2021 Community Health Profile

Metro Public Health Department

Updated Fall 2023

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Community Health
Profile

Metro Public Health Department

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Introduction

2021 Community Health Profile

Metro Public Health Department



Overview

This report is an update to the Community Health Profile (CHP) that was published in 2021. The report is based on publicly available quantitative

data to describe the overall health of the Nashville community. It is built on a wide range of community-level health indicators identified by partner organizations in health-related fields during the 2018 Community Health Assessment process.

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 validated quantitative data available at the county level. Comparison data are reported when available, including time series comparisons, geographical comparisons at the state and national levels, and demographic breakouts by age, sex, race, and 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, as well as
- 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 are our residents?
- 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 ascertained that the indicators were in sync 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:

- Demographics
- Socioeconomic Status
- Social Determinants of Health Inequities
- Access to Health Care
- Behavioral Risk Factors
- Morbidity & Mortality
- Maternal & Child Health
- Mental Health
- Environmental Factors
- Infectious Disease
- Sentinel Events Quality of Life

Introduction

Once the indicators had been categorized, the committee prioritized the indicators through a consensus multivoting 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, one that 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. We have included measures of health that recognize the importance of the interplay between behavior and context in the health and well-being of individuals. Inclusion of a broad range of health indicators supports the idea that health should be a consideration in decision-making across multiple health and non-health sectors. Housing, law enforcement, education, and urban planning, among others, have important roles to play in improving community health.

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

Social Economic Status

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

Social Determinants of Health

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 related to food safety measures.

 $^{^{1}\}text{Centers}$ for Disease Control and Prevention. (2014). Social determinants of health. $\underline{\text{http://www.cdc.gov/socialdeterminants/Definitions.html}}$

²Preamble 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

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
- a description of the data
- the data source(s)
- the data for Davidson County
- comparison and benchmark data, when applicable

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





Demographic data provide 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.

Demographic data help us visualize a variety of community conditions: how far someone must travel to the store, how city leaders determine property tax rates, and how much support schools receive from local, state, and federal sources. Changes in population size, age, race, and ethnicity also affect healthcare resource needs and costs. 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 12.5% in 2019. (Indicator D3)
- In 2019, 13.0% 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 (13.6%). (Indicator D7)
- Residents living with a physical, mental, or emotional disability represented 10.9% of the population in Davidson County in 2019, compared to 12.6% in the state and 15.5% nationwide. (Indicator D9)

Demographics



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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 may be needed to support a growing population.

Data Description

This indicator shows the total population of Davidson County.

Data Source

U.S. Census Bureau. (2010–2019). 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/

C	0	u	n	ty

694,144 total population in 2019

2.2% increase from 2015

State

6,829,174 total population in 2019

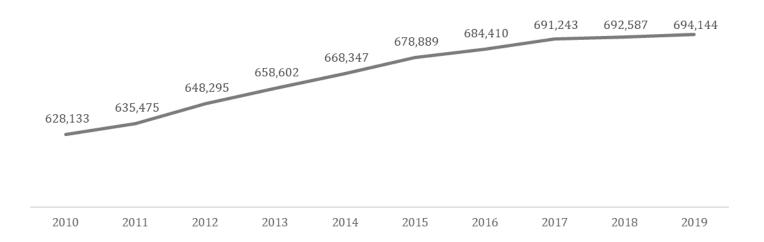
3.5% increase from 2015

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. (2014–2019). American Community Survey, 1–year population estimates, Table S0101.

Population distribution by Age, Davidson County, 2014-2019						
	2014	2015	2016	2017	2018	2019
Total Estimate	668,347	678,889	684,410	691,243	692,587	694144
Under 5 years	7.0%	7.0%	6.9%	6.8%	6.6%	6.6%
5 to 9 years	6.0%	6.3%	5.9%	5.9%	5.9%	5.3%
10 to 14 years	5.6%	5.1%	5.5%	5.4%	5.3%	5.8%
15 to 19 years	5.7%	5.7%	5.6%	5.6%	5.7%	5.5%
20 to 24 years	7.6%	7.6%	7.5%	7.3%	7.1%	7.1%
25 to 29 years	10.1%	10.3%	10.4%	10.6%	10.7%	10.8%
30 to 34 years	9.1%	9.0%	9.2%	9.4%	9.5%	9.8%
35 to 39 years	7.2%	7.4%	7.6%	7.5%	8.1%	7.6%
40 to 44 years	6.6%	6.4%	6.1%	6.1%	5.8%	6.2%
45 to 49 years	6.1%	6.1%	6.1%	6.1%	6.0%	5.8%
50 to 54 years	6.5%	6.4%	6.1%	5.9%	5.7%	5.6%
55 to 59 years	6.2%	6.3%	6.2%	6.1%	6.4%	6.0%
60 to 64 years	5.3%	5.4%	5.3%	5.5%	5.1%	5.4%
65 to 69 years	3.8%	3.9%	4.3%	4.5%	4.3%	4.5%
70 to 74 years	2.7%	2.6%	2.6%	2.7%	3.1%	3.2%
75 to 79 years	1.9%	1.8%	2.1%	1.9%	2.0%	2.1%
80 to 84 years	1.4%	1.3%	1.2%	1.5%	1.3%	1.6%
85 years and over	1.4%	1.5%	1.2%	1.3%	1.4%	1.1%
Median Age (in yrs.)	34.4	34.2	34.2	34.4	34.5	34.5

D3 Senior Population



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. 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. (2015–2019). American Community Survey, 1–year population estimates, Table DP05.

County

12.5% of total population in 2019

12.6% increase from 2015

State

16.5% of total population in 2019

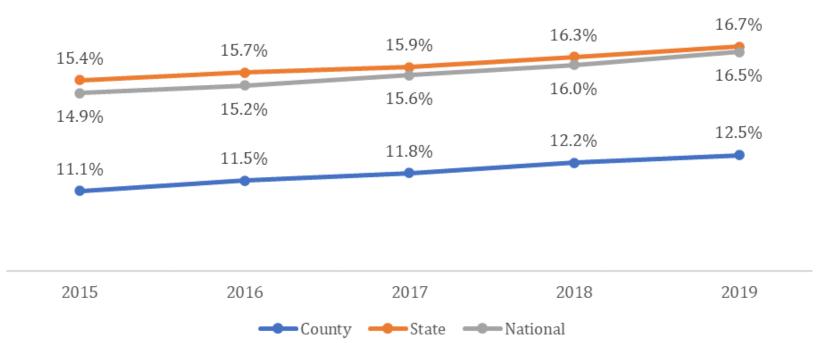
8.4% increase from 2015

National

16.7% of total population in 2019

10.7% increase from 2015

Percent of the Population Aged 65 Years and Older, 2015-2019



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. (2015-2019). American Community Survey, 1–year estimates. ACS Demographic and Housing Estimates, Table DP05.

County

48.2% of the population was male in 2019

51.8% of the population was female in 2019

State

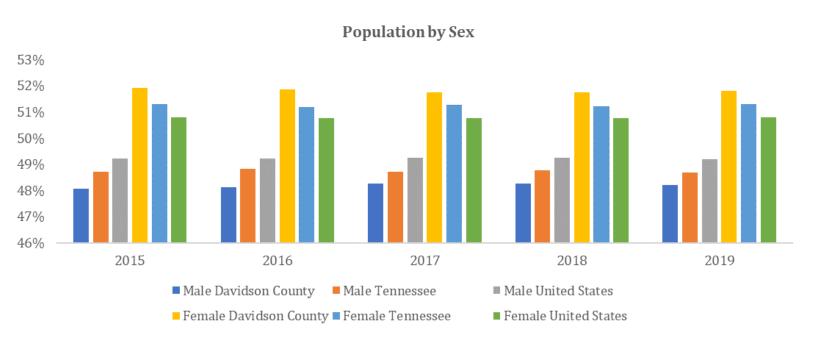
48.7% of the population was male in 2019

51.3% of the population was female in 2019

National

49.2% of the population was male in 2019

50.8% of the population was female in 2019



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. (2014-2019). 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	2014	2019	
Hispanic or Latino (of any race)	9.9%	10.4%	
Mexican	6.2%	6.3%	
Puerto Rican	0.4%	0.3%	
Cuban	0.2%	0.3%	
Other Hispanic or Latino	3%	3.5%	
Not Hispanic or Latino (of any race)	90.1%	89.6%	
White Alone	56.8%	56%	
Black or African-American Alone	27.4%	26.7%	
American Indian and Alaska Native Alone	0.3%	0.3%	
Asian Alone	3.2%	3.8%	
Native Hawaiian and Other Pacific Islander Alone	0%	0.1%	
Some Other Race Alone	0.3%	0.5%	
Two or More Races	1.9%	2.2%	

D6 Population Growth



Considering population's heavy impact on service and resource availability, population growth is a critical determinant of public health. The public health impact of this growth has been tremendous, and the implications for the future are equally

daunting. 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 (2009-2019). American Community Survey, 1–year estimates. Total Population.

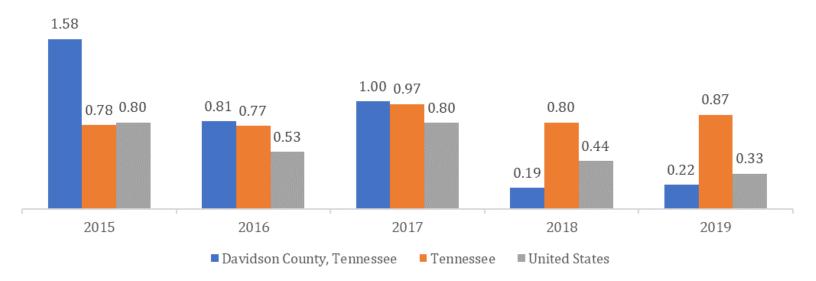
County

0.22% population increase in 2018-2019

State

0.87% population increase in 2017-2018

Rate of Annual Population Change 2015-2019



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. (2019). American Community Survey, 5–year estimates. Selected Social Characteristics in the United States, Table DP02.

County

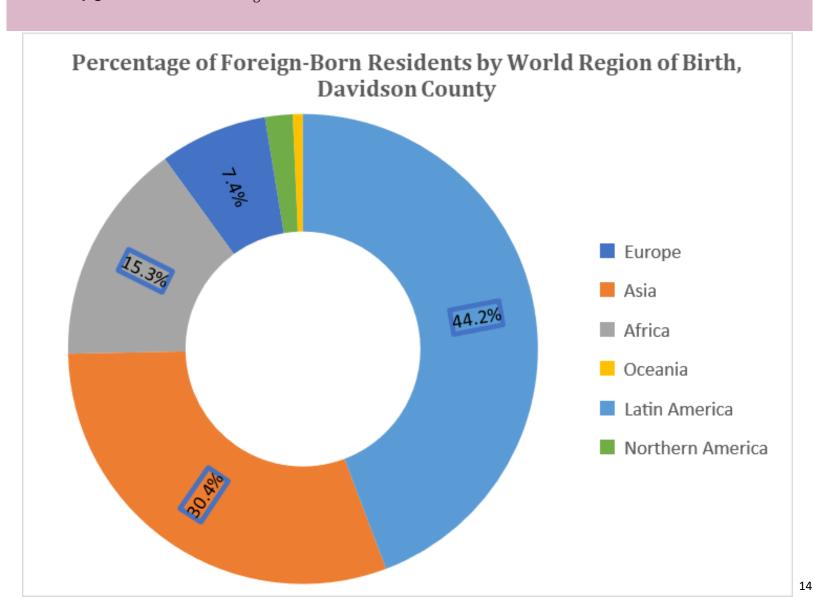
13.0% of residents were foreign-born in 2019

State

5.1% of residents were foreign-born in 2019

National

13.6% of residents were foreign-born in 2019



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. (2015-2019). American Community Survey, 1–year estimates. Veteran Status, Table S2101.

County

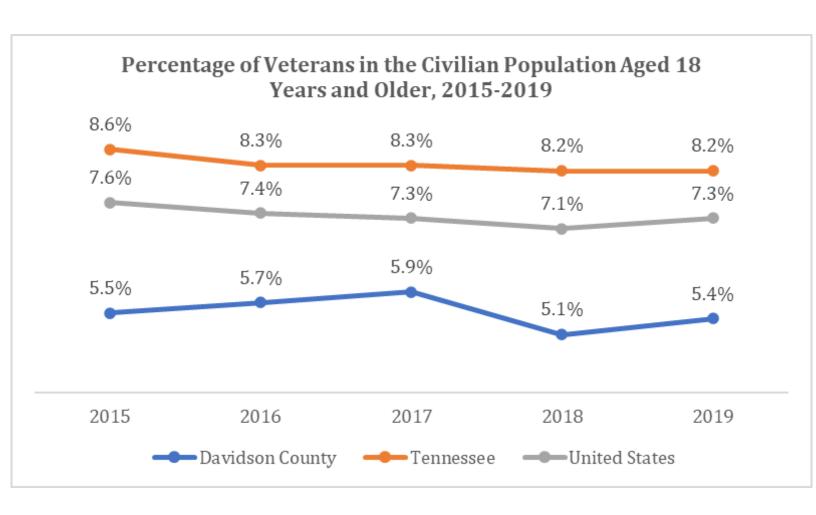
5.4% of total residents in 2019

State

8.2% of total residents in 2019

National

7.3% of total residents in 2019



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 (2015-2019). Disability Characteristics. Table C18120

County

10.9% of the population with disability in 2019

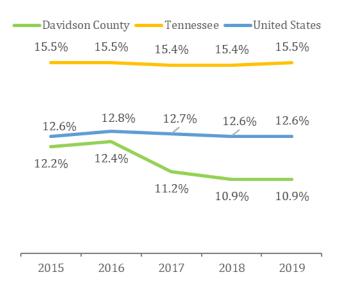
State

15.5% of the population with disability in 2019

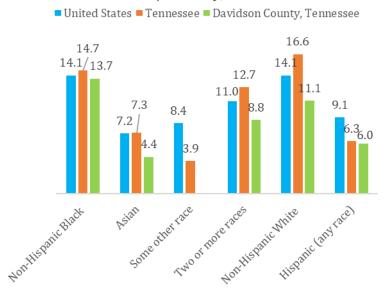
National

12.6% of the population with disability in 2019

Percent of Population With a Disability 2015-2019



Percent of Population With a Disability by Race/Ethnicity, 2019



Socioeconomic status





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 provide 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 \$52,026 in 2015 to \$63,938 in 2019, which was consistently above state and below national estimates over the 5 years. (Indicator S7)
- Income inequality in the county decreased prior to 2017 hitting the lowest mark of this reported period, but has increased since to remain wider than the state and national levels. (Indicator S9)
- In 2019, 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%). The rate (17.5%) of people 18 years or younger living below the poverty line as higher than that of people 18 to 64 years old (11.2%) and those aged 65 and older (10.2%). (Indicators S10-S11)
- Public assistance to needy families declined between 2015 and 2019. Mean cash received declined from \$2,940 to \$2,230; Supplemental Nutrition Assistance Program (SNAP) recipients declined from 14.8% to 8.1%; and Temporary Assistance for Needy Families (TANF) recipients declined from 4.6% to 0.6% respectively. (Indicators \$16-\$18)
- The county unemployment rate declined from 5.0% in 2015 to 4.5% in 2019. Throughout this period, unemployment rates among African Americans were 2-3 times higher than the rates among Non-Hispanic Whites. (Indicators S23-S24)

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



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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. (2015-2019). American Community Survey, 1–year estimates. Language spoken at home, Table S1601.

County

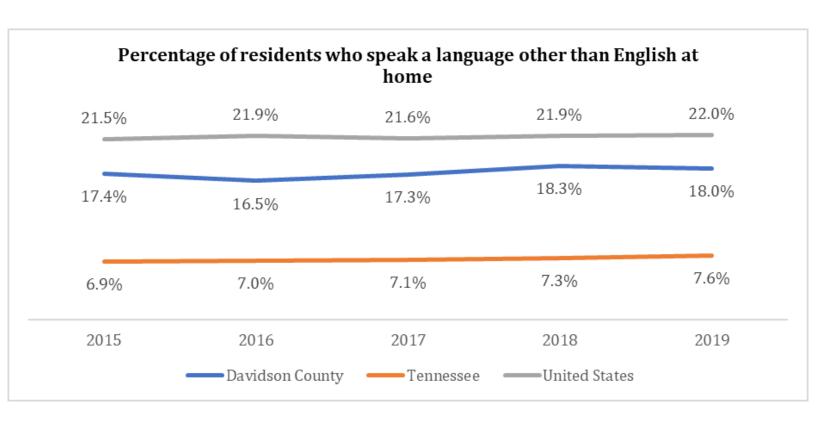
18.0% of residents in 2019

State

7.6% of residents in 2019

National

22.0% of residents in 2019



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 impact 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 life 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. (2015–2019). American Community Survey, 1–year estimates. Limited English Speaking Households, Table S1602.

County

4.5% of households in 2019

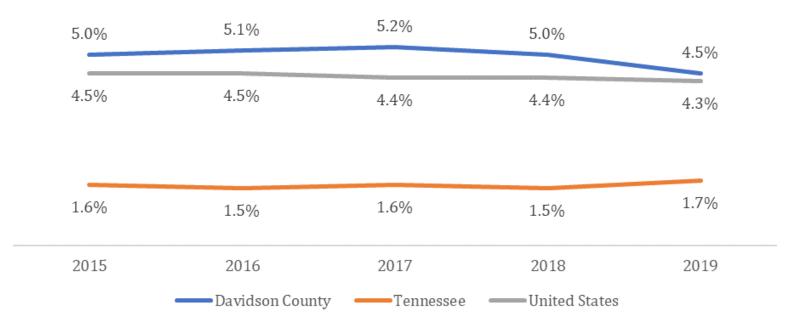
State

1.7% of households in 2019

National

4.3% of households in 2019

Percentage of Linguistically Isolated Households, 2015-2019



¹ HealthyPasadena.org. (2014). Linguistic isolation. Retrieved from: http://www.healthypasadena.org/modules.php?
op=mod-load&name=NS-

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 are better educated have lower morbidity and mortality rates, and generally have better 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. (2015–2019). US Census Bureau. American Community Survey 1-year estimates. Educational Attainment, Table S1501.

County

19.8% high school graduate or equivalent in 2019 45.7% bachelor's degree or higher in 2019

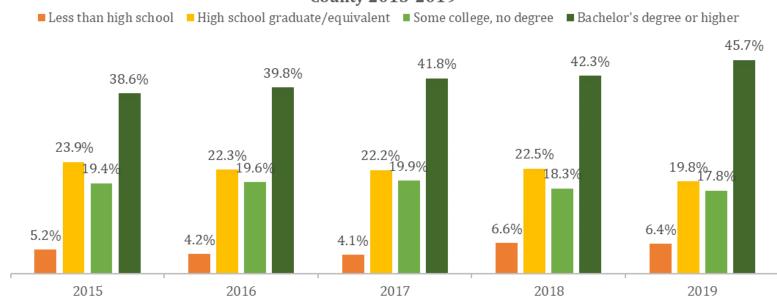
State

31.5% high school graduate or equivalent in 2019 28.7% bachelor's degree or higher in 2019

National

26.9% high school graduate or equivalent in 2018 33.1% bachelor's degree or higher in 2018

Highest Educational Attainent Among Adults 25 Years and Older, Davidson County 2015-2019



S4 Educational Attainment by Race



Racial/ethnic disparities in academic success are a strong indicator for disparities in overall well-being and are a predictor and determinant of disparities in health outcomes. People who are better educated have lower morbidity and mortality rates, and generally have better 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 Attainment, Table S1501.

County

Non-Hispanic White

55.3% bachelor's degree or higher in 2019

Non-Hispanic Black

29.6% bachelor's degree or higher in 2019

Hispanic

16.2% bachelor's degree or higher in 2019

Percentage of residents 18 years and older with bachelor's degree or higher by race/ethnicity, Davidson County 2015-2019

	NH White	—NH Black	-	55.3%
46.9%	48.1%	49.2%	52.0%	30.070
24.6%	26.0%	29.3%	27.0%	29.6%
14.1%	13.1%	16.7%	15.2%	16.2%
2015	2016	2017	2018	2019

S₅ Youth Educational Attainment



person's life.

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

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. (2015–2019). US Census Bureau. American Community Survey 1–year estimates. Educational Attainment, Table S1501.

