

COUNTY HEALTH PROFILES METHODS APPENDIX

Read this document for additional information about the methods, measures, and data sources used in our [2018 County Health Profiles](#) for each of Tennessee's 95 counties.

NOTES ABOUT OUR METHODOLOGY

Rankings

- For "Quick Facts," a rank of 1 indicates highest value. For all other measures, a rank of 1 is best and 95 worst. For example, the county with the highest diabetes rate ranks 95th. Due to data availability, only 72 counties are ranked for overdose deaths and 87 counties for mental health providers.
- When counties have the same value, they share the same ranking, which affects subsequent rankings. For example, 100% of individuals in 20 counties live in a rural area. All 20 counties are ranked as 1, and the county with the next highest rural concentration (99.9%) is ranked 21.

Measure Selection Criteria

- In order to be included, all measures had to be available at the county level.
- For each driver of health, we selected measures that are supported by the literature and have been used in analyses to assess the health care system, access to care, social and economic environments, physical environments, and health outcomes.

Timeliness of Data

- While the most recent available county-level data are used for each metric, the year of the most recent data varies by each source.
- To provide context for the county-level data, the state- and national-level data shown represent the same year(s) as the county data. In some cases, the comparable state- and national-level data may not represent the most recent available data. For example, many of the economic measures use 5-year estimates that represent an average over 2012-2016. These are the most recent estimates available across all counties; however, 1-year estimates that represent 2016 are available at the state and national levels but are not shown here because they would not be comparable to the county-level data.

ABOUT EACH MEASURE

Quick Facts

2017 Population: total estimated population on July 1, 2017

Data Source: U.S. Census Bureau's Annual Estimates of the Resident Population (1)

Years of Data: 2017

Age <18: percent of total mid-year population estimate under the age of 18

Data Source: U.S. Census Bureau's Annual Estimates of the Resident Population (1)

Years of Data: 2017

Age 65+: percent of total mid-year population estimate ages 65 and older

Data Source: U.S. Census Bureau's Annual Estimates of the Resident Population (1)

Years of Data: 2017

Median Age: median age of total mid-year population estimate

Data Source: U.S. Census Bureau's Annual Estimates of the Resident Population (1)

Years of Data: 2017

Percent Rural: percent of population living in a rural area

Data Source: U.S. Census Bureau's 2010 Census (2)

Years of Data: 2010

Notes: Based on the Census Bureau's definition, rural includes all populations not within Urbanized Areas of 50,000 people or more or Urbanized Clusters of at least 2,500 people and less than 50,000 people. (3)

County Health Outcomes

Overall Health Ranking: overall health outcomes ranking

Data Source: Robert Wood Johnson Foundation (RWJF) County Health Rankings (4)

Years of Data: 2018

Fair/Poor Health: percent of adults who rate their health as "fair" or "poor" (age-adjusted rate)

Data Source: U.S. Center for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) via the 2018 RWJF County Health Rankings (4)

Years of Data: 2016

Adult Diabetes: percent of adults ages 20+ who have ever been diagnosed with diabetes (age-adjusted rate)

Data Sources: County and state data are from CDC's U.S. Diabetes Surveillance System via the 2018 RWJF County Health Rankings (4). National data are from Table 40 of CDC's "Health, United States, 2016." (5)

Years of Data: 2014

Poor Mental Health Days: average number of days in the past 30 days adults reported "not good" mental health (age-adjusted)

Data Source: CDC's BRFSS via the RWJF's 2018 County Health Rankings (4)

Years of Data: 2016

Obese Adults: percent of adults that report a body mass index (BMI) of 30 or more (age-adjusted)

Data Source: CDC's U.S. Diabetes Surveillance System via the 2018 RWJF County Health Rankings (4)

Years of Data: 2014

Overweight/Obese Students: Percent of public school students that are overweight or obese

Data Source: Tennessee Coordinated School Health Program via the Kids Count Data Center (6)

Years of Data: 2017

Note: Comparable national rates are not available for the age-range represented by the county- and state- level data used here.

Low Birth Weight Babies: percent of live births in which the baby weighed less than 2,500 grams (or 5 pounds, 8 ounces)

Data Source: Tennessee Department of Health via the Kids Count Data Center (6)

Years of Data: 2016

The Drivers of Health

Research shows there are 4 broad factors (other than genetics) that influence our health. (7) (8) (9)

- The Social and Economic Environment
- Health Behavior
- Clinical Care
- The Physical Environment

We call these influencing factors the drivers of health. While the percentages may vary from study to study, research shows that some drivers have more influence on health than others. (8) Another term for the drivers of health is the social determinants of health.

