

# 2019 County Health Rankings Key Findings Report



# Introduction

By ranking the health of nearly every county in the nation, County Health Rankings & Roadmaps (CHR&R) illustrates how where we live affects how well and how long we live. CHR&R also shows what each of us can do to create healthier places to live, learn, work, and play – for everyone. This year highlights an important element that shapes how well and how long we live: secure, affordable housing.

## Summary of Key Findings

- Across the U.S., more than 1 in 10 households (11%) spend more than half of their income on housing costs (severe housing cost burden). Among those who own their home, housing cost burden has decreased in the past decade. At the same time, there has been no improvement in the rates among renters. Housing cost burden remains substantially higher among renters than owners, particularly for households with low incomes.
- Severe housing cost burden affects health and is linked to barriers to living long and well. Across counties, increases in the share of households severely cost burdened are associated with more food insecurity, more child poverty, and more people in fair or poor health.
- More segregated counties have higher rates of severe cost burden, for both White and Black households. However, Black residents face greater barriers to opportunity and health than White residents. Nearly 1 in 4 Black households spend more than half of their income on housing.
- Owning a home can, over time, help build savings for education or for other opportunities important to health and future family wealth. In large urban and smaller metro counties, the vast majority of households headed by Whites own their home, while more than half of households headed by Blacks are renters, rather than homeowners. In the past decade, trends in homeownership rates have changed little on average, though gaps among racial/ethnic groups are widening.



## A Call to Action

This report is a call to action for leaders, residents, and community changemakers to take these national findings, dig into local data to better understand the health of your own community, and implement strategies to create communities where everyone has a fair and just chance to lead the healthiest life possible. Throughout the report you will find references to specific local data resources, evidence-informed strategies, and examples of other communities that are working to close gaps in opportunity. Supporting materials (such as data tables) are available at [countyhealthrankings.org/reports](http://countyhealthrankings.org/reports).



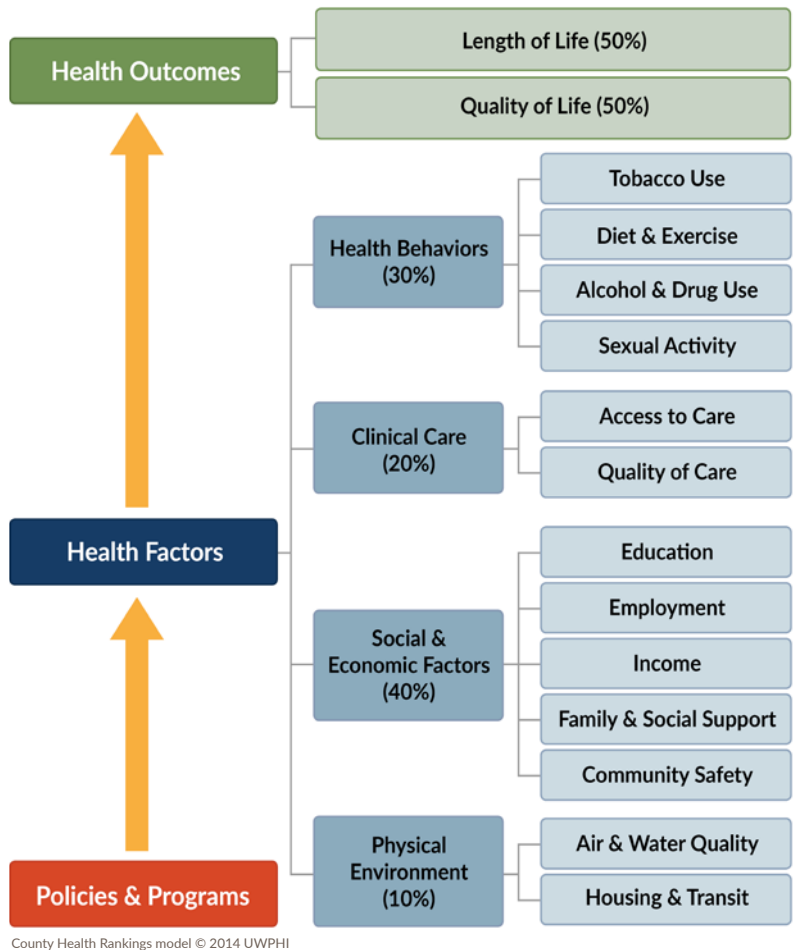
# Our Homes, Our Communities, Our Health

The County Health Rankings show that meaningful gaps persist in health outcomes among counties across the U.S. in large part because of differences in opportunities for health. As the Rankings model to the right illustrates, health outcomes are shaped by a range of factors that are heavily influenced by where we live – including health behaviors, clinical care, physical environment, and social and environmental factors. This year we focus on one such factor: our homes.

Our homes, and those of our neighbors, play a critical role in shaping our health and the health of the whole community. When our homes are near quality schools and good jobs, it's easier to get a quality education and earn living wages. When people live near grocery stores where nutritious food is available and affordable, eating healthy is easier. Green spaces and parks encourage active lifestyles. By contrast, inside our homes things like lead, mold, smoke, and other toxins can make us sick. And when too much of a paycheck goes toward the rent or mortgage, it makes it hard to afford the doctor, cover utility bills, or maintain reliable transportation to work or school. Owning a home can help build savings, providing stability and wealth over time.

Our collective health and well-being depend on building opportunity for everyone. Yet, across and within counties there are stark differences in the opportunities to live in safe, affordable homes, especially for people with low incomes and people of color. These differences emerge from discrimination and institutional racism in the form of long-standing, deep-rooted and unfair systems, policies, and practices such as redlining, restrictive zoning rules, and predatory bank lending practices that reinforce residential segregation and barriers to opportunity. As a result, we consistently see worse health outcomes for people with low incomes and people of color. We cannot thrive as a nation when the factors that contribute to good health are available to some, but denied to others.

County Health Rankings Model



This report explores the intersection of place and health and focuses on how our homes contribute to other factors that matter for good health. In the following pages you will find discussion of:

- Housing affordability across the nation.
- Housing cost burden and community conditions.
- Insecure housing and homelessness.
- Health and housing in counties of long-standing segregation.

