Disease Prevention and Control (2020). Changes in Life Expectancy At Birth, 2010-2018. Retrieved from: https://www.cdc.gov/nchs/data/hestat/life-expectancy/lifeexpectancy-H.pdf

County

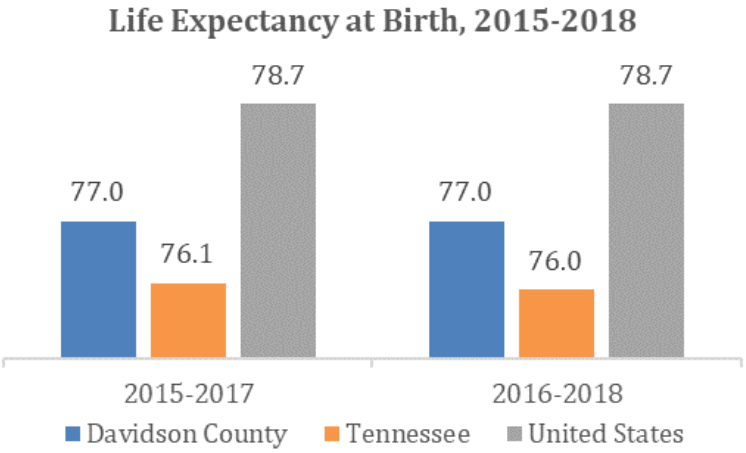
77.0 years overall, 74.0 years for males, 79.8 years for females in 2016-2018

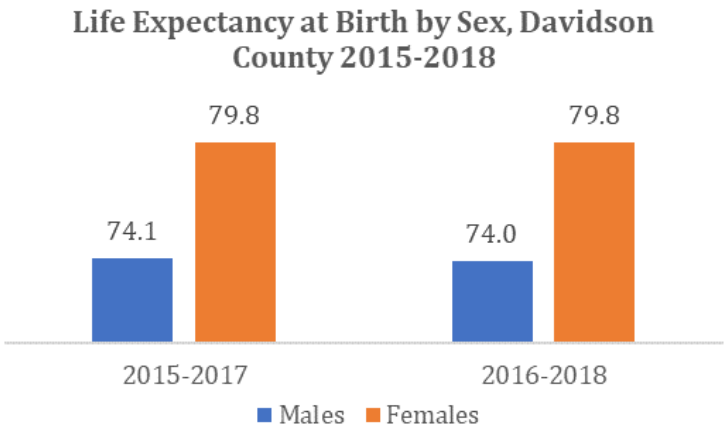
State

76.0 years overall, 73.4 years for males, 78.6 years for females in 2016-2018

National

78.7 years overall, 76.2 years for males, 81.1 years for females in 2016-2018





[1] County Health Rankings and Road Maps: Life expectancy. Retrieved from: https://www.countyhealthrankings.org

L2 Life Expectancy by Race/Ethnicity

Life expectancy is a common and important population health outcome measure.[1] Although the overall U.S. average life expectancy at birth has been steadily increasing, there are great variations in life expectancy between racial and ethnic groups.[2]

Data Description

This indicator shows the three-year rolling average life expectancy at birth in years by race/ethnicity. Life expectancy measures the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population.

Data Source

Death and population data for 2015 to 2018 from CDC Wonder: https://wonder.cdc.gov/
Life expectancy calculated using the calculator from County Health Rankings: https://www.countyhealthrankings.org

County

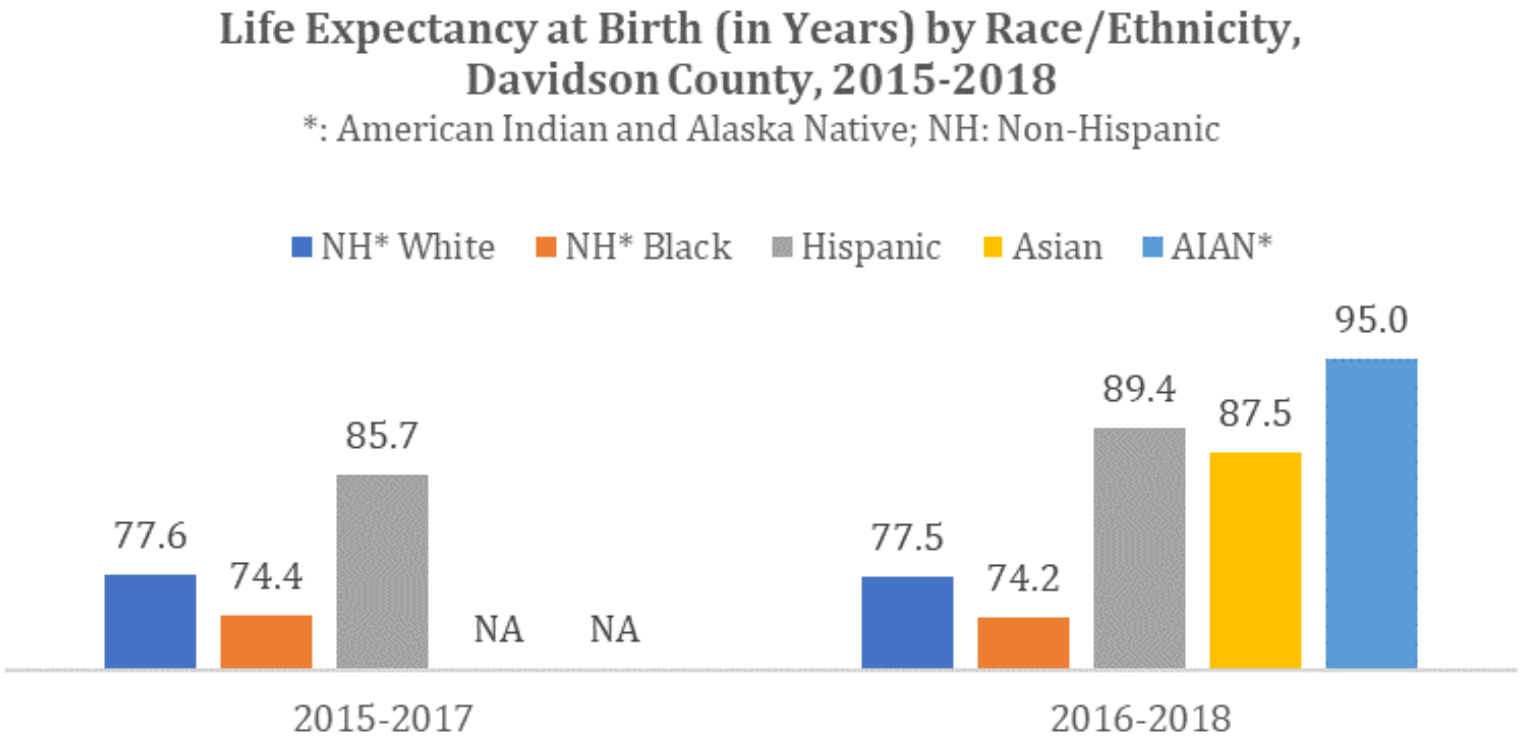
77.5 years for Whites, 74.2 years for Blacks, 89.4 years for Hispanics in 2016-2018

State

76.1 years for Whites, 73.7 years for Blacks, 92.6 years for Hispanics in 2016-2018

National

78.8 years for Whites, 75.5 years for Blacks, 83.7 years for Hispanics in 2016-2018



[1] County Health Rankings & Roadmaps. Life expectancy. Retrieved from: https://www.countyhealthrankings.org
[2] Healthy Nashville: Life Expectancy. Retrieved from: http://www.healthynashville.org

L3 Life Expectancy by Geography

Death, Illness and Injury

Life expectancy is a core measure of a population's longevity and general health. Although the overall U.S. average life expectancy at birth has been steadily increasing, there are great variations in life expectancy by geography. These variations are mostly caused by differences in public health infrastructure, medical care, and diet. [1]

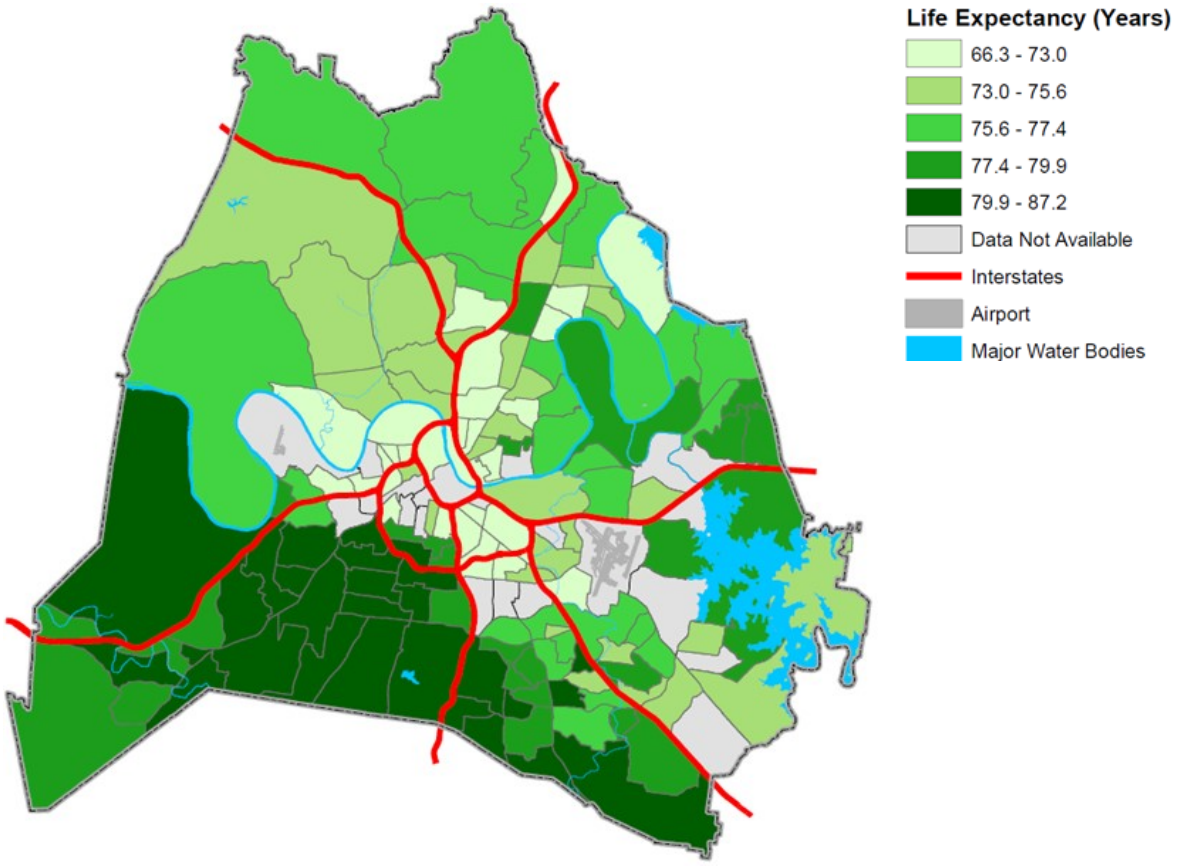
Data Description

This indicator shows the five-year average life expectancy at birth by census tract. Life expectancy measures the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population.

Data Source

National Center for Health Statistics. U.S. Small-Area Life Expectancy Estimates Project (USALEEP): Life Expectancy Estimates File for Tennessee, 2010-2015. National Center for Health Statistics. 2018.
Retrieved from: https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html

Life Expectancy at Birth in Years by Census Tract, Davidson County, 2010-2015



[1] Healthy Nashville: Life Expectancy. Retrieved from: www.healthynashville.org

L4 Preventable Hospitalization among Medicare Enrollees

Preventable hospitalizations in a community is a measure of the availability, quality, and accessibility of primary health care services. If the quality of care in the outpatient setting is poor, then people may be more likely to overuse the hospital as a main source of care and be hospitalized unnecessarily. If available, primary health care should be sufficient for ambulatory care-sensitive conditions. An area with a higher density of primary care providers usually has lower rates of hospitalization for ambulatory care-sensitive conditions. If access to high quality primary care is increased, a community may be able to reduce its preventable hospitalizations.

Data Description

This indicator shows the rate of preventable hospitalization among Medicare enrollees.

Data Source

Center for Medicare & Medicaid Services' Mapping Medicare Disparities (MMD) Tool. Retrieved from: https://data.cms.gov/mapping-medicare-disparities

County

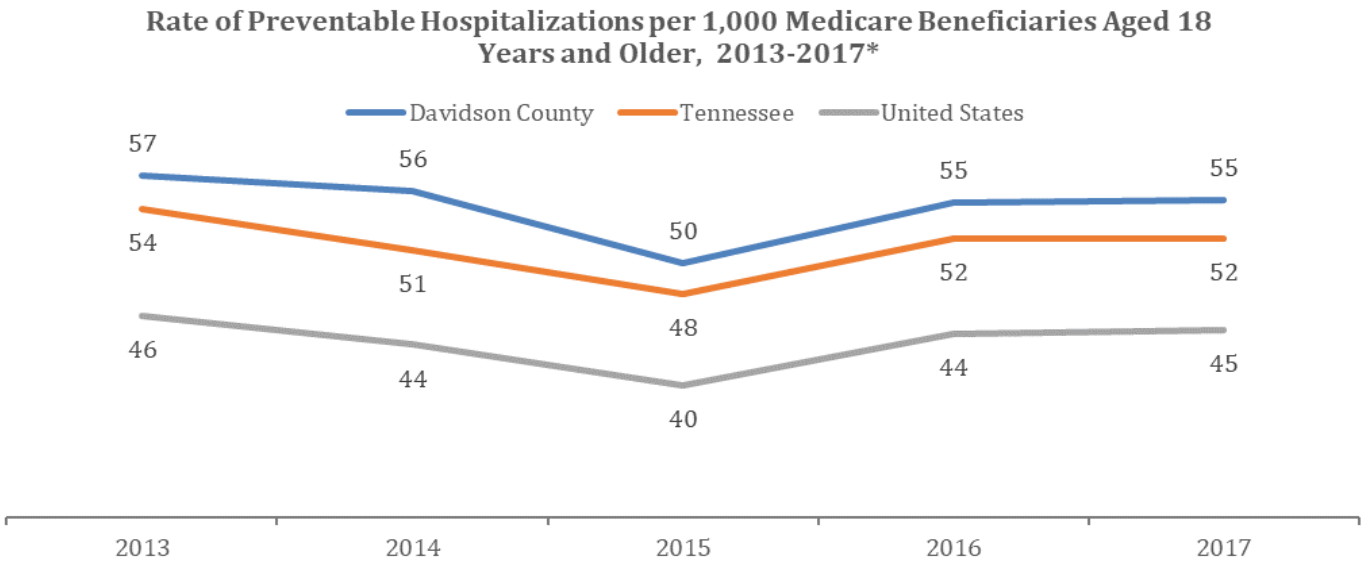
55/1,000 preventable hospitalizations, 2017

State

52/1,000 preventable hospitalizations, 2017

National

45/1,000 preventable hospitalizations, 2017



Hospitalizations were defined using the ICD-9-CM diagnosis codes until October 2015 and ICD-10-CM diagnosis codes October 2015 and after. Therefore, the trend should be interpreted with caution as estimates may not be comparable across the transition.

L5 Adult Hospitalization for Asthma

Death, Illness and Injury

According to the Centers for Disease Control and Prevention (CDC) hospitalizations due to asthma could be reduced if asthma is managed according to established guidelines. Effective management includes control of exposure to factors that trigger exacerbations, adequate pharmacological management, continual monitoring of the disease, and patient education in asthma care.[1]

Data Description

The indicator shows the number of hospitalizations for asthma per 100,000 adults aged 18 years and older.

Data Source

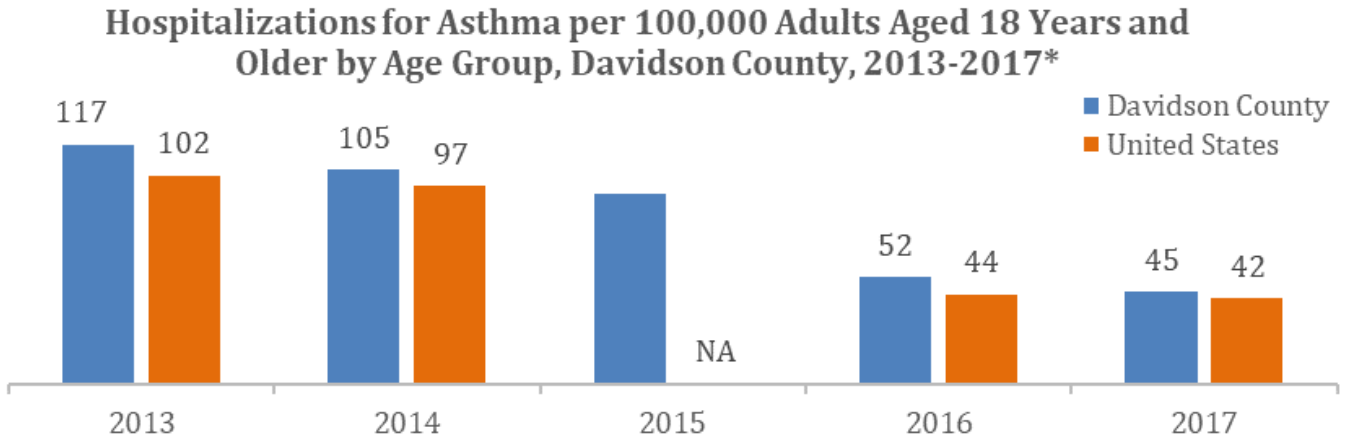
Centers for Disease Control and Prevention. Asthma-Related Healthcare Use. Retrieved from: https://www.cdc.gov/asthma/national-surveillance-data/healthcare-use.htm on 2/21/20.
Tennessee Department of Health, Hospital Discharge Data System (numerator.) Population estimates from the U.S. Census Bureau (denominator.)

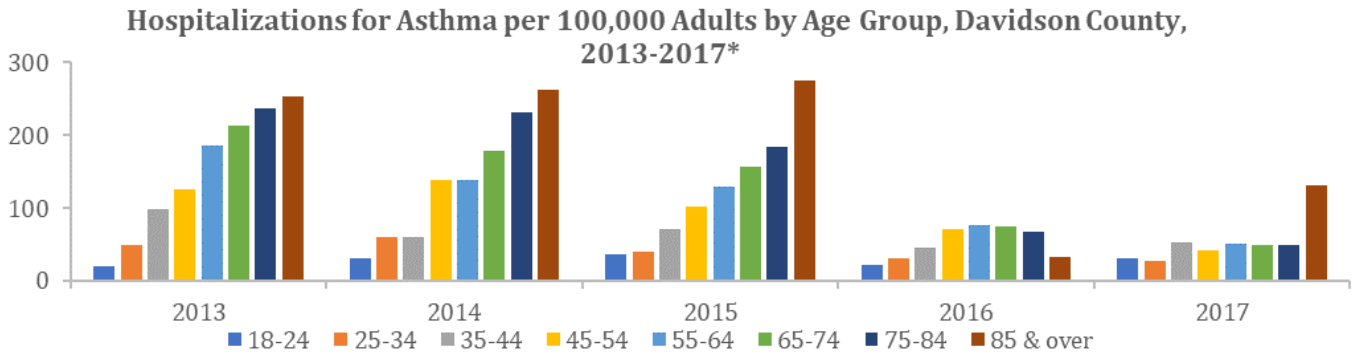
County

45/100,000 Hospitalizations in 2017

National

42/100,000 Hospitalizations in 2017





*Hospitalizations were defined using the ICD-9-CM diagnosis codes until October 2015 and ICD-10-CM diagnosis codes October 2015 and after. The trend should be interpreted with caution as estimates may not be comparable across the transition.

