COUNTY HEALTH RANKINGS 2018: CODEBOOK FOR ANALYTIC DATASETS

The SAS and CSV files provided at http://www.countyhealthrankings.org/rankings/data contain the measure value, numerator, denominator and confidence intervals, where available, for all County Health Rankings ranked and unranked measures for each county in the nation.

This codebook and documentation provides the name of each variable, its data source and the years of data. For the full detailed list of variable names, please see the file titled "DataDictionary_2018."

Standard variable format

Each measure variable name is coded with a measure ID. These measure IDs can be found in the tables at the end of the documentation and in the data dictionary referenced above. You will find at least five variables for each measure:

> Measure value coded as v(measure id)_rawvalue
> Numerator coded as v(measure id)_numerator
> Denominator coded as v(measure id)_denominator
> Lower bound of 95% confidence interval coded as v(measure id)_cilow
> Upper bound of 95% confidence interval coded as v(measure id)_cihigh

Non-standard measure variables

Health care provider measures: Four measures have a "ratio" variable included. These measures and their corresponding variable are

- Primary care physicians (variable = v004_other_data_1),
- Dentists (variable = v088_other_data_1),
- Mental health providers (variable = v062_other_data_1), and
- Other primary care providers (variable = v131_other_data_1)

For these measures, we report a ratio of population:# number of providers on the website. However, in calculating the rankings, we use the actual *rate* of number of providers/100,000 population. We include both the rate (as the raw value variable), and the *ratio* (as the "other data 1" variable). If you are trying to replicate the rankings, you should use the rate rather than the ratio.

When a county has no reported providers (ratio = [population]:0), the value for the ratio variable is assigned to be the negative population value. For example, v004_other_data_1 stores the ratio variable as a positive number if the ratio is XXXX:1. However, for counties that have zero providers, the value is stored as a negative number to indicate that the ratio is different and is instead XXXX:0. (For example, if the ratio is 2000:0, the value stored in the field would be -2000.)

Race-specific data: Several measures are now available by racial or ethnic group for some counties. These measures are coded as

- v(measure ID)_other_data_1 for Whites
- v(measure ID)_other_data_2 for Blacks
- v(measure ID)_other_data_3 for Hispanics.

Drinking water violations is a Yes/No variable, where a 1 indicates a "Yes" and a zero indicates a "No". A "Yes" indicates that at least one community water system in the county received a violation during the specified time frame, while a "No" indicates that there were no health-based drinking water violations in any community water system in the county. State values are the proportion of counties in the state that have a violation.

Drug overdose deaths – modeled has values ranging from 1 to 15 for the 2018 release year. These are numeric codes that reflect modeled interval rates of drug-overdose deaths per 100,000 population. The code and the corresponding rates used for the 2018 data release are as follows:

Value in Dataset	Death rate per 100,000 population		Value in Dataset	Death rate per 100,000 population
1	<2		9	18-19.9
2	2-3.9		10	20-21.9
3	4-5.9		11	22-23.9
4	6-7.9		12	24-25.9
5	8-11.9		13	26-27.9
6	12-13.9		14	28-29.9
7	14-15.9		15	30+
8	16-17.9			

For information about how the County Health Rankings are calculated, and more in depth descriptions of each of the measures, please visit www.countyhealthrankings.org

