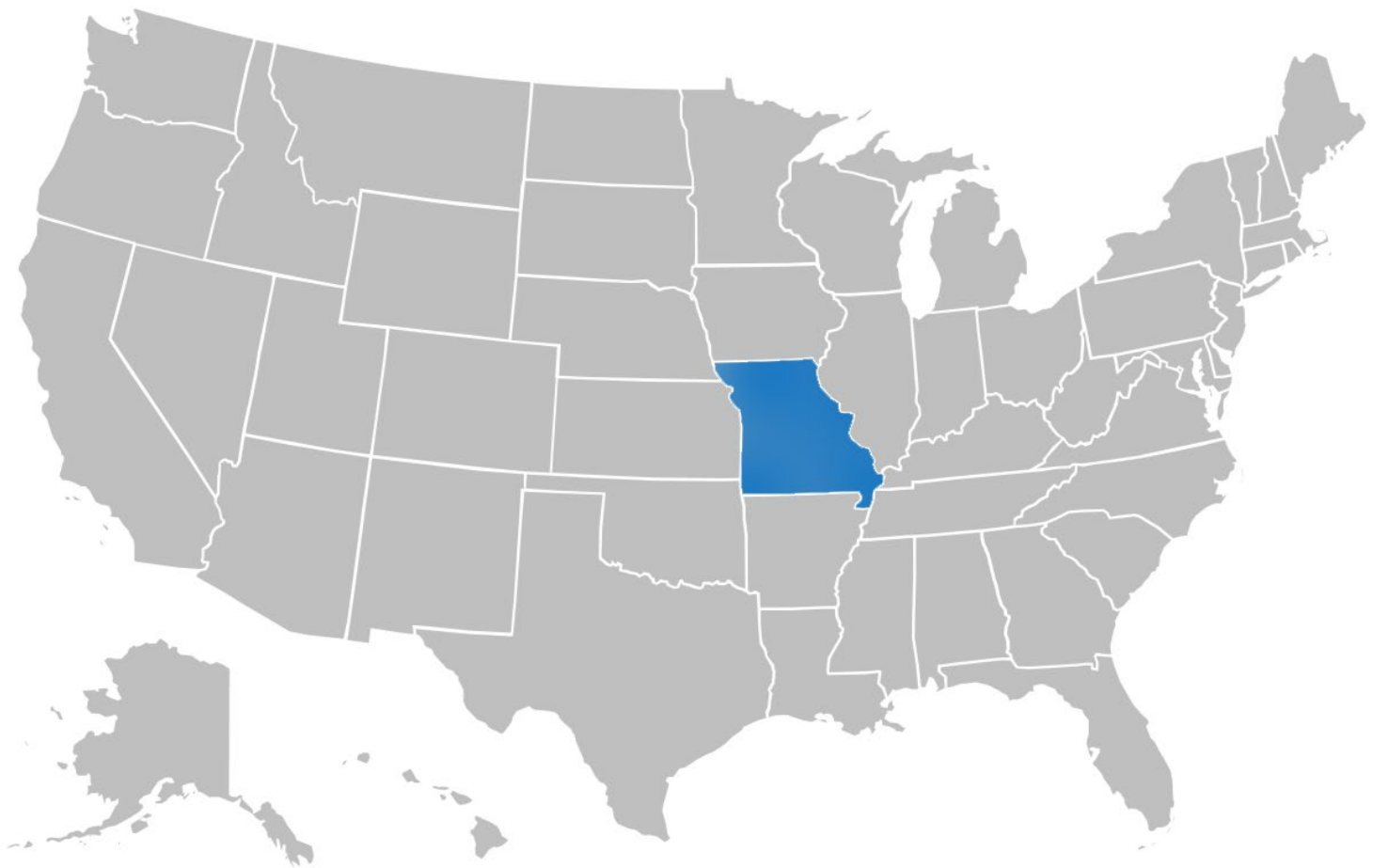


## County Health Rankings & Roadmaps

Building a Culture of Health, County by County

# Missouri



## 2021 State Level Data and Ranks

## 2021 County Health Rankings for Missouri: Measures and National/State Results

Measure	Description	US	MO	MO Minimum	MO Maximum
<b>HEALTH OUTCOMES</b>					
Premature death*	Years of potential life lost before age 75 per 100,000 population (age-adjusted).	6,900	8,400	5,600	14,000
Poor or fair health	Percentage of adults reporting fair or poor health (age-adjusted).	17%	19%	14%	31%
Poor physical health days	Average number of physically unhealthy days reported in past 30 days (age-adjusted).	3.7	4.2	3.4	6.0
Poor mental health days	Average number of mentally unhealthy days reported in past 30 days (age-adjusted).	4.1	4.5	3.9	5.7
Low birthweight*	Percentage of live births with low birthweight (< 2,500 grams).	8%	8%	5%	13%
<b>HEALTH FACTORS</b>					
<b>HEALTH BEHAVIORS</b>					
Adult smoking	Percentage of adults who are current smokers (age-adjusted).	17%	20%	16%	31%
Adult obesity	Percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m <sup>2</sup> .	30%	33%	19%	42%
Food environment index	Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best).	7.8	7.0	4.5	8.8
Physical inactivity	Percentage of adults age 20 and over reporting no leisure-time physical activity.	23%	26%	18%	43%
Access to exercise opportunities	Percentage of population with adequate access to locations for physical activity.	84%	77%	5%	98%
Excessive drinking	Percentage of adults reporting binge or heavy drinking (age-adjusted).	19%	21%	15%	24%
Alcohol-impaired driving deaths	Percentage of driving deaths with alcohol involvement.	27%	27%	0%	60%
Sexually transmitted infections	Number of newly diagnosed chlamydia cases per 100,000 population.	539.9	568.1	59.5	1,421.8
Teen births*	Number of births per 1,000 female population ages 15-19.	21	24	5	59
<b>CLINICAL CARE</b>					
Uninsured	Percentage of population under age 65 without health insurance.	10%	11%	6%	22%
Primary care physicians	Ratio of population to primary care physicians.	1,320:1	1,420:1	17,300:1	810:1