County

27.3% high school graduate or equivalent in 2019

22.6% bachelor's degree or higher in 2019

State

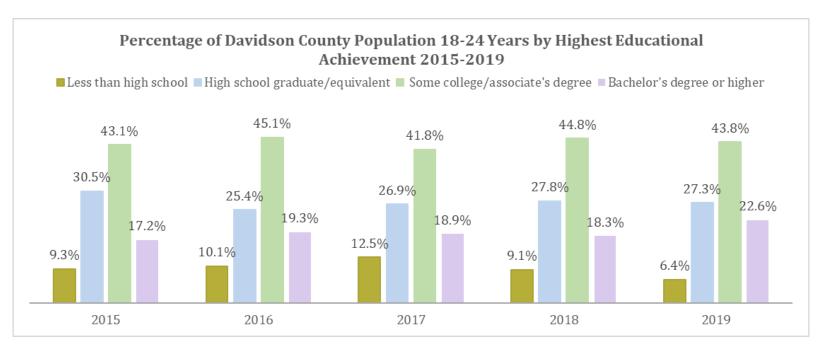
34.7% high school graduate or equivalent in 2019

11.4% bachelor's degree or higher in 2019

National

32.7% high school graduate or equivalent in 2019

11.9% bachelor's degree or higher in 2019



¹ Telfair, J. & Shelton, T.L. (2012). Educational attainment as a social determinant of health. North Carolina Journal of Medicine, 73(5), 358–365.

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 2030 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 90.7%.

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

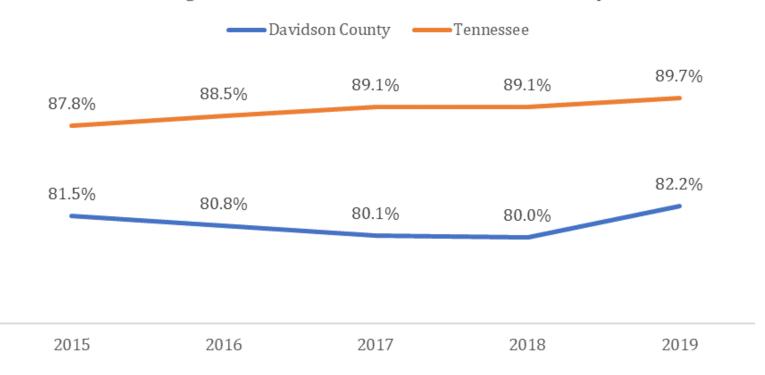
County

82.2% of ninth-grade cohort that graduates in 4 years in 2019

State

89.7% of ninth-grade cohort that graduates in 4 years in 2019

Percentage of 9th Grade Cohort that Graduate within 4 years



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. (2015–2019). American Community Survey, 1–year estimates. Median Income in the Past 12 Months, Table S1903.

County

\$65,712 median household income in 2019

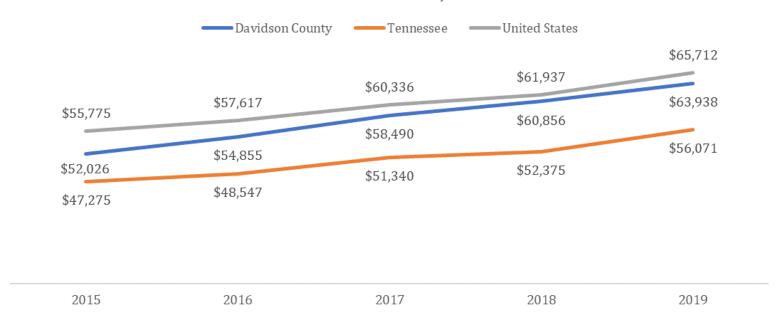
State

\$56,071 median household income in 2019

National

\$63,938 median household income in 2019

Median Household Income, 2015-2019



 $^{^{\}rm 1}$ 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." 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.

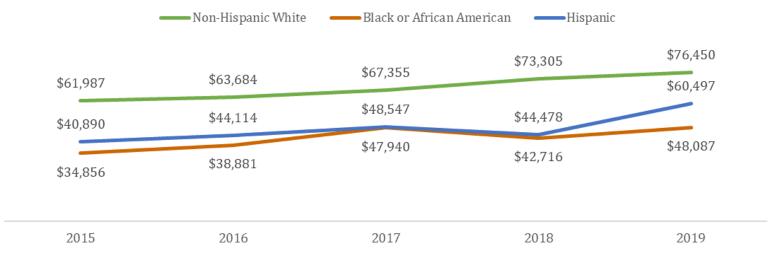
Data Source

U.S. Census Bureau. (2015–2019). American Community Survey, 1–year estimates. Median Income in the Past 12 Months, Table S1903.

Median Household Income by Race/Ethnicity 2019



Median Household Income in Davidson County by Race/Ethnicity 2015-2019



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

So 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. (2015–2019). American Community Survey 1–year estimates. GINI Index of Income Inequality, Table B19083.

County

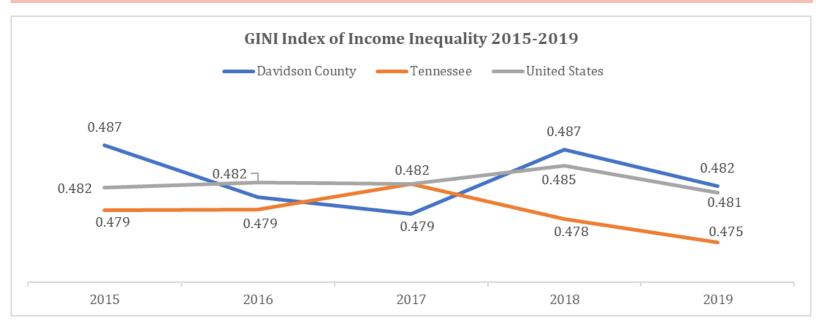
0.482 GINI Index score in 2019

State

0.475 GINI Index score in 2019

National

0.481 GINI Index score in 2019



 $^{^{1}}$ 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. (2015–2019). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.

County

12.4% of residents lived below the poverty level in 2019

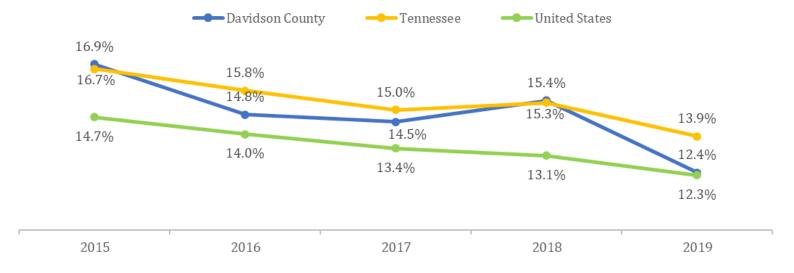
State

13.9% of residents lived below the poverty level in 2019

National

12.3% of residents lived below the poverty level in 2019

Percentage of People Living Below the Poverty Line 2015-2019



 $^{^{\}rm 1}$ 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 people whose income in the past 12 months was below the poverty level by age.

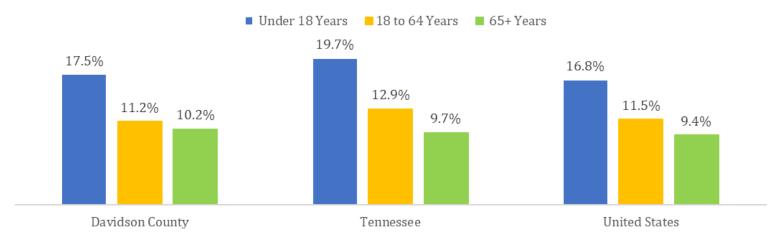
Data Source

U.S. Census Bureau. (2015–2019). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.

Percentage of People Living Below the Poverty Line by Age, Davidson County, 2015-2019



Percentage of People Living Below the Poverty Line by Age, 2019



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. Unhealthy communities, in turn, negatively impacts the health of the individuals living in those areas.

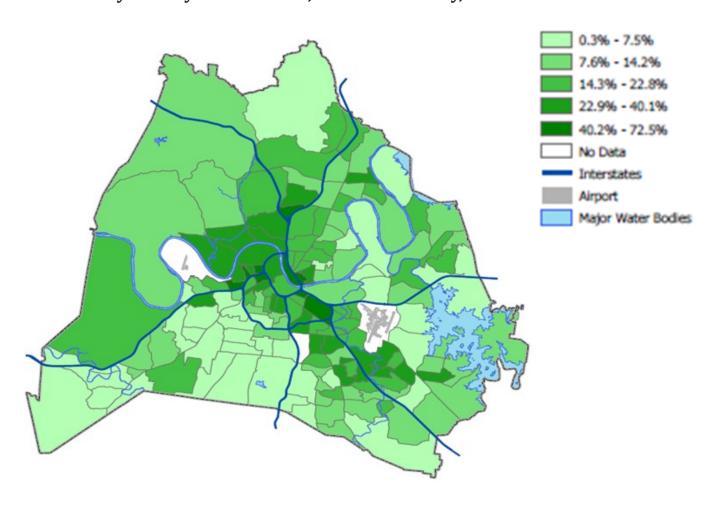
Data Description

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. (2019). American Community Survey 2015–2019, 5–year estimates. Income in the past 12 months below poverty level, Table B17017e2; Geography layer from Metro Planning Department.

Poverty Rate by Census Tract, Davidson County, 2015-2019



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

 $^{^{\}rm 2}$ 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." Such disparities can be both a cause and a consequence of racial and ethnic disparities in employment, wealth and health.

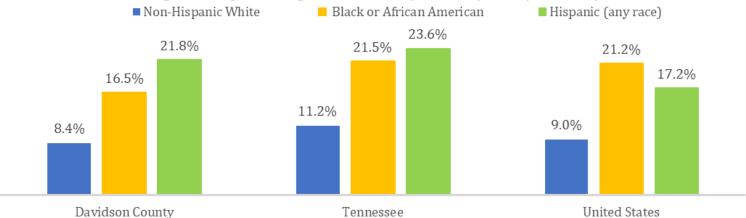
Data Description

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

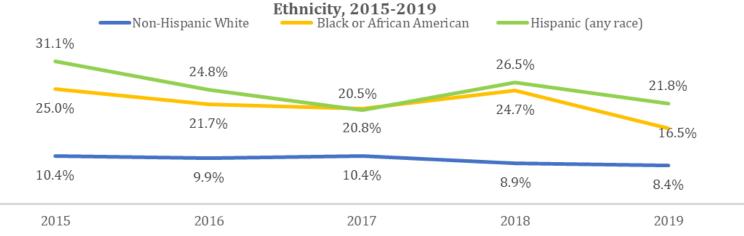
Data Source

U.S. Census Bureau. (2015–2019). American Community Survey 1–year estimates. Poverty Status in the last 12 months; Table S1701.

Percentage of People Living Below Poverty Level by Race/Ethnicity, 2019



Percentage of People Living Below the Poverty Line in Davidson County by Race or



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

18.1% of children under the age of 18 living below the federal poverty level in 2019

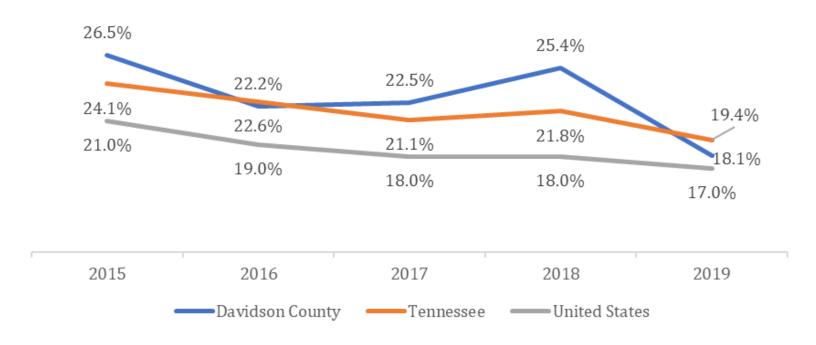
State

19.4% of children under the age of 18 living below the federal poverty level in 2019

National

17.0% of children under the age of 18 living below the federal poverty level in 2019

Percent of Children Under 18 Living Below Federal Poverty Level, 2015-2019



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.

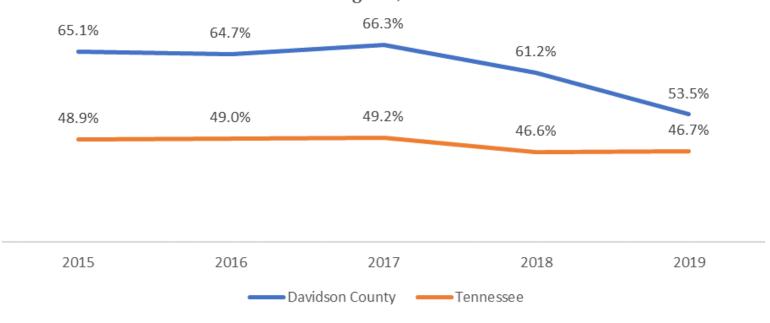
County

53.5% of students received free or reduced-price school meals in 2019

State

46.7% of students received free or reduced-price school meals in 2019

Percent of Students Participating in the Free or Reduced Price School Meals Program, 2015-2019



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. (2015-2019). American Community Survey 1-year estimates. Selected Economic Characteristics; Table DP03.

County

\$2,230 of mean cash benefits in 2019

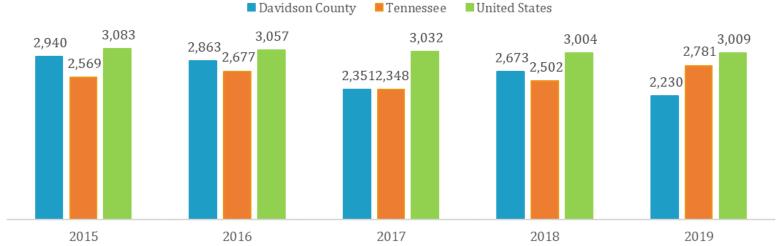
State

\$2,781 of mean cash benefits in 2019

National

\$3,009 of mean cash benefits in 2019

Mean Cash Public Cash Assistance (in dollars), 2015-2019



¹ https://www.census.gov/topics/income-poverty/publicassistance/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. (2015–2019). American Community Survey

County

8.1% of households received SNAP benefits in 2019

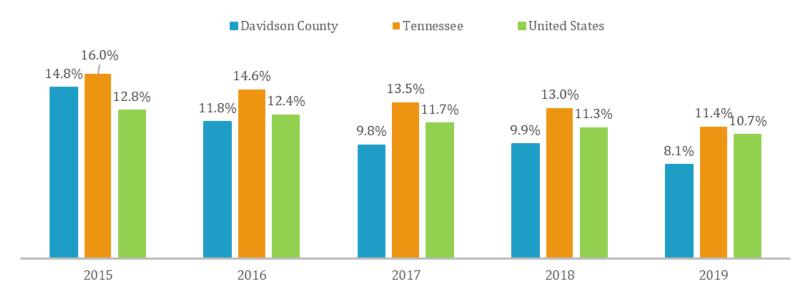
State

11.4% of households received SNAP benefits in 2019

National

10.7% of households received SNAP benefits in 2019

Percentage of Households Receiving SNAP 2015-2019



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. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

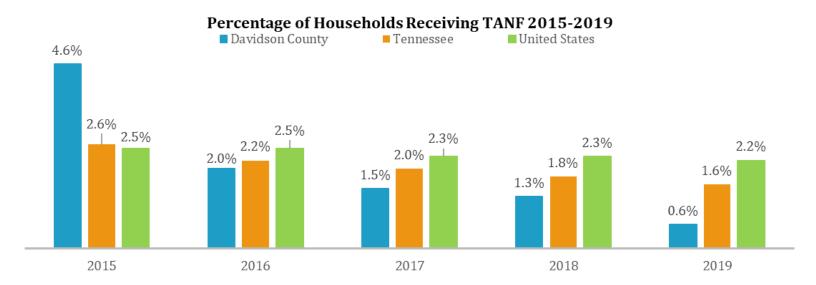
0.6% of households received TANF benefits in 2019

State

1.6% of households received TANF benefits in 2019

National

2.2% of households received TANF benefits in 2019



 $^{^{1}}$ 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. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

4.1% of households received SSI benefits in 2019

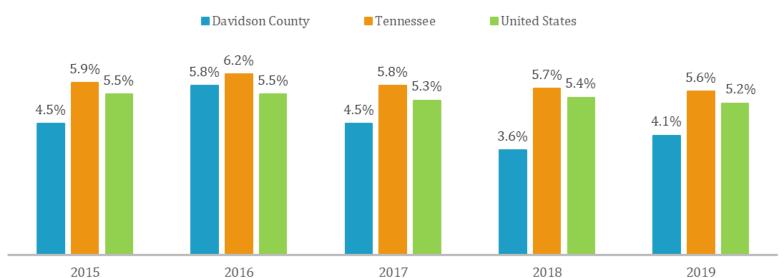
State

5.6% of households received SSI benefits in 2019

National

5.2% of households received SSI benefits in 2019

Percentage of Households Receiving SSI 2015-2019



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

S20 Employement 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.¹

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.

Data Source

U.S. Census Bureau. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

County

70.0% employed in 2019

State

58.6% employed in 2019

National

60.2% employed in 2019

Percent of Working Age Adult Residents Employed 2015-2019

	——Davidson County	——Tennessee	——United States	
66.7%	67.6%	69.1%	69.3%	70.0%
58.8%	59.1%	59.5%	59.8%	60.2%
56.8%	56.8%	58.1%	57.7%	58.6%
2015	2016	2017	2018	2019

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.

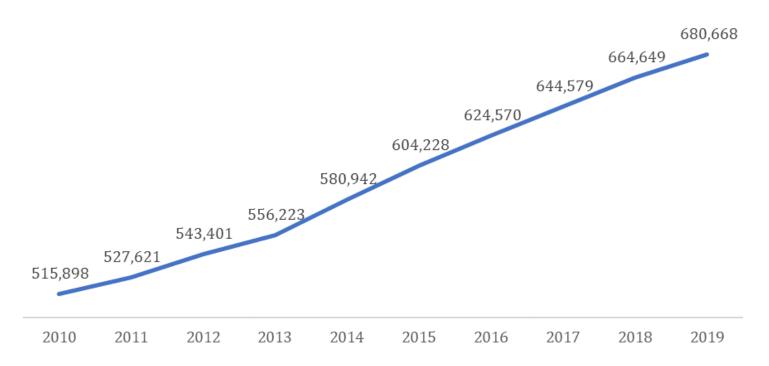
County

680,668 total number of jobs in 2019

16,019 jobs added compared to the past year (2018)

31.9% increase in total number of jobs since 2010

Total Number of Jobs for Davidson County, 2010-2019



S22 Unemployement



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.

Data Source

U.S. Census Bureau. (2015–2019). American Community Survey 1-year estimates. Selected Economic Characteristics; Table DP03.

County

4.5% unemployed in 2019

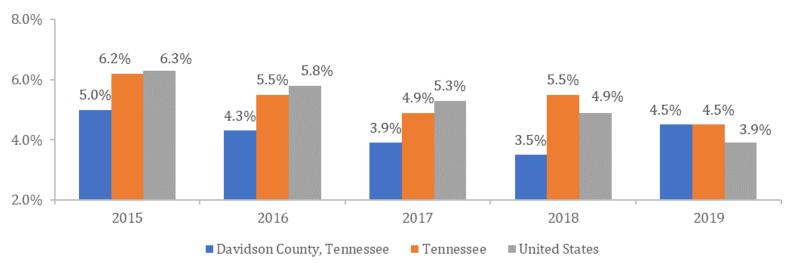
State

4.5% unemployed in 2019

National

3.9% unemployed in 2019

Percent of Civilian Labor Force Unemployed, 2015-2019



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 benefits 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

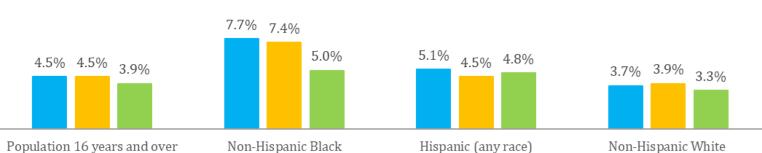
Data Description

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

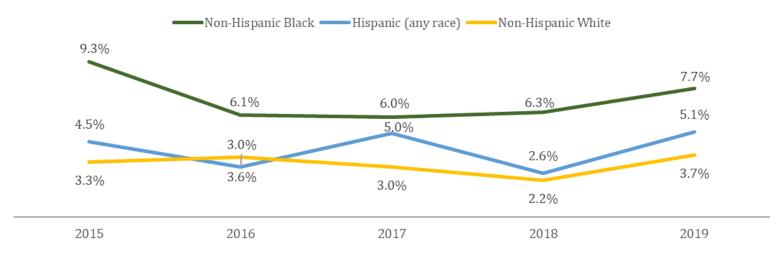
Data Source

U.S. Census Bureau. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03.