[1] Centers for Disease Prevention and Control.
Indicator Definition: https://www.cdc.gov/cdi/definitions/asthma.html#AST3_1

L6 Adult Hospitalization for Diabetes

Death, Illness and Injury

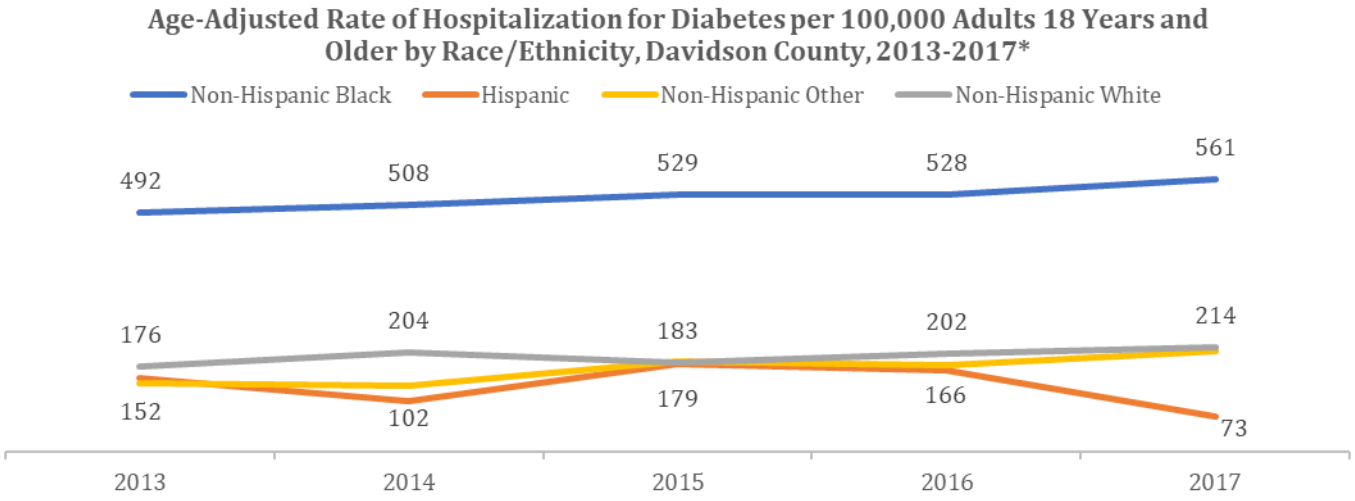
Long-term complications of diabetes requiring hospitalization can be prevented through glucose, lipid, and blood pressure regulation, as well as screening and treatment for eye, foot, and kidney abnormalities. Patient education, self-management, and medical care can prevent complications.

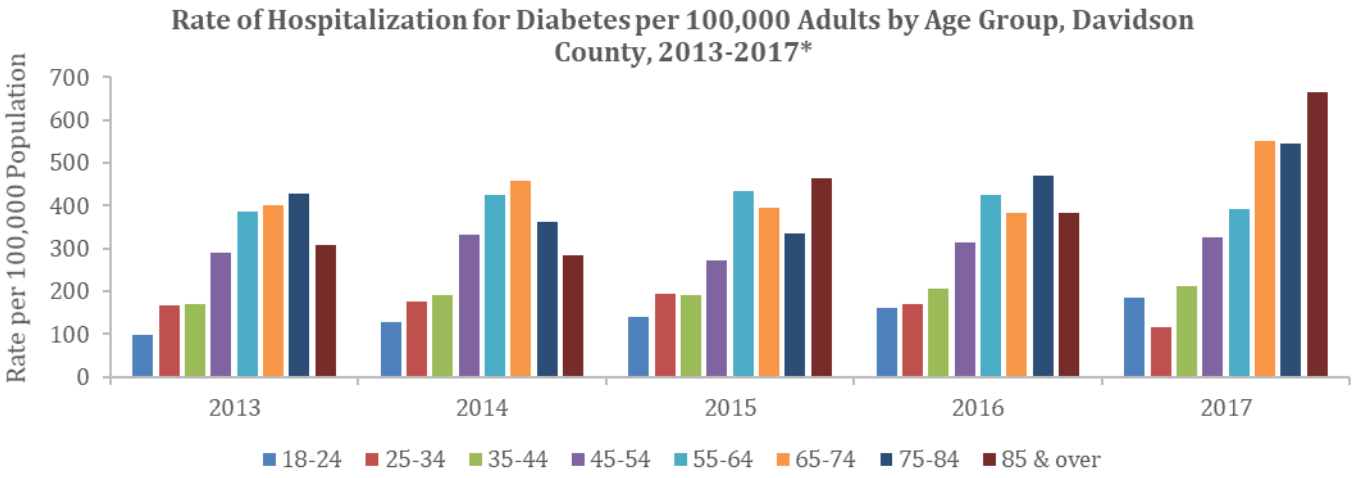
Data Description

The indicator shows the number of hospitalizations for diabetes per 100,000 adults aged 18 years and older.

Data Source

Tennessee Department of Health, Hospital Discharge Data System (numerator). Population estimates from the U.S. Census Bureau (denominator).





* Hospitalizations were defined using ICD-9-CM diagnosis codes until October 2015 and ICD-10-CM diagnosis codes October 2015 and after. The trend should be interpreted with caution as estimates may not be comparable across the transition.

L7 Leading Causes of Death

Determining the leading causes of death for a population is useful for evaluating the relative impact of particular health conditions or risks and can aid in setting priorities for improving health and safety in a community.

Data Description

This indicator shows the leading causes of death, 2014-2018, in Davidson County based on age-adjusted mortality rates per 100,000 population. The top 15 ranked causes are listed.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released in April, 2020.

Leading Causes of Death, Number of Deaths, and Age-Adjusted Mortality Rates per 100,000 Population, Davidson County, 2014-2018

Disease	2014		2015		2016		2017		2018	
	N	Rate	N	Rate	N	Rate	N	Rate	N	Rate
Heart Disease	1190	192.7	1199	192	1180	184.6	1221	187.8	1187	180.7
Cancer	1174	185.7	1142	175.8	1108	171.1	1091	160.3	1078	155.7
Accidents	372	56.4	380	57.1	468	68.6	493	71.4	492	70.8
Chronic lower respiratory disease	248	41.4	308	50	313	49.7	295	45.1	296	44.9
Stroke	269	44	304	50	293	47.8	285	44.6	283	43.7
Alzheimer's Disease	209	35.8	239	39.8	302	51.1	331	54.3	325	52.4
Diabetes	134	21.5	149	23.5	176	27.1	155	23	168	24.8
Influenza and pneumonia	95	16.2	96	16.1	91	14.8	98	15.3	95	14.4
Suicide	90	13	92	13.1	110	15.5	92	12.8	93	13.4
Chronic liver disease/ cirrhosis	68	9.7	72	10.6	83	11.7	78	10.7	78	10.6
Nephritis, nephrotic syndrome and nephrosis	67	10.9	55	8.9	74	11.4	65	10	61	9.4
Septicemia	53	8.3	55	8.8	61	9.5	68	10.6	53	7.8
Essential hypertension and hypertensive renal disease	48	7.6	70	11	51	8.6	61	9.6	68	10.2
Homicide	48	6.9	72	10.2	83	11.4	105	15.5	92	13.1
Parkinson disease	46	8.4	42	7.5	46	7.9	50	8.3	63	10.5

L8 Leading Causes of Death by Race/Ethnicity

Determining the leading causes of death by race/ethnicity is useful for evaluating disparities in the relative impact of particular health conditions or risks and can aid in setting priorities for improving health and safety in a community.

Data Description

This indicator shows the leading causes of death by race/ethnicity in Davidson County based on age-adjusted mortality rates per 100,000 population. The top 15 ranked causes are listed, and these are a subset of the ICD 113 and ICD 130 Cause Lists.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018, CDC WONDER Online Database, released April 2020. Retrieved from: http://wonder.cdc.gov/ucd-icd10.html

Leading Causes of Death, Number of Deaths, and Age-Adjusted Mortality Rates per 100,000 Population, By Race/Ethnicity, Davidson County, 2014-2018

Note: grey cells indicate not a leading cause of death for that year

Disease	Non-Hispanic White		Non-Hispanic Black		Hispanic	
	N	Rate	N	Rate	N	Rate
Heart Disease	4192	179.9	1620	230.4	73	92
Cancer	3889	166.7	1483	194.5	111	98.9
Accidents	1618	74	458	50.7	81	33.3
Chronic Lower Respiratory Disease	1201	52.1	235	32	10	Unreliable
Alzheimer's Disease	1170	49.3	212	40.3		
Stroke	994	42.7	391	58.1	19	Unreliable
Diabetes	437	19.1	324	44.6	10	Unreliable
Suicide	382	17.7	66	6.6	17	Unreliable
Influenza and Pneumonia	350	15.4	104	14.8	10	Unreliable
Chronic Liver Disease & Cirrhosis	307	13.3			10	Unreliable
Parkinson Disease	213	9.5				
Nephritis, Nephrotic Syndrome & Nephrosis	197	8.6	113	15.7		
Septicemia	192	8.3	88	12.3		
Essential Hypertension & Hypertensive Renal Disease	159	6.8	130	19		
Pneumonitis Due to Solids & Liquids	144	6.1				
Human Immunodeficiency Virus (HIV) Disease			57	5.9		
Certain Conditions Originating in the Perinatal Period			90	8.7		
Homicide			282	27.4	30	8.1
Congenital Malformations, Deformations and Chromosomal Abnormalities					19	Unreliable
Certain Conditions Originating in the Perinatal Period					16	Unreliable

L9 Leading Causes of Death by Gender

Determining the leading causes of death by gender is useful for evaluating gender disparities in the relative impact of particular health conditions or risks and can aid in setting priorities for improving health and safety in a community.

Data Description

This indicator shows the leading causes of death by gender in Davidson County based on age-adjusted mortality rates per 100,000 population. Each year shows the top 15 ranked causes, a subset of the ICD 113 and ICD 130 Cause Lists.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018, CDC WONDER Online Database, released April 2020. Retrieved from: http://wonder.cdc.gov/ucd-icd10.html

Leading Causes of Death, Number of Deaths, and Age-Adjusted Mortality Rates per 100,000 Population, by Gender, Davidson County, 2014-2018

Note: grey cells indicate not a leading cause of death for that year

Disease	Female		Male	
	N	Rate	N	Rate
Heart Disease	2850	148.4	3127	240.6
Cancer	2636	140.5	2957	212.2
Alzheimer's Disease	992	50.1	414	40
Accidents	885	47.9	1320	84.1
Stroke	866	45.3	568	45.5
Chronic Lower Respiratory Disease	787	41.8	673	52.6
Diabetes	366	19.3	416	29.8
Influenza & Pneumonia	256	13.7	219	17.7
Septicemia	170	8.9	120	8.9
Nephritis, Nephrotic Syndrome & Nephrosis	163	8.5	159	12.8
Essential Hypertension & Hypertensive Renal Disease	162	8.5	136	10.3
Suicide	128	7.1	349	21.2
Chronic Liver Disease & Cirrhosis	126	6.7	253	15.3
Parkinson Disease	105	5.8	142	13.2
Certain Conditions Originating in the Perinatal Period	77	4.3		
Homicide			337	19.5

L10 Accidental Death Rate

Unintentional injuries are a leading cause of death in the U.S., regardless of age, gender, race, or income. The most common types of unintentional injuries include motor-vehicle collisions, poisonings, and falls.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to unintentional injuries.

Data Source

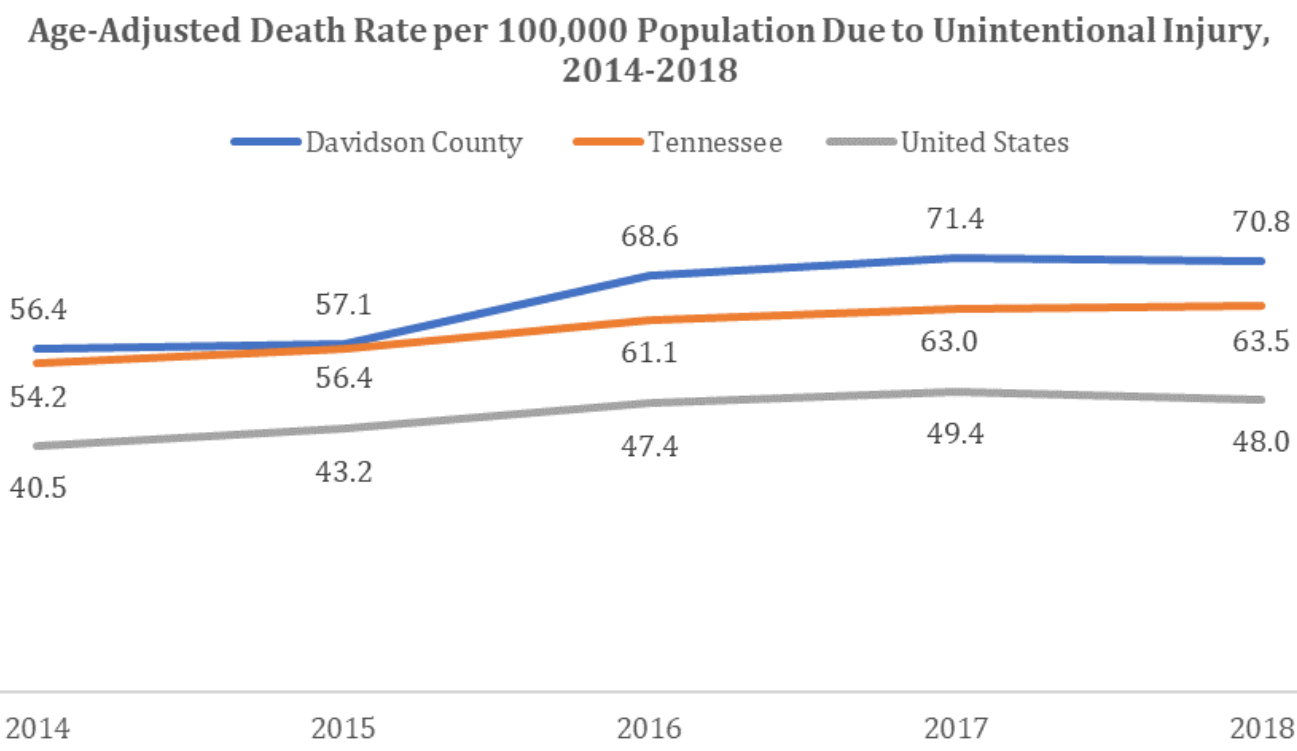
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April, 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
70.8/100,000 death rate in 2018

State
63.5/100,000 death rate in 2018

National
48.0/100,000 death rate in 2018

Benchmark
36.4/100,000 2020 target



L11 Death Due to Motor Vehicle Crashes

In 2012, more than 2.5 million people went to the emergency department (ED) – and nearly 200,000 of them were hospitalized – because of motor vehicle crash injuries.[1] Motor vehicle related injuries are the leading cause of death for children and young adults in the U.S. Motor vehicle injuries and deaths can be prevented through increased use of seatbelts and reductions in impaired driving.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to motor vehicle collisions.

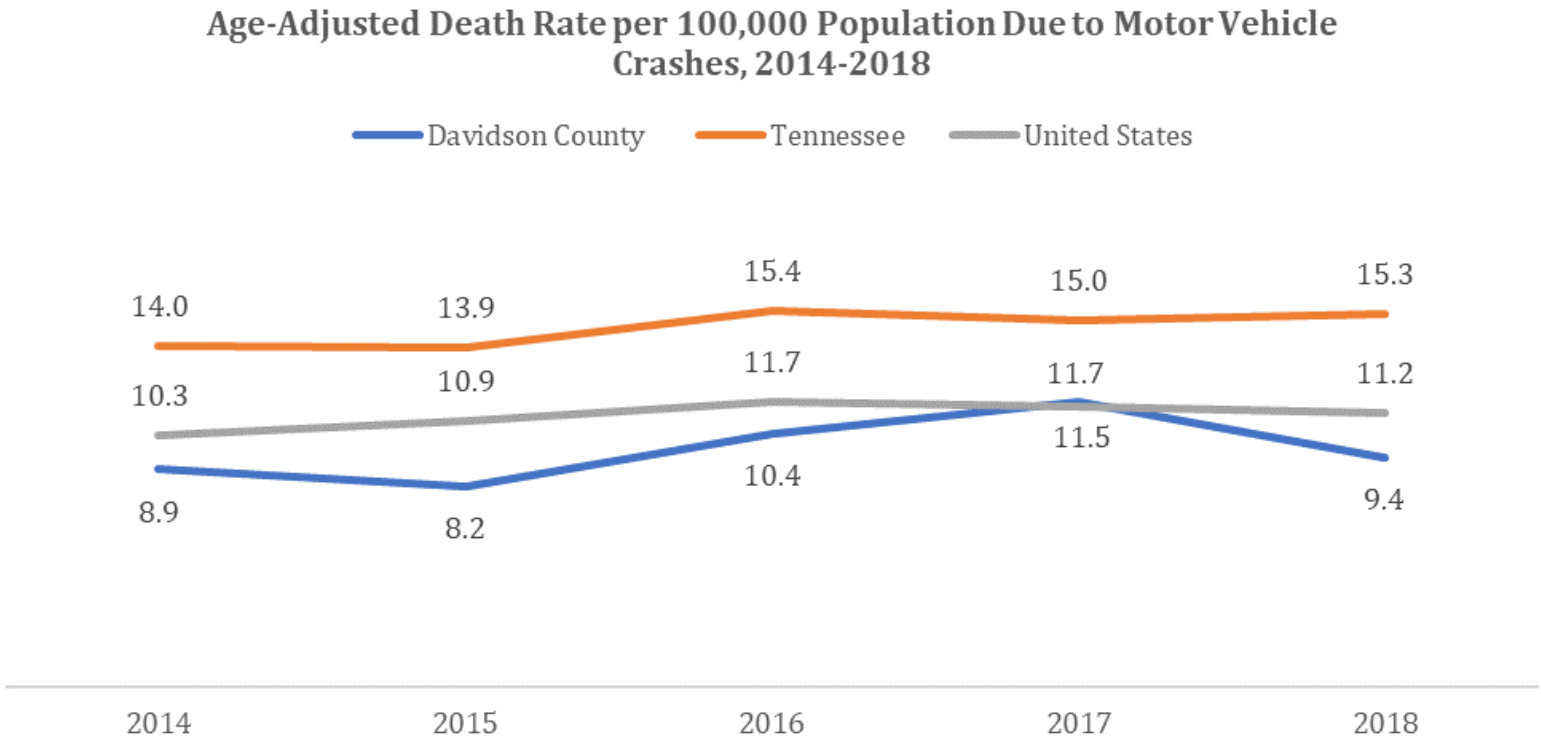
Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April, 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
9.4/100,000 death rate in 2018

State
15.3/100,000 death rate in 2018

National
11.2/100,000 death rate in 2018



[1] CDC report shows motor vehicle crash injuries are frequent and costly.
Retrieved from: https://www.cdc.gov/media/releases/2014/p1007-crash-injuries.html

L12 Pedestrian Fatality Rate

In 2012, 73 percent of pedestrian fatalities occurred in urban settings, 70 percent occurred at non-intersections, and 70 percent occurred at night. Alcohol use was reported in 48 percent of pedestrian fatality crashes. Pedestrian safety can be addressed by improving pedestrian infrastructure on roadways, including sidewalks, crosswalks, crossing signals, and visibility, as well as reducing traffic speeds.