Dentists	Ratio of population to dentists.	1,400:1	1,670:1	3,620:0	880:1
Mental health providers	Ratio of population to mental health providers.	380:1	490:1	13,620:1	240:1
Preventable hospital stays*	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees.	4,236	4,638	2,083	8,075
Mammography screening*	Percentage of female Medicare enrollees ages 65-74 that received an annual mammography screening.	42%	44%	28%	58%
Flu vaccinations*	Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccination.	48%	47%	16%	61%
<b>SOCIAL &amp; ECONOMIC FACTORS</b>					
High school completion	Percentage of adults ages 25 and over with a high school diploma or equivalent.	88%	90%	76%	96%
Some college	Percentage of adults ages 25-44 with some post-secondary education.	66%	67%	32%	80%
Unemployment	Percentage of population ages 16 and older unemployed but seeking work.	3.7%	3.3%	2.4%	6.9%
Children in poverty*	Percentage of people under age 18 in poverty.	17%	17%	5%	41%
Income inequality	Ratio of household income at the 80th percentile to income at the 20th percentile.	4.9	4.5	3.4	6.4
Children in single-parent households	Percentage of children that live in a household headed by single parent.	26%	25%	11%	51%
Social associations	Number of membership associations per 10,000 population.	9.3	11.6	4.7	29.0
Violent crime	Number of reported violent crime offenses per 100,000 population.	386	481	0	1,820
Injury deaths*	Number of deaths due to injury per 100,000 population.	72	91	39	154
<b>PHYSICAL ENVIRONMENT</b>					
Air pollution - particulate matter	Average daily density of fine particulate matter in micrograms per cubic meter (PM2.5).	7.2	8.1	6.3	9.7
Drinking water violations	Indicator of the presence of health-related drinking water violations. 'Yes' indicates the presence of a violation, 'No' indicates no violation.	N/A	N/A	No	Yes
Severe housing problems	Percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.	18%	13%	5%	21%
Driving alone to work*	Percentage of the workforce that drives alone to work.	76%	82%	60%	89%
Long commute - driving alone	Among workers who commute in their car alone, the percentage that commute more than 30 minutes.	37%	32%	13%	58%