Unemployment Rate by Race/Ethnicity in 2019 ■ Davidson County, Tennessee ■ Tennessee ■ United States



Unemployment Rate by Race/Ethnicity, Davidson County 2015-2019



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.

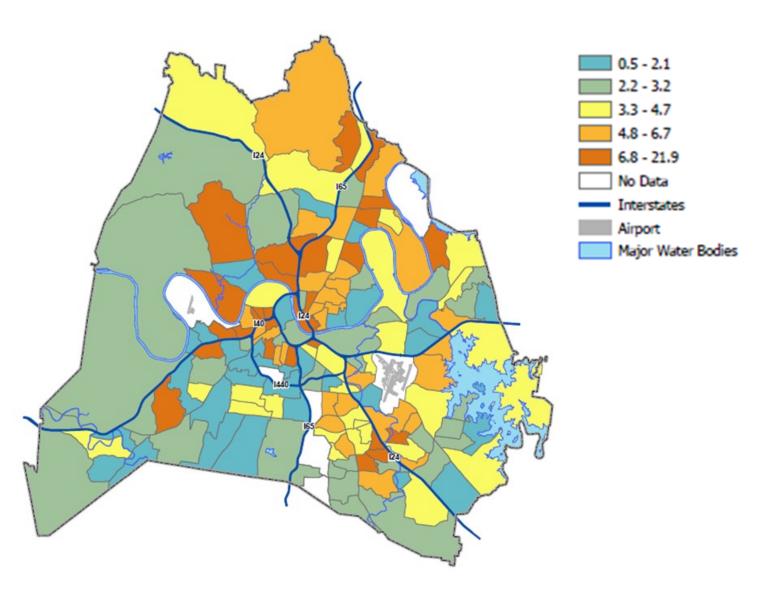
Data Description

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, 2014-2019



S25 Employement 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. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table S1701.

County

6.5% of employed workers lived below the poverty line in 2019

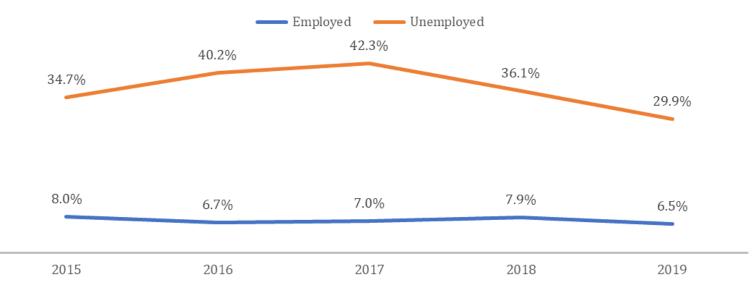
State

6.2% of employed workers lived below the poverty line in 2019

National

5.7% of employed workers lived below the poverty line in 2019

Percent Civilian Labor Force 16 Years and Older Living Below the Poverty Line by Employment Status, Davison County , 2015-2019



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. (2021). 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

7% of youths not employed or in school in 2019

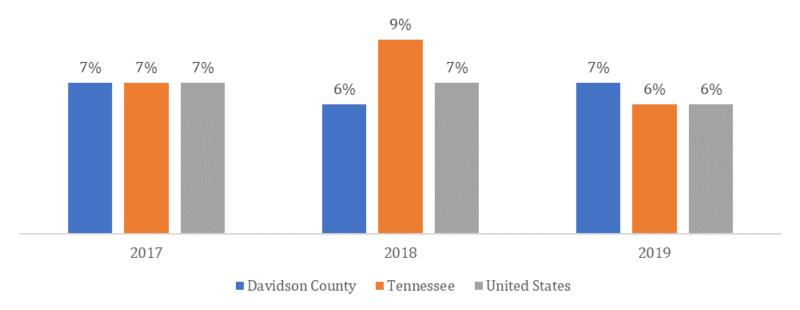
State

6% of youths not employed or in school in 2019

National

6% of youths not employed or in school in 2019

Percent of Youth Aged 16-19 Years Not Employed or in School, 2017-2019



S27 Housing Occupancy



Housing occupancy is a housing characteristic that conveys important information about housing units that are occupied and those not occupied and helps to shape targeted 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

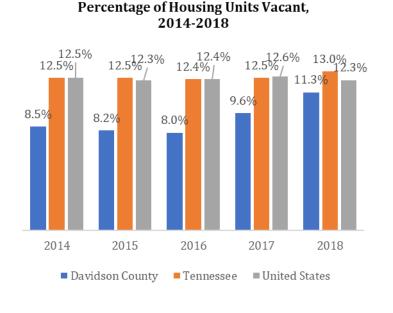
State

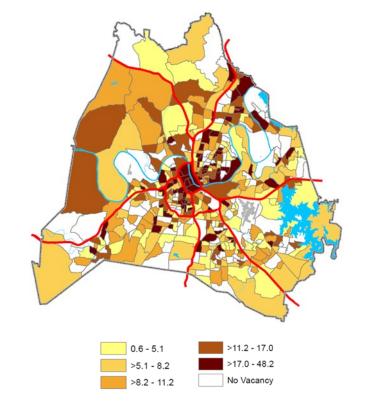
87.0% housing units occupied in 2018

National

87.7% housing units occupied in 2018

Percentage of Housing Units Vacant 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 (2019). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04.

County

2.46 persons for an owner-occupied unit in 2019

State

2.59 persons per owner-occupied unit in 2019

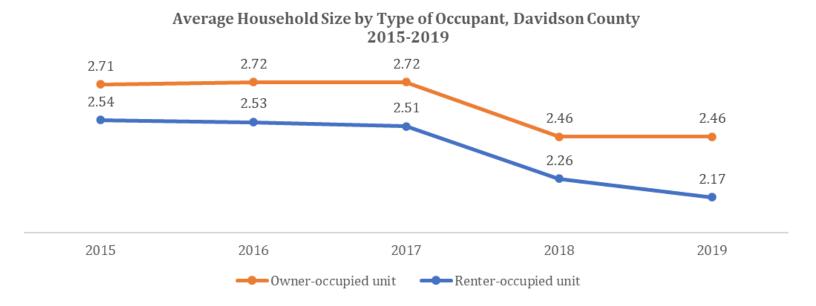
National

2.70 persons per owner-occupied unit in 2019

2.17 persons per renter-occupied unit in 2019

2.36 persons per renter-occupied unit in 2019

2.44 persons per renter-occupied unit in 2019



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. (2015–2019). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04.

County

 $\$290,\!400$ median home value in 2019

State

\$191,900 median home value in 2019

National

\$240,500 median home value in 2019

Median Value of Owner-Occupied Units (dollars) 2015-2019

	——Davidson County	Tennessee	Unite	d States
		¢250.200	\$277,100	\$290,400
\$194,500	\$213,300	\$250,200		\$240,500
\$188,200	\$205,000	\$217,600	\$229,700	\$240,500 \$191,900
\$150,600	\$157,700	\$167,500	\$177,500	\$171,700
2015	2016	2017	2018	2019

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 (2015-2019). American Community Survey, 1–year estimates. Selected Housing Characteristics, Table DP04

County

\$1,192 median household gross rent in 2019

State

\$904 median household gross rent in 2019

National

\$1,097 median household gross rent in 2019

Median Household Gross Rent (in dollars), Davidson County 2015-2019

	_	Davidson County	Tennessee	——United S	States	
				\$1,081	\$1,121	\$1,192
\$905	\$934	\$959	\$982 \$981	\$1,012	\$1,058	\$1,097
\$856	\$887	\$924	2981		\$861	\$904
\$748	\$770	\$785	\$806	\$833	\$001	
2013	2014	2015	2016	2017	2018	2019

http://aspe.hhs.gov/hsp/07/marriageonhealth/index.htm

 $^{^{1}}$ 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:

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

Fair Market Rent, FY2015-FY2019

Monthly Rent for a 2-Bedroom Unit

	——Davison County	Tennessee	——United States	
\$1,006	\$1,056	\$1,103	\$1,149	\$1,194
\$1,000				\$1,103
\$850	\$925	\$959	\$1,002	
\$749	\$779	\$798	\$819	\$862
FY2015	FY2016	FY2017	FY2018	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 in 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 (2021). 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

Hourly Wage Needed to Afford a 2-Bedroom Unit at Fair Market Rent, FY2015-FY2019

	——Davidson County	T ennessee	——United States	
		\$21.21	\$22.10	\$22.96
\$19.35	\$20.30 \$17.79	\$18.44	\$19.27	\$21.21
\$16.35	\$17.79	\$15.34	\$15.74	\$16.58
\$14.41	φ1 1 .99			
FY2015	FY2016	FY2017	FY2018	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. (2015–2019). American Community Survey 1–year estimates. Gross Rent as a Percentage of Household Income, Selected Housing Characteristics, DP04.

County

46.8% of renters were cost-burdened in 2019

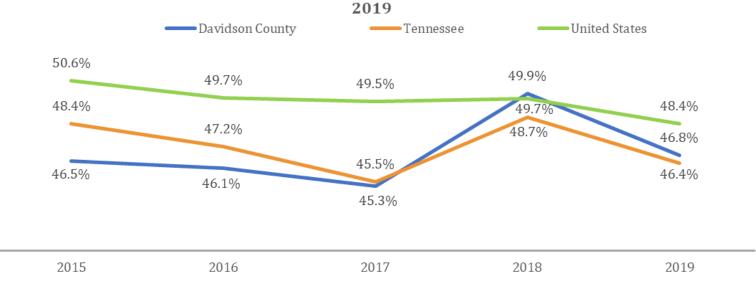
State

46.4% of renters were cost-burdened in 2019

National

48.4% of renters were cost-burdened in 2019

Percentage of Renters Who Spend More Than 30% of Their Income on Rent 2015-



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

 $\overline{279}_{\text{ permits of commercial building in 2019}}$

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. 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 i	in 2014 and 2018	
	2014	2019
Total households	267,952	289,427
Family households (families)	153,161	-
With own children under 18 years	71,904	-
Married-couple family	101,831	105,455
With own children under 18 years	42,318	38,882
Cohabiting Couple Household	-	18,176
With own children of householder under 18 years	-	3,568
Male householder, no wife present, family	10,573	65,245
With own children under 18 years	4,754	2,865
Female householder, no husband present, family	40,757	100,551
With own children under 18 years	24,832	18,262
Nonfamily households	114,791	-
Householder living alone	90,351	104,308
65 years and over	23,019	26,362
Households with one or more people under 18 years	79,610	70,910
Households with one or more people 65 years and over	54,592	63,519
Average household size	2	2
Average family size	3	3

¹U.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

Retrieved from: http://www.healthynashville.org/modules.php?op=mod-load&name=NS-Indicator&file=indicator&iid=8413191

² HealthyNashville.org. (2014). Single-parent households.

Social Determinants of Health Inequity





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 1,141 victims/100,000 residents in 2015 to 1,105 victims/100,000 in 2019. (Indicator SD1)
- The percentage of children in single family households in Davidson County was consistently higher than for Tennessee and the U.S. from 2015 to 2019. (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 2019, 2.3% of Davidson County workers used public transportation and 2.9% walked to work. On average they spent 25.4 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 2019, 31% 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 from 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.

Social Detriments of Health Equity



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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

America's Health Rankings (2021). 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

Metro Nashville Police Department. Uniform Crime Reports, Part1 Crimes: 1963-2021 by population (crime rate). Retrieved from: https://www.nashville.gov/departments/police/news-and-reports/crime-statistics/nashville-crime-statistics

County

1,105/100,000 in 2019

National

379/100,000 in 2019

State

595/100,000 in 2019

Violent Crime Rate per 100,000 Population, 2015-2019

1140.8	1142.7	1161.8	1150.1	1105.2
612.0	633.0	652.0	624.0	595.0
383.0	397.0	394.0	381.0	379.0
2015	2016	2017	2018	2019
	——Davidson County	Tennessee	——United States	

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. (2015–2019). 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

39.5% of children in 2019

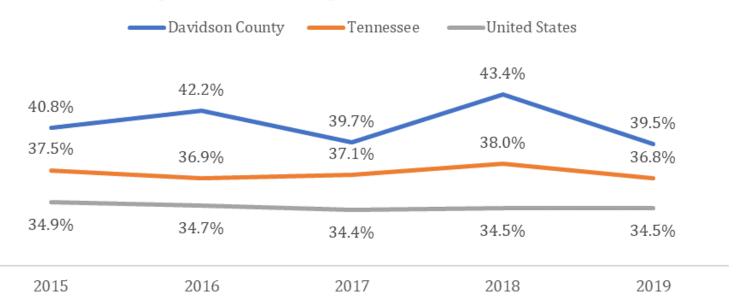
State

36.8% of children in 2019

National

34.5% of children in 2019

Percentage of Children in Single-Parent Households, 2015-2019



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. (2015–2019). American Community Survey, 1–year estimates. Selected Social Characteristics in the United States, Table DP02.

County

42.6% of grandparents in 2018

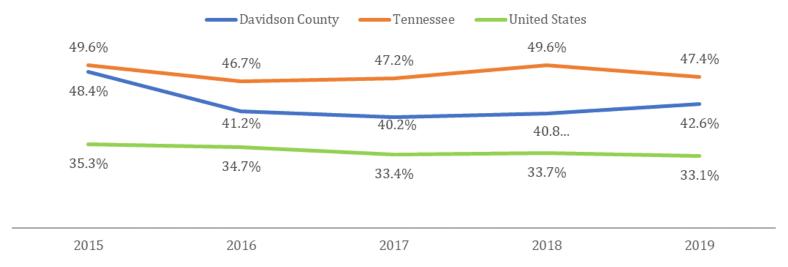
State

47.4% of grandparents in 2018

National

33.1% of grandparents in 2018

Percent of Grandparents Raising their own Grandchildren, 2015 - 2019



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.

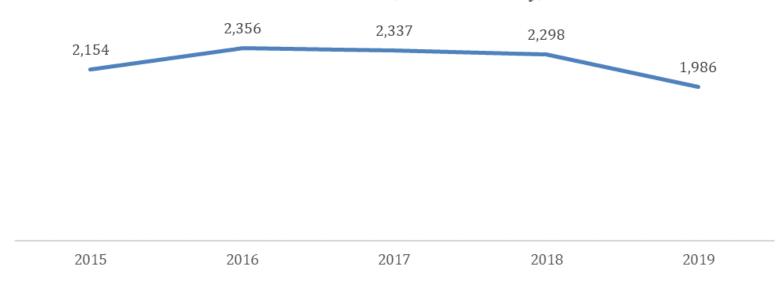
Data Source

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

Point-In-Time Homeless Count, Davidson County, 2015-2019



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

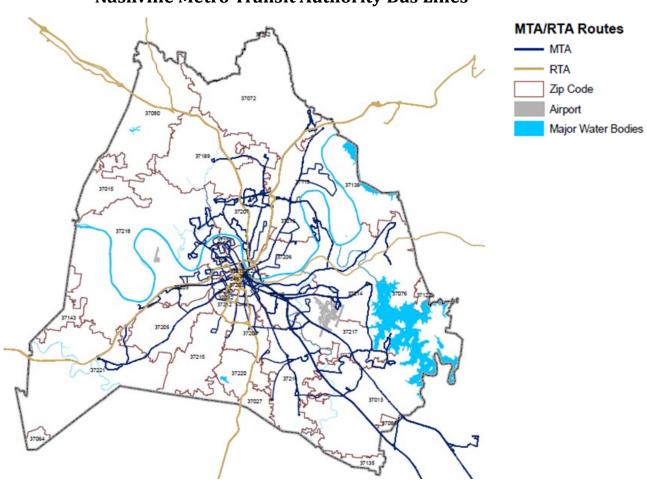
Geography layer from Metro Planning Department. Percentage calculated in ArcGIS using residential properties and Metro Transit Authority Bus Stops layers from Metro Planning Department.

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 the high cost of ownership, resulting in environmental and 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 2019

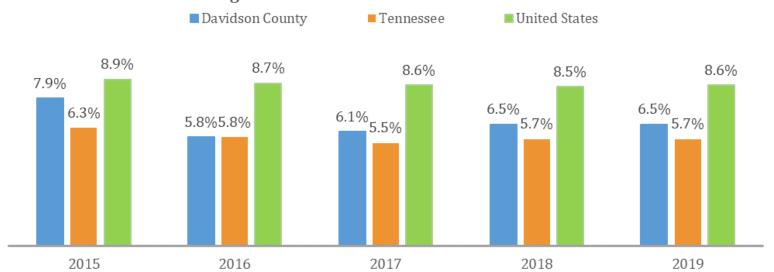
State

5.7% without access to a vehicle in 2019

National

8.6% without access to a vehicle in 2019

Percentage of Households Without a Vehicle 2015-2019



SD7 Public Transportation to Work



Public transportation provides an alternative to driving to work, 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 the percentage of workers aged 16 years and over who commute to work by type of transportation.

Data Source

U.S Census Bureau. (2015–2019). American Community Survey 1-yr estimates. Selected Economic Characteristics; Table DP03. Means of Transport to Work; Tables B08101,

County

2.3% of workers took public transportation to work in 2019

State

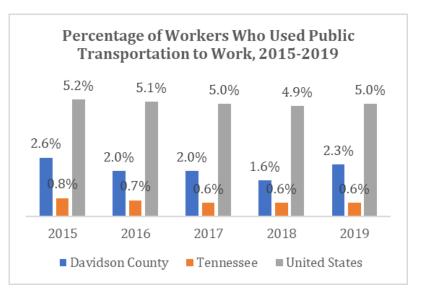
0.6% of workers took public transportation to work in 2019

National

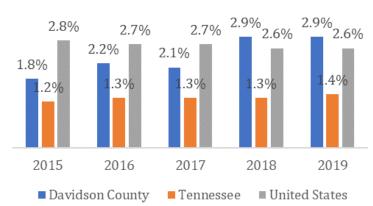
5.0% of workers took public transportation to work in 2019

Benchmark

5.5% Healthy People 2020 Target



Percentage of Workers Who Walked to Work, Davidson County, 2015-2019



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. (2015–2019). American Community Survey 1-yr estimates. Selected Economic Characteristics; Table DP03.