Data Description

This indicator shows the pedestrian fatality rate defined as the number of pedestrians killed in traffic collisions per 100,000 resident population.

Data Source

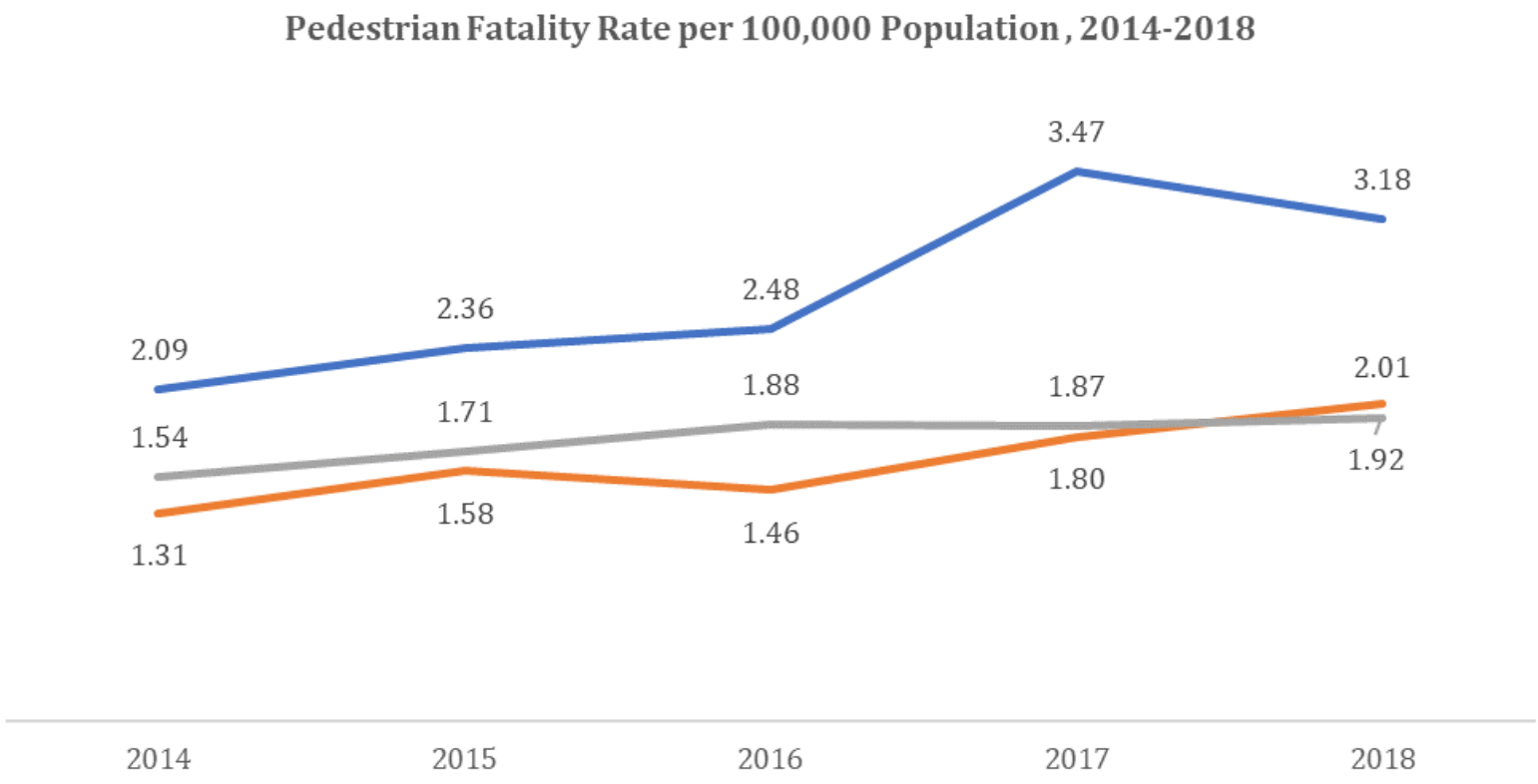
National Highway Traffic Safety Administration (2019). Fatality Analysis Reporting System Encyclopedia. Retrieved from: https://www-fars.nhtsa.dot.gov/States/StatesPedestrians.aspx

County
3.18/100,000 fatality rate in 2018

State
2.01/100,000 fatality rate in 2018

National
1.92/100,000 fatality rate in 2018

Benchmark
1.40/100,000 2020 target



L13 Death Due to Unintentional Poisoning

Unintentional poisoning is the accidental harm to oneself as a result of consuming drugs or chemicals in excessive amounts. According to the Centers for Disease Control and Prevention, unintentional poisonings are overwhelmingly due to drug overdoses, which commonly involve prescription pain medications. Drug overdoses are a rising public health threat, with drug overdose death rates in the United States tripling since 1990.[1] Men, and people aged 45-49 are at the highest risk of suffering death due to unintentional poisoning.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to unintentional poisoning.

Data Source

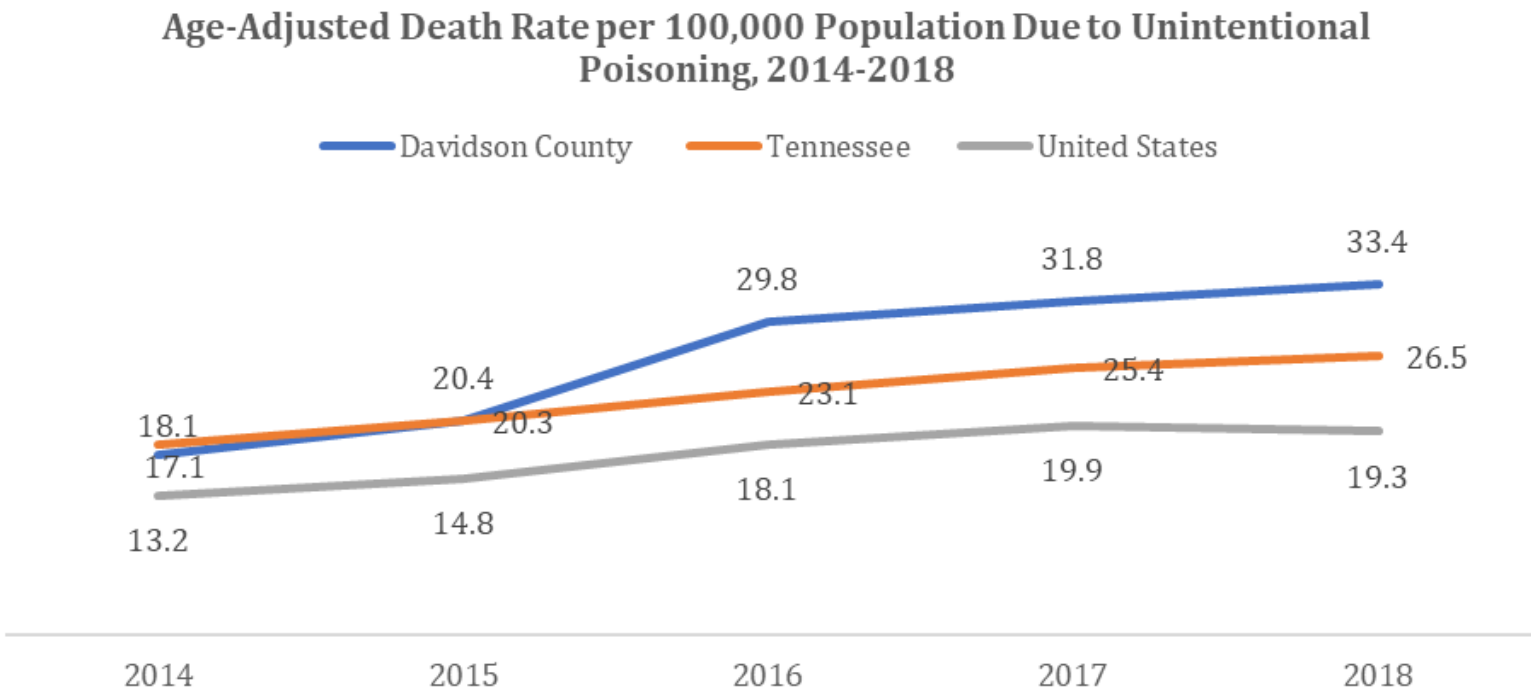
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
33.4/100,000 death rate in 2018

State
26.5/100,000 death rate in 2018

National
19.3/100,000 death rate in 2018

Benchmark
1.40/100,000 2020 Target



[1] Centers for Disease Prevention and Control (2016). Increases in Drug and Opioid Overdose Deaths – United States, 2000-2014. Morbidity and Mortality Weekly Report, 60: 1378-82.

L14 Homicide Rate

Death, Illness and Injury

Homicide has been in the top 15 leading causes of death in the U.S. since 1965. Violence, and the threat of violence, negatively impact the safety and well-being of communities, and contribute to an overall environment that can negatively impact health outcomes .[1]

Data Description

This indicator reports the age-adjusted rate of homicide death per 100,000 population.

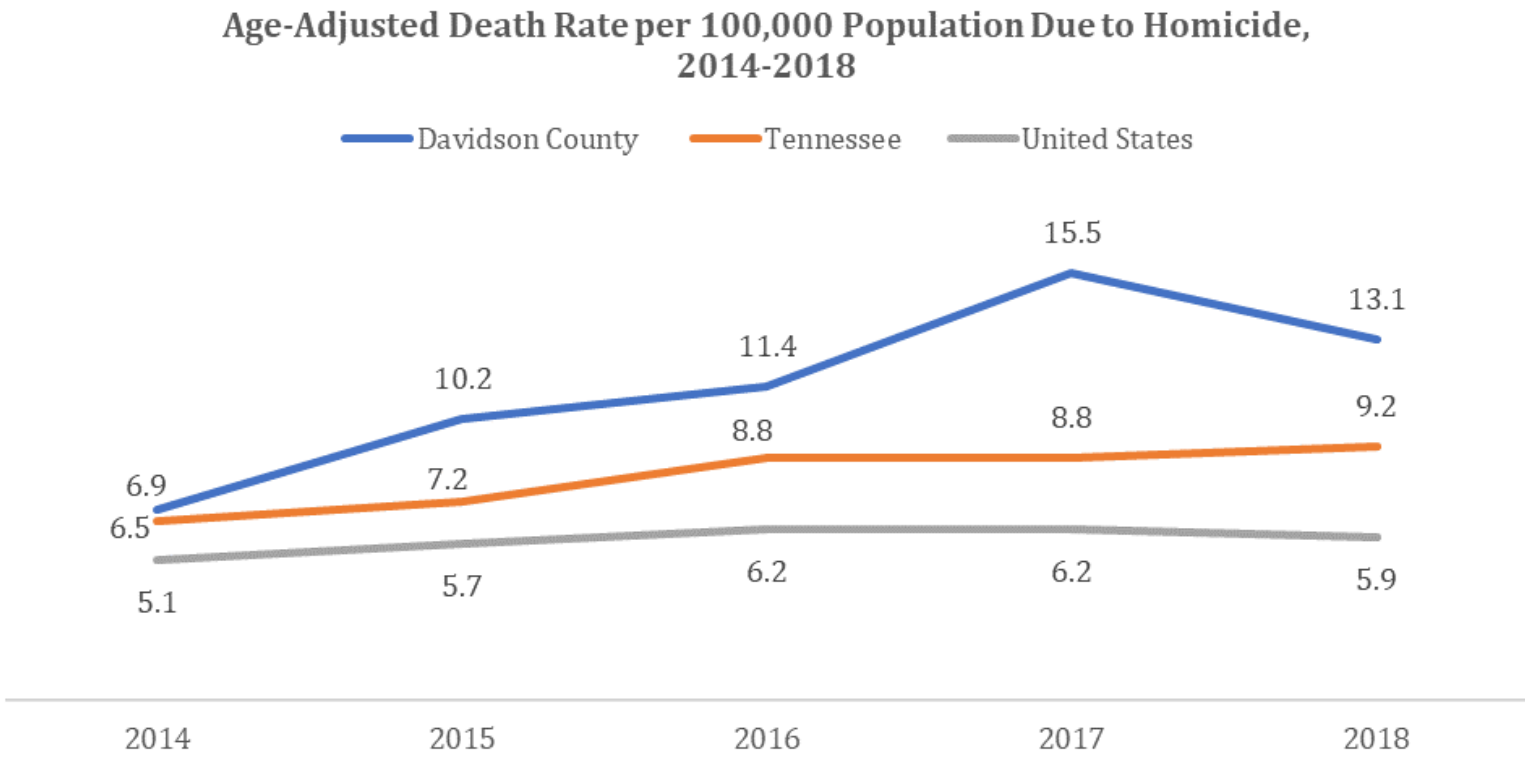
Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
13.1/100,000 death rate in 2018

State
9.2/100,000 death rate in 2018

National
5.9/100,000 death rate in 2018



[1] Centers for Disease Control and Prevention. (2009). The history of violence as a public health issue. Retrieved from: http://www.cdc.gov/violenceprevention/pdf/history_violence-a.pdf

L15 Suicide Death

Suicide is a preventable public health problem. Its causes are complex, and its prevention should be addressed at multiple levels of influence: individual, community, and societal. Effective suicide prevention strategies promote awareness, decrease exposure to risk factors, and promote resilience .[1]

Data Description

This indicator shows the age-adjusted suicide death rate per 100,000 population.

Data Source

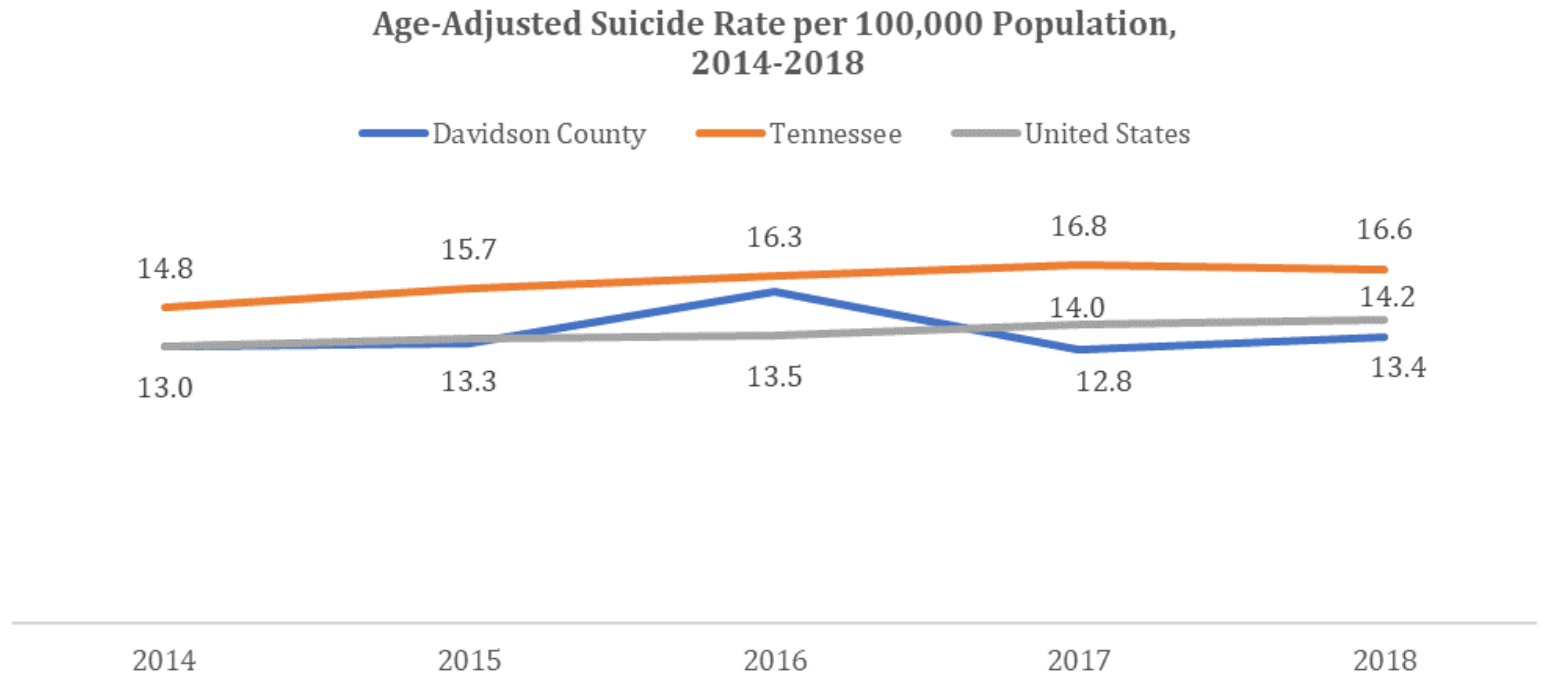
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
13.4/100,000 death rate in 2018

State
16.6/100,000 death rate in 2018

National
14.2/100,000 death rate in 2018

Benchmark
10.2/100,000 Healthy People 2020 Target



[1] Centers for Disease Control and Prevention. (2014). Injury prevention and control, suicide prevention. Retrieved from: http://www.cdc.gov/violenceprevention/suicide/

L16 Stroke Death Rate

Death, Illness and Injury

Cerebrovascular disease refers to conditions, including stroke, caused by problems with the blood vessels in the brain. Cerebrovascular disease is a leading cause of death in the United States, and although it is more common in older adults, it can occur at any age. The most important modifiable risk factor for cerebrovascular disease and stroke is high blood pressure. Other risk factors include high cholesterol, heart disease, diabetes mellitus, physical inactivity, obesity, excessive alcohol use, and tobacco use.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to cerebrovascular disease (stroke.)