\* Indicates subgroup data by race and ethnicity is available

## 2021 County Health Rankings: Disaggregated State-Level Racial/Ethnic Data

Measure	Overall	AIAN	Asian	Black	Hispanic	White
<b>HEALTH OUTCOMES</b>						
Premature death*	8,400	4,800	3,000	14,400	4,600	7,800
Life expectancy	77.3	96.1	88.6	72.4	88.8	77.7
Premature age-adjusted mortality	400	220	150	630	220	390
Child mortality	60	---	30	110	40	50
Infant mortality	6	---	4	12	5	5
Low birthweight*	8%	9%	9%	15%	7%	7%
<b>HEALTH FACTORS</b>						
<b>HEALTH BEHAVIORS</b>						
Drug overdose deaths	25	19	4	44	8	23
Motor vehicle crash deaths	14	8	6	17	7	15
Teen births*	24	24	8	38	35	21
<b>CLINICAL CARE</b>						
Preventable hospital stays*	4,638	6,739	2,680	7,180	4,020	4,427
Mammography screening*	44%	30%	33%	41%	34%	44%
Flu vaccinations*	47%	44%	48%	36%	42%	48%
<b>SOCIAL &amp; ECONOMIC FACTORS</b>						
Reading scores <sup>^</sup>	3.0	N/A	3.4	2.4	2.8	3.2
Math scores <sup>+</sup>	3.0	N/A	3.5	2.3	2.7	3.2
Children in poverty* <sup>‡</sup>	17%	26%	12%	36%	29%	14%
Median household income	\$57,400	\$39,000	\$68,500	\$37,200	\$48,000	\$59,100
Injury deaths*	91	47	27	134	39	89
Homicides	9	4	2	47	6	4
Suicides	18	11	9	9	10	20
Firearm fatalities	20	8	5	54	11	16
<b>PHYSICAL ENVIRONMENT</b>						
Driving alone to work*	82%	78%	74%	76%	75%	83%

\* Ranked measure

<sup>^</sup> Data not available for AK, AZ, LA, MD, NM, NY, VT

<sup>+</sup> Data not available for AK, AZ, LA, MD, NY, VT, VA

<sup>‡</sup> Overall county level values of children in poverty are obtained from one-year modeled estimates from the Small Area Income and Poverty Estimates (SAIPE) Program. Because SAIPE does not provide estimates by racial and ethnic groups, data from the 5-year American Community Survey (ACS) was used to quantify children living in poverty by racial and ethnic groups.

N/A indicates data not available for this race/ethnicity.

--- Data not reported due to NCHS suppression rules (A missing value is reported for counties with fewer than 20 deaths or 10 births.)