# A Closer Look at Housing Affordability

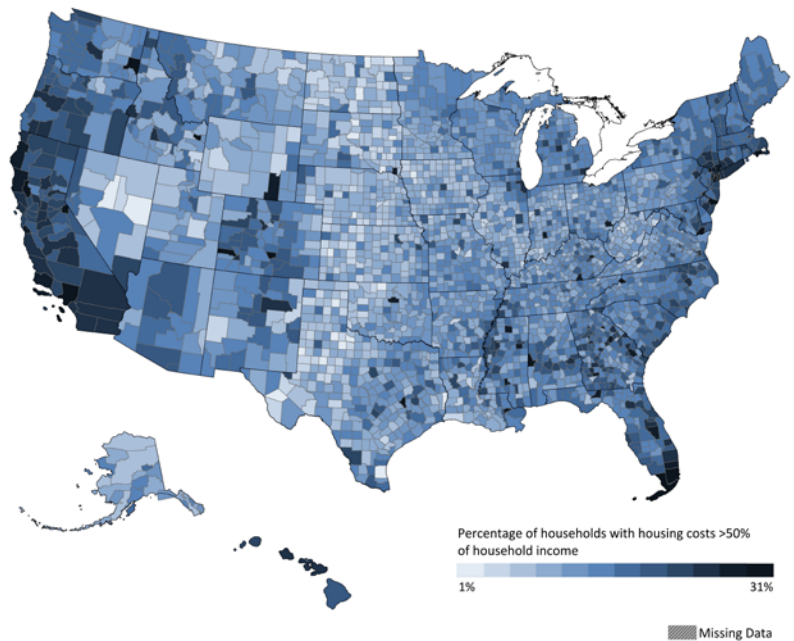
There is a strong and growing evidence base linking our homes to our health. As housing costs have outpaced local incomes, particularly for low-wage workers, families not only struggle to find and stay in safe, secure homes, but also face difficult trade-offs in meeting other basic needs. General guidance suggests that housing costs should not exceed 30% of monthly household income. When too much of a paycheck goes to paying the rent or mortgage, this housing cost burden can force people to choose among paying for other essentials such as utilities, food, transportation, or medical care. And as housing costs rise, so does the chance of becoming homeless, especially for families with low incomes and household budgets that are already strained.

## Key Findings

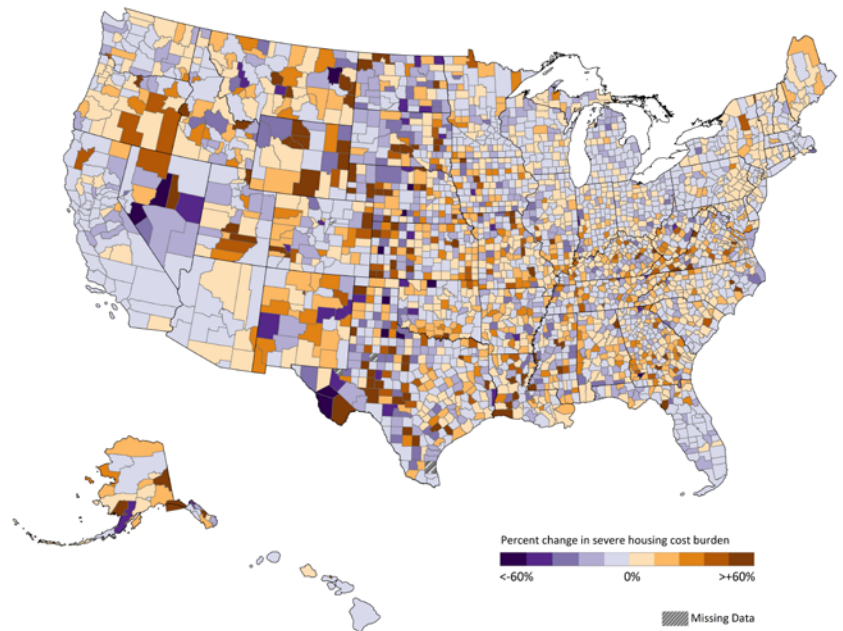
- Across the U.S., more than 1 in 10 households (11%) experience severe housing cost burden (paying more than 50% of household income on housing). The rate of severe housing cost burden among counties ranges from 1% to 31% of households.
- On average, severe housing cost burden is highest in large urban metro counties and lowest in rural counties.<sup>1</sup>
- Since 2006-2010, when a real estate crisis affected more than half of U.S. states, severe housing cost burden has decreased in large urban metro counties. However, half of all rural counties experienced an increase in severe housing cost burden since the housing crisis of 2006-2010.

<sup>1</sup> See Technical Notes on page 13 for definition of county level of urbanization.