County

25.0 minutes average time to work in 2019

State

25.9 minutes average time to work in 2019

National

27.6 minutes average time to work in 2019

Average Travel Time to Work (minutes), 2015-2019

	——Davidson County	Tennessee	——United States	
26.4	26.6	26.9	27.1	27.6
24.8	25.1	25.1	25.4	25.9
25.1	25.2	24.8	24.5	25
2015	2016	2017	2018	2019

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

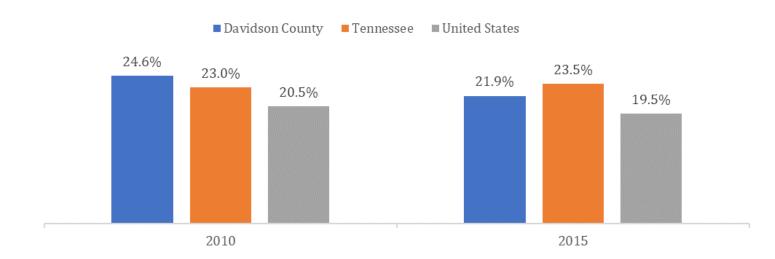
21.9% of the population with low access to healthy food in 2015

State

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

National

 $19\mbox{.}5\%$ of the population with low access to healthy food in 2015



SD₁₀ Access to Healthy Food by Household Income



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 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. This population include households in a county without a car and living more than one mile from a supermarket or large grocery store.¹

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

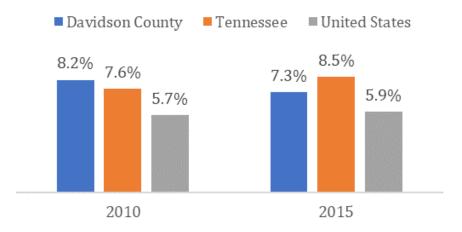
State

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

Percent of Low Income Population with Low Access to Healthy Food 2010 and 2015



¹ 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

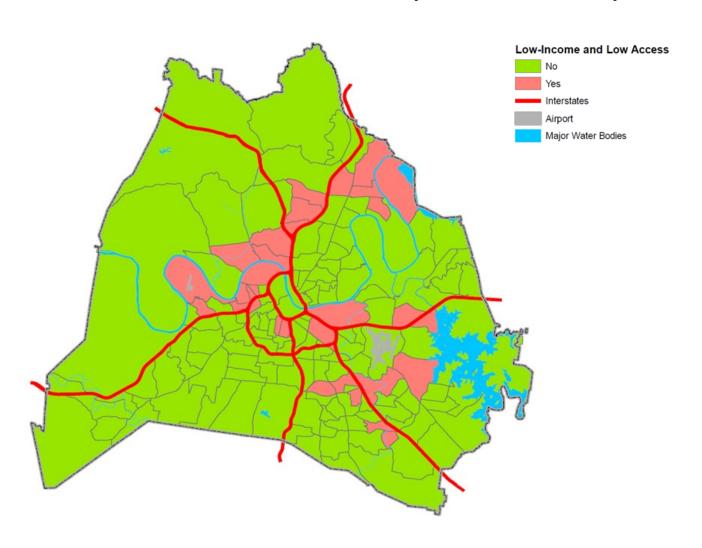
This indicator shows the distribution of census tracts with low-income and low-access to healthy food, defined as those having at least 500 or 33% of low income people with low access to healthy food (i.e., living more than one mile from a supercenter store or a large grocery store if in an urban area,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



Farmer's 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/dataproducts/food-environment-atlas/data-access-anddocumentation-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

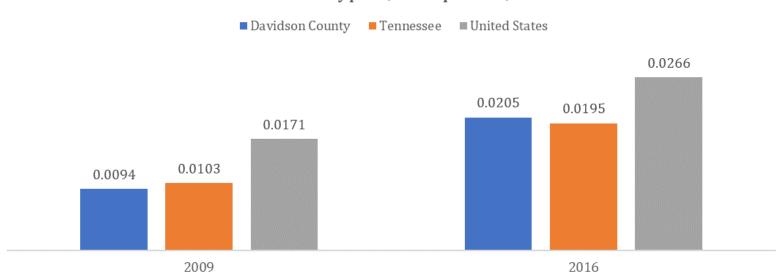
State

0.0195 Farmers Markets per 1,000 population in 2016

National

0.0266 Farmers Markets per 1,000 population in 2016

Farmers Markets Density per 1,000 Population, 2009 and 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. Lowincome 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

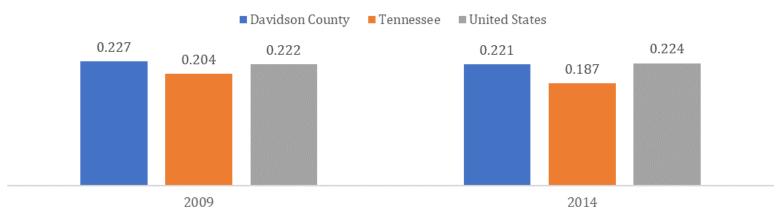
State

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

National

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

Density of Grocery and Supercenter Stores, 2009 and 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

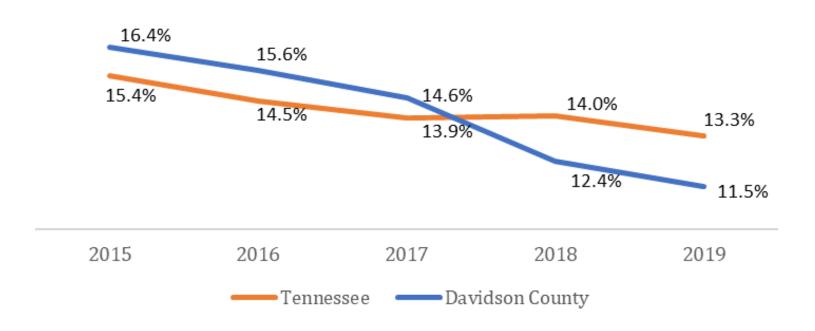
County

11.5% of food insecure people in 2019

State

13.3% of food insecure people in 2019

Percentage of People Living with Food Insecurity



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

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

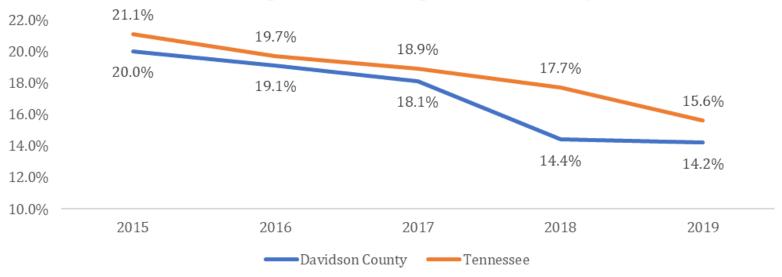
County

14.2% of food insecure children in 2019

State

15.6% of food insecure children in 2019

Percentage of Children Living with Food Insecurity



¹ Healthy Nashville: Child Food Insecurity. Retrieved from: <u>www.healthynashville.org</u>

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 while others may not even qualify 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

Feeding America (2021). Child Food insecurity in the United States.

Retrieved from: https://map.feedingamerica.org/

County

31% food insecure children likely ineligible for assistance in 2019

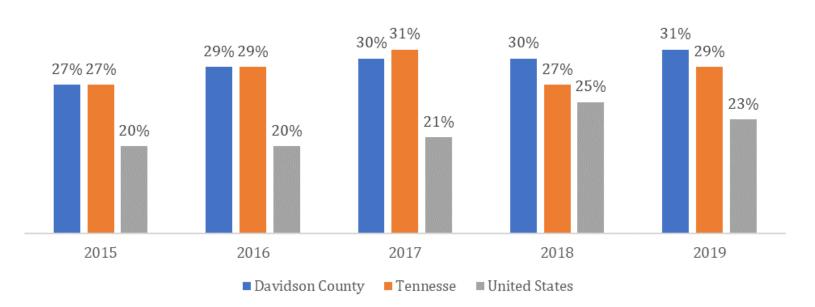
State

29% food insecure children likely ineligible for assistance in 2019

National

23% food insecure children likely ineligible for assistance in 2019

Food Insecure Children Likely Ineligible for Assistance



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

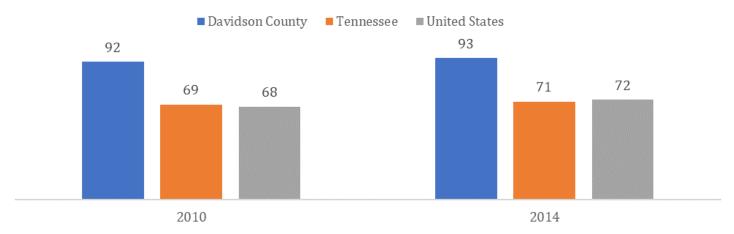
State

 $71\,$ 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: <u>www.healthynashville.org</u>

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

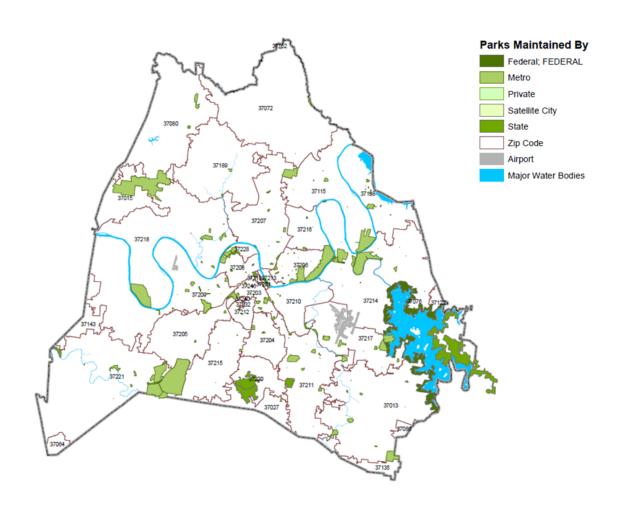
Geography layer from Metro Planning Department.

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



 $^{^{\}rm 1}$ 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. Having access to places for physical activity, such as parks and trails, encourages community residents to participate in physical activity and do so more often. 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 radius 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)

Health.

Retrieved from: https://www.cdc.gov/healthyplaces/healthtopics/parks.htm

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

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 0.065 ppm and was below the National Ambient Air Quality Standard of 0.070 ppm (Indicator E1.)
- The annual PM2.5, which is a 3-year average concentration of particulate matter was 7.8 ug/m³ in 2019, which was below the National Ambient Air Quality Standard of 12 ug/m³ (Indicator E2.)
- The annual PM10 for both annual and 24-hour averages were within the national standards of not exceeding 150 ug/m³ (Indicator E4 & E5).
- 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



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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, averaged over the past 3 years.

Data Source

U.S. Environmental Protection Agency. (2021). Air Quality System.

Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

 $0.065\ ppm$ average over past three years as of 2019

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, averaged over the past 3 years

Data Source

U.S. Environmental Protection Agency (2021). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

 $7.8\ ug/m^3$ annual average over past three years as of 2019

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, averaged over the past 3 years.

Data Source

U.S. Environmental Protection Agency (2021). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

State

 $17.7\ ug/m^3$ daily 98th percentile concentration, averaged over the past 3 years as of 2019

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 (2021). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air- quality-data/air-quality-statistics-report

County

 $oldsymbol{0}$ exceedances in the past 3 years as of 2019

Benchmark

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

Es 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 (2021). Air Quality System. Retrieved from: https://www.epa.gov/outdoor-air-quality-data/air-quality-statistics-report

County

 $35.7 \ ug/m^3$ daily average over the past 3 years as of 2019

Benchmark

50 ug/m³

E6 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

Data not available for this indicator 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 Davison county

Access to Health Care





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.

Available from: https://www.cdc.gov/nchs/healthy-people/hp2020/hp2020-midcourse-review.htm

Section Highlights

- In Davidson County in 2019, there was 1 primary care provider for every 1,040 residents; 1 dentist for every 1,230 residents; and 1 mental health provider for every 310 residents. These provider-to-resident ratios were higher than the state estimates (Indicator A1)
- In 2019, 11.4% of Davidson County residents did not have health insurance, slightly lower than previous years, but consistently higher than for the state and the United States (Indicator A2)
- In 2019, 6.3% of Non-Hispanic Whites did not have insurance coverage compared to 8.9% of Non-Hispanic Blacks and 45.7% 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.

Access to Health Care



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A1 Health Care Providers Available for the Population



Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary)

utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.¹

Data Description

This indicator shows the ratio of the population to healthcare providers. The ratio represents the number of individuals served by one provider, if the population was equally distributed across providers.

Data Source

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

County

1,040:1 population per primary care physician

1,230:1 population per dentist

310:1 population per mental health provider in 2019

State

1,400:1 population per primary care physician

1,800:1 population per dentist

660:1 population per mental health provider in 2019

Number of Persons per One Health Care Provider, 2015-2019

<u> </u>	Primary care physicians	——Dentists	Dentists ——Mental health providers		
1,380	1,340	1,296	1,290	1,230	
1,090	1,070	1,060	1,040	1,040	
360	340	310	340	310	
2015	2016	2017	2018	2019	

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. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03

County

11.4% uninsured in 2019

State

10.1% uninsured in 2019

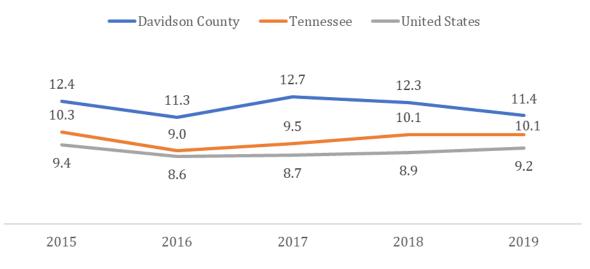
National

9.2% uninsured in 2019

Benchmark

0.6 Healthy People 2030 target

Percent Population Without Health Insurance, 2015-2019



¹2014 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 (for adults.)

Data Source

U.S Census Bureau. (2015–2019). American Community Survey 1–year estimates. Selected Economic Characteristics; Table DP03

County

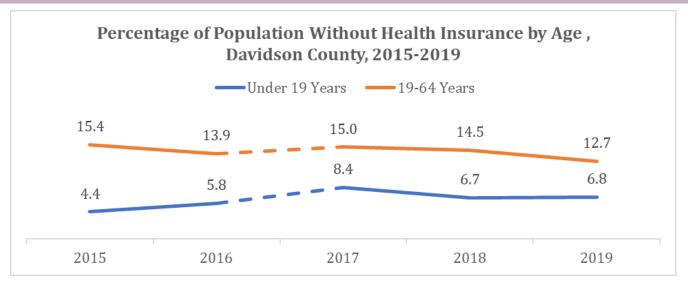
6.8% of children uninsured in 2019

12.7% of unemployed adults uninsured in 2019

State

10.1% uninsured in 2019

12.6% of adults not in the labor force uninsured in 2019



^{*} In the 2017 and 2018 DP03 tables the Census Bureau changed the age group to under 19 years, hence the break in the series. Therefore, the trend should be interpreted with caution as estimates may not be comparable across the transition.

¹2014 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. (2015–2019). American Community Survey 1–year estimates.

Health Insurance Coverage Status; Table S2701

County

8.9% of Black/African American residents did not have health insurance 2019

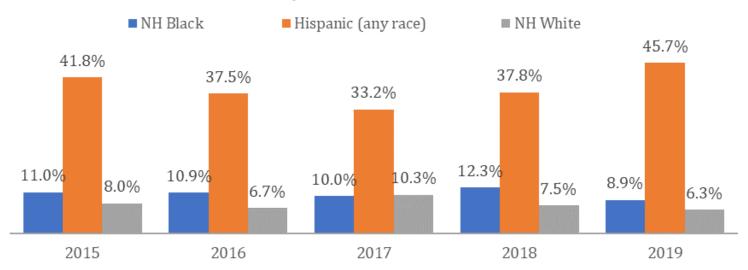
6.3% of Non-Hispanic White residents did not have health insurance 2019

45.7% of Hispanic residents (of any race) did not have health insurance 2019

Benchmark

0.6% Healthy People 2030 target

Percentage of Population Uninsured by Race/Ethnicity, Davidson County, 2015-2019



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

As 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.

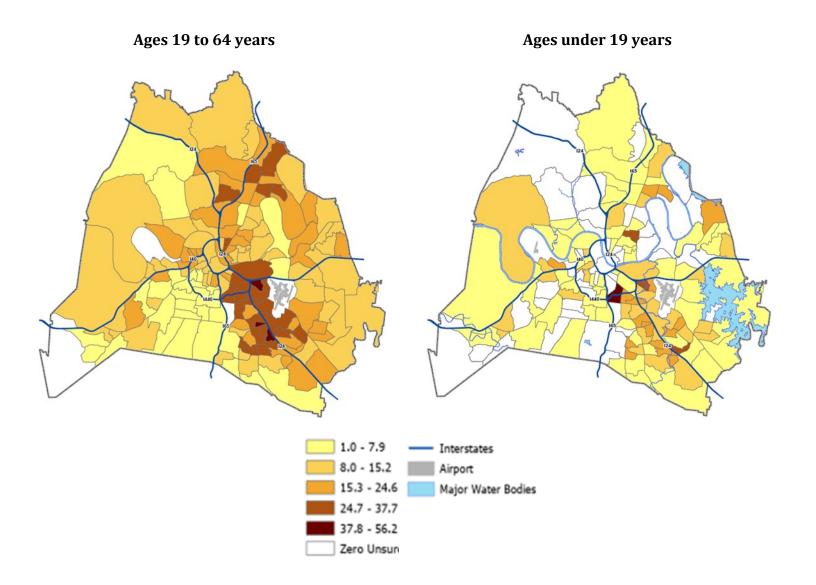
Data Description

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



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).

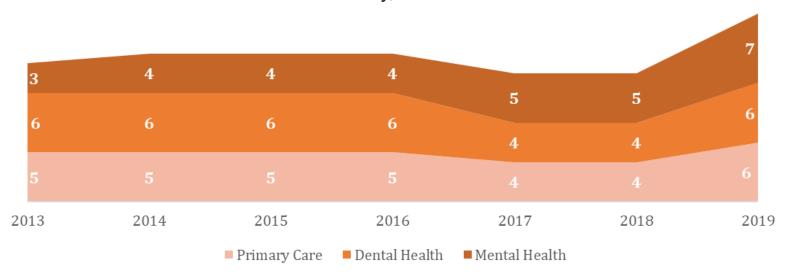
County

6 areas with a shortage of primary care professionals in 2019

6 areas with a shortage of dental health professionals in 2019

 $\overline{7}$ 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





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

- Cigarette Smoking rates among Davidson County adult residents declined from 21.0% in 2015 to 16.9% in 2019. These rates were higher than the national target of 6.1% (Indicator B1)
- In 2019, 27% of Davidson County adults (20 years and older) were physically inactive, up from 23% in 2015 through 2017. (Indicator B6)
- The percent of overweight or obese children in public schools decreased from 36.9% in 2015 to 36.6% in 2017 and then rose to 37.1% in 2019. (Indicator B7)
- The percentage of Davidson County adults who have routine health check-ups declined from 71.2% in 2015 to 68.6% in 2016 then increased to 76.8% in 2019. (Indicator B9)
- Cholesterol screening rates among adults increased from 76.9% in 2015 to 88.0% in 2019, mirroring the increase at the state and national level (Indicator B10). Screening rates for colorectal and cervical cancers also increased, but decreased for breast (Indicators B11-B13).
- Binge drinking among adults increased from 12.6% in 2015 to 16.5% in 2019. (Indicator B14)
- The Davidson County death rate from alcohol-related motor vehicle crashes declined from 1.84 per 100,000 residents in 2015 to 1.35 per 100,000 residents in 2019. (Indicator B16)

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.com. Accessed on 4/3/2010 at https://www.cdc.gov/pcd/issues/2015/15 0134.htm

²Institute 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/

³https://www.who.int/healthinfo/global burden disease/GlobalHealthRisks report full.pdf

Behavioral Risk Factors



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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

B1 Adult Smoking Rate



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. 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. 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 (2021). 500 Cities: Local Data for Better Health. Centers for Disease Control and Prevention (2021). BRFS Prevalence and Trends Data.

County

16.9% smoking rate in 2019

National

15.7% smoking rate in 2019

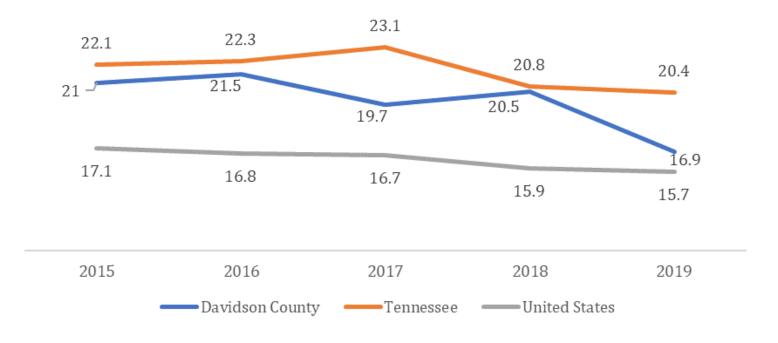
State

20.4% smoking rate in 2019

Benchmark

6.1% Health People 2030 Target

Percent of Adult Population who Smoke, 2015-2019



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

²World Health Organization. Tobacco: Key Facts.

Retrieved from: https://www.who.int/news-room/fact-sheets/detail/tobacco

B2 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, (i.e., body mass index (BMI) ≥30 kg/m2). The measure is calculated using self-reported height and weight in the Behavioral Risk Factor Surveillance Survey (BRFSS). County level estimates are generated from 3 years of BRFSS data using modeling techniques. Long-term tracking is not recommended due to the limitations of modeling techniques and modifications in the BRFSS methodology beginning in 2015.

Data Source

County Health Rankings and Roadmaps (2022). Tennessee. Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2018/measure/factors/11/description? sort=sc-0

Centers for Disease Control and Prevention (2021). 500 Cities Project: Local Data for Better Health. Retrieved from: http://www.cdc.gov/500cities/ BRFSS Prevalence & Trends Data: Home | DPH | CDC

County

34% adults obese in 2019

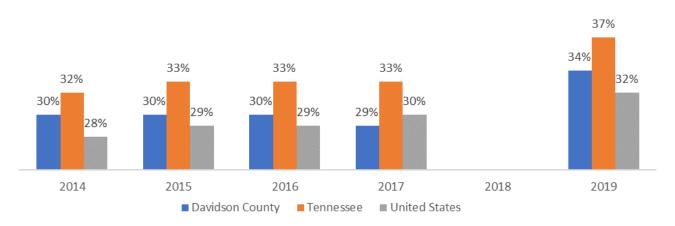
State

37% adults obese in 2019

National

30% adults obese in 2019

Percentage of the adult population (age 20 and older) obese 2014-2019



 $^{^{1}}$ County Health Rankings.org.