## 2021 County Health Rankings: Ranked Measure Sources and Years of Data

	Measure	Weight	Source	Years of Data
<b>HEALTH OUTCOMES</b>				
Length of Life	Premature death*	50%	National Center for Health Statistics - Mortality Files	2017-2019
Quality of Life	Poor or fair health	10%	Behavioral Risk Factor Surveillance System	2018
	Poor physical health days	10%	Behavioral Risk Factor Surveillance System	2018
	Poor mental health days	10%	Behavioral Risk Factor Surveillance System	2018
	Low birthweight*	20%	National Center for Health Statistics - Natality files	2013-2019
<b>HEALTH FACTORS</b>				
<b>HEALTH BEHAVIORS</b>				
Tobacco Use	Adult smoking	10%	Behavioral Risk Factor Surveillance System	2018
Diet and Exercise	Adult obesity	5%	United States Diabetes Surveillance System	2017
	Food environment index	2%	USDA Food Environment Atlas, Map the Meal Gap from Feeding America	2015 & 2018
	Physical inactivity	2%	United States Diabetes Surveillance System	2017
	Access to exercise opportunities	1%	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2019
Alcohol and Drug Use	Excessive drinking	2.5%	Behavioral Risk Factor Surveillance System	2018
	Alcohol-impaired driving deaths	2.5%	Fatality Analysis Reporting System	2015-2019
Sexual Activity	Sexually transmitted infections	2.5%	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2018
	Teen births*	2.5%	National Center for Health Statistics - Natality files	2013-2019
<b>CLINICAL CARE</b>				
Access to Care	Uninsured	5%	Small Area Health Insurance Estimates	2018
	Primary care physicians	3%	Area Health Resource File/American Medical Association	2018
	Dentists	1%	Area Health Resource File/National Provider Identification file	2019
	Mental health providers	1%	CMS, National Provider Identification	2020
Quality of Care	Preventable hospital stays*	5%	Mapping Medicare Disparities Tool	2018
	Mammography screening*	2.5%	Mapping Medicare Disparities Tool	2018
	Flu vaccinations*	2.5%	Mapping Medicare Disparities Tool	2018
<b>SOCIAL &amp; ECONOMIC FACTORS</b>				
Education	High school completion	5%	American Community Survey, 5-year estimates	2015-2019
	Some college	5%	American Community Survey, 5-year estimates	2015-2019
Employment	Unemployment	10%	Bureau of Labor Statistics	2019
Income	Children in poverty*	7.5%	Small Area Income and Poverty Estimates	2019
	Income inequality	2.5%	American Community Survey, 5-year estimates	2015-2019
Family and Social Support	Children in single-parent households	2.5%	American Community Survey, 5-year estimates	2015-2019
	Social associations	2.5%	County Business Patterns	2018
Community Safety	Violent crime	2.5%	Uniform Crime Reporting - FBI	2014 & 2016
	Injury deaths*	2.5%	National Center for Health Statistics - Mortality Files	2015-2019
<b>PHYSICAL ENVIRONMENT</b>				
Air and Water Quality	Air pollution - particulate matter	2.5%	Environmental Public Health Tracking Network	2016
	Drinking water violations	2.5%	Safe Drinking Water Information System	2019
Housing and Transit	Severe housing problems	2%	Comprehensive Housing Affordability Strategy (CHAS) data	2013-2017
	Driving alone to work*	2%	American Community Survey, 5-year estimates	2015-2019
	Long commute - driving alone	1%	American Community Survey, 5-year estimates	2015-2019

\*Indicates subgroup data by race and ethnicity is available

## 2021 County Health Rankings: Additional Measure 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	2017-2019
	Premature age-adjusted mortality*	National Center for Health Statistics - Mortality Files	2017-2019
	Child mortality*	National Center for Health Statistics - Mortality Files	2016-2019
	Infant mortality*	National Center for Health Statistics - Mortality Files	2013-2019
Quality of Life	Frequent physical distress	Behavioral Risk Factor Surveillance System	2018
	Frequent mental distress	Behavioral Risk Factor Surveillance System	2018
	Diabetes prevalence	United States Diabetes Surveillance System	2017
	HIV prevalence	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention	2018
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
Diet and Exercise	Food insecurity	Map the Meal Gap	2018
	Limited access to healthy foods	USDA Food Environment Atlas	2015
Alcohol and Drug Use	Drug overdose deaths*	National Center for Health Statistics - Mortality Files	2017-2019
	Motor vehicle crash deaths*	National Center for Health Statistics - Mortality Files	2013-2019
Other Health Behaviors	Insufficient sleep	Behavioral Risk Factor Surveillance System	2018
<b>CLINICAL CARE</b>			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates	2018
	Uninsured children	Small Area Health Insurance Estimates	2018
	Other primary care providers	CMS, National Provider Identification	2020
<b>SOCIAL &amp; ECONOMIC FACTORS</b>			
Education	High school graduation	EDFacts	2017-2018
	Disconnected youth	American Community Survey, 5-year estimates	2015-2019
	Reading scores* <sup>+</sup>	Stanford Education Data Archive	2018
	Math scores* <sup>+</sup>	Stanford Education Data Archive	2018
Income	Median household income*	Small Area Income and Poverty Estimates	2019
	Children eligible for free or reduced price lunch	National Center for Education Statistics	2018-2019
Family and Social Support	Residential segregation - Black/White	American Community Survey, 5-year estimates	2015-2019
	Residential segregation - non-White/White	American Community Survey, 5-year estimates	2015-2019
Community Safety	Homicides*	National Center for Health Statistics - Mortality Files	2013-2019
	Suicides*	National Center for Health Statistics - Mortality Files	2015-2019
	Firearm fatalities*	National Center for Health Statistics - Mortality Files	2015-2019
	Juvenile arrests <sup>+</sup>	Easy Access to State and County Juvenile Court Case Counts	2018
<b>PHYSICAL ENVIRONMENT</b>			
Housing and Transit	Traffic volume	EJSCREEN: Environmental Justice Screening and Mapping Tool	2019
	Homeownership	American Community Survey, 5-year estimates	2015-2019
	Severe housing cost burden	American Community Survey, 5-year estimates	2015-2019
	Broadband access	American Community Survey, 5-year estimates	2015-2019