Severe Housing Cost Burden Among U.S. Counties, 2011-2015



A Decade of Change in Severe Housing Cost Burden\*



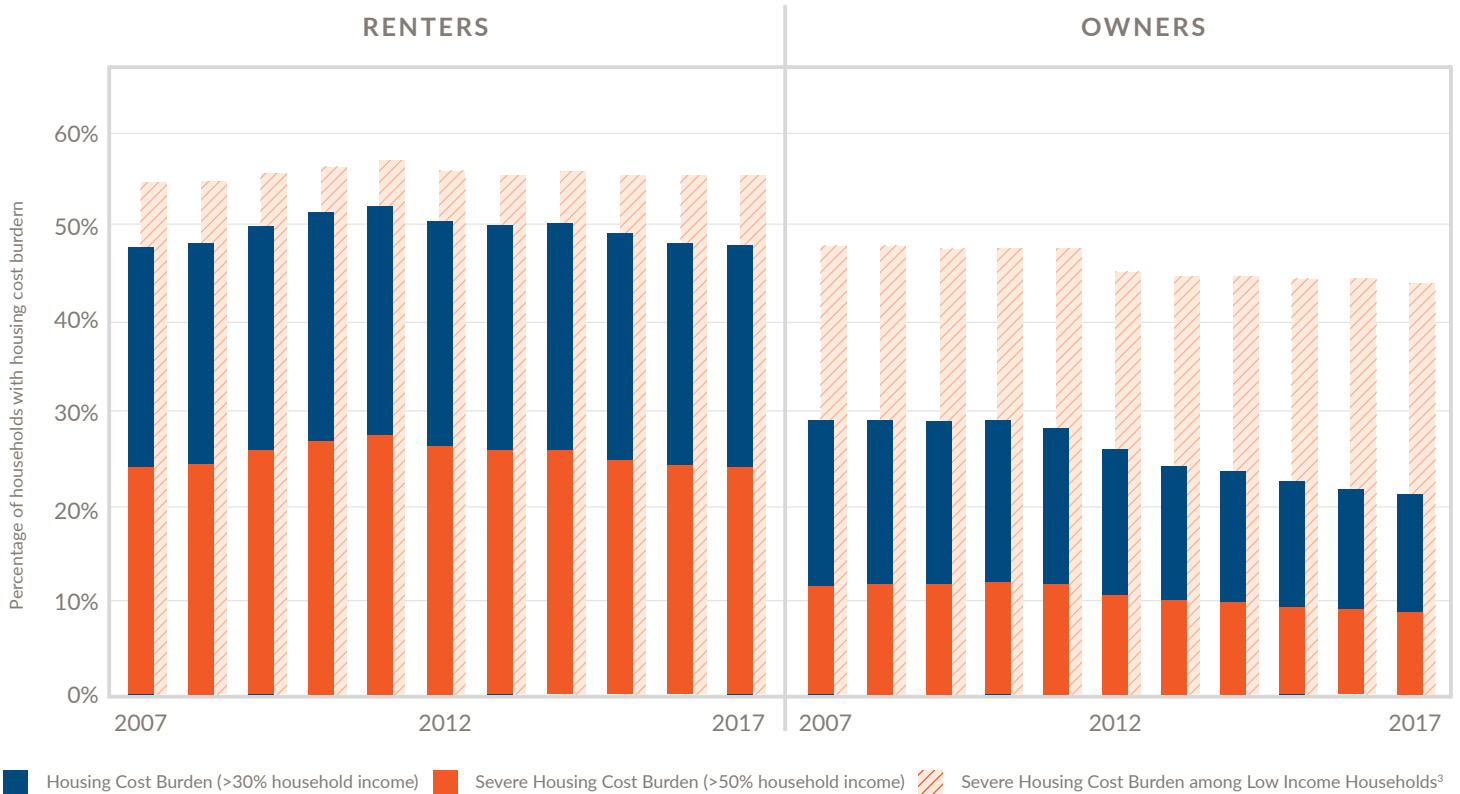
\*2006-2010 to 2011-2015

Data source: Comprehensive Housing Affordability Strategy (CHAS)

Housing Cost Burden is measured as the percentage of households that spend more than 30% of their income on housing costs.

Severe Housing Cost Burden is the percentage of households that spend more than 50% of their income on housing costs. To learn more about our measure of Severe Housing Cost Burden, visit [countyhealthrankings.org/housingburden](http://countyhealthrankings.org/housingburden) and find your county's data in the Additional Measures section of your county snapshot.

## Trends in Housing Cost Burden Among Renters and Owners Nationwide



Data source: Public Use Microdata Sample (PUMS)

Recent data show that of the approximately 120 million U.S. households,<sup>2</sup> most own a home (64% or 76.2 million), while fewer households rent (36% or 42.8 million). On average, household incomes for renters are lower than for owners, and renters tend to have very little savings and wealth. With less income to draw on, renters are disproportionately burdened by housing costs compared to homeowners. The graphic above shows the share of all households that spend more than 30% (blue bar), or more than 50% (orange bar) of their income on housing costs among renters and owners, each year over the past decade. Housing cost burden is also worse for those with the lowest incomes. The share of low-income households that spent more than half of their income on housing costs in this same time period can be seen with the hatched bars.

### Key Findings

- The percentages of housing cost burdened or severely housing cost burdened homeowners has decreased over the past decade.
- Among renters, there has been no indication of improvement in the percentage of housing cost burdened or severely housing cost burdened households. Housing cost burden remains substantially higher among renters than owners.
- One in 4 renters spends more than half of their income on housing costs. Nearly 1 in 2 renters spends more than 30% of their income on housing costs.
- Low-income renters and homeowners<sup>3</sup> are the most likely to be housing cost burdened, showing little improvement in the past decade. More than half of all low-income renters pay more than 50% of their income on housing costs.

<sup>2</sup> Households are defined as all people living in a housing unit. Members of a household can be related or unrelated.

<sup>3</sup> Low-income renters and homeowners are households earning less than 150% of the federal poverty level (FPL). In 2017, a household of four at 150%FPL earned \$36,900.

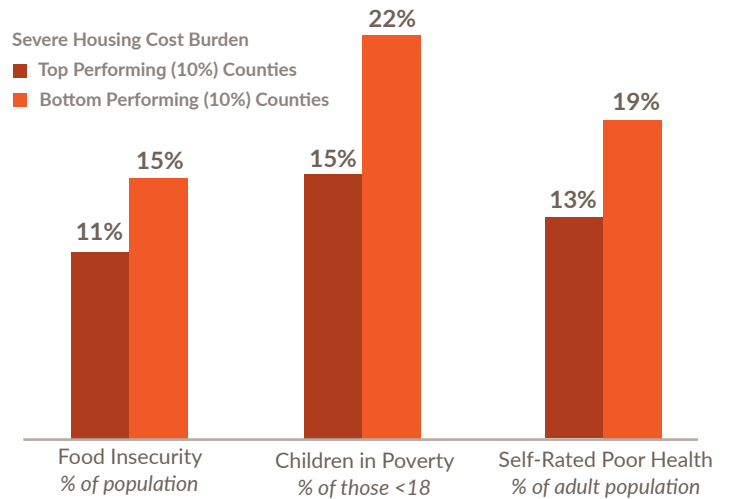
# Housing Cost Burden and Community Conditions

In communities where housing costs rise faster than local incomes, households struggle to acquire and maintain adequate shelter, often to the detriment of other social and economic factors that enable us all to be healthier.

## Key Findings

- Severe housing cost burden affects households across the nation, with as many as 800,000 households paying more than half of their income on rent or mortgage in some counties.
- After accounting for demographic factors,<sup>4</sup> the counties with the highest and lowest housing cost burden differ remarkably in rates of child poverty, food insecurity, and self-rated fair or poor health.
- Across these communities, with every increase in the share of households severely housing cost burdened, there are greater barriers to living long and well, such as more people who are food insecure, more children in poverty, and more people reporting poor or fair health.


Health Factors and Outcomes in Top and Bottom Performing Counties for Severe Housing Cost Burden





**10%**

**Across counties, every 10% increase in the share of households severely cost burdened is linked to...**



**29,000**  
more children in poverty



**86,000**  
more people who are food insecure



**84,000**  
more people in fair or poor health

Data sources: Comprehensive Housing Affordability Strategy; Small Area Income and Poverty Estimates; Map the Meal Gap; Behavioral Risk Factor Surveillance System

<sup>4</sup> Analyses adjusted for median household income and rurality of counties (please see Technical Notes for more detail).



