# County Health Rankings & Roadmaps

A Healthier Nation, County by County

## 2012 *Rankings*

## Kentucky

Robert Wood Johnson Foundation

UNIVERSITY OF WISCONSIN

Population Health Institute

*Translating Research into Policy and Practice*

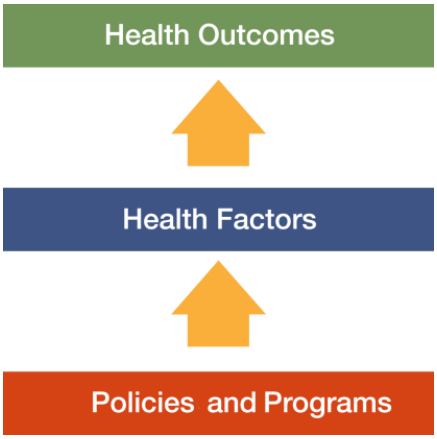
## Introduction

Where we live matters to our health. The health of a community depends on many different factors, including the environment, education and jobs, access to and quality of healthcare, and individual behaviors. We can improve a community's health by implementing effective policies and programs. For example, people who live in communities with smoke-free laws are less likely to smoke or to be exposed to second-hand smoke, which reduces lung cancer risk. In addition, people who live in communities with safe and accessible park and recreation space are more likely to exercise, which reduces heart disease risk.

However, health varies greatly across communities, with some places being much healthier than others. And, until now, there has been no standard method to illustrate what we know about what makes people sick or healthy or a central resource to identify what we can do to create healthier places to live, learn, work and play.

We know that much of what influences our health happens outside of the doctor's office – in our schools, workplaces and neighborhoods. The *County Health Rankings & Roadmaps* program provides information on the overall health of your community and provides the tools necessary to create community-based, evidence-informed solutions. Ranking the health of nearly every county across the nation, the *County Health Rankings* illustrate **what we know** when it comes to what is making communities sick or healthy. The *County Health Roadmaps* show **what we can do** to create healthier places to live, learn, work and play. The Robert Wood Johnson Foundation collaborates with the University of Wisconsin Population Health Institute to bring this groundbreaking program to counties and states across the nation.

The *County Health Rankings & Roadmaps* program includes the *County Health Rankings* project, launched in 2010, and the newer *Roadmaps* project that mobilizes local communities, national partners and leaders across all sectors to improve health. The program is based on this model of population health improvement:




In this model, health outcomes are measures that describe the current health status of a county. These health outcomes are influenced by a set of health factors. Counties can improve health outcomes by addressing all health factors with effective, evidence-informed policies and programs.

Everyone has a stake in community health. We all need to work together to find solutions. The *County Health Rankings & Roadmaps* serve as both a call to action and a needed tool in this effort.

## Guide to Our Web Site

To compile the *Rankings*, we selected measures that reflect important aspects of population health that can be improved and are available at the county level across the nation. Visit www.countyhealthrankings.org to learn more.

To get started and see data, enter your county or state name in the search box. Click on the name of a county or measure to see more details. You can: Compare Counties; Download data for your state; Print one or more county snapshots; or Share information with others via Facebook, Twitter, or Google+. To understand our methods, click on Learn about the Data and Methods. To learn about steps that you can take to improve health in your community, click on the *Roadmaps* tab. The *Roadmaps to Health* Action Center provides tools and resources to help groups working together to create healthier places. The Opportunities section provides information on funding, recognition, and partnership opportunities. The Connections section helps you learn what others are doing.

## *County Health Roadmaps*

The *Rankings* illustrate **what we know** when it comes to making people sick or healthy. The *County Health Rankings* confirm the critical role that factors such as education, jobs, income and the environment play in how healthy people are and how long we live.

This report introduces the *County Health Roadmaps*, a new partnership that mobilizes local communities, national partners and leaders across all sectors to improve health. The *County Health Roadmaps* show **what we can do** to create healthier places to live, learn, work and play. The Robert Wood Johnson Foundation collaborates with the University of Wisconsin Population Health Institute to bring this groundbreaking project to cities, counties and states across the nation.

The *Roadmaps* project includes grants to local coalitions and partnerships among policymakers, business, education, public health, health care, and community organizations; grants to national organizations working to improve health; recognition of communities whose promising efforts have led to better health; and customized technical assistance on strategies to improve health.

***Roadmaps to Health*** **Community Grants**
The *Roadmaps to Health* Community Grants provide funding for 2 years to state and local efforts among policymakers, business, education, healthcare, public health and community organizations working to create positive policy or systems changes that address the social and economic factors that influence the health of people in their community.