Data Source

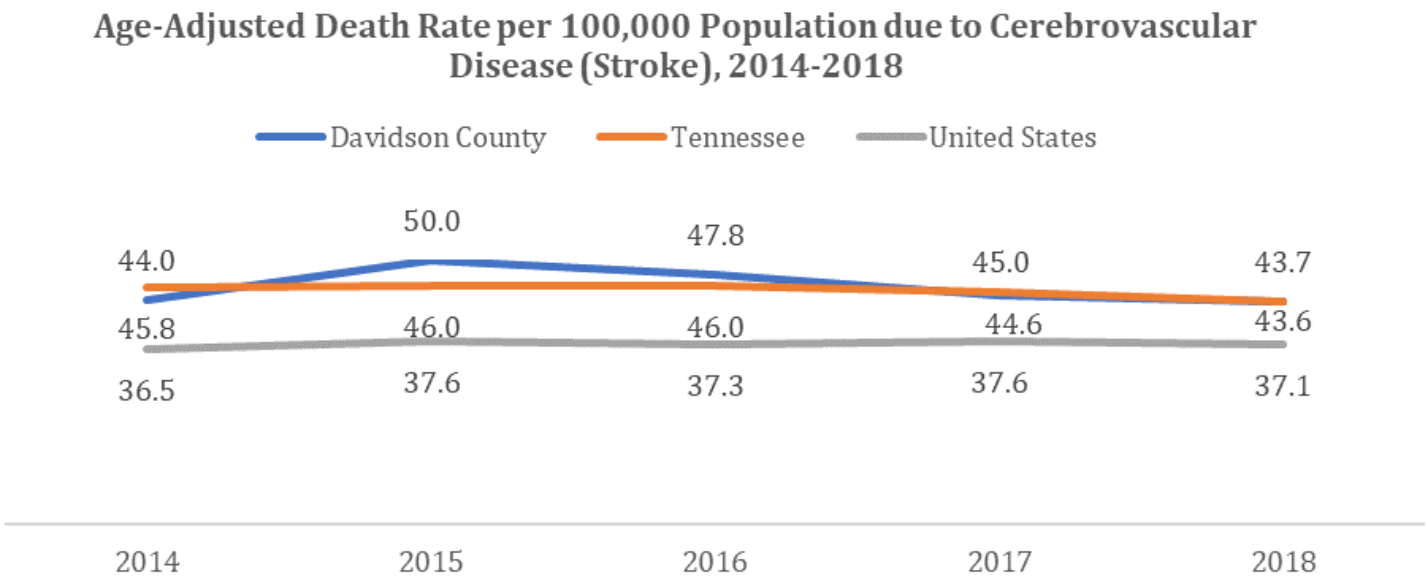
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
43.7/100,000 death rate in 2018

State
43.6/100,000 death rate in 2018

National
37.1/100,000 death rate in 2018

Benchmark
34.8/100,000 2020 Target



L17 Heart Disease Death Rate

Death, Illness and Injury

Cardiovascular diseases, including heart disease and stroke, account for more than one-third of all U.S. deaths and are a leading cause of disability. Heart disease is a term that encompasses a variety of different diseases affecting the heart. The most common type in the United States is coronary artery disease, which can cause heart attacks, angina, heart failure, and arrhythmias. There are many modifiable risk factors for heart disease including tobacco smoking, obesity, sedentary lifestyle, and poor diet. Controlling high blood pressure and cholesterol are also important prevention strategies. According to the Centers for Disease Control and Prevention (CDC), a 12-13-point reduction in systolic blood pressure can reduce heart disease risk by 21%, stroke risk by 37%, and risk for death from heart disease or stroke by 25%. [1]

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to heart disease.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

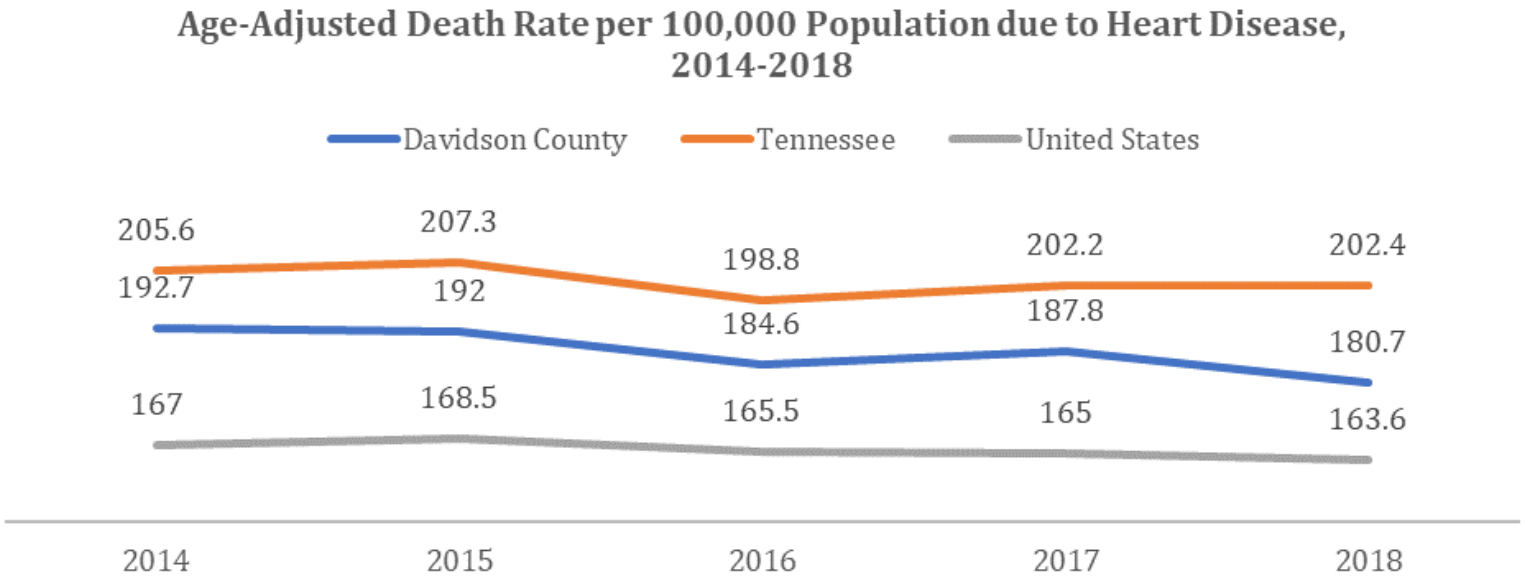
180.7/100,000 death rate in 2018

State

202.4/100,000 death rate in 2018

National

163.6/100,000 death rate in 2018



[1] Centers for Disease Prevention and Control. State Heart Disease and Stroke Prevention Program Addresses High Blood Pressure. Retrieved from: https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_state_hbp.htm

L18 Chronic Lower Respiratory Diseases Death Rate

Chronic lower respiratory disease (CLRD) refers to a diverse group of disorders characterized by airway obstruction, causing shortness of breath and impaired lung function, and includes asthma, emphysema, bronchitis, and chronic obstructive pulmonary disease. CLRD is a leading cause of death and generally occurs among older adults. While mortality rates of other leading causes of death have decreased, deaths due to CLRD continue to rise. Smoking cigarettes as well as exposure to secondhand smoke and chemical irritants are important risk factors. According to the Centers for Disease Control and Prevention, Costs attributable to having COPD were $32.1 billion in 2010 with a projected increase to $49.0 billion by 2020.[1]

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to chronic lower respiratory disease.

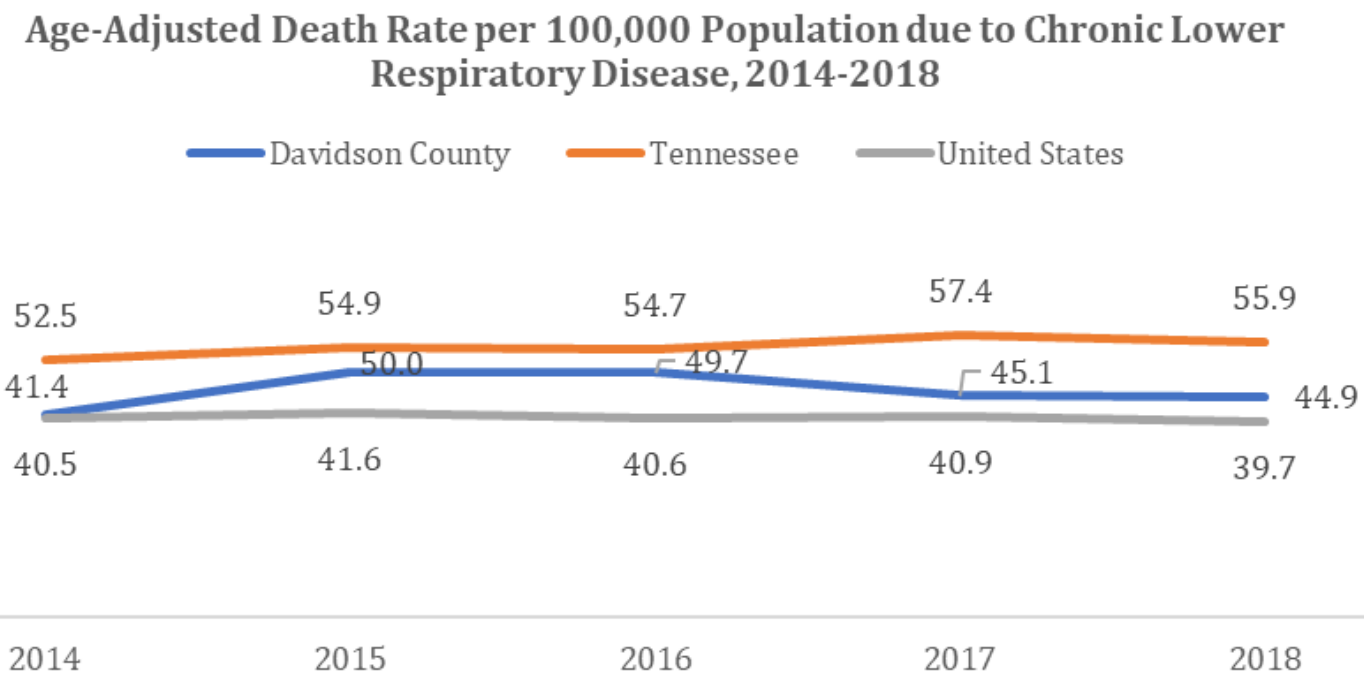
Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
44.9/100,000 death rate in 2018

State
55.9/100,000 death rate in 2018

National
39.7/100,000 death rate in 2018



[1] Centers for Disease Control and Prevention: COPD Costs.
Retrieved from: https://www.cdc.gov/copd/infographics/copd-costs.html

L19 Alzheimer's Disease Death Rate

Alzheimer's disease is the most common form of dementia among older people. It is a progressive and irreversible disease that impairs memory and affects thinking and behavior, to the point of eventually interfering with daily tasks. The greatest risk factor currently known is increasing age. After age 65, the likelihood of developing the disease doubles every five years; the risk is nearly 50% after age 85.[1] Alzheimer's imposes heavy emotional and financial burdens on families. While there is currently no cure, there are treatments that can slow the progression of Alzheimer's and improve the quality of life for people with Alzheimer's and their caregivers.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to Alzheimer's disease.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020. Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

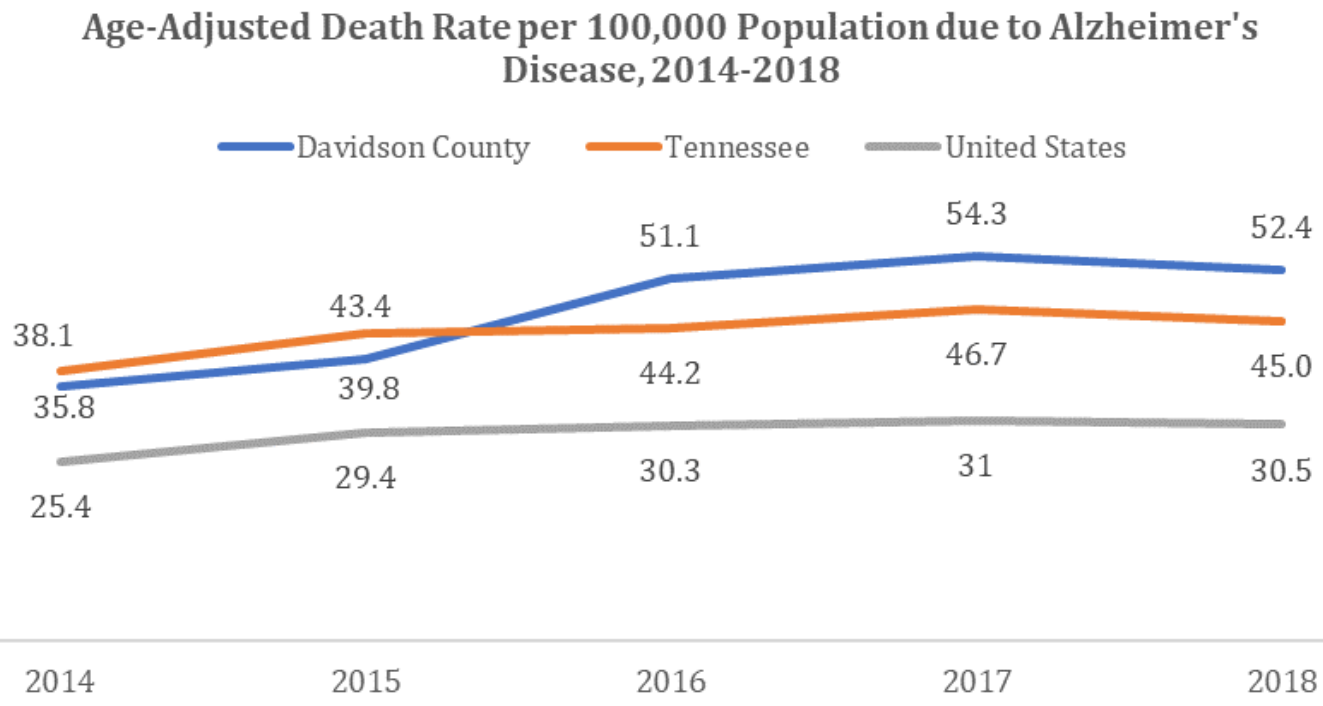
52.4/100,000 death rate in 2018

State

45.0/100,000 death rate in 2018

National

30.5/100,000 death rate in 2018



[1] Corrada et al (2010). Dementia Incidence Continues to Increase with Age in the Oldest Old The 90+ Study. Ann Neurol 67: 114-121.

L20 Diabetes Death Rate

Diabetes is a group of diseases marked by high levels of blood glucose, also called blood sugar, resulting from defects in endogenous insulin production, insulin action, or both. Diabetes is a leading cause of death in the United States. In 2018, 34.2 million Americans (10.5% of the population) had diabetes.[1] The prevalence of diagnosed Type 2 diabetes increased six-fold in the second half of the 1900s. Diabetes risk factors such as obesity and physical inactivity have played a major role in this dramatic increase. Age, race, and ethnicity are also important risk factors. Diabetes disproportionately affects minority populations and the elderly, and its incidence is likely to increase as minority populations grow and the U.S. population becomes older.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to Diabetes.

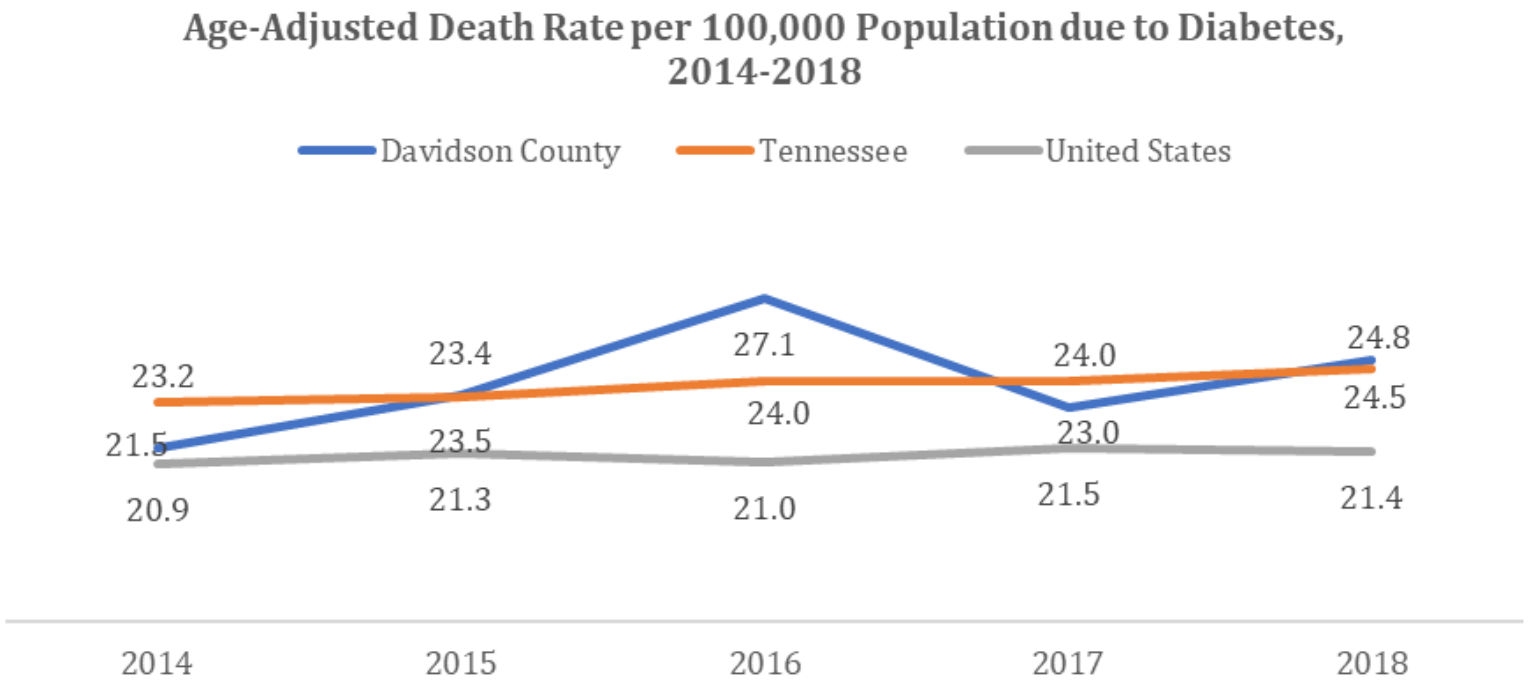
Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
24.8/100,000 death rate in 2018

State
24.5/100,000 death rate in 2018

National
21.4/100,000 death rate in 2018



[1] American Diabetes Association. Statistics About Diabetes.
Retrieved from: https://www.diabetes.org/resources/statistics/statistics-about-diabetes

L21 Cancer Death Rate

Death, Illness and Injury

Cancer is the second leading cause of death in the United States. Cancer is a term used to describe diseases in which abnormal cells divide without control and can invade other tissues. There are over 100 types of cancer, with lung, colorectal, breast, pancreatic, and prostate cancer resulting in the greatest number of annual deaths.