In the vast rural area of the Columbia River Gorge, two counties—Hood River and Wasco—are among the top five most expensive counties to live in Oregon. Residents earning the minimum wage would have to work nearly two full-time jobs to afford a two-bedroom apartment and still have some money to spare for other basic essentials. To increase affordable housing in the region, the Mid-Columbia Housing Authority (MCHA) is utilizing state and federal funding not only to develop housing, but also to equip the new homes with supportive services for the more than 1,100 households receiving Housing Choice Vouchers or residents in affordable housing. Community health workers serve as resident service coordinators and a community-based Housing Team develops comprehensive policy recommendations for expanding affordable housing opportunities. Learn more at [rwjf.org/prize](http://rwjf.org/prize).

# Insecure Housing and Homelessness

Many households are just one unforeseen event – an illness, job loss, financial crisis, or even a drop in hours at work – from losing their home. The risk for homelessness is especially high for low-income families spending more than half of household income on housing costs. A dataset from The Eviction Lab that measures insecure housing, forced moves, and poverty in the U.S. estimates that, in 2016, nearly 900,000 households faced evictions. That same year, more than 900,000 households also began the foreclosure process. Some of these families end up without a place to live. Though homelessness is difficult to measure, according to the U.S. Department of Housing and Urban Development, the overall number of people experiencing homelessness was approximately 553,000 in 2018.

Families that face insecure housing, forced moves, or homelessness are more likely to experience poor mental or physical health and preventable hospitalizations. For children in these families, experiencing homelessness can also be harmful to brain and body function and development, with lifelong and cumulative negative health outcomes for the child, the family, and the community.

## Key Findings

- Families are considered “at risk” for homelessness if they are low-income and spend more than half of their household income on housing. Recent data suggest that in large urban and smaller metro counties where homelessness is more common, 6.7 million households – nearly 1 in 10 – could be considered “at risk” for homelessness.<sup>5</sup>
- Even among the healthiest of these counties (top 10% performers in measures of length and quality of life), as many as 1 million households (or 10% of households) could be considered “at risk” for homelessness.

5 Households considered “at risk” for homelessness are severely housing cost burdened and earn 30% or less of the area median family income.

Just outside Boston, in Chelsea, Massachusetts, the community knows that health and housing are inextricably linked. Through the Boston Foundation’s Health Starts at Home initiative, the MGH Chelsea HealthCare Center screens medical patients for housing instability and refers those who are most at risk of homelessness to CONNECT, a multi-agency one-stop shop that helps people secure stable housing, gain skills, find jobs, and manage finances. In 2018 alone, CONNECT helped over 450 clients get back on their feet by stabilizing their income and/or housing. The Neighborhood Developers (TND), where CONNECT is based, is also leading the charge to build affordable housing in Chelsea. The Box District is one example: a 248-unit development where half of the units are designated as affordable. With 395 affordable housing units already developed, TND wants to continue its momentum by adding 400 more in the next seven years. Beyond building new homes, Chelsea is focused on the preservation, rehabilitation, and maintenance of existing affordable housing through an Affordable Housing Trust Fund. Learn more at [rwjf.org/prize](http://rwjf.org/prize).



## Call To Action

- Explore how national and state findings on stable and affordable homes are playing out in your community. Find your county snapshot (enter your county in the search box at [countyhealthrankings.org](http://countyhealthrankings.org)) and review your data.
- Check with your local health department, housing authority, or county government for data on affordable housing and homelessness, including data by race and income.
- Work with local, statewide and regional partners in community development corporations and financial institutions, hospital systems, government planning and health services, and others.
- Focus on strategies that increase opportunities for low-income households and families at risk of homelessness to be healthy, such as safe and affordable housing in neighborhoods with opportunities for a good education, living wage jobs, and access to healthy foods and quality clinical care.



# Housing at the Intersection of Place, Race, and Health

## Impacts of Discriminatory Policies and Practices on Housing and Health

To illustrate how our homes and neighborhoods impact access to opportunity and health, we took a closer look at large urban and smaller metro counties, areas with long-standing segregation of Black and White residents. Residential segregation has resulted in large part from a long history and continuation of discriminatory policies and practices selectively restricting occupancy in neighborhoods reserved for Whites and denying housing loans in ‘redlined’ neighborhoods, often where mostly Black residents live. While most explicit policies and practices have been outlawed, racial discrimination persists in many forms, such as unfair bank lending and realtor practices that sort prospective homebuyers into certain neighborhoods based on their race, and zoning laws that prohibit lower cost multi-family housing. Additionally, the impacts of once legal discriminatory policies and practices exist today. Past and current discrimination coupled with disinvestment in schools, businesses, and public services limit the opportunities for people of color to rent or own an affordable home in neighborhoods with good schools, living wage jobs, green spaces, and safe environments. Poor health is more common in places that are segregated from opportunity.

Decades of research shows that separating communities by race and ethnicity, income, and other categories is a fundamental cause of health disparities in the U.S.

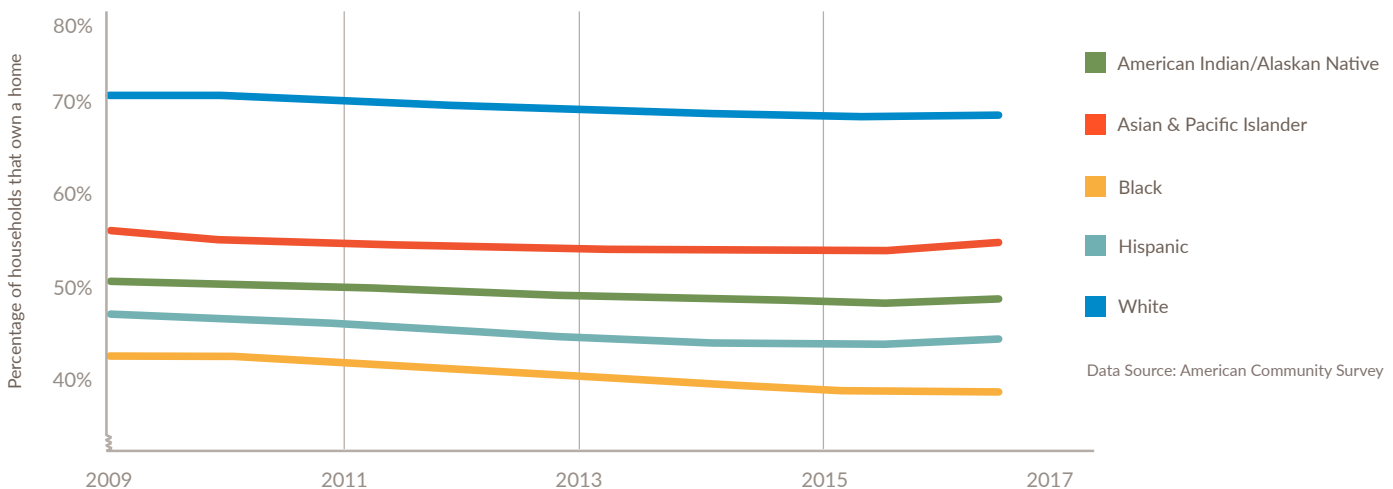
## How Disparities in Homeownership Limit Opportunity