Social & Economic Environment

Poverty Rate: percent of the population living in households with incomes below the poverty level

Data Source: U.S. Census Bureau's American Community Survey (10)

Years of Data: 2012-2016 5-year estimates

Educational Attainment (Associates Degree or More): percent of population ages 25+ with at least an associate's degree

Data Source: U.S. Census Bureau's American Community Survey (10)

Years of Data: 2012-2016 5-year estimates

Unemployment Rate: percent of population that does not have a job, are available for work, and have actively looked for a work in the prior 4 weeks (annual rate)

Data Source: U.S. Bureau of Labor Statistics' Local Area Unemployment (11)

Years of Data: 2017

Median Household Income: median income of all households

Data Source: U.S. Census Bureau's American Community Survey (10)

Years of Data: 2012-2016 5-year estimates

Crime Rate: number of crimes committed per 1,000 population

Data Source: Tennessee Bureau of Investigation's TIBRS Online Reports System (12)

Years of Data: 2017

Note: National rates are not available for 2017.

Health Behaviors

Drug Overdose Deaths: total drug overdose deaths per 100,000 population

Data Source: CDC WONDER Database (13)

Years of Data: 2012-2016 5-year average

Adult Smokers: percent of adults who currently smoke

Data Sources: State and county data are from CDC's BRFSS via RWJF's 2018 County Health Rankings (4). National data are directly from CDC's BRFSS. (14)

Years of Data: 2016

Physically Inactive Adults: percent of adults age 20+ reporting no leisure-time physical activity

Data Source: CDC's BRFSS via RWJF's 2018 County Health Rankings (4)

Years of Data: 2014

Excessive Drinking: percent of adults reporting binge or heavy drinking

Data Source: CDC's BRFSS via RWJF's 2018 County Health Rankings (4)

Years of Data: 2016

Notes: Binge drinking is defined as >4 drinks for women or >5 drinks for men on a single occasion in the past 30 days. Heavy drinking is defined as an average of >1 drink for women or >2 drinks for men per day.

Clinical Care

Uninsured Rate, Age <65: percent of population under 65 without health insurance

Data Source: U.S. Census Bureau's Small Area Health Insurance Estimates (15)

Years of Data: 2016

Notes: The U.S. Census Bureau combines American Community Survey, administrative records data, and 2010 Census data to produce single-year, county-level uninsured rates. (16)

Pregnant Women Receiving Adequate Prenatal Care: percent of live births in a given calendar year where the mother received adequate prenatal care

Data Source: Tennessee Department of Health via the Kids Count Data Center (6)

Years of Data: 2016

Note: The adequacy of care is based on the Kessner index, which was developed by the Institute of Medicine in 1973 to assess prenatal care. Comparable national data are unavailable for this measure.

Mental Health Providers: number of mental health providers per 100,000 population

Data Source: U.S. Centers for Medicare and Medicaid Services (CMS) via RWJF's 2018 County Health Rankings (4)

Years of Data: 2017

Notes: Mental health providers include psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers who treat alcohol and other drug abuse, and advanced practice nurses specializing in mental health care. The reported data were converted from the underlying data, which provided the ratio of the county population to mental health providers

Physical Environment

Air Quality: average annual ambient concentration of particulate matter measured in micrograms per cubic meter

Data Source: CDC's National Environmental Public Health Tracking Network (17)

Years of Data: 2014

Notes: The Tennessee data represent the 95-county average. A national average is unavailable. For context, however, the national air quality standard recommends a concentration of 12.0 micrograms per cubic meter or less.

Tennessee does not have air quality monitors in all 95 counties. As a result, the data reported for 79 counties are CDC's modeled estimates.

Percent with Severe Housing Problems: percent of occupied housing units with 1 or more of the following severe housing problems: is severely cost-burdened (i.e. spend 50% or more of monthly income on housing costs), housing lacks complete kitchen, housing lacks complete plumbing, and/or is severely overcrowded (i.e. more than 1.5 persons per room)

Data Source: U.S. Housing and Urban Development's (HUD) Comprehensive Housing Affordability Strategy data (18)

Years of Data: 2011-2015 5-year estimates

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