Data Description

This indicator shows the annual age-adjusted death rate per 100,000 population for all types of cancer.

Data Source

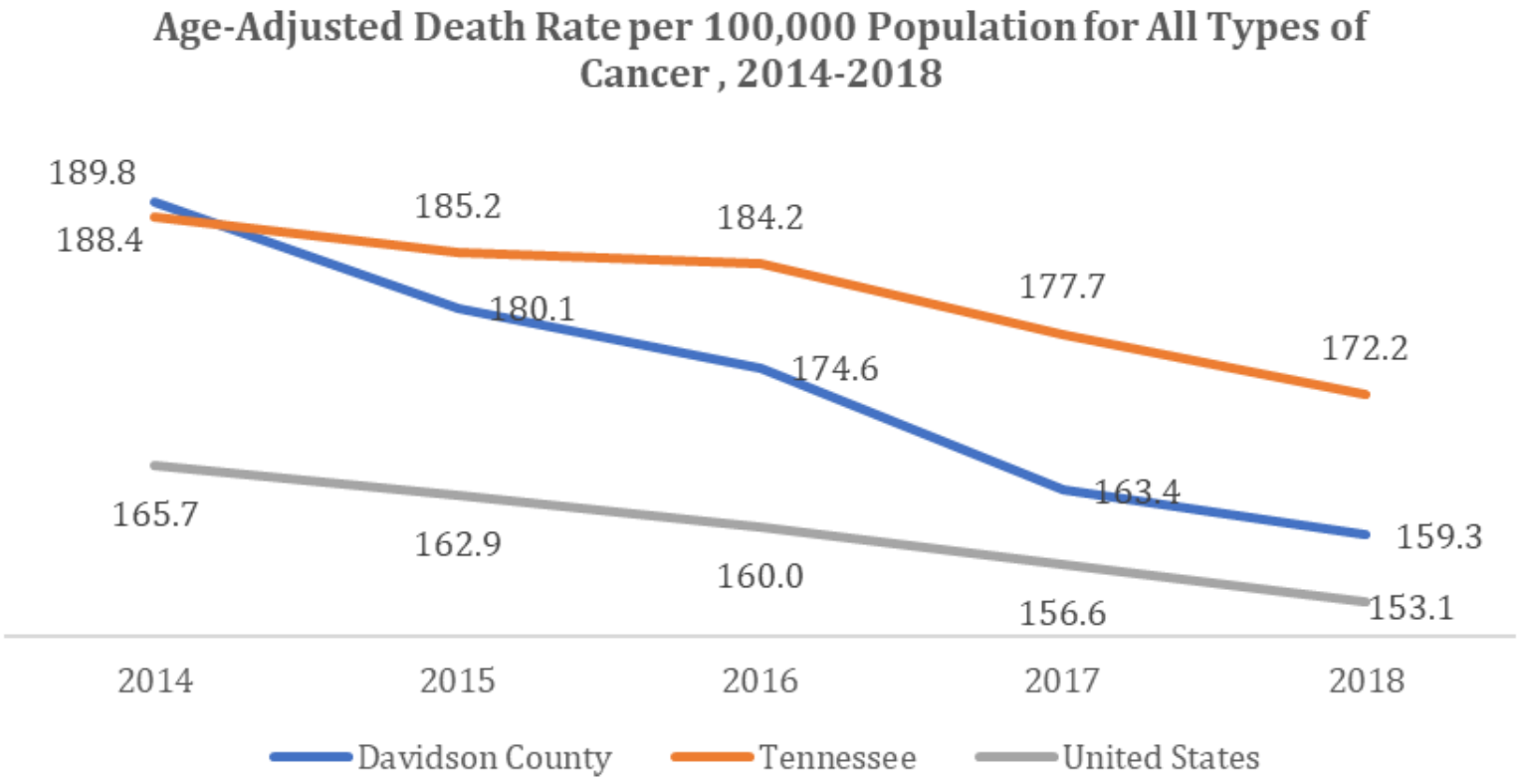
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
159.3/100,000 death rate in 2018

State
172.2/100,000 death rate in 2018

National
153.1/100,000 death rate in 2018

Benchmark
161.4/100,000 Healthy People 2020 Target



L22 Cervical Cancer Death Rate

Cervical cancer was previously the leading cause of cancer death for women in the United States. However, in the past 40 years, the number of cases of cervical cancer and the number of deaths from cervical cancer have decreased significantly. This decline largely is the result of many women getting regular Pap tests, which can find cervical precancer before it becomes cancer. [1]

Data Description

This indicator shows the age-adjusted death rate per 100,000 population for cervical cancer (women only). Due to the small number of deaths, a five-year rate estimate was calculated.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
2.3/100,000 death rate in 2014-2018

State
2.7/100,000 death rate in 2014-2018

National
2.2/100,000 death rate in 2014-2018

Benchmark
2.3/100,000 Healthy People 2020 Target

[1] National Institutes of Health. Cervical Cancer. *NIH Consensus Statement.* 1996;14(1):1–38

L23 Breast Cancer Death Rate

In the U.S., breast cancer is the second most common type of cancer among women, and the second leading cause of cancer death among women. Age is the greatest risk factor in developing breast cancer. Advancement in detection and treatment have led to progressively declining breast cancer death rates since 1990.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population for breast cancer (women only.)

Data Source

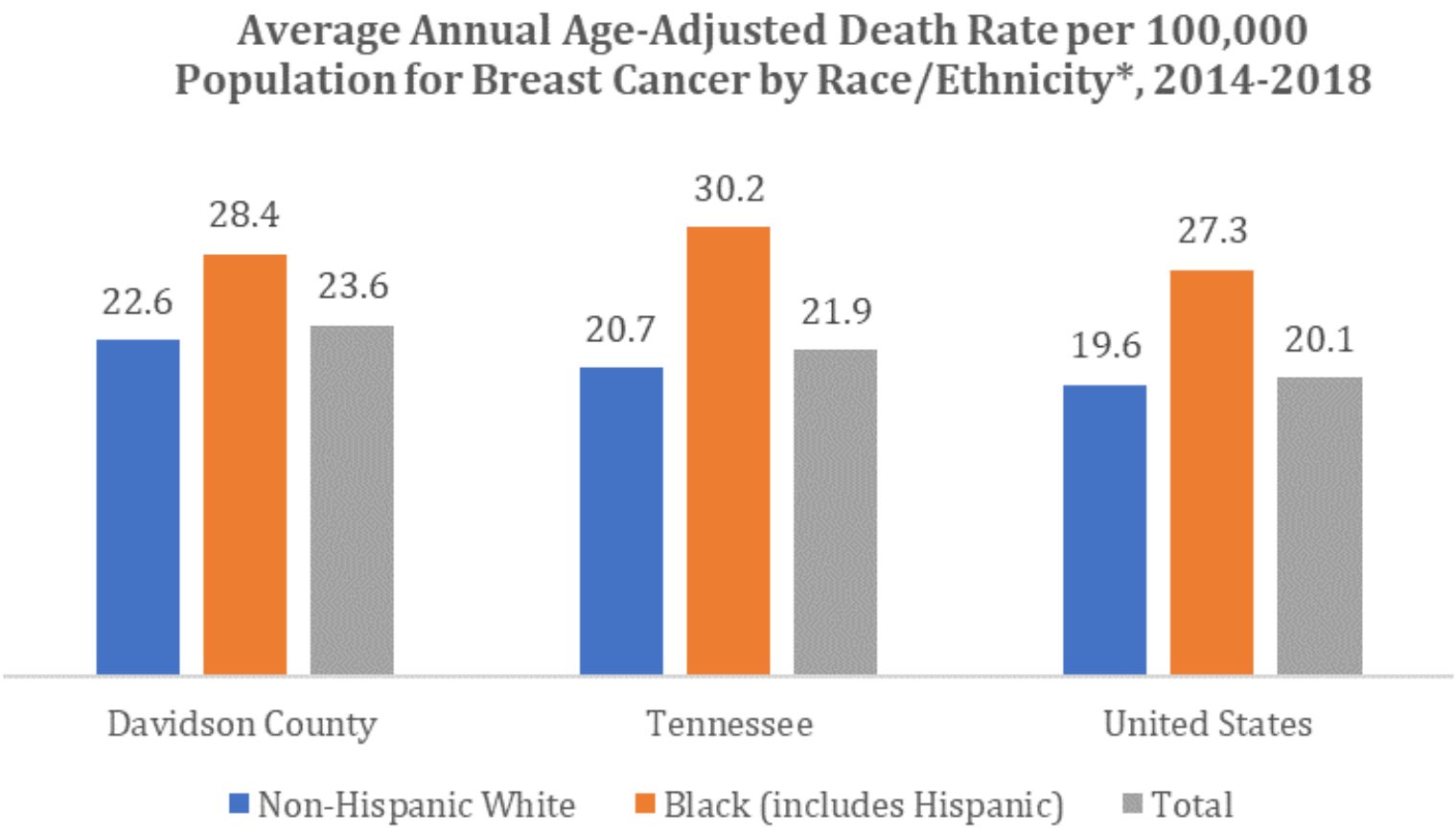
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020. Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
23.6/100,000 rate in 2014-2018

State
21.9/100,000 rate in 2014-2018

National
20.1/100,000 rate in 2014-2018

Benchmark
20.7/100,000 Healthy People 2020 Target



*: Rates for the County are not available for races other than Non-Hispanic White and Black

L24 Prostate Cancer Death Rate

Death, Illness and Injury

Prostate cancer is the most commonly diagnosed form of cancer among men in the U.S. It is the second-leading cause of cancer-related death among men, following lung cancer. Age and race/ethnicity are the leading risk factors, with men who are African American and over the age of 65 having the highest incidence rates.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population for prostate cancer (men only.)

Data Source

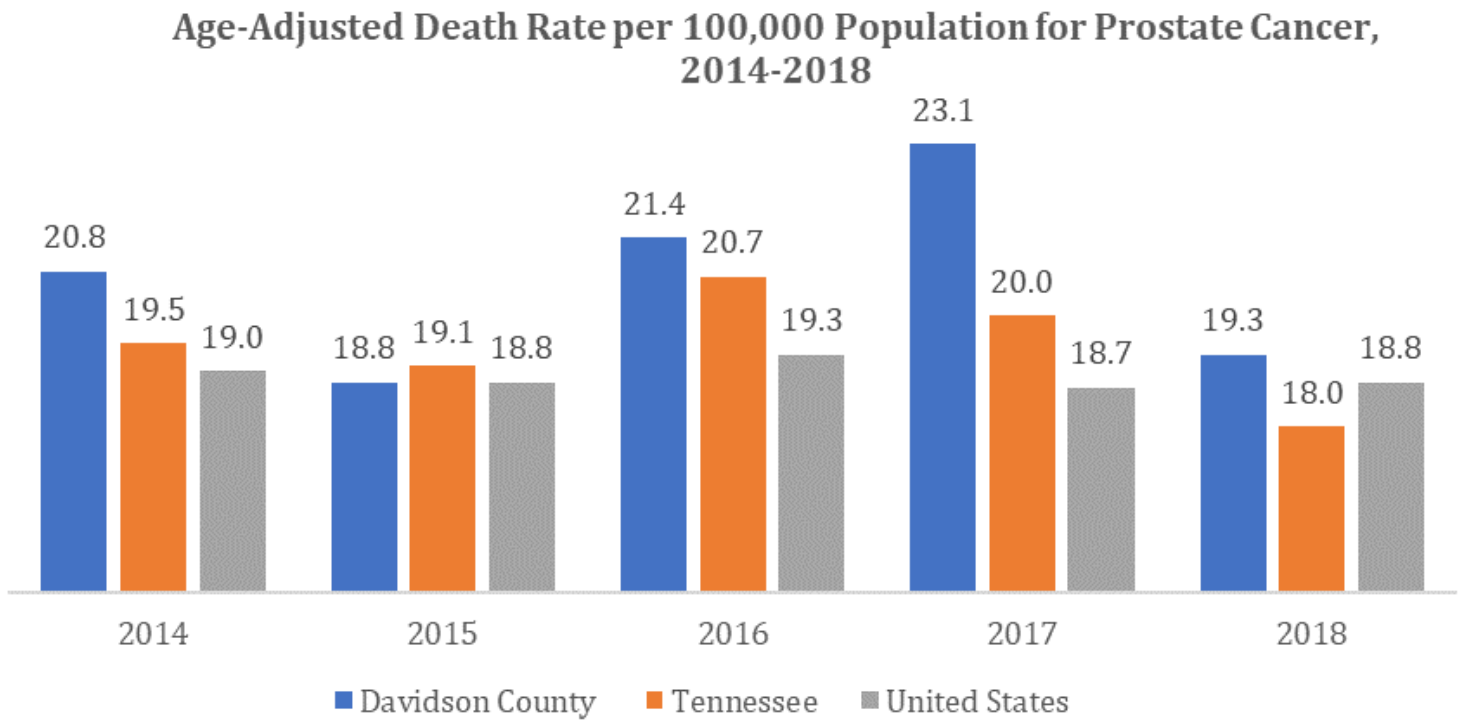
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020. Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
19.3/100,000 death rate in 2018

State
18.0/100,000 death rate in 2018

National
18.8/100,000 death rate in 2018

Benchmark
21.8/100,000 Healthy People 2020 Target



L25 Death Rate for Cancer of Trachea, Bronchus and Lung

Death, Illness and Injury

Lung cancer is the leading cancer killer in the U.S., greater than the total number of deaths caused by breast cancer, colorectal cancer, and prostate cancer combined. Smoking is the greatest risk factor for lung cancer. The mortality rate among men due to lung cancer has stabilized, but the mortality rate among women continues to increase.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population for cancer of trachea, bronchus and lung.

Data Source

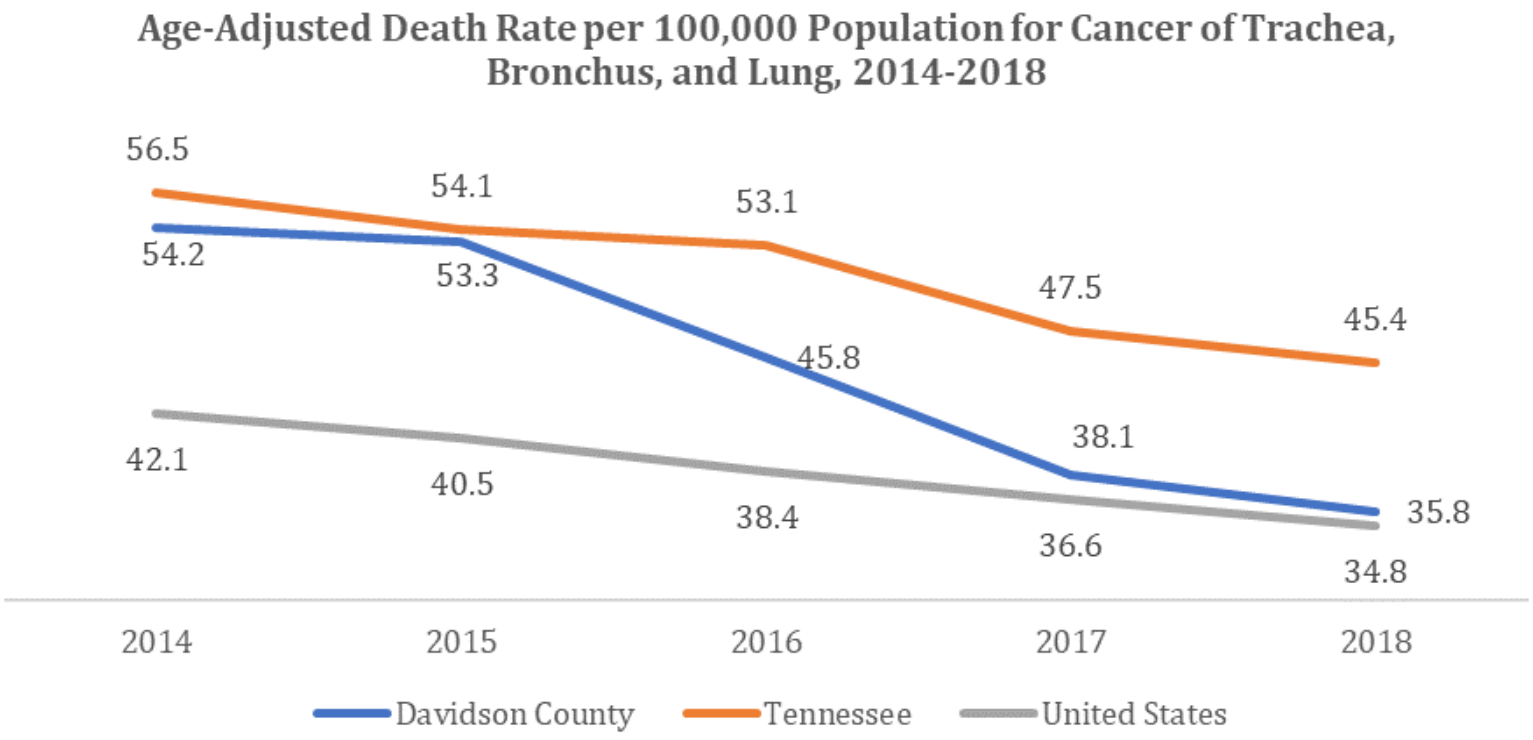
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
35.8/100,000 death rate in 2018

State
45.4/100,000 death rate in 2018

National
34.8/100,000 death rate in 2018

Benchmark
45.5/100,000 Healthy People 2020 Target



L26 Death Rate for Cancer of Colon, Rectum and Anus

Death, Illness and Injury

Colorectal cancer is the second leading cancer killer in the U.S. Up to 60 percent of these deaths could be prevented if adults aged 50 or older had regular screenings. Screening procedures include fecal occult blood tests (FOBT) annually; flexible sigmoidoscopy every 5 years; double-contrast barium enema every 5 years, or colonoscopy every 10 years.

Data Description

This indicator shows the annual age-adjusted death rate per 100,000 population for cancer of colon, rectum, and anus.