Owning a home can, over time, help build wealth and savings for education or for other opportunities that are important for health and future wealth for families. Today, most households across the U.S. (approximately 64%, or 76.2 million) own a home

Homeownership is the percentage of households that own a home. To learn more about our measure of homeownership, visit [countyhealthrankings.org/homeownership](http://countyhealthrankings.org/homeownership) and find your county’s data in the Additional Measures section of your county snapshot.

– a result in part from policies and tax incentives designed to promote the purchase of housing in some communities. However, not all households have had a fair chance to pursue homeownership and the potential to accrue equity from owning a home. Black homeownership rates have hovered at a level well below that of Whites, remaining virtually unchanged since 1968, when passage of the Fair Housing Act made housing discrimination illegal.

Trends in Homeownership by Race/Ethnicity in Large Urban and Smaller Metro Counties

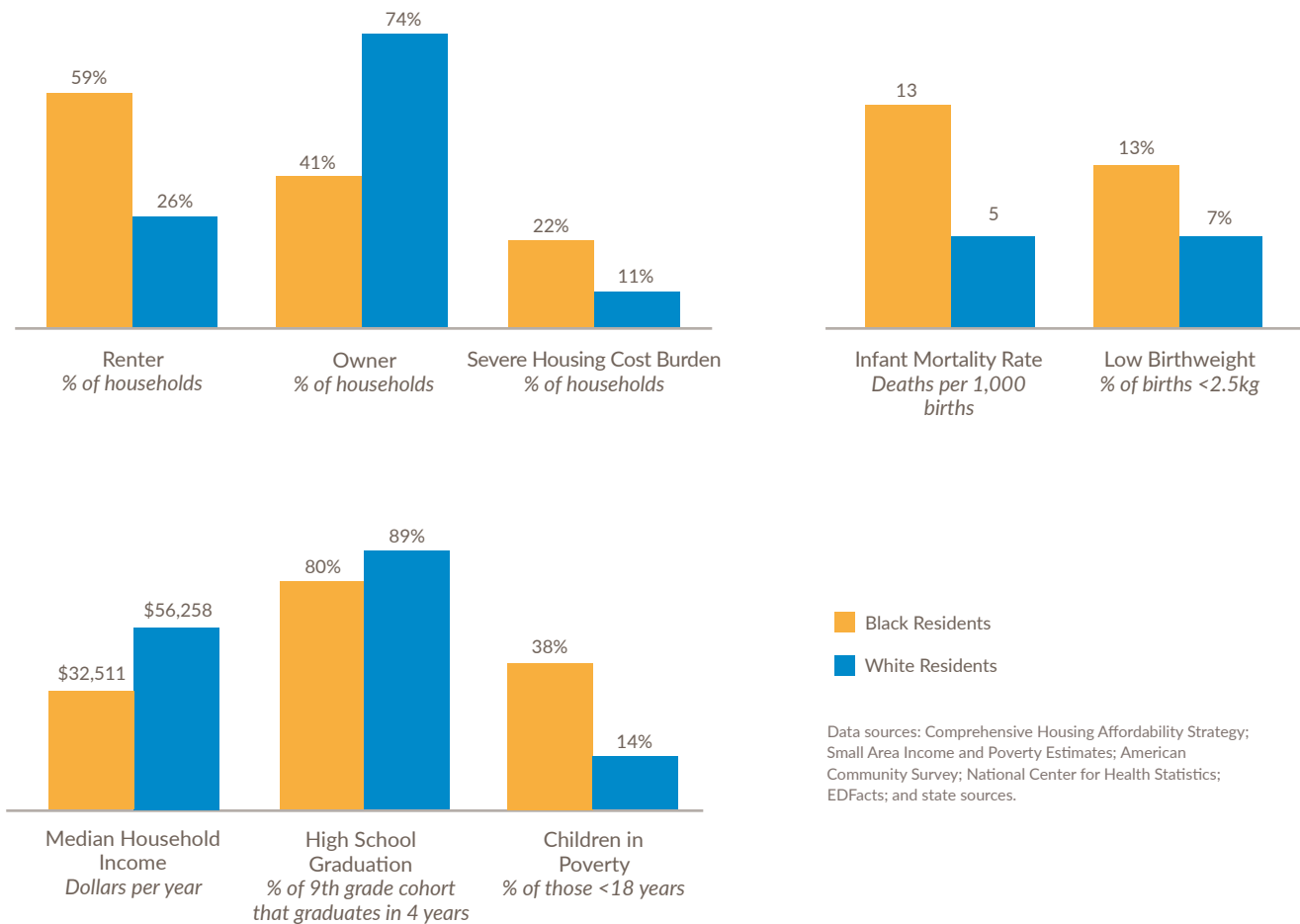




## Key Findings Among Large Urban and Smaller Metro Counties

- The vast majority of households headed by Whites are homeowners, while households headed by Blacks are more likely to rent, with fewer than half being homeowners.
- The median income among households headed by Whites is \$56,000, and more than 1 in 10 are severely housing cost burdened. In contrast, the median income among households headed by Blacks is \$33,000 and these households are twice as likely to be severely housing cost burdened compared to White-headed households. Nearly 1 in 4 households headed by Blacks spends more than half of their income on housing.
- Black residents face greater barriers to opportunity and health than White residents. Black children, youth, and adults have higher rates of child poverty, poorer birth outcomes, higher rates of premature death, and lower high school graduation rates than do White residents. For example, 38% of Black children live in poverty compared to 14% of White children, and infant mortality rates for babies born to Black mothers are more than twice that of babies born to White mothers.
- In the past decade, homeownership rates have changed little on average. However, gaps among racial/ethnic groups are widening. Households headed by Whites have consistently had the highest rates of homeownership. These homeownership rates are 20-30% higher than for people of color.