B3 Physical Inactivity Rate



Physical inactivity or reduction 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 Survey (BRFSS). ¹

Data Source

County Health Rankings and Roadmaps (2022). Tennessee. Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/70/description
Centers for Disease Control and Prevention (2021). 500 Cities Project: Local Data for Better Health. Retrieved from: http://www.cdc.gov/500cities/BRFSS Prevalence&
Trends Data: Home | DPH | CDC

County

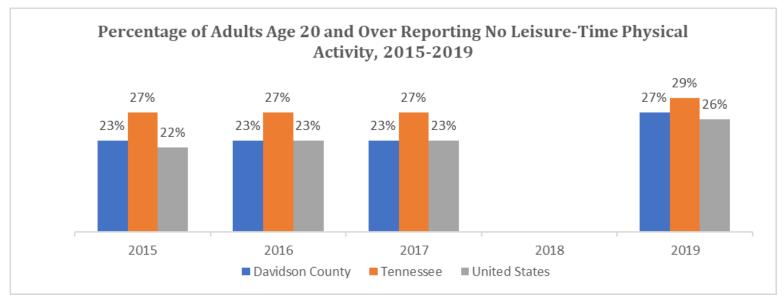
27% no leisure-time physical activity in 2019

State

29% no leisure-time physical activity in 2019

National

26% no leisure-time physical activity in 2019



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

¹County Health Rankings & Roadmaps: Physical Inactivity.

Retrieved from: https://www.countyhealthrankings.org/app/tennessee/2015/measure/factors/70/description

B4 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 diseases 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 (2021).

Retrieved from: https://datacenter.kidscount.org/data/

tables/8705

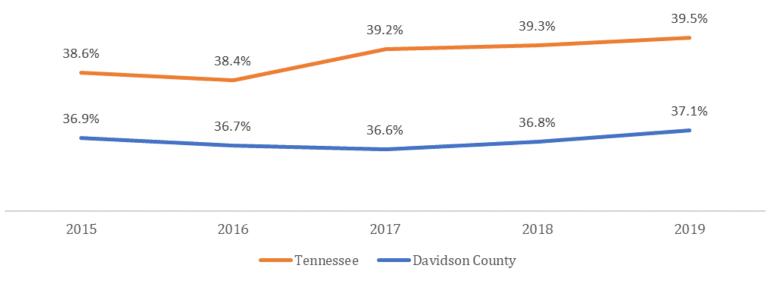
County

37.1% of public school children in 2019

State

39.5% of public school children in 2019

Percent of Public School Students Who Were Overweight or Obese



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

B⁵ Health Check-Up



Regular health exams and tests can help find problems early, when the chances for treatment and cure are better. By getting the right health services, screenings, and treatments, people can improve their

chances for living a longer, healthier life. Age, health and 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 the doctor for routine check-ups within the past year.

Data Source

Centers for Disease Control and Prevention (2021). 500 Cities Project: Local Data for Better Health.

Retrieved from: http://www.cdc.gov/500cities/

County

76.8% of adults visited a doctor for a routine check-up in 2019

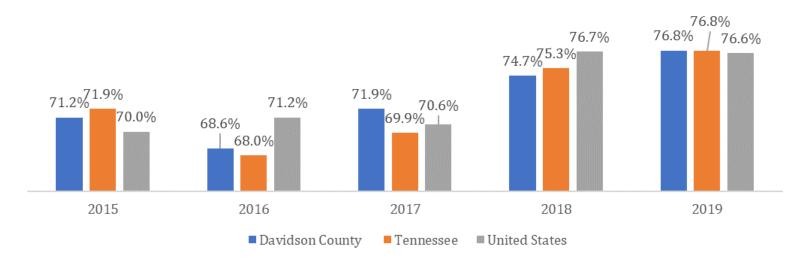
State

76.8% of adults visited a doctor for a routine check-up in 2019

National

76.8% of adults visited a doctor for a routine check-up in 2019

Percentage of Adults Aged 18 Years who Visited Doctor for Routine Check-Up within Past Year, 2014-2019



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

B6 Cholesterol Screening



High blood cholesterol is one of the major risk factors 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 \geq 18 years who have had their blood cholesterol checked in the past 5 years.

Data Source

Centers for Disease Control and Prevention (2021). 500 Cities Project: Local Data for Better Health.

Retrieved from: https://www.cdc.gov/500cities/

County

88.0% cholesterol screening rate as of 2019

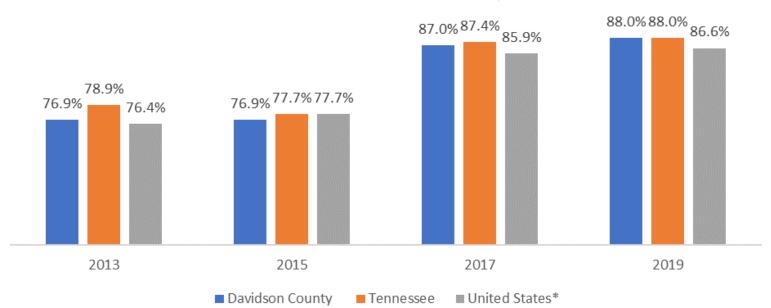
State

88.0% cholesterol screening rate as of 2019

National

86.6% cholesterol screening rate as of 2019

Percentage of Adults Aged ≥ 18 Years Who Have Had their Blood Cholesterol Checked in the Past 5 Years, 2013-2019



B7 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 cancer

killer 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. 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 (2021). 500 Cities: Local Data for Better Health.

Retrieved from: https://nccd.cdc.gov/500 Cities/

rdPage.aspx?

<u>rdReport=DPH 500 Cities.ComparisonReport&Locations=4</u> 752006

County

64.2% colorectal screening rate as of 2018

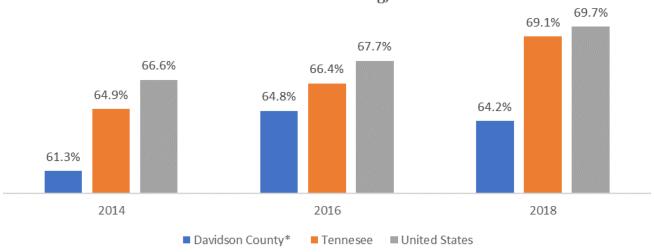
State

69.1% colorectal screening rate as of 2018

National

69.7% colorectal screening rate as of 2018

Percentage of Adults Aged 50-75 Years Who Have Had the recomanded Colorectal Cancer Screening, 2014-2018



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

B⁸ 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 for 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. Although 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 (2021). 500

Cities: Local Data for Better Health.

Retrieved from: https://www.cdc.gov/500cities/

Centers for Disease Control and Prevention (2021). BRFSS

Prevalence & Trends Data.

Retrieved from: https://www.cdc.gov/brfss/

brfssprevalence/index.html

County

72.5% screening rate as of 2018

State

76.2% screening rate as of 2018

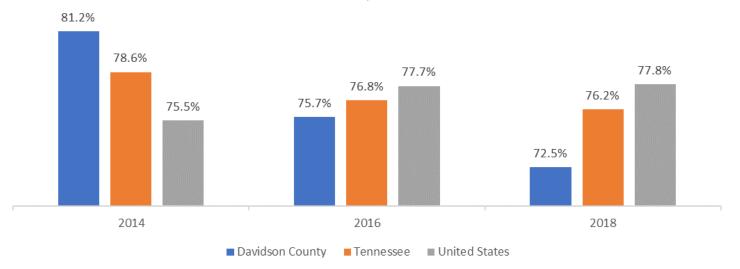
National

77.8% screening rate as of 2018

Benchmark

80.5% Healthy People 2030 Target

Percentage of Women Aged 50-74 Years Who Have Had a Mammogram in the Past 2 Years, 2014-2018



B9 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 caught 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. .

Data Source

Centers for Disease Control and Prevention (2021). 500 Cities: Local Data for Better Health.

Retrieved from: https://www.cdc.gov/500cities/

Centers for Disease Control and Prevention (2021). BRFSS

Prevalence & Trends Data.

Retrieved from: https://www.cdc.gov/brfss/

brfssprevalence/index.html

County

85.4% cervical cancer screening rate as of 2019

State

79.8% cervical cancer screening rate as of 2019

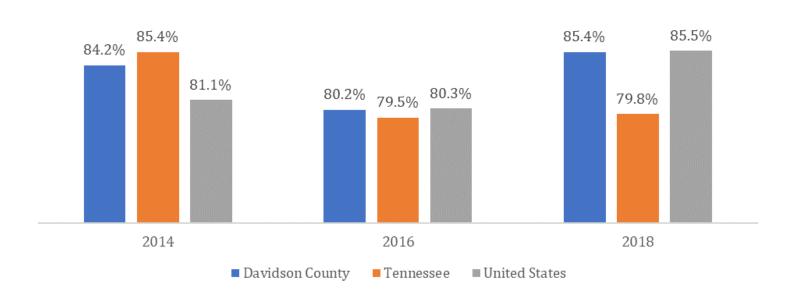
National

85.5% cervical cancer screening rate as of 2019

Benchmark

84.3% Healthy People 2030 Target

Percentage of Women Age 21-65 Years Having Had Pap Smears in the Past 3 Years, 2014-2018



B10 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 In general, alcohol abuse is associated with a variety of negative health and safety outcomes. Additionally, 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?

<u>rdReport=DPH 500 Cities.ComparisonReport&Locations=4</u> 752006

County

16.5% of adults were binge drinkers in 2019

State

14.4% of adults were binge drinkers in 2019

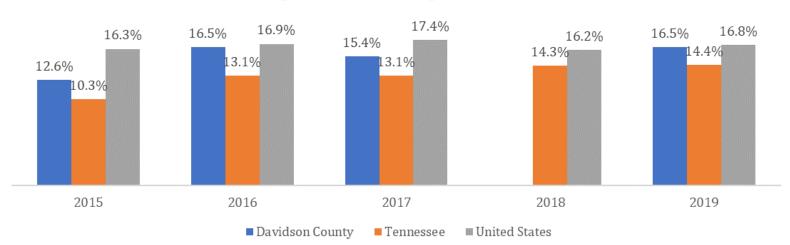
National

16.8% of adults were binge drinkers in 2019

Benchmark

25.4% Healthy People 2030 Target

Percentage of Adults Who Binge Drink, 2015-2019



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

B11 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

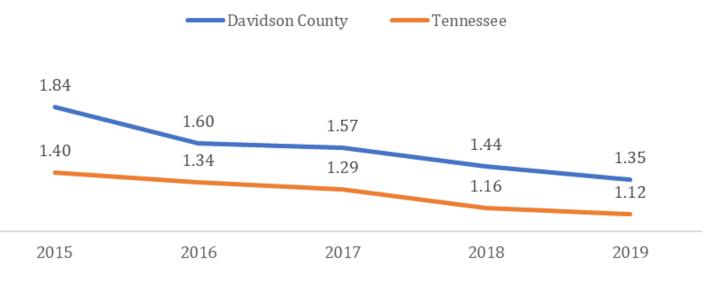
1.35/100,000 motor vehicle crash fatality rate involving alcohol in 2019

State

1.12/100,000 motor vehicle crash fatality rate involving alcohol in 2019

Motor Vehicle Crash Fatality Rate per 100,000 Population Involving Alcohol*, 2015-2019





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.

B12 Pedestrians Injured in Crashes



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

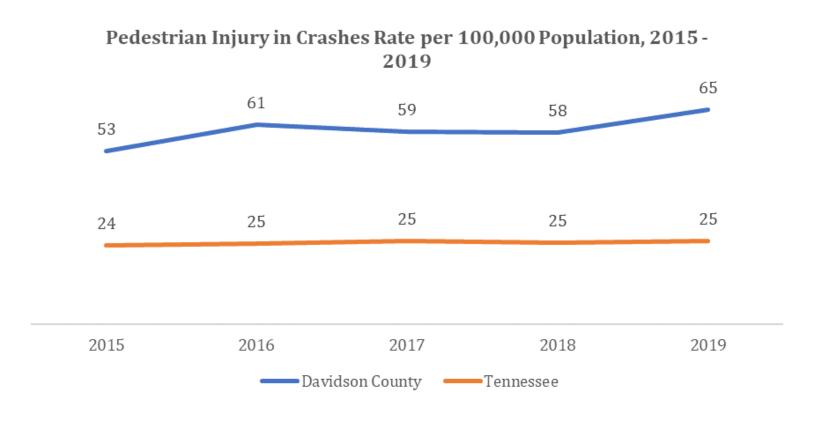
Tennessee Department of Safety & Homeland Security (2020). Pedestrians and Other Pedestrians Involved in Tennessee Traffic Crashes by Year and County 2007 – 2019. Retrieved from: https://www.tn.gov/content/dam/tn/safety/documents/Pedestrians.pdf

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



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

17.3 per 100,000 population in 2019

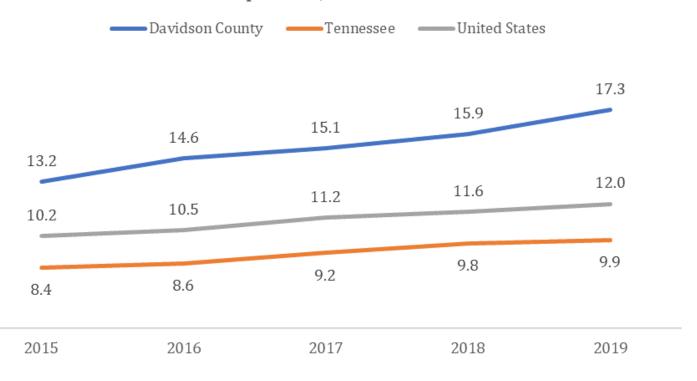
State

9.9 per 100,000 population in 2019

Nation

12.0 per 100,000 population in 2019

Number of Recreation and Fitness Facilities per 100,000 Population, 2015-2019



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





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 2015 and 2017, ranging from 14.0% to 13.8%, but slightly rose since then to 15.8 in 2019. (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)
- The opioid prescription rate in Davidson County declined and was consistently lower than the state rate between 2015 (890 vs. 1,218 per 100,000 population) and 2019 (475 vs. 684 per 100,000 population). (Indictor M6)
- Drug overdose deaths in Davidson County rose from 33.2 per 100,000 population in 2016 to 75.1 per 100,000 population in 2021, mirroring the state trend. (Indicator M7)
- The rate of domestic violence declined 23% between 2015 (17.4 victims per 1,000 residents) and 2019 (13.4 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



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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. Occasional down days are normal, but 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 (2021). 500 Cities Project: Local Data for Better Health. Retrieved from: https://nccd.cdc.gov/500 Cities/rdPage.aspx?

<u>rdReport=DPH_500_Cities.ComparisonReport&Locations=4_752006</u>

15.4

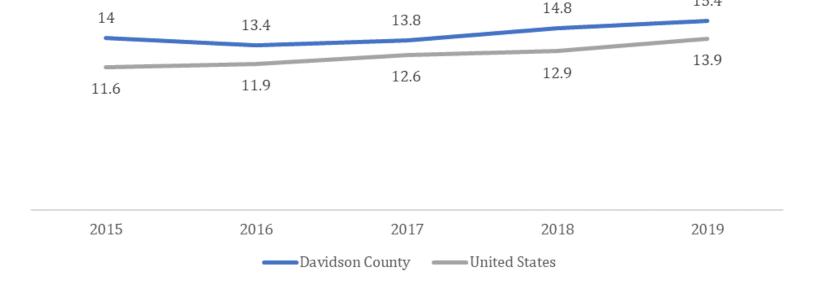
County

 $15.4\,$ adults who stated their mental health was not good for 14 or more days in the past 30 days in 2019

National

13.9 adults who stated their mental health was not good for 14 or more days in the past 30 days in 2019

Percent of Adults Who Stated Their Mental Health Was not Good for >=14 Days in the Past 30 Days



M2 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. Occasional down days are normal, but 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

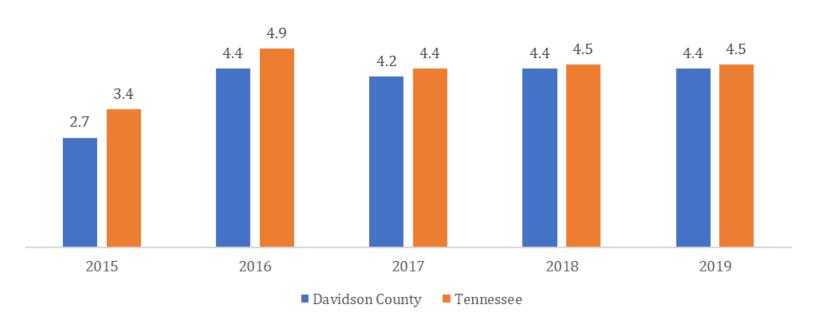
County

 $4 \ \, 4$ mentally unhealthy days reported in the past 30 days as of 2019

State

4.5 mentally unhealthy days reported in the past 30 days as of 2019

Average Number of Mentally Unhealthy Days Reported in The Past 30 Days, 2015-2019



M₃ 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. 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 young population aged 10-24.

Data Source

Tennessee Department of Health. Hospital Discharge System Data, 2015-2019.

County

39.0/10,000 suicide attempts rate among young females in 2019

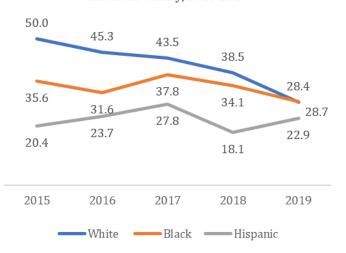
16.3/10,000 suicide attempts rate among young males in 2019

28.4/10,000 suicide attempts rate among young Whites in 2019

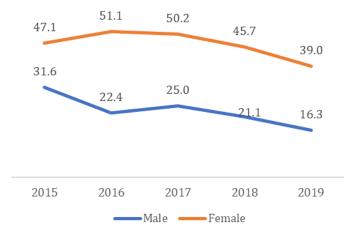
28.7/10,000 suicide attempts rate among young Blacks in 2019

22.9/10,000 suicide attempts rate among young Hispanics in 2019

Rate per 10,000 Young Population of ED Visits for Self-harm/Suicide Attempt by Race/Ethnicity, Davidson County, 2015-2019



Rate per 10,000 Young Population of ED Visits for Self-harm/Suicide Attempt by Gender, Davidson County, 2015-2019



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

M₄ Syringe Containers Collected



Syringe Services Programs, often called SSPs, are community-based prevention programs. SSPs provide a range of health services, and they provide a lifeline to those struggling with substance abuse. Comprehensive SSPs offer patients

vaccinations and testing for diseases, referrals to treatment for substance use disorder and other diseases (such as viral hepatitis and HIV), and sterile injection equipment to prevent the transmission of infectious diseases.1

Data Description

This indicator shows the number of syringe containers collected by the health department as medical waste from the local SSP.

Data Source

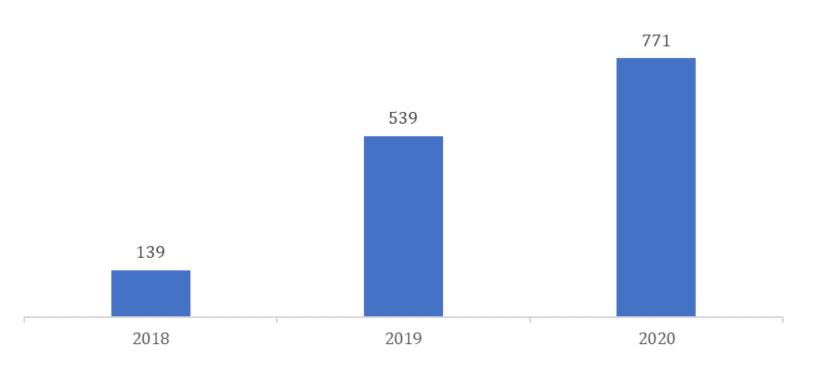
Centers for Disease Control and Prevention - National Center for HIV, Viral Hepatitis, STD, and TB Prevention. Syringe Services Programs (SSPs). https://www.cdc.gov/ ssp/index.html, accessed December 7, 2021.

Metro Public Health Department of Nashville/Davidson County. Syringe Container Database [restricted accessed database], accessed December 7, 2021. Davidson County, TN..