Data Source

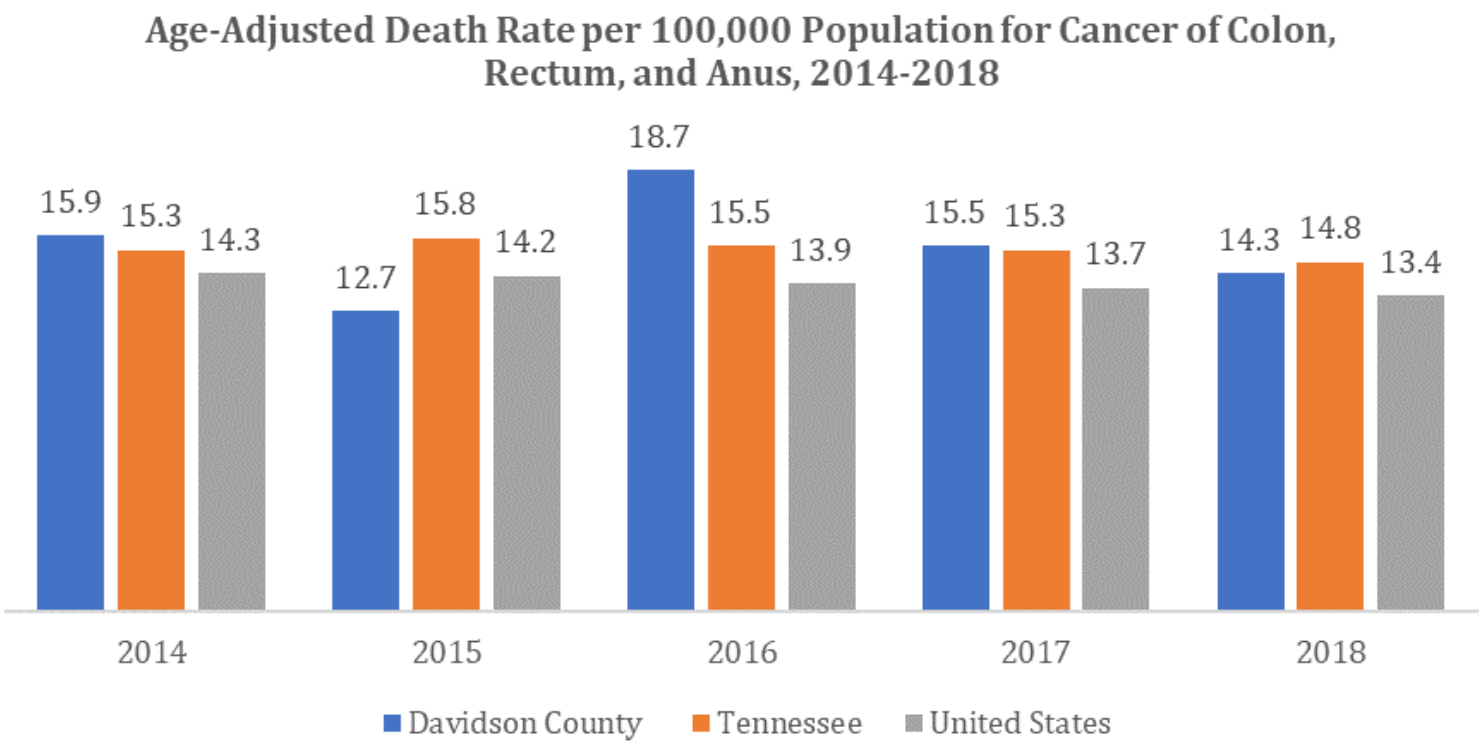
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
14.3/100,000 death rate in 2018

State
14.8/100,000 death rate in 2018

National
13.4/100,000 death rate in 2018

Benchmark
14.5/100,000 Healthy People 2020 Target



L27 Death Rate Due to Influenza and Pneumonia

Influenza and pneumonia are a leading cause of death in the United States. The two diseases are traditionally reported together because pneumonia is frequently a complication of influenza. Influenza is a contagious disease caused by a virus. Pneumonia is a serious infection of the lungs that develops when the immune system is weakened. It is mainly caused by bacteria, viruses, and mycoplasmas. Typically, there are more deaths from pneumonia than from influenza. Influenza vaccination is suggested for all individuals six months and older, but influenza and pneumococcal pneumonia vaccination are especially recommended for persons most at risk, including the elderly, the very young, and the immunocompromised.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to influenza and pneumonia.

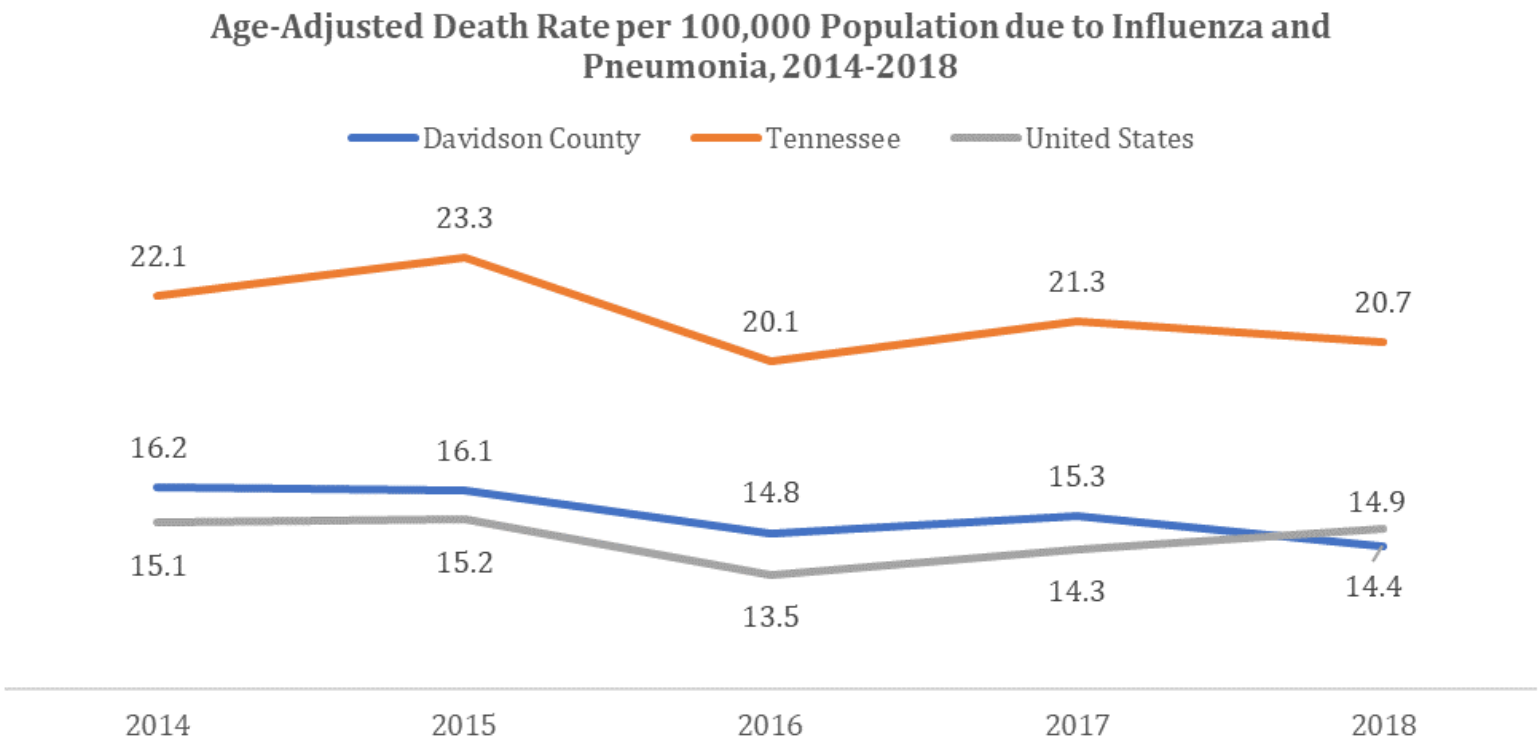
Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
14.4/100,000 death rate in 2018

State
20.7/100,000 death rate in 2018

National
14.9/100,000 death rate in 2018



L28 HIV/AIDS Death Rate

HIV/AIDS is a significant cause of illness, disability, and death, and more people than ever before are living with HIV/AIDS. Those living with HIV/AIDS are living longer because of better treatments. The Centers for Disease Control and Prevention estimates that 50,000 people become infected with HIV each year in the United States. African Americans, men who have sex with men, and young people aged 13-24 are disproportionately affected by HIV.

Data Description

This indicator shows the age-adjusted death rate per 100,000 population due to HIV/AIDS.

Data Source

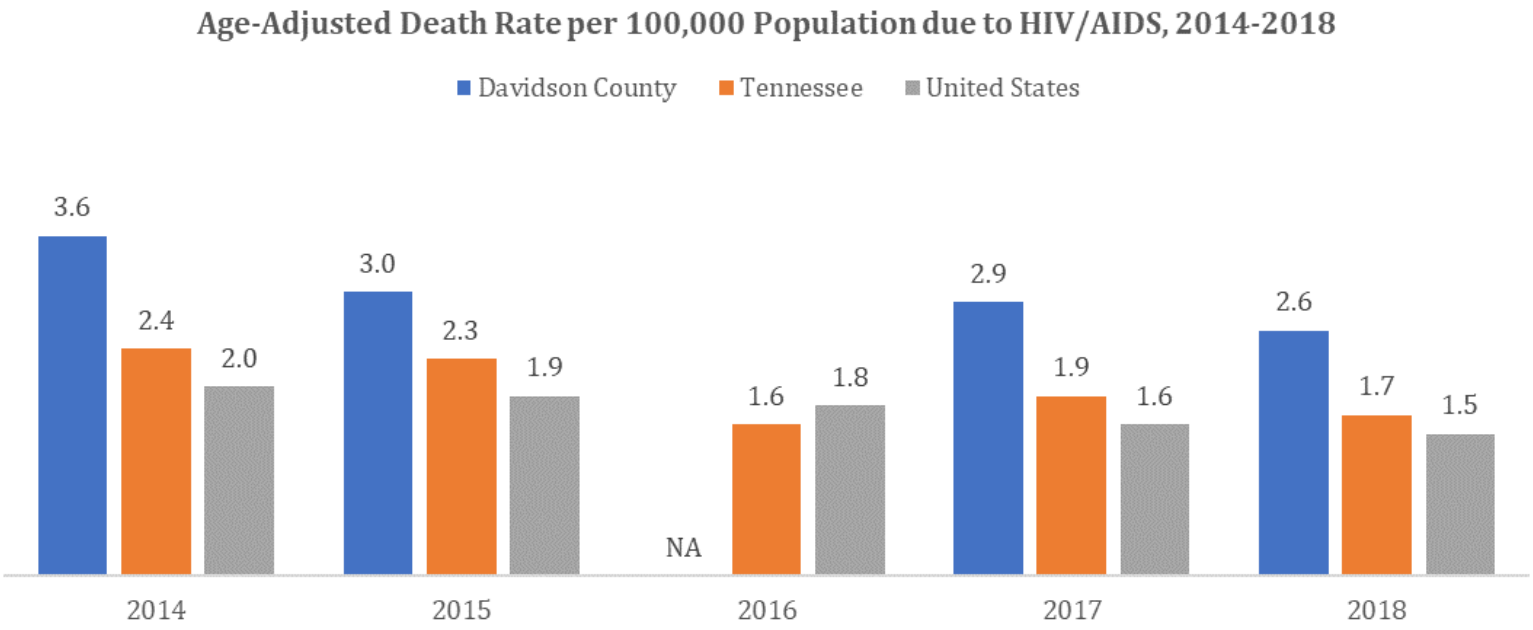
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2018 on CDC WONDER Online Database, released April 2020.
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County
2.6/100,000 death rate in 2018

State
1.7/100,000 death rate in 2018

National
1.5/100,000 death rate in 2018

Benchmark
3.3/100,000 Healthy People 2020 Target



Infectious Diseases

2021 Community Health Profile
Metro Public Health Department

Disorders that are caused by infectious agents such as bacteria, viruses, fungi or parasites and their toxic products, account for a significant portion of the global burden of disease, including morbidity, premature mortality and disability.[1] Disease outbreaks often result in psycho-social and economic costs to society, as reflected in documented impacts of the 2003 SARS, 2014 Ebola and 2020 Covid-19 outbreaks.[2] Disease surveillance and control measures can help detect trends, support the development of prevention strategies and policies to protect community health, and direct limited healthcare resources to the most vulnerable subpopulations.[3]

This section presents incidence of notifiable diseases (such as legionellosis, ehrlichiosis, *Streptococcus pneumoniae*, Group A strep, and Rocky Mountain Spotted Fever) as well as incidence of specific infectious diseases that are at the core of local surveillance and control efforts such as chlamydia, gonorrhea, syphilis, HIV, TB and Hepatitis B and C, and food-borne diseases related to food safety measures.

Section Highlights

- Incidence of notifiable diseases rose from 22.7 per 100,000 population in 2014 to 34.0 per 100,000 population in 2017, and then declined to 20.2 per 100,000 population in 2018, mirroring the state trend. (Indicator I1)
- Incidence of enteric diseases declined from 31.7 per 100,000 residents in 2013 to 18.0 per 100,000 residents in 2015 and then increased to 33.6 per 100,000 residents in 2018. (indicator I2)
- Newly reported chlamydia cases in the county increased steadily each year from 2012 through 2018 for both males and females. The rate for Davidson County was consistently above state and national rates. (Indicator I3)
- There were increasing trends in the incidence of gonorrhea and syphilis between 2012 and 2018, with greater increases occurring among males than females. (Indicators I4-I5)
- Newly reported HIV cases (incidence) in the county declined from 27.2 per 100,000 in 2014 to 21.1 per 100,000 2017. Rates among Black or African American residents were twice those among Non-Hispanic White and Hispanic residents. (Indicator I7)
- Between 2014 and 2018, the burden of tuberculosis (TB) was highest among county residents of Asian origin. However, rates in this population declined significantly from 46.5 per 100,000 residents in 2014 to 18.5 per 100,000 residents in 2018. (Indicator I8)

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[1] Lederberg J. Summary and Assessment. In: Institute of Medicine (US) Forum on Emerging Infections; Davis JR, Lederberg J, editors. *Emerging Infectious Diseases from the Global to the Local Perspective: A Summary of a Workshop of the Forum on Emerging Infections*. Washington (DC): National Academies Press (US); 2001. Available from: https://www.ncbi.nlm.nih.gov/books/NBK99562/

[2] Dong L, Bouey J. Public mental health crisis during COVID-19 pandemic, China. *Emerg Infect Dis*. 2020 Jul [ePub 3/23/2020]. https://doi.org/10.3201/eid2607.200407

[3] https://epi.dph.ncdhhs.gov/cd/

Infectious Diseases

I1 Notifiable Disease Incidence

The CDC produces a list of nationally notifiable conditions each year, which include sexually transmitted infections, vaccine-preventable diseases, and tuberculosis. Davidson County has a notifiable disease program that monitors and investigates nationally-notifiable conditions and works to protect the population from serious disease, like vector-borne illness, enteric illnesses, health care acquired infections, and novel or high importance pathogens. Many of these illnesses demonstrate a variety of community impacts and control challenges. For example, vector-borne diseases like spotted fever rickettsiosis and ehrlichiosis comprise a large number of tickborne infections each year in Davidson County, yet are difficult to control with limited vector control measures in place.

Data Description

This indicator shows the incidence of selected notifiable diseases per 100,000 population. The diseases included are: legionellosis, ehrlichiosis, *Streptococcus pneumoniae* (invasive disease), Group A strep, and Rocky Mountain Spotted Fever.

Data Source

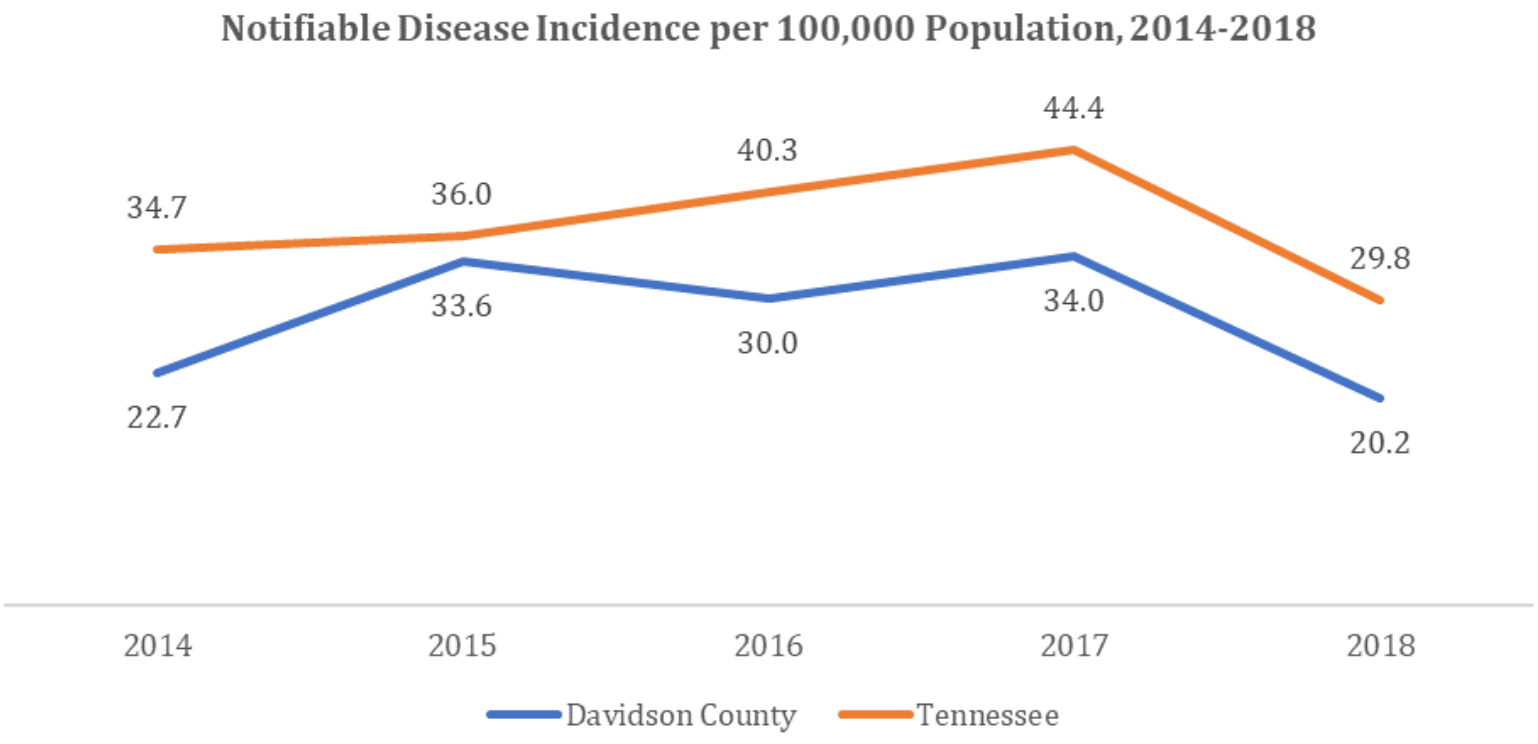
Tennessee Department of Health, NNDSS-Based System (NBS)

County

20.2/100,000 incidence in 2018

State

29.8/100,000 incidence in 2018



I2 Incidence of Select Enteric Diseases

Enteric diseases are bacterial or viral infections transmitted through food or water. Symptoms of infection can range from mild to severe and may include nausea, vomiting, diarrhea with or without bloody stool, and fever. Some infections, like STEC O157:H7, can even lead to kidney failure and death if untreated. Others can be of long duration and cause discomfort or suffering that eventually necessitates doctors' visits or cause patients to miss days of work or other social gatherings. There are many routes of exposure, so investigation of outbreaks helps ensure that the food and water in the community are safe for consumption.