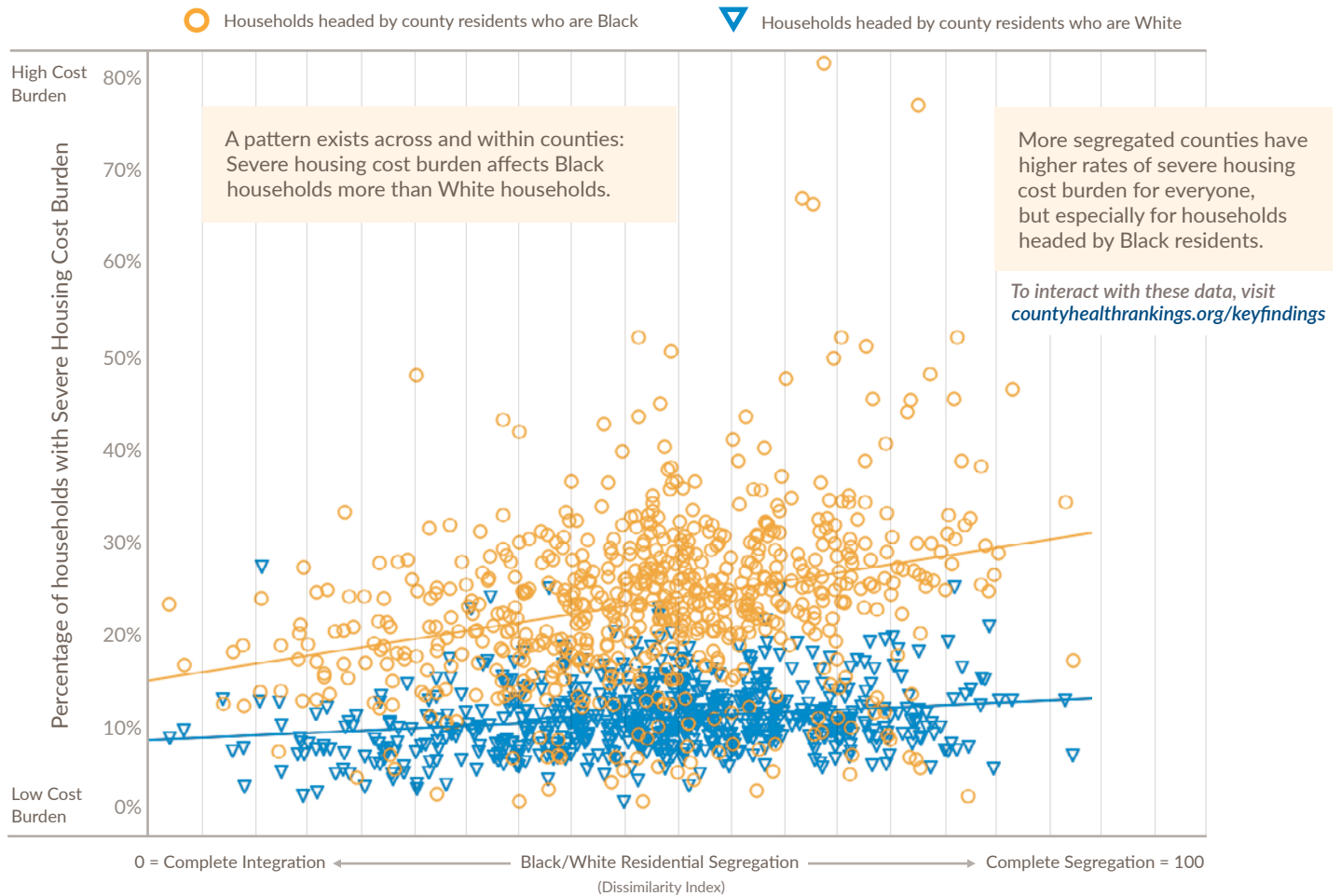
### Housing and Health Among Black and White Residents Within Large Urban and Smaller Metro Counties



## More Segregated Counties have Higher Housing Cost Burden

The graphic below illustrates the relationship between severe housing cost burden and residential segregation for Black and White households in large urban and smaller metro counties. The percentage of severely housing cost burdened households headed by Blacks (circles) and Whites (triangles) can be seen across the range of counties with varying levels of residential segregation. The orange and blue lines show the nature of the relationship between severe housing cost burden and residential segregation across counties for households headed by Blacks or Whites, respectively.

Severe Housing Cost Burden by Levels of Segregation Across Large Urban and Smaller Metro Counties



Data Sources: Comprehensive Housing Affordability Strategy; American Community Survey

### Key Findings Among Large Urban and Smaller Metro Counties

- Places with higher levels of residential segregation have higher rates of severe housing cost burden for households headed by White or Black residents.
- In the most segregated counties (top 10%), on average, 26% of households headed by Blacks and 12% of households headed by Whites are severely housing cost burdened, while in the least segregated counties (bottom 10%) the rates are 18% and 9%, respectively.

Residential segregation is measured using the index of dissimilarity, where higher values indicate greater residential segregation between Black and White county residents. The residential segregation index ranges from 0 (complete integration) to 100 (complete segregation). To learn more about our measure of residential segregation, visit [countyhealthrankings.org/segregation](https://countyhealthrankings.org/segregation) and find your county's data in the Additional Measures section of your county snapshot.

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## Gentrification, Displacement, and Neighborhood Change

Growing demand for housing in many communities can mean increased housing costs in neighborhoods that had historically been home to low- and moderate-income households and/or families of color. Gentrification – a form of neighborhood change that brings in new businesses and investments and higher income residents to areas of historical disinvestment – can transform neighborhoods from low market value to high market value. But long-term residents can be displaced if those investments are not carefully managed and coordinated with authentic community engagement, resident-driven leadership, and policies that value inclusion and prioritize the preservation of a sufficient quantity of affordable options. For low-income households and/or families of color, owning or renting a home in these communities can become unaffordable, which can result in relocation to neighborhoods with less access to health-promoting resources. And even for those who find a way to stay, they may struggle to have a voice in the process of neighborhood change.