***Roadmaps to Health*** **Partner Grants**
The Robert Wood Johnson Foundation is awarding *Roadmaps to Health* Partner Grants to national organizations that are experienced at engaging local partners and leaders and are able to deliver high-quality training and technical assistance, and committed to making communities healthier places to live, learn, work and play. Partner grantees increase awareness about the *County Health Rankings & Roadmaps* to their members, affiliates and allies. The first Partner Grant was awarded to United Way Worldwide (UWW) in July 2011.

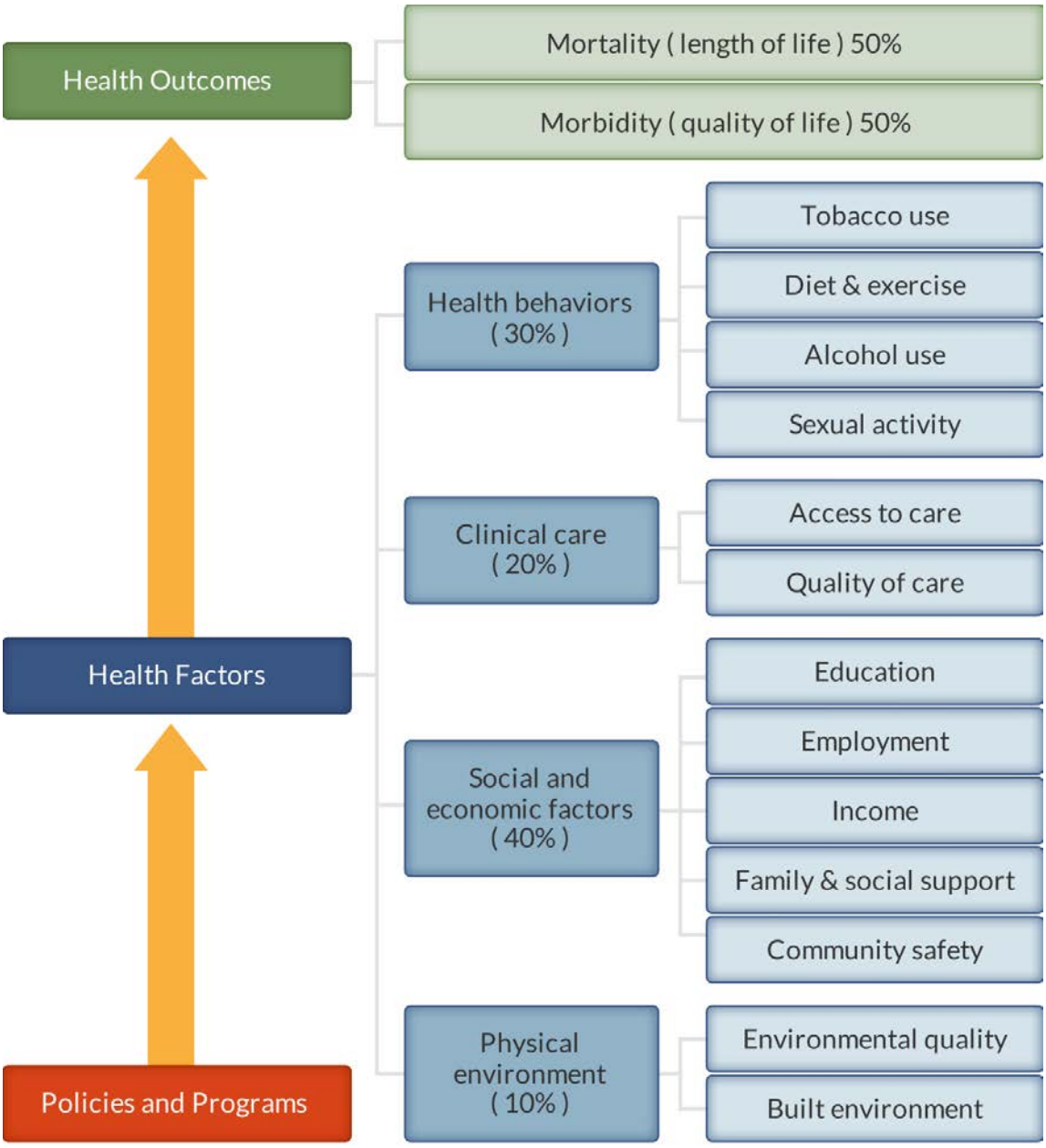
***Roadmaps to Health*** **Prize**
The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute will award *Roadmaps to Health* Prizes of $25,000 to up to six communities that are working to become healthier places to live, learn, work and play. The *Roadmaps to Health* Prize is intended not only to honor successful efforts, but also to inspire and stimulate similar activities in other U.S. communities.