\*Indicates subgroup data by race and ethnicity is available

<sup>+</sup> Not available in all states

See additional contextual demographic information and measures online at [www.countyhealthrankings.org](http://www.countyhealthrankings.org)

## 2021 County Health Rankings for the 115 Ranked Counties in Missouri

County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors	County	Health Outcomes	Health Factors
Adair	62	18	Clay	3	7	Iron	100	95	Montgomery	89	45	Schuyler	33	74
Andrew	7	8	Clinton	12	24	Jackson	63	49	Morgan	84	92	Scotland	32	81
Atchison	6	16	Cole	16	6	Jasper	59	44	New Madrid	111	110	Scott	93	87
Audrain	71	51	Cooper	20	23	Jefferson	51	21	Newton	54	41	Shannon	107	107
Barry	73	84	Crawford	99	89	Johnson	4	12	Nodaway	10	13	Shelby	70	15
Barton	52	58	Dade	103	48	Knox	43	56	Oregon	102	100	St. Charles	2	2
Bates	56	83	Dallas	91	104	Laclede	82	94	Osage	18	4	St. Clair	27	97
Benton	85	90	Daviess	11	85	Lafayette	42	34	Ozark	101	109	St. Francois	88	78
Bollinger	66	88	DeKalb	34	46	Lawrence	75	70	Pemiscot	115	114	St. Louis	23	5
Boone	9	3	Dent	96	86	Lewis	94	61	Perry	17	26	St. Louis City	110	102
Buchanan	60	52	Douglas	76	101	Lincoln	48	68	Pettis	28	75	Ste. Genevieve	22	19
Butler	104	103	Dunklin	112	115	Linn	74	72	Phelps	65	36	Stoddard	83	96
Caldwell	86	76	Franklin	40	30	Livingston	44	28	Pike	61	79	Stone	87	71
Callaway	24	27	Gasconade	39	31	Macon	47	37	Platte	1	1	Sullivan	95	63
Camden	21	43	Gentry	41	25	Madison	77	65	Polk	26	55	Taney	72	60
Cape Girardeau	36	11	Greene	46	10	Maries	53	69	Pulaski	25	20	Texas	78	98
Carroll	49	54	Grundy	64	47	Marion	50	42	Putnam	81	38	Vernon	67	57
Carter	98	99	Harrison	31	67	McDonald	92	106	Ralls	19	32	Warren	30	40
Cass	13	14	Henry	80	66	Mercer	37	50	Randolph	79	73	Washington	109	108
Cedar	69	59	Hickory	108	93	Miller	55	77	Ray	45	53	Wayne	106	111
Chariton	8	33	Holt	29	17	Mississippi	114	113	Reynolds	97	91	Webster	38	80
Christian	5	9	Howard	57	29	Moniteau	14	35	Ripley	113	112	Worth	68	22
Clark	15	62	Howell	90	82	Monroe	35	64	Saline	58	39	Wright	105	105

For more information on how these ranks are calculated visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



### Stay Up-To-Date with County Health Rankings & Roadmaps

For the latest updates on Rankings, What Works for Health, Action Learning Guides, and more visit [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

You can see what we are featuring on our webinar series, what communities are doing to improve health, and how you can get involved!