2018 Measures & Data Sources

	Measure (ID)	Data Source	Years of Data
HEALTH OUTCOMES			
Length of Life	Premature death (1)	National Center for Health Statistics – Mortality Files	2014-2016
Quality of Life	Poor or fair health (2)	Behavioral Risk Factor Surveillance System	2016
	Poor physical health days (36)	Behavioral Risk Factor Surveillance System	2016
	Poor mental health days (42)	Behavioral Risk Factor Surveillance System	2016
	Low birthweight (37)	National Center for Health Statistics – Natality Files	2010-2016
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco Use	Adult smoking (9)	Behavioral Risk Factor Surveillance System	2016
Diet and Exercise	Adult obesity (11)	CDC Diabetes Interactive Atlas	2014
	Food environment index (133)	USDA Food Environment Atlas, Map the Meal Gap	2015
	Physical inactivity (70)	CDC Diabetes Interactive Atlas	2014
	Access to exercise opportunities (132)	Business Analyst, Delorme map data, ESRI, & US Census Tigerline Files	2010 & 2016
Alcohol and Drug Use	Excessive drinking (49)	Behavioral Risk Factor Surveillance System	2016
	Alcohol-impaired driving deaths (134)	Fatality Analysis Reporting System	2012-206
Sexual Activity	Sexually transmitted infections (45)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	2015
	Teen births (14)	National Center for Health Statistics – Natality Files	2010-2016
CLINICAL CARE			
Access to Care	Uninsured (85)	Small Area Health Insurance Estimates	2015
	Primary care physicians (4)	Area Health Resource File/American Medical Association	2015
	Dentists (88)	Area Health Resource File/National Provider Identification file	2016
	Mental health providers (62)	CMS, National Provider Identification file	2017
Quality of Care	Preventable hospital stays (5)	Dartmouth Atlas of Health Care	2015
	Diabetes monitoring (7)	Dartmouth Atlas of Health Care	2014
	Mammography screening (50)	Dartmouth Atlas of Health Care	2014
SOCIAL AND ECONOMIC FACTORS			
Education	High school graduation (21)	EDFacts	2014-2015
	Some college (69)	American Community Survey	2012-2016
Employment	Unemployment (23)	Bureau of Labor Statistics	2016
Income	Children in poverty (24)	Small Area Income and Poverty Estimates	2016
	Income inequality (44)	American Community Survey	2012-2016
Family and Social Support	Children in single-parent households (82)	American Community Survey	2012-2016
	Social associations (140)	County Business Patterns	2015
Community Safety	Violent crime (43)	Uniform Crime Reporting – FBI	2012-2014
	Injury deaths (135)	CDC WONDER mortality data	2012-2016
PHYSICAL ENVIRONMENT			
Air and Water Quality	Air pollution – particulate matter [1] (125)	Environmental Public Health Tracking Network	2012
	Drinking water violations (124)	Safe Drinking Water Information System	2016
Housing and Transit	Severe housing problems (136)	Comprehensive Housing Affordability Strategy (CHAS) data	2010-2014
	Driving alone to work (67)	American Community Survey	2012-2016
	Long commute – driving alone (137)	American Community Survey	2012-2016

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[1]   Not available for AK and HI.

Additional Measures, Data Sources, and Years of Data, 2018

Measure (ID)	Data Source	Years of Data
Health Outcomes		
Premature age-adjusted mortality (127)	CDC WONDER mortality data	2014-2016
Infant mortality (129)	Health Indicators Warehouse	2010-2016
Child mortality (128)	CDC WONDER mortality data	2013-2016
Frequent physical distress (144)	Behavioral Risk Factor Surveillance System	2016
Frequent mental distress (145)	Behavioral Risk Factor Surveillance System	2016
Diabetes prevalence (60)	CDC Diabetes Interactive Atlas	2015
HIV prevalence (61)	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB prevention	2014
Health Behaviors		
Food insecurity (139)	Map the Meal Gap	2015
Limited access to healthy foods (83)	USDA Food Environment Atlas	2015
Motor vehicle crash deaths (39)	CDC WONDER mortality data	2010-2016
Drug overdose deaths (138)	CDC WONDER mortality data	2014-2016
Drug overdose deaths modeled (146)	National Center for Health Statistics	2016
Insufficient sleep (143)	Behavioral Risk Factor Surveillance System	2016
Clinical Care		
Uninsured adults (3)	Small Area Health Insurance Estimates	2015
Uninsured children (122)	Small Area Health Insurance Estimates	2015
Health care costs (86)	Dartmouth Atlas of Health Care	2015
Other primary care providers (131)	CMS, National Provider Identification file	2017
Social and Economic Environment		
Disconnected youth (149)	Measure of America	2010-2014
Median household income (63)	Small Area Income and Poverty Estimates	2016
Children eligible for free or reduced price lunch (65)	National Center for Education Statistics	2015-2016
Homicides (15)	CDC WONDER mortality data	2010-2016
Firearm fatalities (148)	CDC WONDER mortality data	2012-2016
Residential segregation—black/white (141)	American Community Survey	2012-2016
Residential segregation—non-white/white (142)	American Community Survey	2012-2016
Demographics		
Population (51)	Census Population Estimates	2016
% below 18 years of age (52)	Census Population Estimates	2016
% 65 and older (53)	Census Population Estimates	2016
% Non-Hispanic African American (54)	Census Population Estimates	2016
% American Indian and Alaskan Native (55)	Census Population Estimates	2016
% Asian (81)	Census Population Estimates	2016
% Native Hawaiian/Other Pacific Islander (80)	Census Population Estimates	2016
% Hispanic (56)	Census Population Estimates	2016
% Non-Hispanic white (126)	Census Population Estimates	2016
% not proficient in English (59)	American Community Survey	2012-2016
% Females (57)	Census Population Estimates	2016
% Rural (58)	Census Population Estimates	2010