***Roadmaps to Health*** **Action Center**
The *Roadmaps to Health* Action Center, based at the University of Wisconsin Population Health Institute, provides tools and resources to help groups working to make their communities healthier places. The new Action Center will provide guidance on developing strategies and advocacy efforts to advance pro-health policies, offer opportunities for ongoing learning, and in the summer of 2012, host a searchable database of evidence-informed policies and programs focused on health improvement. Experts provide customized consultation to local communities who have demonstrated the willingness and capacity to address factors that we know influence how healthy a person is, such as education, income and family connectedness.

## *County Health Rankings*

The 2012 *County Health Rankings* report ranks Kentucky counties according to their summary measures of **health outcomes** and **health factors**. Counties also receive a rank for mortality, morbidity, health behaviors, clinical care, social and economic factors, and the physical environment. The figure below depicts the structure of the *Rankings* model; those having high ranks (e.g., 1 or 2) are estimated to be the "healthiest."

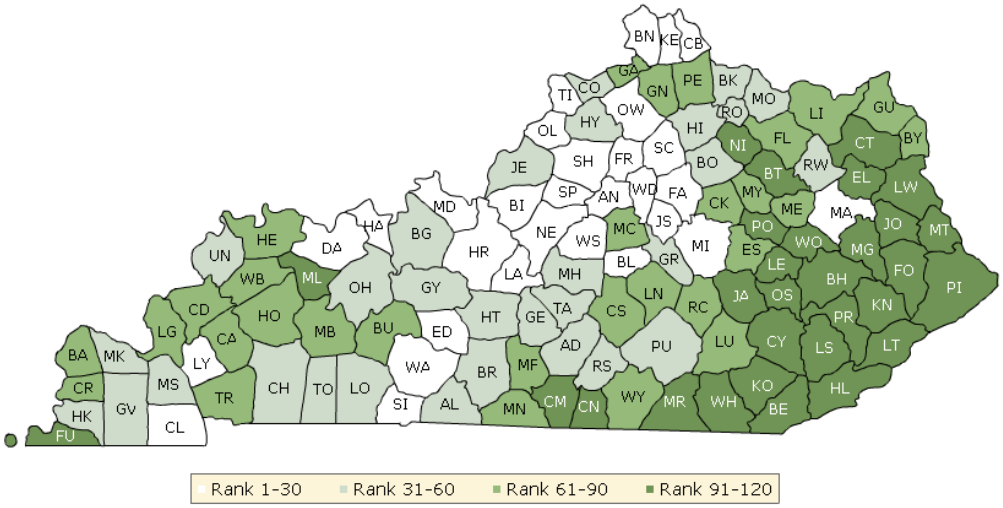
Our summary **health outcomes** rankings are based on an equal weighting of mortality and morbidity measures. The summary **health factors** rankings are based on weighted scores of four types of factors: behavioral, clinical, social and economic, and environmental. The weights for the factors (shown in parentheses in the figure) are based upon a review of the literature and expert input, but represent just one way of combining these factors.




*County Health Rankings model ©2012 UWPHI*

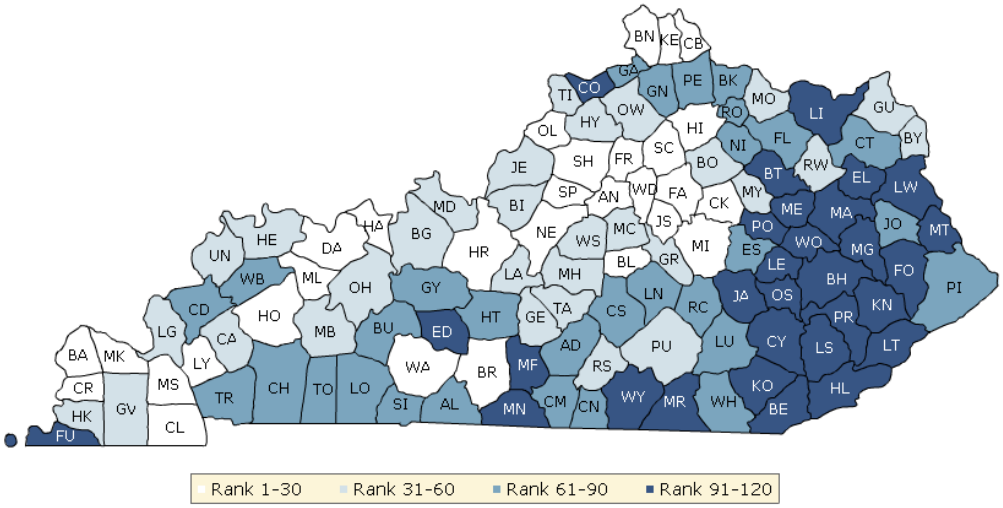
The maps on this page and the next display Kentucky's counties divided into groups by health rank. Maps help locate the healthiest and least healthy counties in the state. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