## Technical Notes

### How are race and ethnicity categories defined?

Race and ethnicity are different forms of identity but are sometimes categorized in non-exclusive ways. Race is a form of identity constructed by our society to give meaning to different groupings of observable physical traits. An individual may identify with more than one race group. Ethnicity is used to group individuals according to shared cultural elements. Racial and ethnic categorizations relate to health because our society sorts groups of individuals based on perceived identities. These categorizations have meaning because of social and political factors, including systems of power such as racism. Examining the variation among racial and ethnic groupings in health factors and outcomes is key to understanding and addressing historical and current context that underlie these differences.

Data sources differ in methods for defining and grouping race and ethnicity categories. To incorporate as much information as possible in our summaries, County Health Rankings & Roadmaps (CHR&R) race/ethnicity categories vary by data source. With a few exceptions, CHR&R adheres to the following nomenclature originally defined by [The Office of Management and Budget \(OMB\)](#):

**American Indian & Alaska Native (AIAN):** includes people who identify as American Indian or Alaska Native and do not identify as Hispanic.

**Asian:** includes people who identify as Asian or Pacific Islander and do not identify as Hispanic.

**Black:** includes people who identify as Black or African American and do not identify as Hispanic.

**Hispanic:** includes people who identify as Mexican, Puerto Rican, Cuban, Central or South American, other Hispanic, or Hispanic of unknown origin.

**White:** includes people who identify as White and do not identify as Hispanic.

Note:

- Racial and ethnic categorization masks variation within groups.
- Individuals may identify with multiple races, indicating that none of the offered categories reflect their identity; these individuals are not included in our summaries.
- OMB categories have limitations and have changed over time, reflecting the importance of attending to contemporary racialization as a principle for examining approaches to measurement.
- For some data sources, race categories other than White also include people who identify as Hispanic.

### Learn More:

The above definitions apply to all measures using data from the [National Center for Health Statistics](#) (see Ranked & Additional Measure Sources and Years of Data tables on pages 4 & 5). For this data source, all race/ethnicity categories are exclusive so that each individual fits into only one category.

Other data sources offer slight nuances of the race/ethnicity categories listed above. [The American Community Survey \(ACS\)](#) only provides an exclusive race and ethnicity category for people who identify as non-Hispanic White. An individual who identifies as Hispanic and as Black would be included in both the Hispanic *and* Black race/ethnicity categories. Another difference with ACS data is the separate race categories for people who identify as Asian and people who identify as Hawaiian & Other Pacific Islander. For measures of Children in Poverty and Driving Alone to Work, CHR&R reports a combined estimate for the Asian & Other Pacific Islander categories, while for Median Household Income we only report the Asian race category.

Measures using data from the [Center for Medicare and Medicaid Services](#) (Mammography, Preventable Hospital Stays, Flu Vaccinations) follows the ACS categories with the exception of having a combined Asian/Pacific Islander category. For this data source, race and ethnicity are not self-reported.

The [Stanford Education Data Archive](#) used for the Reading and Math Scores measures follow the [National Center for Education Statistics](#) (NCES) definitions of Asian or Pacific Islander, American Indian & Alaska Native, non-Hispanic Black, non-Hispanic White, and Hispanic.

### How do we rank counties?

To calculate the ranks, we first standardize each of the measures using z-scores. Z-scores allow us to combine multiple measures because the measures are now on the same scale. The ranks are then calculated based on weighted sums of the measure z-scores within each state to create an aggregate z-score. The county with the best aggregate z-score (healthiest) gets a rank of #1 for that state. To see more detailed information on rank calculation please visit our methods in **Explore Health Rankings** on our website: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).