Data Description

This indicator shows the incidence rate of selected enteric diseases per 100,000 population. The diseases included are: campylobacterosis, cryptosporidiosis, cyclosporaisis, salmonellosis, shiga-toxin producing *E. Coli* (STEC), shigellosis, vibriosis (vulnificus), vibriosis (parahemolyticus), and listeriosis.

Data Source

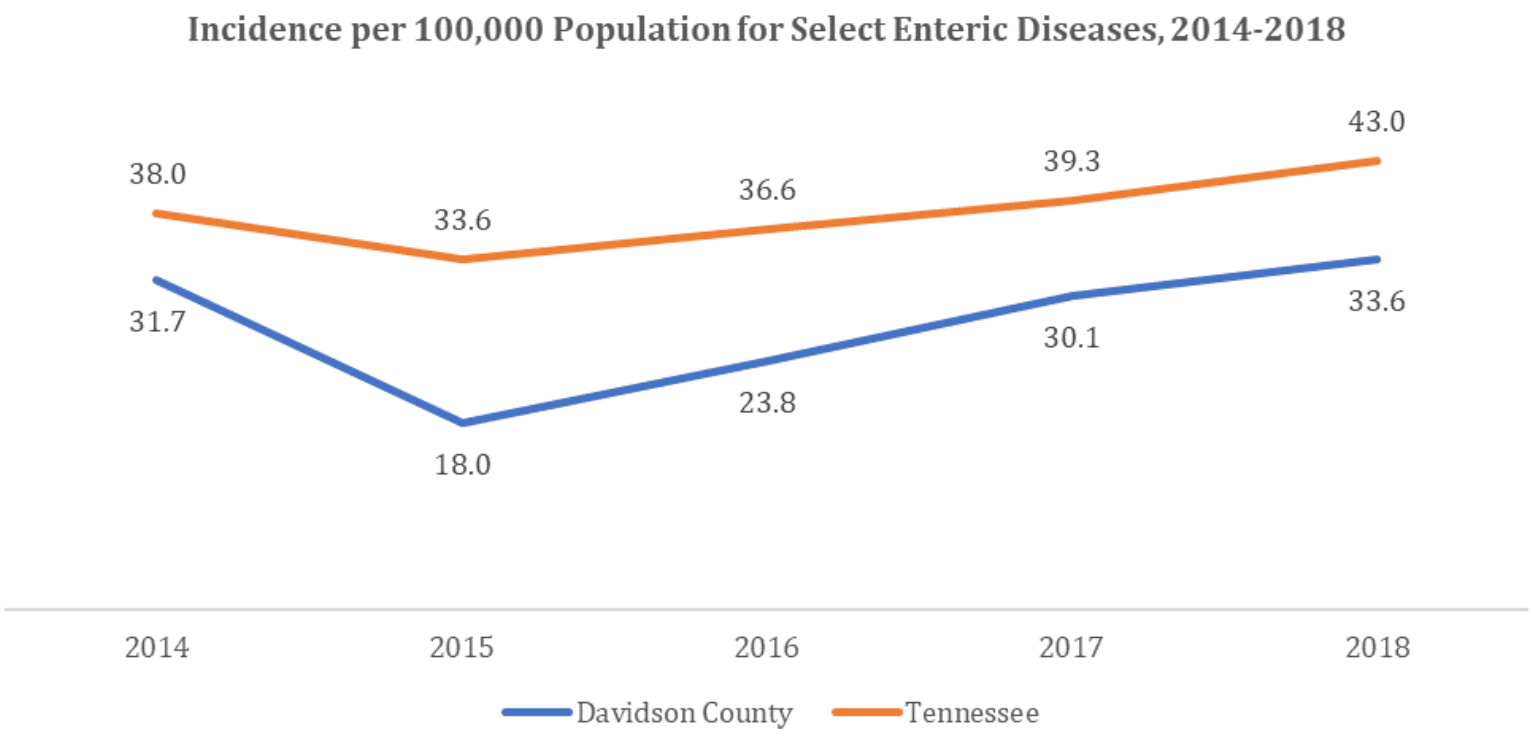
Tennessee Department of Health, NNDSS-Based System (NBS)

County

33.6/100,000 incidence in 2018

State

43.01/100,000 incidence in 2018



I3 Chlamydia Incidence

Chlamydia is one of the most common reportable sexually transmitted infections (STIs) in the United States and locally. Although symptoms of chlamydia can be mild, serious complications can occur including ectopic pregnancy or infertility. Untreated chlamydia can also impact a neonate by causing eye infections or pneumonia. Since chlamydia is so common and may cause no symptoms, many people do not know they are infected. In Davidson County, chlamydia disproportionately impacts young, black females, which illustrates another health disparity and an area in need of tailored public health interventions to reduce the burden of disease among this population and countywide.

Data Description

This indicator shows the chlamydia incidence per 100,000 population.

Data Source

Tennessee Department of Health, Patient Reporting Investigating Surveillance Manager (PRISM)

County

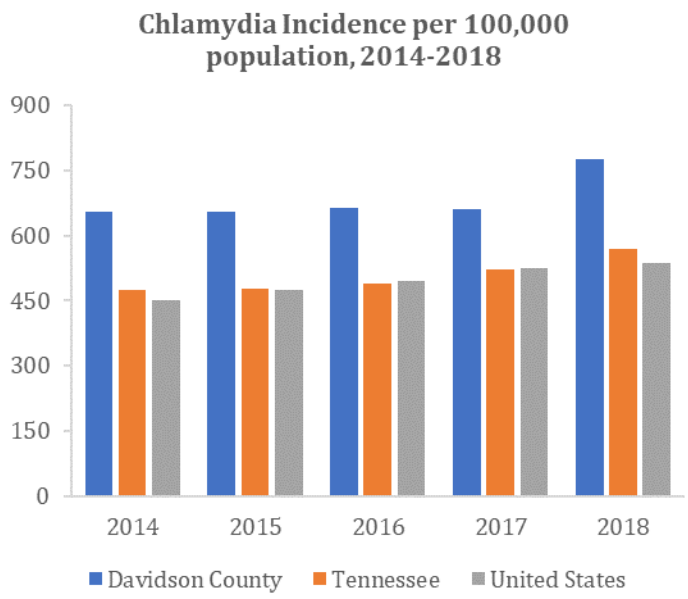
776.2/100,000 incidence in 2018

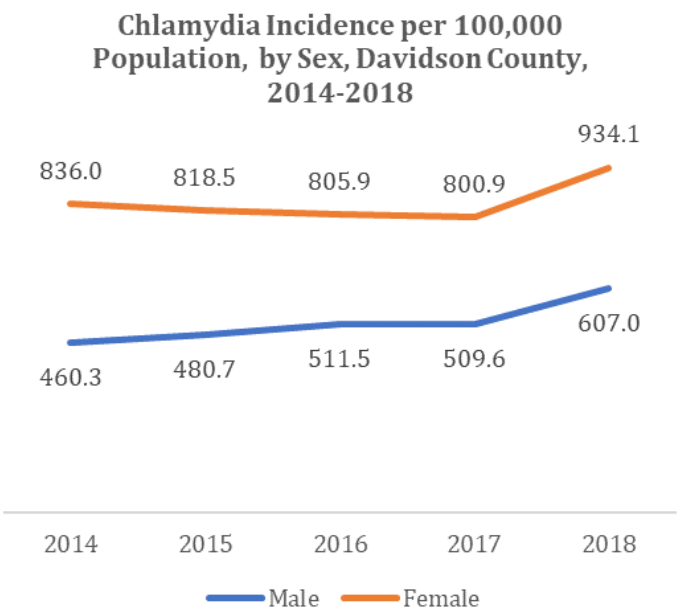
State

569.0/100,000 incidence in 2018

National

537.5/100,000 incidence in 2018





I4 Gonorrhea Incidence

Gonorrhea is a typically asymptomatic sexually transmitted infection (STI) among men. Left untreated, gonorrhea can cause serious and permanent health problems, such as pelvic inflammatory disease (PID) and infertility in women. It can also cause sterility in men. In both sexes and in rare cases, gonorrhea can cause joint and blood infections. There are currently antibiotic-resistant strains of gonorrhea circulating in populations around the globe, which highlights the need for complete and thorough treatment and good antibiotic stewardship in treating STIs.

Data Description

This indicator shows the gonorrhea incidence per 100,000 population.

Data Source

Tennessee Department of Health, Patient Reporting Investigating Surveillance Manager (PRISM)

County

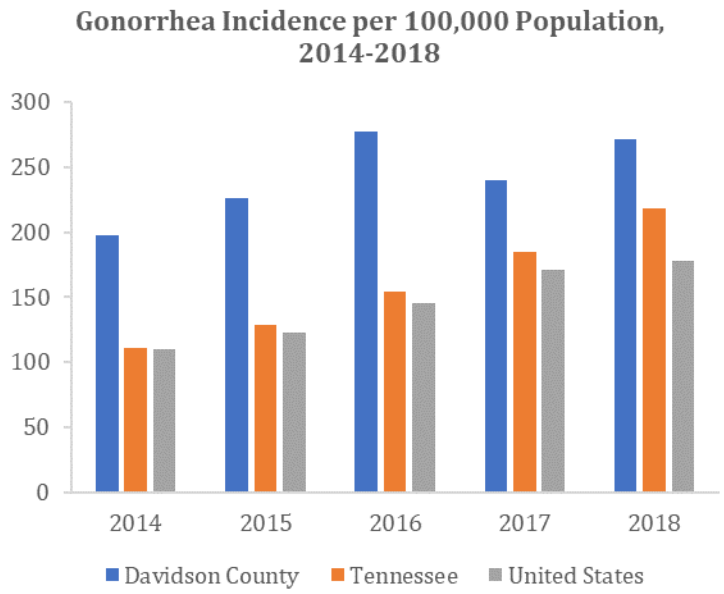
271.5/100,000 incidence in 2018

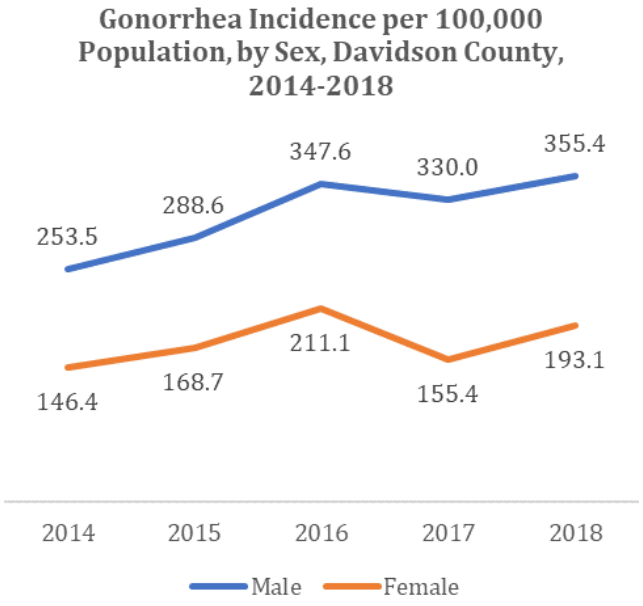
State

217.8/100,000 incidence in 2018

National

178.3/100,000 incidence in 2018





I5 Syphilis Incidence

Syphilis is a sexually transmitted infection that causes genital sores, damage to internal organs, and possibly death. Nationally, the rate of syphilis has been increasing among men who have sex with men (MSM) and among heterosexual men and women. Among MSM, those with a primary or secondary (meaning 1-6 months from date of infection) syphilis infection are more likely to become infected with HIV in the future. Among women, syphilis can be transmitted in utero and can cause developmental delays, seizures, or death in infants born with syphilis.

Data Description

This indicator shows the syphilis incidence of all cases per 100,000 population.

Data Source

Tennessee Department of Health, Patient Reporting Investigating Surveillance Manager (PRISM)

County

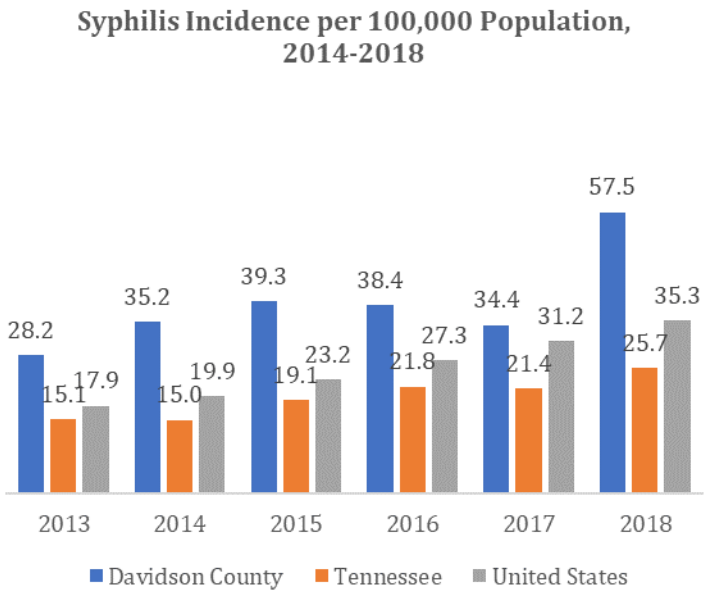
57.5/100,000 incidence in 2018

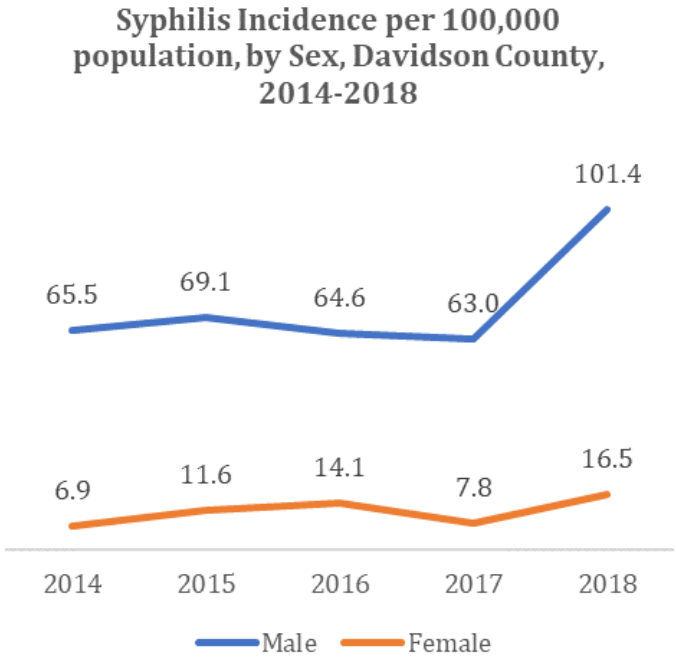
State

25.7/100,000 incidence in 2018

National

35.3/100,000 incidence in 2018





I6 HIV Prevalence

The human immunodeficiency virus (HIV) damages the immune system, eventually leading infected individuals to develop acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition. Men who have sex with men, African Americans, and Hispanics are disproportionately affected by HIV.

Data Description

This indicator shows the prevalence of HIV, or proportion of the population living with HIV/AIDS per 100,000 population.

Data Source

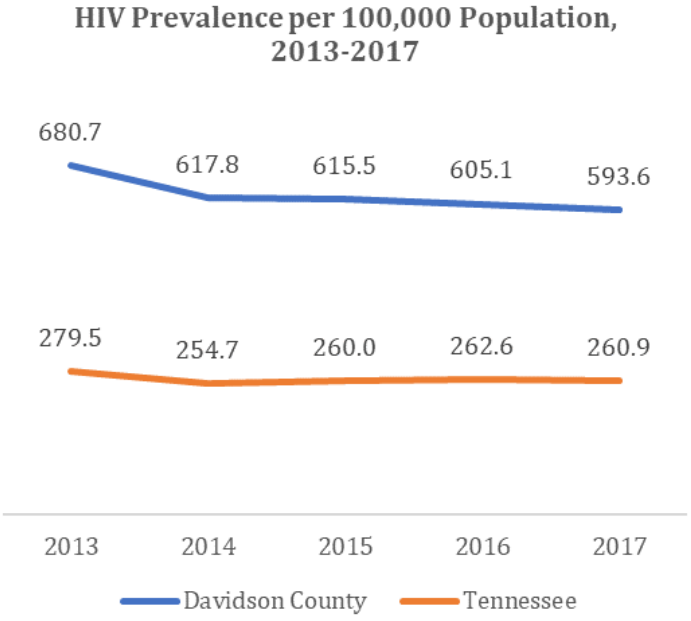
Tennessee Department of Health, HIV Surveillance Reports. (2019). Tennessee HIV Epidemiological Profile 2017.

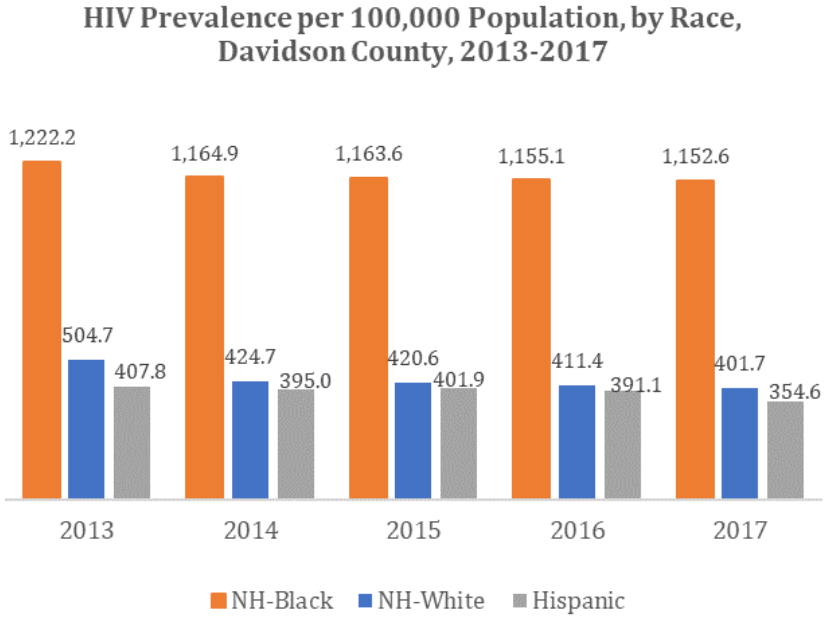
County

593.6/100,000 prevalence in 2017

State

260.9/100,000 prevalence in 2017





I7 HIV Incidence

The human immunodeficiency virus (HIV) damages the immune system, eventually leading infected individuals to develop acquired immunodeficiency syndrome (AIDS), a chronic and potentially life-threatening condition. Men who have sex with men (MSM), African Americans, and Hispanics are disproportionately affected by HIV. In Nashville-Davidson County, the subpopulation most affected by new HIV infections is black MSM. This community deserves special focus in order to equitably reduce rates of new infections countywide.