## HEALTH OUTCOMES




| County | Rank | County | Rank | County | Rank | County | Rank |
|---|---|---|---|---|---|---|---|
| Adair | 60 | Edmonson | 27 | Knox | 105 | Nicholas | 110 |
| Allen | 47 | Elliott | 96 | Larue | 26 | Ohio | 46 |
| Anderson | 24 | Estill | 90 | Laurel | 70 | Oldham | 1 |
| Ballard | 82 | Fayette | 10 | Lawrence | 103 | Owen | 6 |
| Barren | 43 | Fleming | 69 | Lee | 108 | Owsley | 120 |
| Bath | 97 | Floyd | 112 | Leslie | 99 | Pendleton | 83 |
| Bell | 104 | Franklin | 14 | Letcher | 113 | Perry | 115 |
| Boone | 2 | Fulton | 111 | Lewis | 67 | Pike | 116 |
| Bourbon | 42 | Gallatin | 71 | Lincoln | 84 | Powell | 92 |
| Boyd | 88 | Garrard | 36 | Livingston | 77 | Pulaski | 48 |
| Boyle | 30 | Grant | 74 | Logan | 39 | Robertson | 52 |
| Bracken | 44 | Graves | 41 | Lyon | 12 | Rockcastle | 73 |
| Breathitt | 102 | Grayson | 58 | Madison | 20 | Rowan | 40 |
| Breckinridge | 57 | Green | 55 | Magoffin | 114 | Russell | 35 |
| Bullitt | 17 | Greenup | 65 | Marion | 37 | Scott | 7 |
| Butler | 64 | Hancock | 11 | Marshall | 34 | Shelby | 9 |
| Caldwell | 62 | Hardin | 15 | Martin | 119 | Simpson | 22 |
| Calloway | 3 | Harlan | 117 | Mason | 54 | Spencer | 4 |
| Campbell | 18 | Harrison | 59 | McCracken | 45 | Taylor | 32 |
| Carlisle | 80 | Hart | 38 | McCreary | 94 | Todd | 56 |
| Carroll | 49 | Henderson | 72 | McLean | 93 | Trigg | 85 |
| Carter | 91 | Henry | 50 | Meade | 13 | Trimble | 28 |
| Casey | 79 | Hickman | 31 | Menifee | 75 | Union | 53 |
| Christian | 51 | Hopkins | 66 | Mercer | 61 | Warren | 19 |
| Clark | 68 | Jackson | 109 | Metcalfe | 87 | Washington | 8 |
| Clay | 106 | Jefferson | 33 | Monroe | 63 | Wayne | 76 |
| Clinton | 98 | Jessamine | 16 | Montgomery | 86 | Webster | 78 |
| Crittenden | 89 | Johnson | 101 | Morgan | 29 | Whitley | 95 |
| Cumberland | 100 | Kenton | 21 | Muhlenberg | 81 | Wolfe | 118 |
| Daviess | 23 | Knott | 107 | Nelson | 25 | Woodford | 5 |