The 24:1 Community in Missouri includes a nationally-recognized community development effort created by Beyond Housing to address the fundamental challenges within the 24 municipalities in the Normandy school district in North St. Louis County. Beyond Housing is working to boost homeownership in 24:1 in several ways. Its nonprofit 24:1 Community Land Trust uses a variety of subsidies to make homeownership affordable for people who would otherwise be locked out of the market. Residents own their homes, but lease the land, which is owned by the trust. The houses stay affordable because the trust controls the price owners receive when they sell. Buyers receive financial and homeownership counseling before they buy and supportive services after they sign the contract. With its partners, Prosperity Connection, a nonprofit financial education provider, and Red Dough, a lender that offers lower-interest alternatives to predatory payday loans, Beyond Housing has established a “Wealth Accumulation Center” in downtown Pagedale. The center offers free financial coaching and classes on homebuying, credit repair, college and retirement savings, and other topics. There are early signs of success with increased stability for 98 percent of Beyond Housing families with school-aged children. Learn more at [rwjf.org/prize](http://rwjf.org/prize).



## What can work to create and preserve stable and affordable homes that can improve economic and social well-being for residents?

A comprehensive, strategic approach that looks across a community and multiple sectors and draws from a range of evidence-informed strategies is needed to create and preserve stable, affordable homes in local communities. The way forward requires policies, programs, and systems changes that respond to the specific needs of each community, promote inclusive and connected neighborhoods, reduce displacement, and enable opportunity for better health for all people.

An effective approach will include efforts to:

### Make communities more inclusive and connected, such as:

- Inclusionary zoning
- Civic engagement, including youth, in public governance and in community development decisions
- Fair housing laws and enforcement
- Housing mobility programs
- Mixed income development
- Access to living wage jobs, quality health care, grocery stores, green spaces and parks, and public transportation systems

### Facilitate access to resources needed to secure affordable housing, particularly for low- to moderate-income families, such as:

- Housing Choice Vouchers for low- and very low-income households
- Housing trust funds

### Address capital resources needed to create and preserve affordable homes, particularly for low- to moderate-income families, such as:

- Acquisition, management, and financing of land for affordable housing
- Tax credits, block grants, housing trust funds, and other government subsidies or revenues to advance affordable housing development
- Zoning changes that reduce the cost of housing production

### Provide services and supports to increase housing stability and reduce the risk of homelessness by ensuring basic needs are met and improving access to social services, such as:

- Rapid re-housing programs, supportive housing, service-enriched housing, and rental assistance
- Eviction prevention strategies
- Income supports, like living wage laws, paid family leave, or Earned Income Tax Credits

For more information about evidence-informed strategies that can address housing-related priorities, visit What Works for Health at [countyhealthrankings.org/whatworks](http://countyhealthrankings.org/whatworks).

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## Technical Notes and Glossary of Terms

### What is health equity? What are health disparities? And how do they relate?

Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty and discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

Health disparities are differences in health or in the key determinants of health, such as education, safe housing, and discrimination, which adversely affect marginalized or excluded groups.

Health equity and health disparities are closely related to each other. Health equity is the ethical and human rights principle or value that motivates us to eliminate health disparities. Reducing and ultimately eliminating disparities in health and its determinants of health is how we measure progress toward health equity.

*Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. What is Health Equity? And What Difference Does a Definition Make? Robert Wood Johnson Foundation. May 2017*

*Note: In this report, we use the terms disparities, differences, and gaps interchangeably.*

### How do we define racial/ethnic groups?

We recognize that “race” and “ethnicity” are social categories, meaning the way society may identify individuals based on their cultural ancestry, not a way of characterizing individuals based on biology or genetics. A strong and growing body of empirical research provides support for the notion that genetic factors are not responsible for racial differences in health factors and rarely for health outcomes.

Race and ethnicity categories can be but are not always exclusive. For instance, someone can identify as being of the Black race and Hispanic ethnicity. Our analyses by race/ethnicity use several different sources that are inconsistent in how data for those who identify as Hispanic are included or excluded from racial groups. For instance, race/ethnicity categories for data from the National Center for Health Statistics are exclusive where one person fits into only one category. Data from the American Community Survey, on the other hand, are only exclusive for non-Hispanic Whites. Other racial categories, such as Black or Asian, also include those who identify as Hispanic, which can lead to double counting in the Black or Asian categories and the Hispanic category. Our analyses also do not capture people reporting more than one race, as it was not available across all data sources.

“People of color” is a term used to unify racial and ethnic groups in solidarity with one another and describes people who would generally not be identified as White. The term is meant to be inclusive among people usually categorized as “racial minorities,” emphasizing common experiences of racism. Minority, which means “less than half of the larger group,” is becoming less and less statistically true in many places.

### How did we select evidence-informed approaches?

Evidence-informed approaches included in this report represent those backed by strategies that have demonstrated consistently favorable results in robust studies or reflect recommendations by experts based on early research. To learn more about evidence analysis methods and evidence-informed strategies that can improve health and decrease disparities, visit What Works for Health: [countyhealthrankings.org/whatworks](https://countyhealthrankings.org/whatworks).

*We define low-income households in this report according to guidelines on the Federal Poverty Level (FPL) from the U.S. Department of Health and Human Services (DHHS) and on Area Median Family Income (AMFI) from Housing and Urban Development (HUD).*

- *Federal Poverty Level (FPL): DHHS issues annual guidelines on the Federal Poverty Level for administrative purposes, including determining financial eligibility for certain federal programs. These guidelines vary by family size and for non-contiguous states. In 2017, a household of four at 150% of the FPL earned \$36,900.*
- *Area Median Family Income (AMFI): HUD calculates median family income for each metropolitan area and non-metropolitan counties annually in order to determine Fair Market Rent and income limits for eligibility for HUD housing assistance programs. In 2017, the Area Median Family Income in Los Angeles county, CA was \$64,300, while in Elk County, Kansas it was \$49,700. A low-income household at <30% of the Area Median Family Income would earn less than \$19,290 in LA county and \$14,910 in Elk County, KS.*

*We define levels of urbanization as: Rural (non-metropolitan counties with less than 50,000 people); Smaller Metro (counties within a metropolitan statistical area (MSA) with between 50,000 and 1 million people); Large Suburban Metro (non-central fringe counties within an MSA with more than 1 million people); Large Urban Metro (central urban core counties within an MSA with more than 1 million people).*

*We focused our analyses on the intersection of place, race, and health within smaller metro and large urban counties because these counties are more likely to have similar demographic profiles to the larger MSAs (the typical level of geography for examination of residential segregation) than large suburban metro and rural counties.*