Data Description

This indicator shows the HIV incidence, or rate of new HIV infections, per 100,000 population.

Data Source

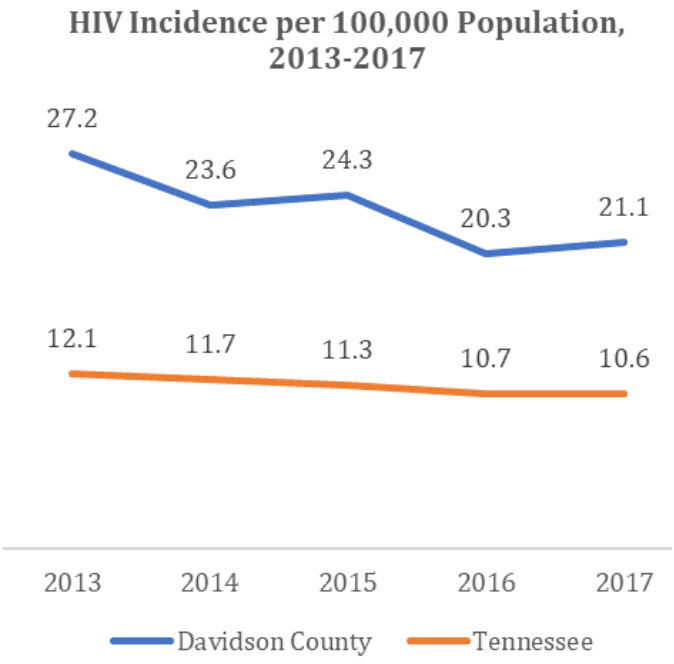
Tennessee Department of Health, HIV Surveillance Reports. (2019). Tennessee HIV Epidemiological Profile 2017. Retrieved From: https://www.tn.gov/content/dam/tn/health/program-areas/hiv/2017_HIV_Epi_Profile.pdf

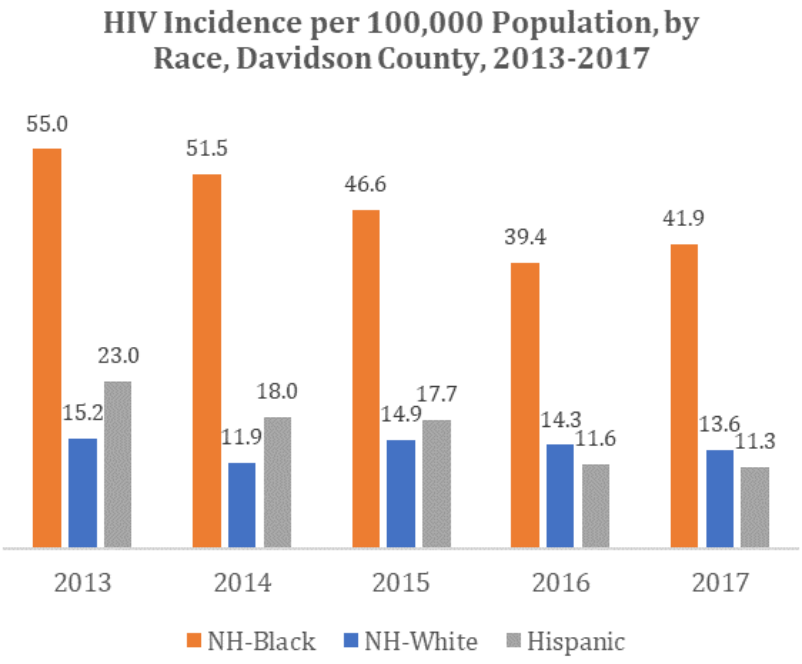
County

21.1/100,000 incidence in 2017

State

10.6/100,000 incidence in 2017





I8 Tuberculosis Incidence

Tuberculosis (TB) is a bacterial disease that usually affects the lungs, but the infection can manifest in other parts of the body. It is one of the top 10 causes of death worldwide. It is spread through the air when a person with untreated TB coughs, sings or speaks. The most effective way to stop the spread of tuberculosis is for TB patients to cover their mouth and nose when coughing and to take all TB medicine exactly as prescribed by their physician. Certain communities are at higher risk for TB than others, including black/African Americans and other minority immigrant communities. TB is also a top killer of people who are coinfected with HIV.

Data Description

This indicator shows the tuberculosis incidence per 100,000 population.

Data Source

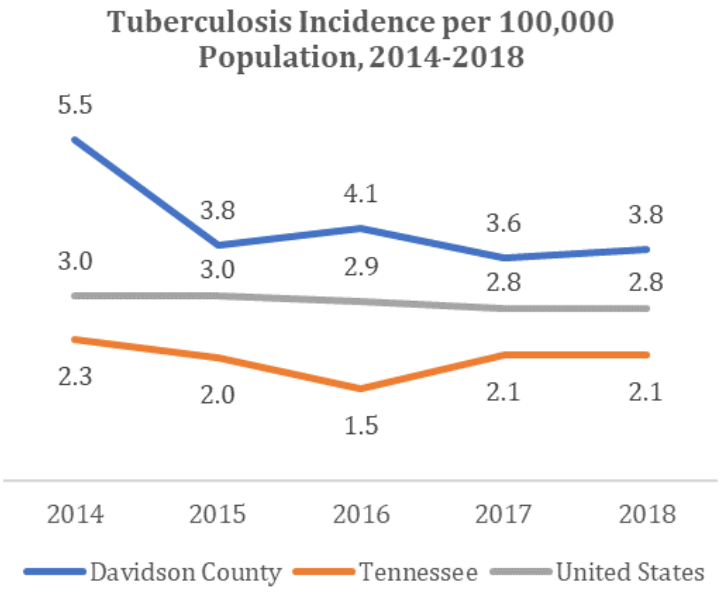
Centers for Disease Control and Prevention. (2019). Reported Tuberculosis in the United States, 2018. Retrieved From: https://www.cdc.gov/tb/statistics/reports/2017/table1.htm

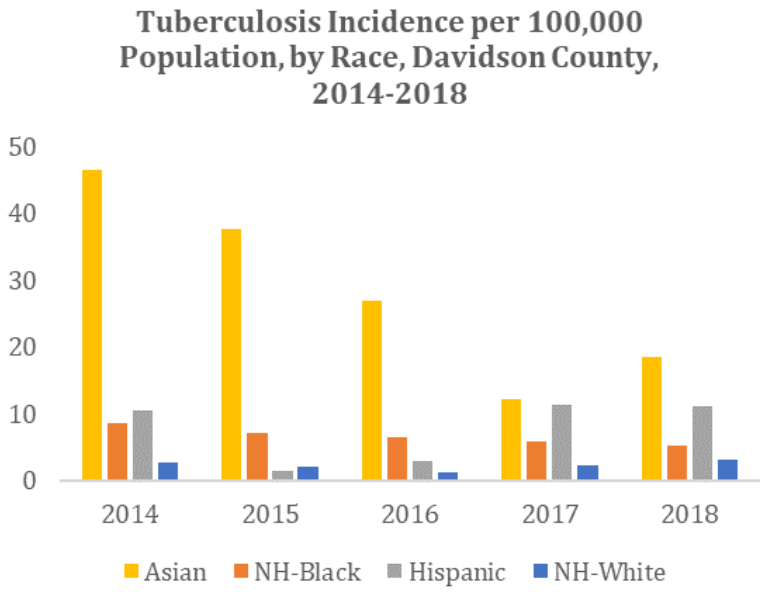
County
3.8/100,000 incidence in 2018

State
2.1/100,000 incidence in 2018

National
2.8/100,000 incidence in 2017

Benchmark
1.0/100,000 2020 target





I9 Hepatitis B Incidence

Hepatitis B is a viral infection of the liver. Acute infection can range in severity from a very mild illness with few symptoms to a serious condition requiring hospitalization. Some infected people are not able to clear the Hepatitis B virus and develop a chronic infection. Over time, the infection can cause liver damage, cirrhosis, liver cancer, and death. There is a vaccine that can protect against the virus.

Data Description

This indicator shows the Hepatitis B incidence per 100,000 population.

Data Source

Tennessee Department of Health, NNDSS-Based System (NBS)

County

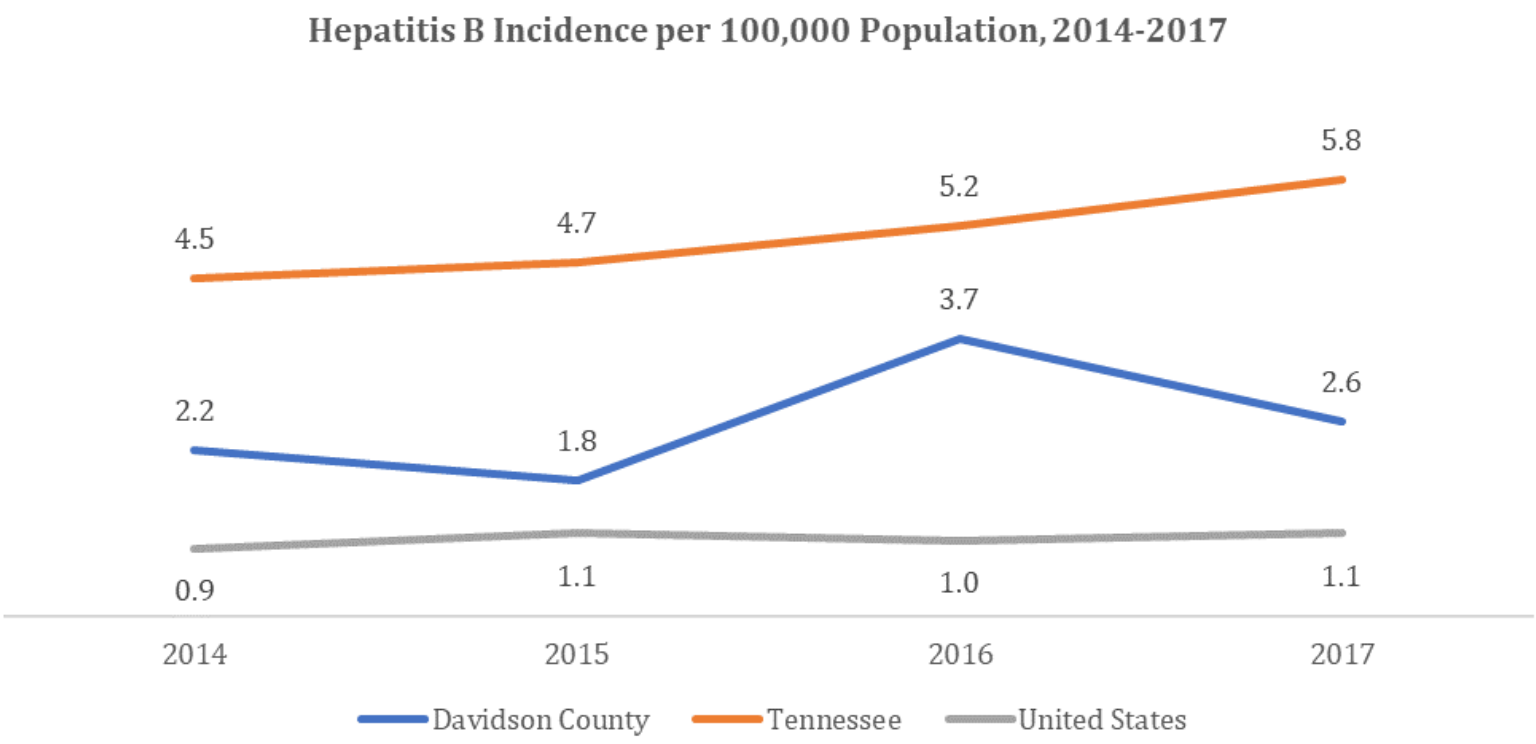
2.6/100,000 incidence in 2017

State

5.8/100,000 incidence in 2017

Nation

1.1/100,000 incidence in 2017



I10 Hepatitis C Incidence

Hepatitis C is a viral infection of the liver. Acute infection can range in severity from a very mild illness with few or no symptoms to a serious condition requiring hospitalization. Most people who are infected are not able to clear the Hepatitis C virus without treatment and develop a chronic infection. Over time, the infection can cause liver disease, liver failure, and liver cancer. People from the "baby boom" generation are at particular risk of chronic Hepatitis C, while drug users are also at a higher risk of acquiring an acute Hepatitis C infection.

Data Description

This indicator shows the Hepatitis C incidence per 100,000 population.

Data Source

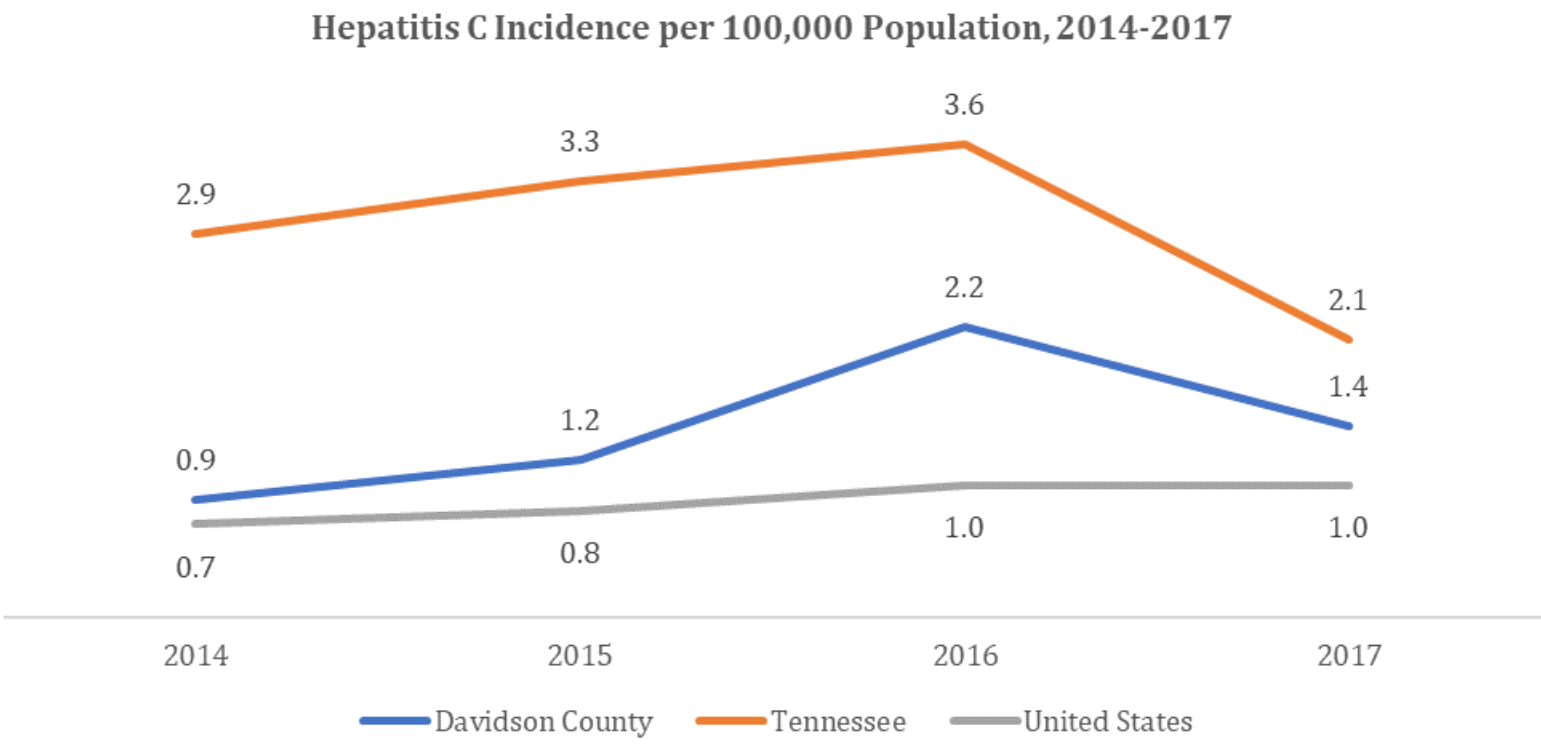
Tennessee Department of Health, NNDSS-Based System (NBS)

County
1.4/100,000 incidence in 2017

State
3.2/100,000 incidence in 2017

Nation
1.1/100,000 incidence in 2017

Benchmark
0.25/100,000 2020 target



Conclusion

2021 Community Health Profile
Metro Public Health Department

The purpose of this report is to provide an overview of Metro Nashville-Davidson County's health. The report brings together empirical data from multiple sources, most of which are available to the public and can be further explored by readers. The data in this report are intended to begin or continue discussions about how to target and prevent poor health outcomes, and provide some insight into the issues that should be prioritized for action. The report's intent is not to "drill down" into the data to provide an in-depth analysis, nor to provide recommendations or strategies for action. A separate report produced by the Nashville Metro Public Health Department (MPHD), the Community Health Improvement Plan (CHIP), provides guidance for action and implementation of strategies for improving the county's health.

By reporting indicators that include not only health outcomes, but also factors and conditions that impact health, this report attempts to define health as broader than health care and the absence of disease, and rather as a condition that is impacted by numerous aspects of our behavior and environment. While each indicator in this report contributes to the overall health of the community, there are many others that impact health that are not included here. This set of indicators is by no means a comprehensive list of health-related factors that should be considered and addressed.

The Community Health Profile report will be updated periodically in conjunction with the Community Health Status Assessment process, which will determine when indicators should be added or removed.

As Nashville continues to change and grow, data is essential for determining how those changes impact our community, and should drive decisions about future strategies for promoting health, addressing health disparities, health inequities, and ensuring we grow in ways that benefit all members of our community.

The 2021 Community Health Profile Report was produced by the Metro Public Health Department's Division of Epidemiology and Research and Division of Community Development & Planning. It provides current data for indicators defined in the 2014 report and adds new indicators selected by the Community Health Status Assessment (CHSA) Committee. A sincere thanks to all community partners and Metro Public Health Department staff who participated in the Community Health Status Assessment process that identified and prioritized the health indicators presented in this report. We also extend additional thanks and appreciation to Tracy Buck, Director of the Division of Community Development & Planning, for facilitating the Community Health Assessment process.

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