County

771 containers in 2020

Syring Containers Collected by SSP, 2018-2020



¹Centers for Disease Control and Prevention: https://www.cdc.gov/ssp/docs/SSP-Infographic print.pdf

M₅ 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

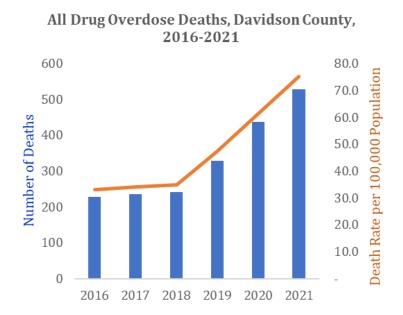
Tennessee Department of Health (2021). Fatal Overdose Data. Retrieved from: https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html

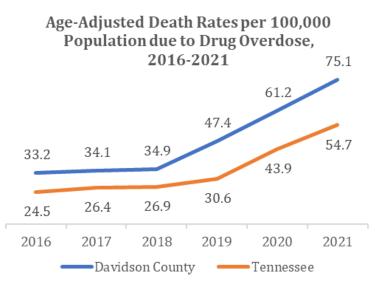
County

75.1/100,000 age-adjusted death rate due to drug overdose in 2021

State

54.7/100,000 age-adjusted death rate due to drug overdose in 2021





¹Center 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

M6 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. 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 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

 $9,\!308$ domestic violence victims in 2019

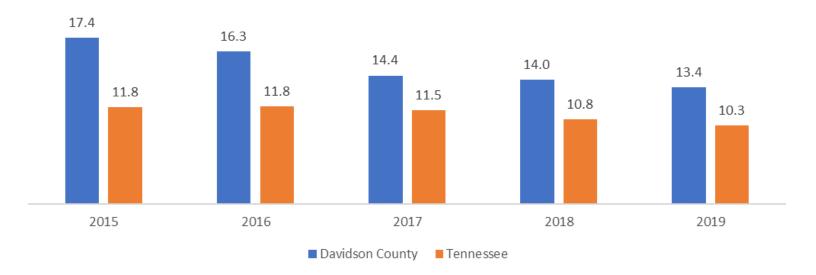
State

 $70,\!617$ domestic violence victims in 2019

13.4/1,000 domestic violence rate in 2019

10.3/1,000 domestic violence rate in 2019

Number of Domestic Violence Victims per 1,000 Residents 2015-2019



¹ Centers for Disease Control and Prevention. (2014). Intimate partner violence. Retrieved from: http://www.cdc.gov/violencepre-vention/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 benchmark of the Healthy People 2020 Target (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



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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

State

7.0/1,000 infant deaths in 2019

Benchmark

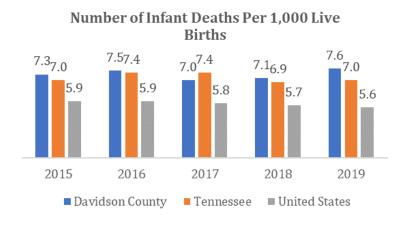
5.0/1,000 Healthy People 2030 target

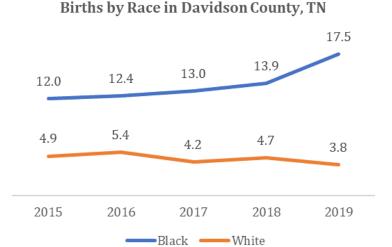
County

7.6/1,000 infant deaths in 2019

National

5.6/1,000 infant deaths in 2019





Number of Infant Deaths per 1,000 Live

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 in the neonatal intensive care unit. 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

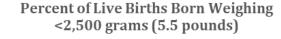
9.0% of infants born in 2019

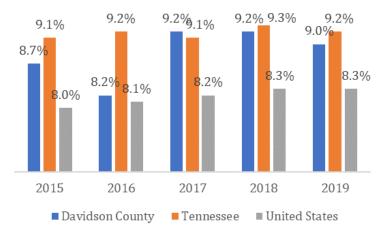
National

8.3% of infants born in 2019

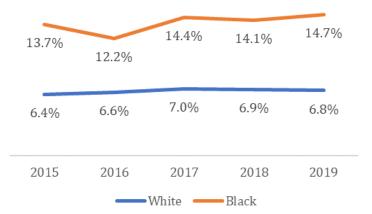
State

9.2% of infants born in 2019





Percent of Live Births Born Weighing <2,500 grams (5.5 pounds) by Race in Davidson County



C₃ Preterm Births



Preterm births (birth at <37 weeks gestation) is the leading cause of under-5 child mortality and an important cause of serious morbidity. 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, 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

National

10.0% of infants born preterm in 2018

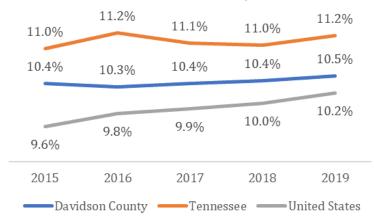
State

11.0% of infants born preterm in 2018

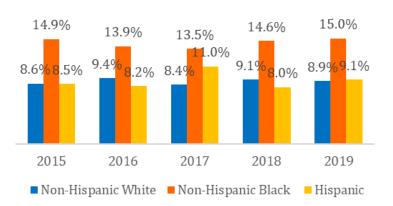
Benchmark

9.4% Healthy People 2030 target

Percent of Live Births Born Preterm (<37 Weeks Gestation)



Percent of Live Births Born Preterm (<37 Weeks Gestation) by Maternal Race/Ethnicity



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 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.

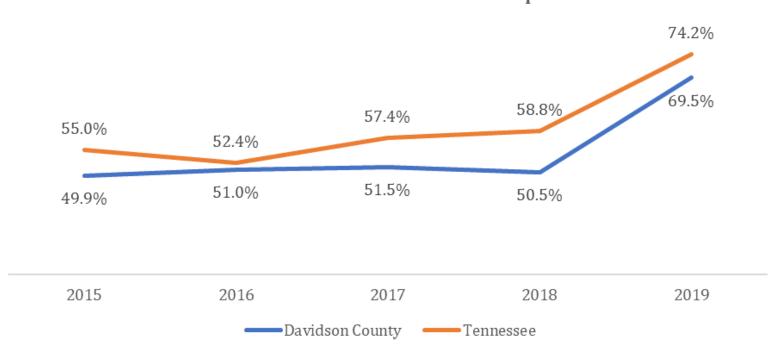
County

69.5% of mothers receive adequate prenatal care in 2019

State

74.2% of mothers receive adequate prenatal care in 2019

Percent of Live Births Where Mother Received Adequate Prenatal Care



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 2016-2022 (expanded), available September 2019.

County

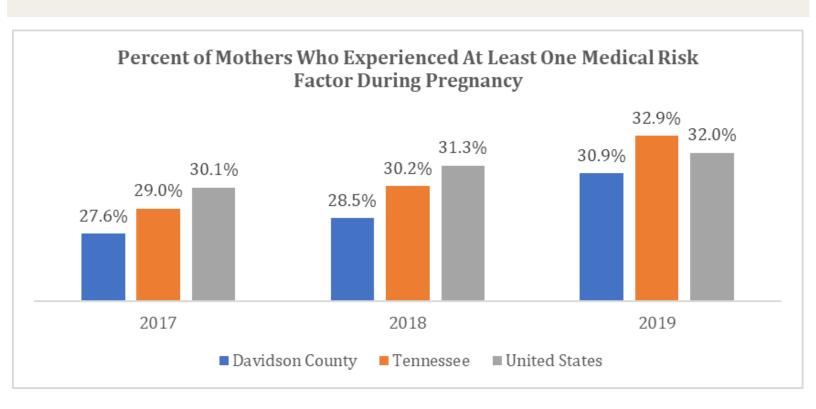
30.9% of mothers experienced at least one medical risk factor during pregnancy in 2019

State

32.9% of mothers experienced at least one medical risk factor during pregnancy in 2019

National

32.0% of mothers experienced at least one medical risk factor during pregnancy in 2019



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 2022.

County

4.3% of mothers smoked in 2019

National

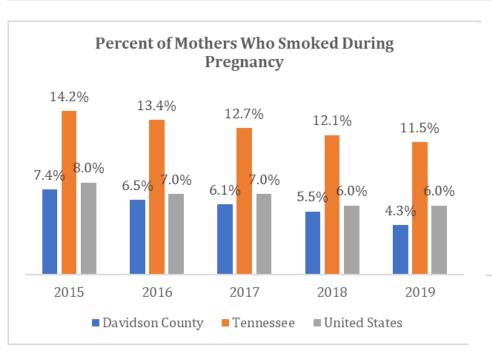
6.0% of mothers smoked in 2019

State

11.5% of mothers smoked in 2019

Benchmark

4.3% Healthy People 2030 target



Davidson County 9.1% 8.5% 7.7% 7.1% 6.5% 7.3% 6.5% 5.5% 5.4% 3.8% 2015 2016 2017 2018 2019 •White = Black

Percent of Mothers Who Smoked

During Pregnancy by Race in

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 19 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

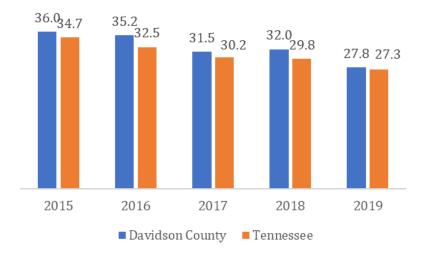
County

27.8/1,000 teen pregnancy rate in 2019

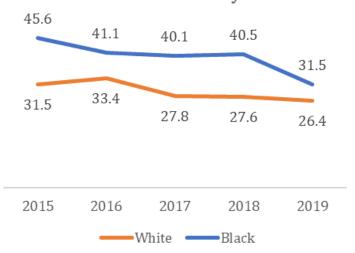
State

27.3/1,000 teen pregnancy rate in 2019





Teen Pregnancy Rate per 1,000 Females Aged 15-19 Years by Race, Davidson County



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 into

adolescence and adulthood. All types of child abuse and neglect can have long lasting effects throughout life, 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 based on a calendar year.

Data Source

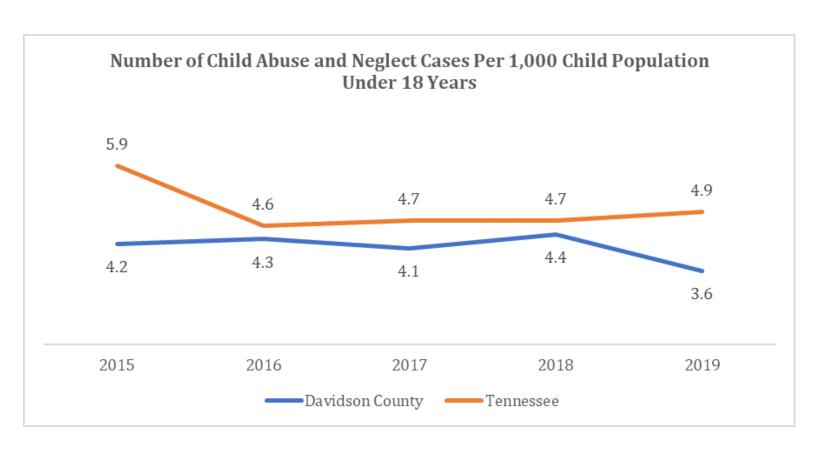
The Annie E. Casey Foundation, KIDS COUNT Data Center. Retrieved from: https://datacenter.kidscount.org.

County

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

State

4.9/1,000 child abuse and neglect rate in 2019



C₂ Childhood Immunization



Timely childhood immunizations and vaccines are important in protecting children against many childhood 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 Pneumococcus vaccine (PCV.)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

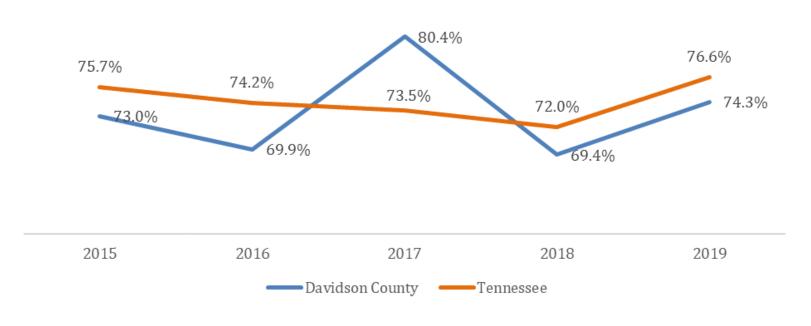
County

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

Percent of 24-month Old Children with On-Time Immunizations, 2015-2019



¹ Tennessee Immunization Program, Tennessee Department of Health (2019). *Results of the 2018 Immunization Status Survey of 24 Month Old Children in Tennessee*.

C₁₀ Lead Poisoning Screening for Children



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. 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: <a href="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

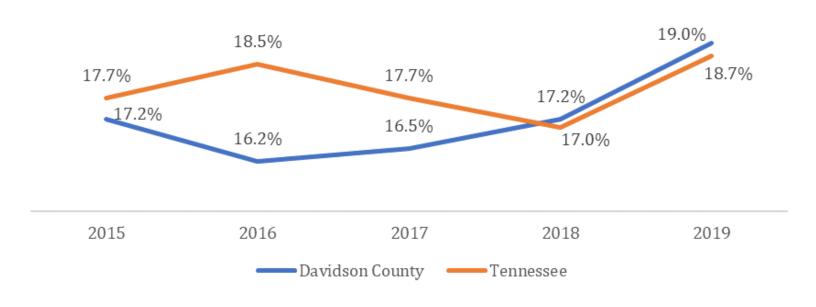
County

19.0% of children under age 6 were screened in 2019

State

18.7% of children under age 6 were screened in 2019

Percent of Children Under Age 6 Who Were Screened for Elevated Lead Levels



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 2016-2019 (expanded), available September 2021.

County

88.8% of infants ever breastfed in 2019

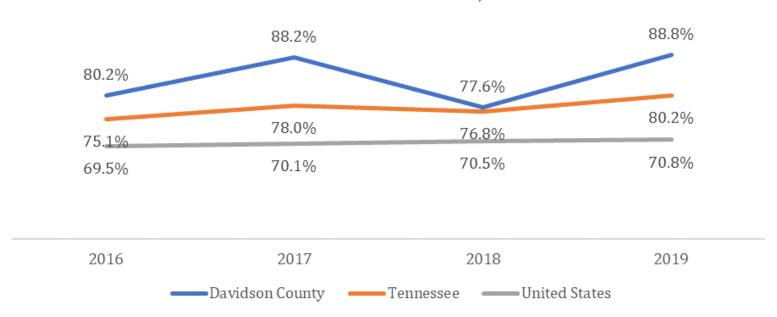
National

70.8% of infants ever breastfed in 2019

State

80.2% of infants ever breastfed in 2019

Percent of Infants Ever Breastfed, 2016-2019



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, and after the baby is born, the baby goes through withdrawal because it is no longer receiving the substances. 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

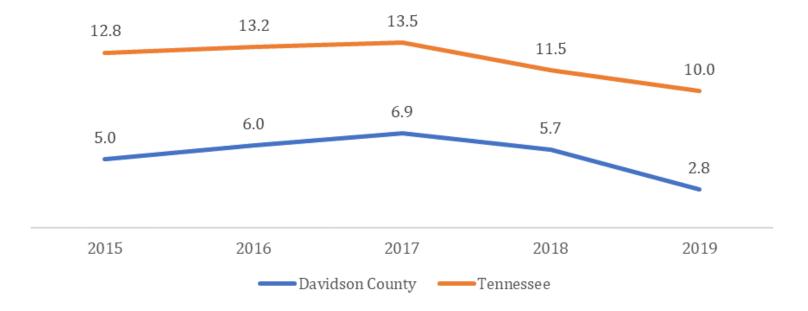
County

2.8/1,000 rate of NAS in 2019

State

10.0/1,000 rate of NAS in 2019

Number of Infants born with NAS per 1,000 Live Births, 2015-2019



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 to 17 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.

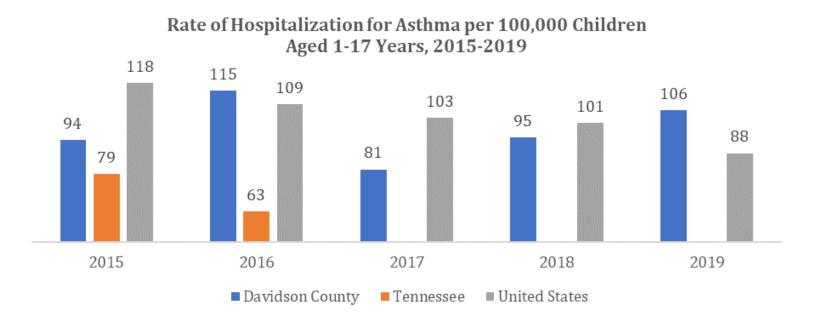
Retrieved from: https://www.cdc.gov/asthma/national-surveillance-data/healthcare-use.htm on 2/21/20

County

106.0/100,000 children hospitalized for asthma in 2019

National

88.0/100,000 children hospitalized for asthma in 2019



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



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/tables/8438/tabl

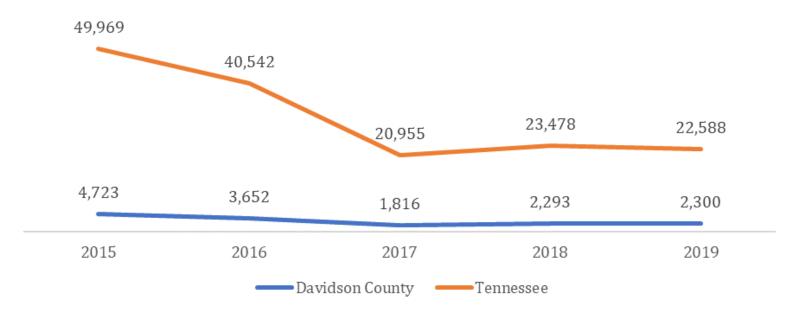
County

2,300 children enrolled in regulated childcare in 2019

State

 $22,\!588$ children enrolled in regulated childcare in 2019

Number of Children Enrolled in Regulated Child Care Agencies



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





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 deaths, 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 2019 (77 years) and was 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 are the two leading causes of death in Davidson County, together representing over 60% of all deaths in 2018, particularly among males and African American residents. (Indicators L7 – L9)
- In Davidson County, deaths due to accidental injury increased from 57.1 per 100,000 residents in 2015 to 83.1 per 100,000 in 2019. (Indicator L10)
- Hospitalizations for diabetes among adults increased between 2015 and 2019 for all age groups. Rates among Non-Hispanic Blacks were 2.9 times higher than among Non-Hispanic Whites in 2015 (529 vs. 183 per 100,000). The disparity remained through 2019. (Indicator L6)
- Between 2015 and 2019 the death rate due to unintentional poisoning more than doubled from 20.4 to 45.4 per 100,000.

 (Indicator L13)
- 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



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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 in 2017-2019

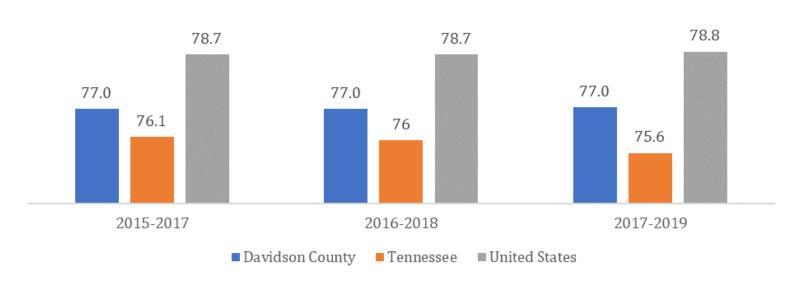
State

76.0 years overall in 2017-2019

National

78.7 years overall in 2017-2019

Life Expectancy at Birth, 2015-2019



¹County 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. 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

77.7 years for Whites, 74.0 years for Blacks, 88.6 years for Hispanics in 2017-2019

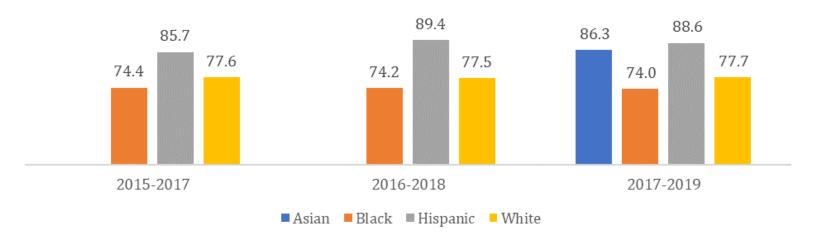
State

76.1 years for Whites, 73.6 years for Blacks, 91.0 years for Hispanics in 2017-2019

National

78.8 years for Whites, 74.8 years for Blacks, 81.9 years for Hispanics in 2017-2019

Life Expectancy at Birth (in Years) by Race/Ethnicity, Davidson County, 2015-2019



¹County 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



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

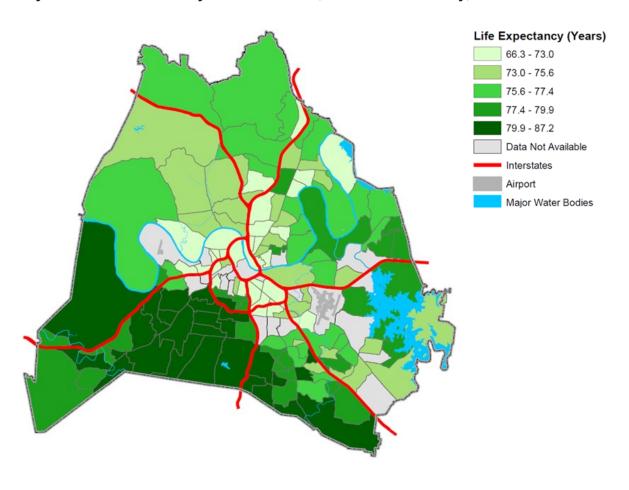
This indicator shows the five-year average life expectancy at birth by census tract. Life expectancy measures the average number of years from birth a person can expect to live, according to the current mortality experience (age-specific death rates) of the population.