*Analyses exploring the association between housing cost burden and community conditions was adjusted for county-level median household income and the percentage of the population living in a rural area. This allowed for a more “apples to apples” comparison of counties across the nation that range from high to low cost housing markets and have households with varying levels of incomes. The 10% increase in the share of households severely cost burdened refers to a 10 percentage point increase (e.g. 15% to 25%).*

## 2019 County Health Rankings: Ranked Measure Sources and Years of Data

	Measure	Source	Years of Data
<b>Health Outcomes</b>			
Length of Life	Premature death	National Center for Health Statistics – Mortality files	2015-2017
Quality of Life	Poor or fair health	Behavioral Risk Factor Surveillance System	2016
	Poor physical health days	Behavioral Risk Factor Surveillance System	2016
	Poor mental health days	Behavioral Risk Factor Surveillance System	2016
	Low birthweight	National Center for Health Statistics – Natality files	2011-2017
<b>Health Factors</b>			
<b>Health Behaviors</b>			
Tobacco Use	Adult smoking	Behavioral Risk Factor Surveillance System	2016
Diet and Exercise	Adult obesity	CDC Diabetes Interactive Atlas	2015
	Food environment index	USDA Food Environment Atlas, Map the Meal Gap	2015 & 2016
	Physical inactivity	CDC Diabetes Interactive Atlas	2015
	Access to exercise opportunities	Business Analyst, Delorme map data, ESRI, & U.S. Census Files	2010 & 2018
Alcohol and Drug Use	Excessive drinking	Behavioral Risk Factor Surveillance System	2016
	Alcohol-impaired driving deaths	Fatality Analysis Reporting System	2013-2017
Sexual Activity	Sexually transmitted infections	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2016
	Teen births	National Center for Health Statistics – Natality files	2011-2017
<b>Clinical Care</b>			
Access to Care	Uninsured	Small Area Health Insurance Estimates	2016
	Primary care physicians	Area Health Resource File/American Medical Association	2016
	Dentists	Area Health Resource File/National Provider Identification file	2017
	Mental health providers	CMS, National Provider Identification file	2018
Quality of Care	Preventable hospital stays	Mapping Medicare Disparities Tool	2016
	Mammography screening	Mapping Medicare Disparities Tool	2016
	Flu vaccinations	Mapping Medicare Disparities Tool	2016
<b>Social and Economic Factors</b>			
Education	High school graduation	State-specific sources & EDFacts	Varies
	Some college	American Community Survey	2013-2017
Employment	Unemployment	Bureau of Labor Statistics	2017
Income	Children in poverty	Small Area Income and Poverty Estimates	2017
	Income inequality	American Community Survey	2013-2017
Family and Social Support	Children in single-parent households	American Community Survey	2013-2017
	Social associations	County Business Patterns	2016
Community Safety	Violent crime	Uniform Crime Reporting – FBI	2014 & 2016
	Injury deaths	CDC WONDER mortality data	2013-2017
<b>Physical Environment</b>			
Air and Water Quality	Air pollution – particulate matter*	Environmental Public Health Tracking Network	2014
	Drinking water violations	Safe Drinking Water Information System	2017
Housing and Transit	Severe housing problems	Comprehensive Housing Affordability Strategy (CHAS) data	2011-2015
	Driving alone to work	American Community Survey	2013-2017
	Long commute – driving alone	American Community Survey	2013-2017

\*Not available for AK and HI.

## Additional Measures (Not Included in Calculation of Ranks)—Sources and Years of Data

	Measure	Source	Years of Data
<b>Health Outcomes</b>			
Length of Life	Life expectancy	National Center for Health Statistics - Mortality Files	2015-2017
	Premature age-adjusted mortality	CDC WONDER mortality data	2015-2017
	Child mortality	CDC WONDER mortality data	2014-2017
	Infant mortality	CDC WONDER mortality data	2011-2017
Quality of Life	Frequent physical distress	Behavioral Risk Factor Surveillance System	2016
	Frequent mental distress	Behavioral Risk Factor Surveillance System	2016
	Diabetes prevalence	CDC Diabetes Interactive Atlas	2015
	HIV prevalence	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2015
<b>Health Factors</b>			
<b>Health Behaviors</b>			
Diet and Exercise	Food insecurity	Map the Meal Gap	2016
	Limited access to healthy foods	USDA Food Environment Atlas	2015
Alcohol and Drug Use	Drug overdose deaths	CDC WONDER mortality data	2015-2017
	Motor vehicle crash deaths	CDC WONDER mortality data	2011-2017
Other Health Behaviors	Insufficient sleep	Behavioral Risk Factor Surveillance System	2016
<b>Clinical Care</b>			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates	2016
	Uninsured children	Small Area Health Insurance Estimates	2016
	Other primary care providers	CMS, National Provider Identification file	2018
<b>Social and Economic Factors</b>			
Education	Disconnected youth	American Community Survey	2013-2017
Income	Median household income	Small Area Income and Poverty Estimates	2017
	Children eligible for free or reduced price lunch	National Center for Education Statistics	2016-2017
Family and Social Support	Residential segregation - black/white	American Community Survey	2013-2017
	Residential segregation - non-white/white	American Community Survey	2013-2017
Community Safety	Homicides	CDC WONDER mortality data	2011-2017
	Firearm fatalities	CDC WONDER mortality data	2013-2017
<b>Physical Environment</b>			
Housing and Transit	Homeownership	American Community Survey	2013-2017
	Severe housing cost burden	American Community Survey	2013-2017
<b>Demographics</b>			
All	Population	Census Population Estimates	2017
	% below 18 years of age	Census Population Estimates	2017
	% 65 and older	Census Population Estimates	2017
	% Non-Hispanic African American	Census Population Estimates	2017
	% American Indian and Alaskan Native	Census Population Estimates	2017
	% Asian	Census Population Estimates	2017
	% Native Hawaiian/Other Pacific Islander	Census Population Estimates	2017
	% Hispanic	Census Population Estimates	2017
	% Non-Hispanic white	Census Population Estimates	2017
	% not proficient in English	American Community Survey	2013-2017
	% Females	Census Population Estimates	2017
	% Rural	Census Population Estimates	2010

# County Health Rankings & Roadmaps

Building a Culture of Health, County by County

## University of Wisconsin Population Health Institute

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**Recommended citation:** University of Wisconsin Population Health Institute. County Health Rankings Key Findings 2019.

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### Robert Wood Johnson Foundation

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and Prevention  
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