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: <u>www.healthynashville.org</u>

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 per 1,000 Medicare enrollees.

Data Source

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

County

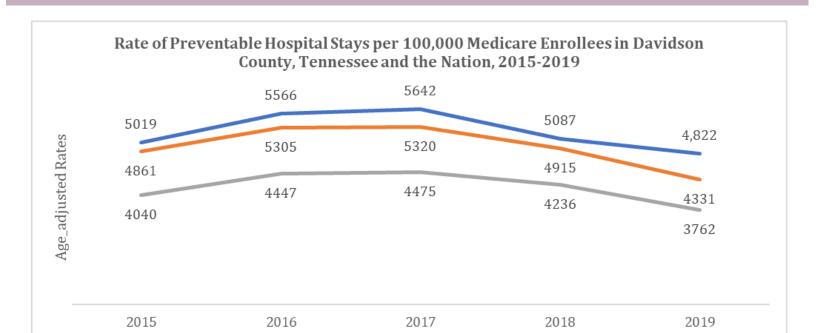
4,822/100,000 Medicare enrollees in 2019

State

4,331/100,000 Medicare enrollees in 2019

National

3,762/100,000 Medicare enrollees in 2019



Hospitalizations were defined using 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



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

40/100,000 Hospitalizations in 2019

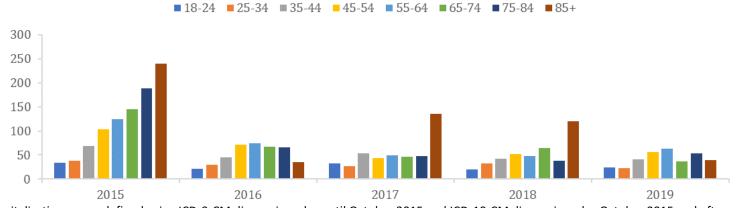
National

41/100,000 Hospitalizations in 2019

Crude Rate of Asthma Hospitalizations per 100,000 Population 18 Years & Older, 2015-2019



Hospitalizations for Asthma per 100,000 Adults 18 Years and Older by Age Group, Davidson County 2015-2019*



^{*} 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.

1

L6 Adult Hospitalization for Diabetes



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.

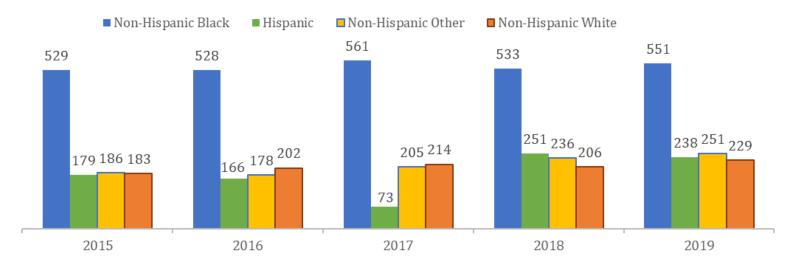
Data Description

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.)

Age-adjusted hospitalization rates for diabetes per 100,000 adults 18 years and older by Race/Ethnicity, Davidson County, 2015-2019



^{*} 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 in Davidson County based on age-adjusted mortality rates (per 100,000 population.)

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020 on CDC WONDER Online Database, released in April, 2021. Retrieved from: http://wonder.cdc.gov/ucd-icd10.html

Age-Adjusted Mortality Rates per 100,000 Population of 15 Leading Causes of Death, Davidson County, 2015-2019

n:	2015		2016		2017		2018		2019	
Disease	N	Rate								
Heart Disease	1199	192	1180	184.6	1221	187.8	1187	180.7	1152	172.2
Cancer	1142	175.8	1108	171.1	1091	160.3	1078	155.7	1047	151.2
Accidents	380	57.1	468	68.6	493	71.4	492	70.8	579	83.1
Chronic lower respiratory disease	308	50	313	49.7	295	45.1	296	44.9	276	41.6
Stroke	304	50	293	47.8	285	44.6	283	43.7	264	40.2
Alzheimer's Disease	239	39.8	302	51.1	331	54.3	325	52.4	284	46.2
Diabetes	149	23.5	176	27.1	155	23	168	24.8	158	22.9
Influenza and pneumonia	96	16.1	91	14.8	98	15.3	95	14.4	80	12.4
Suicide	92	13.1	110	15.5	92	12.8	93	13.4	90	12.5
Chronic liver disease/ cirrhosis	72	10.6	83	11.7	78	10.7	78	10.6	91	12.9
Nephritis, nephrotic syndrome and nephrosis	55	8.9	74	11.4	65	10	61	9.4	78	11.4
Septicemia	55	8.8	61	9.5	68	10.6	53	7.8	56	8.4
Essential hypertension and hypertensive renal disease	70	11	51	8.6	61	9.6	68	10.2	72	10.7
Homicide	72	10.2	83	11.4	105	15.5	92	13.1	75	10.9
Parkinson disease	42	7.5	46	7.9	50	8.3	63	10.5	55	8.8

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 (Infants) 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 with Corresponding Age-Adjusted Mortality Rates per 100,000 population by Race/Ethnicity, Davidson County, 2015-2019 Note: grey cells indicate not a leading cause of death for that year						
	NH White	NH Black	Hispanic			
Disease	Rate		Rate			
Heart Disease	176.8	223.4	94			
Cancer	159.5	190.9	89.4			
Accidents	79.1	58.2	36.6			
Chronic Lower Respiratory Disease	52.7	30.9				
Alzheimer's Disease	51.1	44.5				
Stroke	41.6	57	36.5			
Diabetes	20	43.2				
Suicide	17	7.6	6.9			
Influenza and Pneumonia	14.7	13.9				
Chronic Liver Disease & Cirrhosis	14.1	5.9				
Parkinson Disease	9.6					
Nephritis, Nephrotic Syndrome & Nephrosis	8.2	17.8				
Septicemia	8.4	11.8				
Essential Hypertension & Hypertensive Renal Disease	6.9	21.1				
Pneumonitis Due to Solids & Liquids	5.5					
Human Immunodeficiency Virus (HIV) Disease						
Certain Conditions Originating in the Perinatal Period		9.5	3.3			
Homicide		28.8	10.2			
Congenital Malformations, Deformations and Chromosomal Abnormalities			3.2			

Lo 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 (Infants) Cause Lists.

Data Source

Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2020, CDC WONDER Online Database, released April 2021.

Retrieved from: http://wonder.cdc.gov/ucd-icd10.html

Age-Adjusted Mortality Rates per 100,000 population of 15 Leading Causes of Death by Gender, Davidson County, 2015-2019

Note: grey cells indicate not a leading cause of death for that year						
Disease	Fer	Male				
Disease	N	Rate	N	Rate		
Heart Disease	2721	139.8	3218	242.8		
Cancer	2628	137.8	2838	199.2		
Alzheimer's Disease	1023	51.3	458	43.4		
Accidents	923	49.6	1489	93.5		
Stroke	841	43.8	588	45.6		
Chronic Lower Respiratory Disease	823	43.1	665	50.7		
Diabetes	367	19.3	439	30.7		
Influenza & Pneumonia	244	12.8	216	17		
Septicemia	165	8.8	128	9.2		
Nephritis, Nephrotic Syndrome & Nephrosis	170	8.7	163	12.4		
Essential Hypertension & Hypertensive Renal Disease	172	9	150	11		
Suicide	129	7	348	21.1		
Chronic Liver Disease & Cirrhosis	137	7.4	265	15.8		
Parkinson Disease	91	4.9	165	14.8		
Certain Conditions Originating in the Perinatal Period	82	4.6				
Homicide			356	20.7		

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 1999-2020 on CDC WONDER Online Database, released April, 2021.

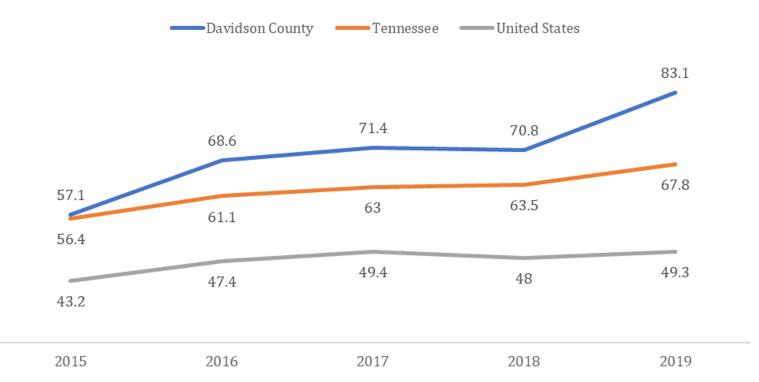
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County 83.1/100,000 death rate in 2019 National 49.3/100,000 death rate in 2019

State 67.8/100,000 death rate in 2019 Benchmark

43.2/100,000 2030 target

Age-Adjusted Death Rate per 100,000 Population, Due to Unintentional Injury 2015-2019



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. 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 1999-2020 on CDC WONDER Online Database, released April, 2021.

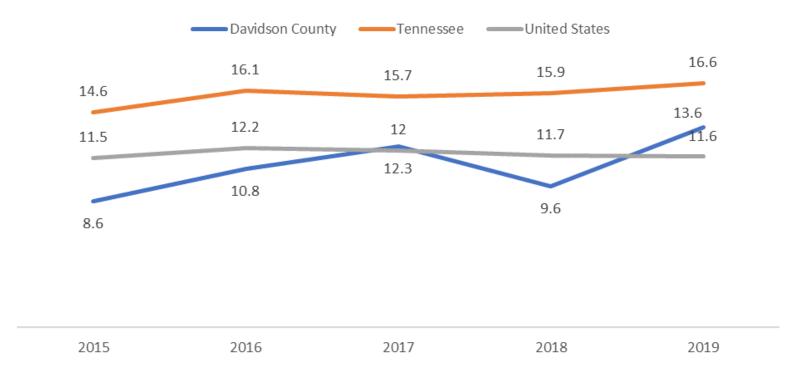
Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County 13.6/100,000 death rate in 2019 National 11.6/100,000 death rate in 2019

State

16.6/100,000 death rate in 2019

Age-Adjusted Death Rate per 100,000 Population Due to Motor Vehicle Crashes, 2015-2019



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

4.61/100,000 fatality rate in 2019

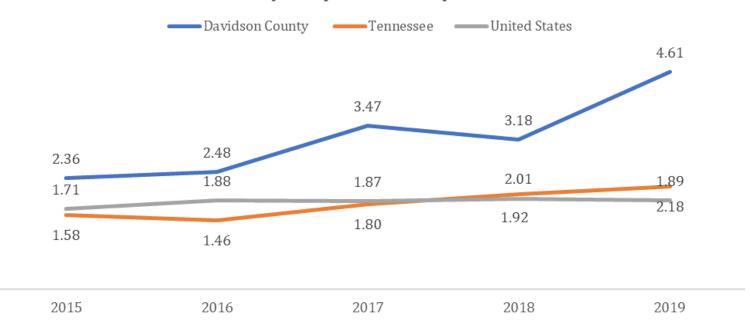
National

1.89/100,000 fatality rate in 2019

State

2.18/100,000 fatality rate in 2019

Pedestrian Fatality Rate per 100,000 Population, 2015-2019



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. 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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

45.4/100,000 death rate in 2019

National

20.2/100,000 death rate in 2019

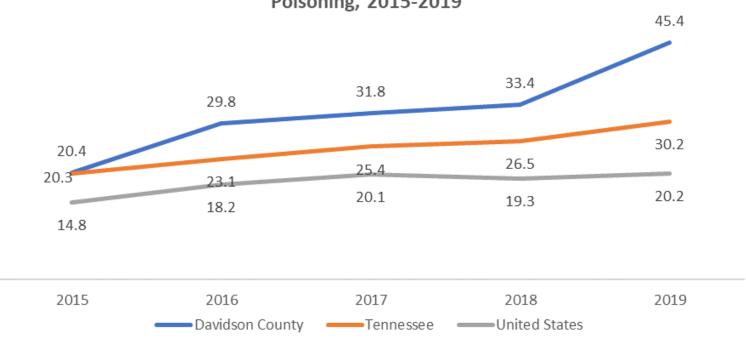
State

30.2/100,000 death rate in 2019

Benchmark

20.7/100,000 2030 Target (drug overdose)

Age-Adjusted Death Rate per 100,000 Population Due to Unintentional Poisoning, 2015-2019



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



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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

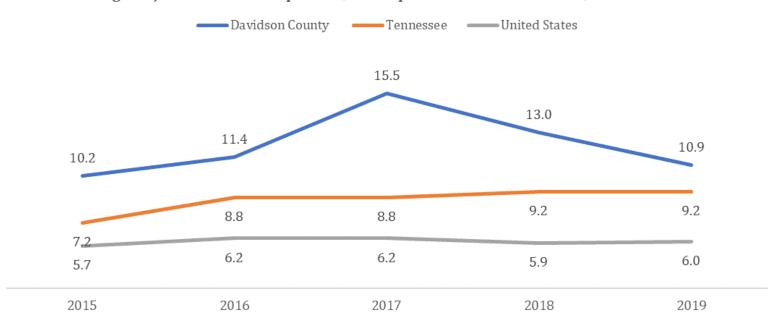
County 10.9/100,000 death rate in 2019 National

State

9.2/100,000 death rate in 2019

6.0/100,000 death rate in 2019

Age-Adjusted Death Rate per 100,000 Population Due to Homicide, 2015-2019



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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

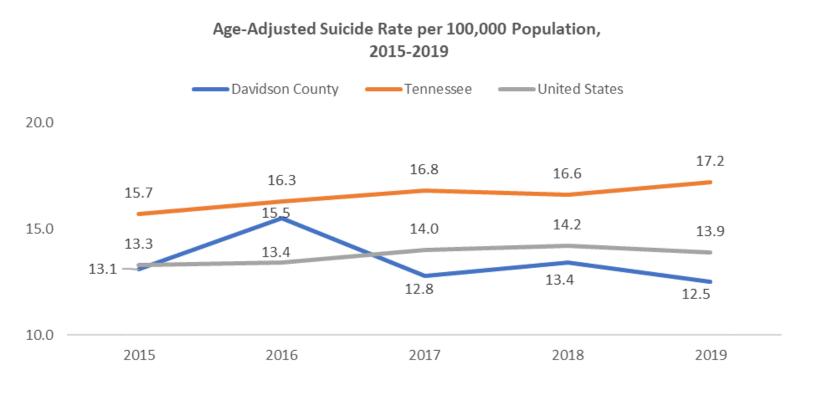
County 12.5/100,000 death rate in 2019 National 13.9/100,000 death rate in 2019

State

17.2/100,000 death rate in 2019

Benchmark

12.8/100,000 Healthy People 2030 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



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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County 40.2/100,000 death rate in 2019 National 37.0/100,000 death rate in 2019

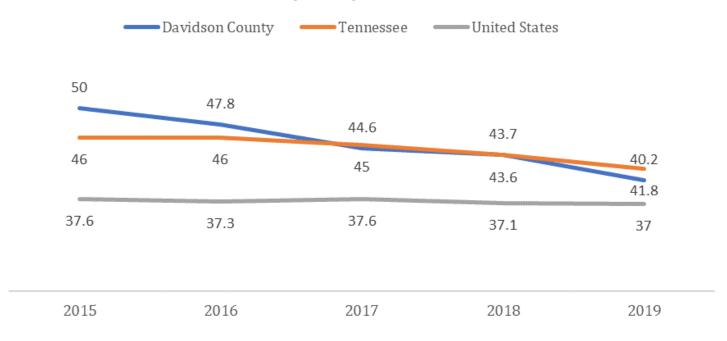
State

41.8/100,000 death rate in 2019

Benchmark

33.4/100,000 2030 Target

Age-Adjusted Death Rate per 100,000 Population due to Cerebrovascular Disease (Stroke), 2015-2019



L₁₇ Heart Disease Death Rate



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 and stroke 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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

172.2/100,000 death rate in 2019

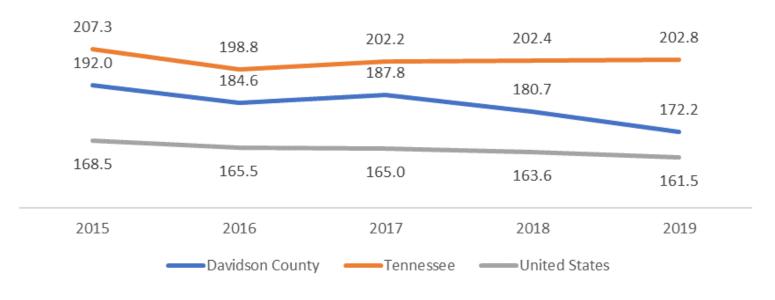
National

161.5/100,000 death rate in 2019

State

202.8/100,000 death rate in 2019

Age Adjusted Death Rate per 100,000 Population due to Heart Disease, 2015-2019



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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

41.6/100,000 death rate in 2019

National

38.2/100,000 death rate in 2019

State

53.2/100,000 death rate in 2019

Age-Adjusted Death Rate due to Chronic Lower Respiratory Disease, 2015-2019

	——Davidson County	Tennessee	——United States	
54.9	54.7	57.4	55.9	53.2
50	49.7			00.2
		45.1	44.9	41.6
				41.0
41.6	40.6	40.9	39.7	38.2
2015	2016	2017	2018	2019

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

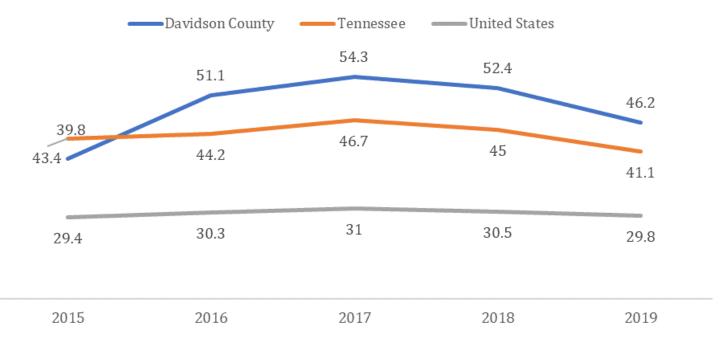
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released April 2021. Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County 46.2/100,000 death rate in 2019 National 29.8/100,000 death rate in 2019

State

41.1/100,000 death rate in 2019

Age-Adjusted Death Rate due to Alzheimer's Disease, 2015-2019



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 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) have diabetes. The prevalence of diagnosed type 2 diabetes increased six-fold in the latter half of the last century. 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

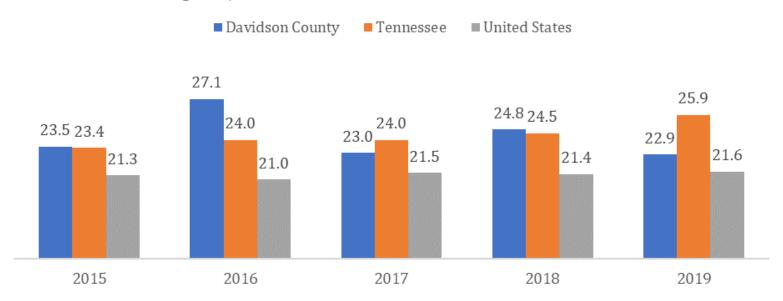
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County $22.9/100,000 \, \text{death rate in 2019}$ National $21.6/100,000 \, \text{death rate in 2019}$

State 25.5/100,000 death rate in 2019

Age-Adjusted Death Rate due to Diabetes, 2015-2019



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

L21 Cancer Death Rate



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

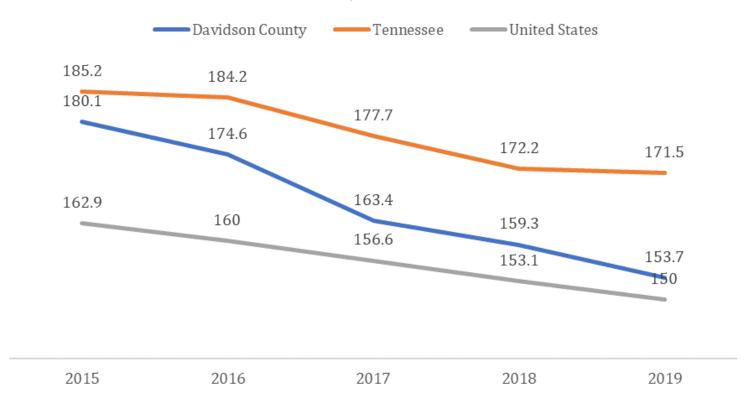
Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County $153.7/100,000 \, \text{death rate in 2019}$ National $150.0/100,000 \, \text{death rate in 2019}$

State 171.5/100,000 death rate in 2019 Benchmark 122.7/100,000 Healthy People 2030 Target

Age-Adjusted Death Rate per 100,000 Population for All Types of Cancer, 2015-2019



L22 Cervical Cancer Death Rate



Cervical cancer used to be 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

National Cancer Institute. State Caner Profiles 2020 Release. Retrieved from: https://statecancerprofiles.cancer.gov/ index.html

County

2.5/100,000 death rate in 2014-2018

National

2.2/100,000 death rate in 2014-2018

State

2.8/100,000 death rate in 2014-2018

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

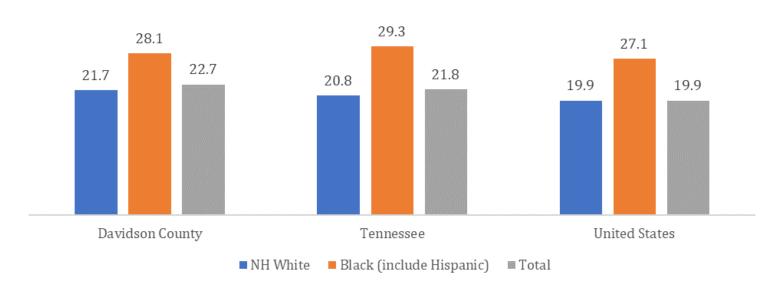
National Cancer Institute. State Caner Profiles 2020 Release. Retrieved from: https://statecancerprofiles.cancer.gov/ index.html

County 22.7/100,000 rate in 2015-2019 National 19.9/100,000 rate in 2015-2019

State
21.8/100,000 rate in 2015-2019

Benchmark
15.3/100,000 Healthy People 2030 Target

Annual Age-Adjusted Death Rate per 100,000 Population for Breast Cancer by Race/Ethnicity, 2015-2019



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

L24 Prostate Cancer Death Rate



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.)

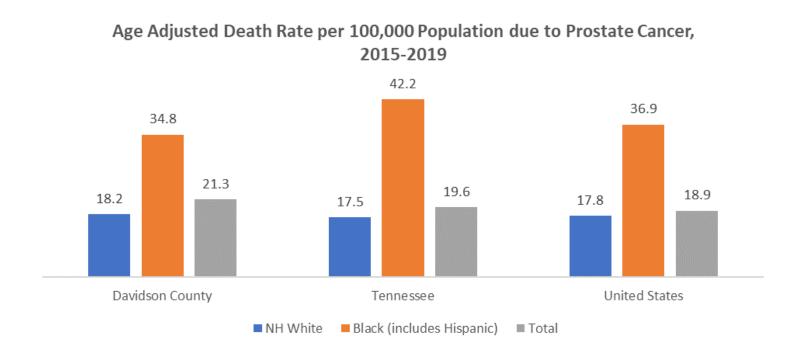
Data Source

National Cancer Institute. State Caner Profiles 2020 Release. Retrieved from: https://statecancerprofiles.cancer.gov/ index.html

County 21.3/100,000 death rate in 2019 National 18.9/100,000 death rate in 2019

State
19.6/100,000 death rate in 2019

Benchmark
16.9/100,000 Healthy People 2030 Target



L25 Death Rate for Cancer of Trachea, Bronchus and Lung



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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/ datarequest/D76

County 34.1/100,000 death rate in 2019

National

33.6/100,000 death rate in 2019

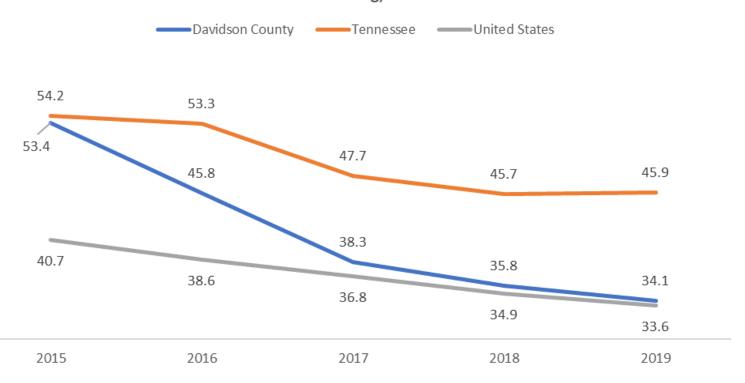
State

45.9/100,000 death rate in 2019

Benchmark

 $25.1/100,\!000~\text{Healthy People 2030 Target}$

Age-Adjusted Death Rate per 100,000 Population due to Cancer of Trachea, Bronchus and Lung, 2015-2019



L₂₆ Death Rate for Cancer of Colon, Rectum and Anus



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.

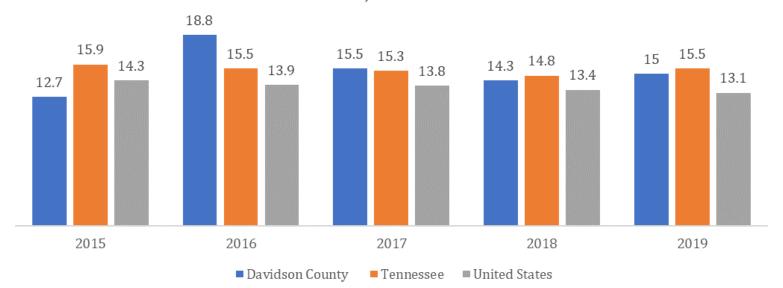
Data Source

National Cancer Institute. State Caner Profiles 2020 Release. Retrieved from: https://statecancerprofiles.cancer.gov/ index.html

County 15.0/100,000 death rate in 2019 National 13.1/100,000 death rate in 2019

State 15.5/100,000 death rate in 2019 Benchmark 8.9/100,000 Healthy People 2030 Target

Age-Adjusted Death Rate per 100,000 Populaiton for Cancer of Colon, Rectum, and Anus, 2015-2019



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 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 1999-2019 on CDC WONDER Online Database, released April 2021.

Retrieved from: https://wonder.cdc.gov/controller/datarequest/D76

County

12.4/100,000 death rate in 2019

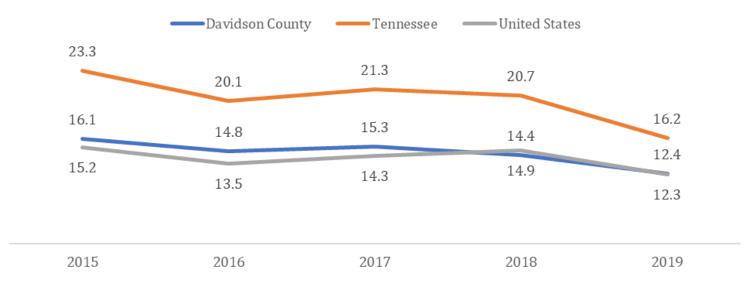
National

12.3/100,000 death rate in 2019

State

16.2/100,000 death rate in 2019

Age-Adjusted Death Rate per 100,000 Population due to Influenza and Pneumonia, 2015-2019



L₂₈ HIV/AIDS Death Rate



HIV/AIDS is a significant cause of illness, disability, and death. Today, more people than ever before are living with HIV/AIDS and are living longer because of better treatments. Also, more people become

infected with HIV than die from the disease each year. 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 most 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

National

1.5/100,000 death rate in 2018

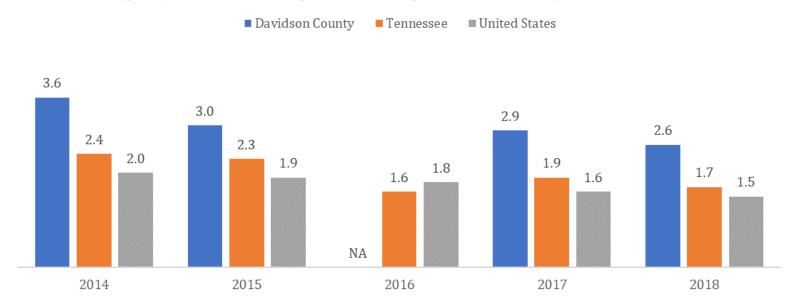
State

1.7/100,000 death rate in 2018

Benchmark

3.3/100,000 Healthy People 2020 Target

Age-Adjusted Death Rate per 100,000 Population due to HIV/AIDS, 2014-2018



Infectious Diseases





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 declined from 14.4 per 100,000 population in 2015 to 9.6 per 100,000 population in 2016, and then rose to 16.3 per 100,000 population in 2019, mirroring the State trend. (Indicator I1)
- Incidence of enteric diseases rose from 19.0 per 100,000 residents in 2015 to 39.0 per 100,000 residents in 2019. (indicator I2)
- Newly reported Chlamydia cases in the county increased steadily each year from 2012 through 2019 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 2019, with greater increases occurring among males than females, and an overall sharp increase of syphilis from 2017. (Indicators I4-I5)
- Newly reported HIV cases (incidence) in the county declined from 24.4 per 100,000 in 2015 to 19.4 per 100,000 in 2017 with an uptick between 2018 and 2019. Rates among Black or African American residents were twice those among Non-Hispanic White and Hispanic residents. (Indicator I7)
- Between 2017 and 2019, the burden of Tuberculosis (TB) was highest among county residents of Asian origin, followed by those of Hispanic ethnicity. (Indicator I8)

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/

²Dong 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

Infectious Diseases



I1 Notifiable Disease Incidence	162
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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 and/or pathogens of high importance. Many of these illnesses demonstrate a variety of community impacts and challenges to their control. 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)

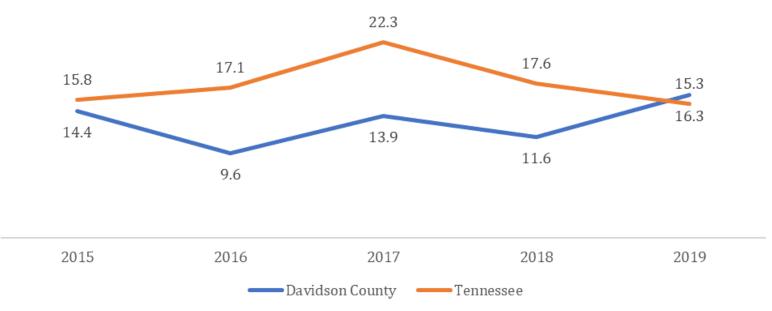
County

16.3/100,000 incidence in 2019

State

15.3/100,000 incidence in 2019

Notifiable Disease Rate per 100,000 Population, 2015-2019



12 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 0157:H7, can even lead to kidney failure and death if untreated. Others can be long duration, very uncomfortable illnesses that necessitate doctors' visits and may 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)

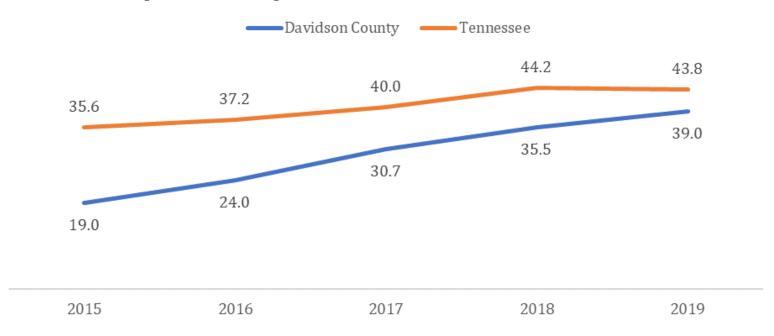
County

39.0/100,000 incidence in 2019

State

43.8/100,000 incidence in 2019

Rate per 100,000 Population for Select Enteric Diseases, 2015-2019



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

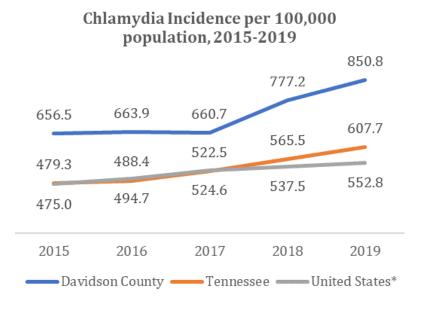
850.8/100,000 incidence in 2019

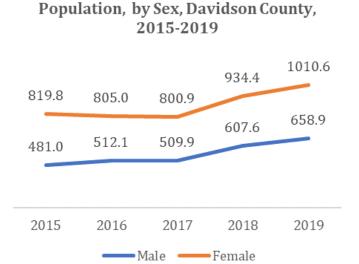
State

607.7/100,000 incidence in 2019

National

552.9/100,000 incidence in 2019





Chlamydia Incidence per 100,000

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

338.5/100,000 incidence in 2019

State

237.0/100,000 incidence in 2019

National

188.4/100,000 incidence in 2019

Gonorrhea Incidence per 100,000 Population, 2015-2019



Gonorrhea Incidence per 100,000 Population, by Sex, Davidson County, 2015-2019



Is 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 heterosexual men and women. Syphilis may also make it easier to acquire an HIV infection. 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 per 100,000 population.

Data Source

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

County

71.3/100,000 incidence in 2019

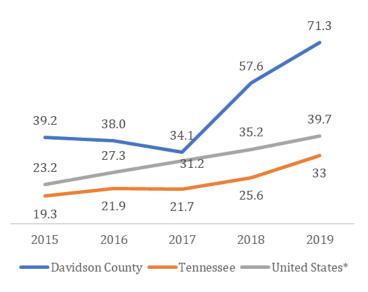
State

33.0/100,000 incidence in 2019

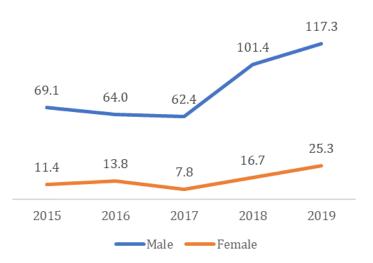
National

39.7/100,000 incidence in 2019

Syphilis Incidence per 100,000 population, 2015-2019



Syphilis Incidence per 100,000 population, by Sex, Davidson County, 2015-2019



16 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 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

546.6/100,000 prevalence in 2019

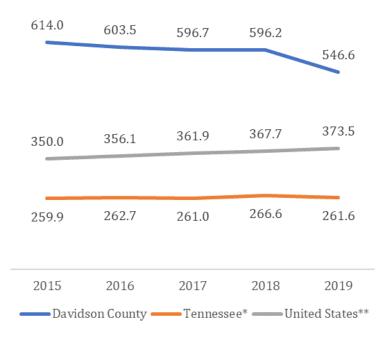
National

373.5/100,000 prevalence in 2019

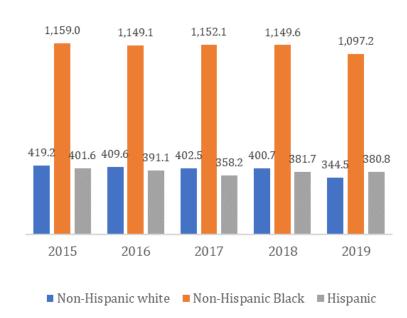
State

261.6/100,000 prevalence in 2019

HIV Prevalence per 100,000 Population, 2015-2019



HIV Prevalence per 100,000 Population, by Race, Davidson County, 2015-2019



17 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 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

22.5/100,000 incidence in 2019

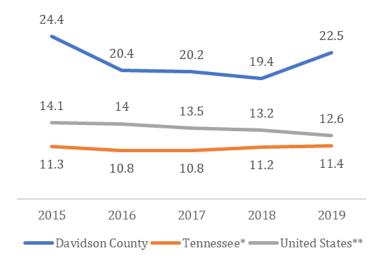
National

12.6/100,000 incidence in 2019

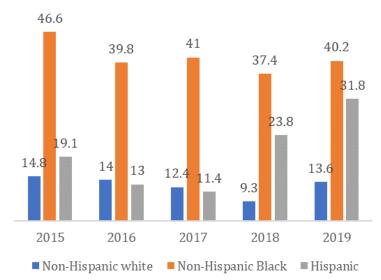
State

11.4/100,000 incidence in 2019

HIV Incidence per 100,000 Population, 2015-2019



HIV Incidence per 100,000 Population, by Race, Davidson County, 2015-2019



Is 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, 2019. Retrieved From: https://www.cdc.gov/tb/statistics/reports/2017/table1.htm

Tennessee Department of Health. TB Elimination Program. Retrieved from: https://www.tn.gov/health/cedep/tuberculosis-elimination/tb-data-and-statistics.html

County

4.3/100,000 incidence in 2019

National

2.7/100,000 incidence in 2019

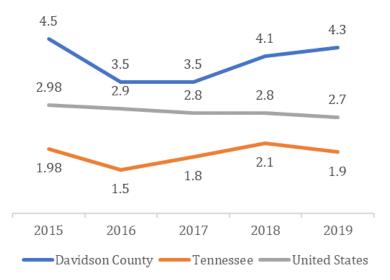
State

1.9/100,000 incidence in 2019

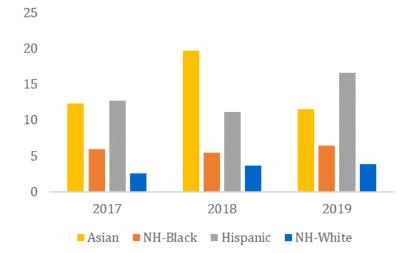
Benchmark

1.0/100,000 2020 target

Tuberculosis Incidence Rate per 100,000 Population, 2015-2019



Tuberculosis Incidence per 100,000 Population, by Race, Davidson County, 2015-2019



19 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 or no symptoms to a serious condition requiring hospitalization. Some people who get

infected 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

5.8/100,000 incidence in 2019

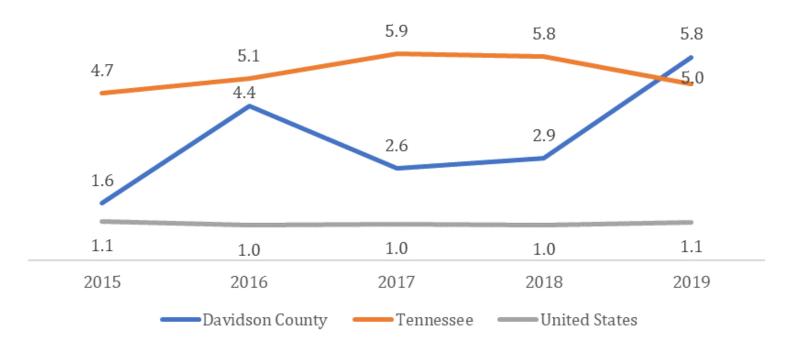
Nation

1.1/100,000 incidence in 2019

State

5.0/100,000 incidence in 2019

Hepatitis B Incidence per 100,000 Population, 2015-2019



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 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

3.5/100,000 incidence in 2019

Nation

1.2/100,000 incidence in 2019

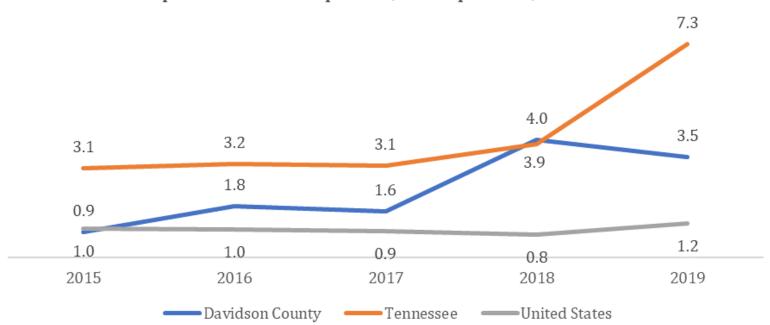
State

7.3/100,000 incidence in 2019

Benchmark

0.25/100,000 2020 target

Hepatitis C Incidence per 100,000 Population, 2015-2019



Conclusion

2021
Community Health
Profile
Metro Public Health Department

This report aims to provide an updated overview of Metro Nashville-Davidson County's health. We bring together empirical data from multiple sources, most of which are available to the public and can be further explored by readers. The report makes current health indicators available to those who are discussing how to target and prevent poor health outcomes and provides some insight into prioritization of actions 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 community's overall health, many others that impact health 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.

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