## HEALTH FACTORS




| County | Rank | County | Rank | County | Rank | County | Rank |
|---|---|---|---|---|---|---|---|
| Adair | 87 | Edmonson | 93 | Knox | 105 | Nicholas | 69 |
| Allen | 76 | Elliott | 109 | Larue | 44 | Ohio | 35 |
| Anderson | 10 | Estill | 90 | Laurel | 66 | Oldham | 2 |
| Ballard | 19 | Fayette | 4 | Lawrence | 103 | Owen | 50 |
| Barren | 18 | Fleming | 71 | Lee | 116 | Owsley | 112 |
| Bath | 92 | Floyd | 104 | Leslie | 115 | Pendleton | 73 |
| Bell | 102 | Franklin | 27 | Letcher | 91 | Perry | 101 |
| Boone | 3 | Fulton | 97 | Lewis | 108 | Pike | 79 |
| Bourbon | 49 | Gallatin | 85 | Lincoln | 88 | Powell | 106 |
| Boyd | 32 | Garrard | 48 | Livingston | 46 | Pulaski | 38 |
| Boyle | 26 | Grant | 78 | Logan | 63 | Robertson | 68 |
| Bracken | 72 | Graves | 39 | Lyon | 13 | Rockcastle | 81 |
| Breathitt | 107 | Grayson | 67 | Madison | 6 | Rowan | 37 |
| Breckinridge | 58 | Green | 56 | Magoffin | 119 | Russell | 60 |
| Bullitt | 31 | Greenup | 34 | Marion | 57 | Scott | 5 |
| Butler | 62 | Hancock | 14 | Marshall | 20 | Shelby | 15 |
| Caldwell | 43 | Hardin | 22 | Martin | 110 | Simpson | 61 |
| Calloway | 7 | Harlan | 100 | Mason | 42 | Spencer | 24 |
| Campbell | 8 | Harrison | 25 | McCracken | 12 | Taylor | 41 |
| Carlisle | 23 | Hart | 82 | McCreary | 117 | Todd | 70 |
| Carroll | 95 | Henderson | 33 | McLean | 30 | Trigg | 64 |
| Carter | 84 | Henry | 54 | Meade | 51 | Trimble | 52 |
| Casey | 86 | Hickman | 59 | Menifee | 113 | Union | 45 |
| **Christian** | **75** | **Hopkins** | **29** | **Mercer** | **40** | **Warren** | **11** |
| Clark | 28 | Jackson | 114 | Metcalfe | 98 | Washington | 36 |
| Clay | 120 | Jefferson | 55 | Monroe | 96 | Wayne | 94 |
| Clinton | 77 | Jessamine | 17 | Montgomery | 47 | Webster | 65 |
| Crittenden | 83 | Johnson | 80 | Morgan | 111 | Whitley | 74 |
| Cumberland | 89 | Kenton | 16 | Muhlenberg | 53 | Wolfe | 118 |
| Daviess | 9 | Knott | 99 | Nelson | 21 | Woodford | 1 |

## Summary Health Outcomes & Health Factors Rankings

Counties receive two summary ranks:

- Health Outcomes
- Health Factors

Each of these ranks represents a weighted summary of a number of measures.

Health outcomes represent how healthy a county is while health factors represent what influences the health of the county.

| Rank | Health Outcomes | Rank | Health Factors |
|---|---|---|---|
| 1 | Oldham | 1 | Woodford |
| 2 | Boone | 2 | Oldham |
| 3 | Calloway | 3 | Boone |
| 4 | Spencer | 4 | Fayette |
| 5 | Woodford | 5 | Scott |
| 6 | Owen | 6 | Madison |
| 7 | Scott | 7 | Calloway |
| 8 | Washington | 8 | Campbell |
| 9 | Shelby | 9 | Daviess |
| 10 | Fayette | 10 | Anderson |
| 11 | Hancock | 11 | Warren |
| 12 | Lyon | 12 | McCracken |
| 13 | Meade | 13 | Lyon |
| 14 | Franklin | 14 | Hancock |
| 15 | Hardin | 15 | Shelby |
| 16 | Jessamine | 16 | Kenton |
| 17 | Bullitt | 17 | Jessamine |
| 18 | Campbell | 18 | Barren |
| 19 | Warren | 19 | Ballard |
| 20 | Madison | 20 | Marshall |
| 21 | Kenton | 21 | Nelson |
| 22 | Simpson | 22 | Hardin |
| 23 | Daviess | 23 | Carlisle |
| 24 | Anderson | 24 | Spencer |
| 25 | Nelson | 25 | Harrison |
| 26 | Larue | 26 | Boyle |
| 27 | Edmonson | 27 | Franklin |
| 28 | Trimble | 28 | Clark |
| 29 | Morgan | 29 | Hopkins |
| 30 | Boyle | 30 | McLean |
| 31 | Hickman | 31 | Bullitt |
| 32 | Taylor | 32 | Boyd |
| 33 | Jefferson | 33 | Henderson |
| 34 | Marshall | 34 | Greenup |
| 35 | Russell | 35 | Ohio |
| 36 | Garrard | 36 | Washington |
| 37 | Marion | 37 | Rowan |
| 38 | Hart | 38 | Pulaski |
| 39 | Logan | 39 | Graves |
| 40 | Rowan | 40 | Mercer |
| 41 | Graves | 41 | Taylor |
| 42 | Bourbon | 42 | Mason |

| Rank | Health Outcomes | Rank | Health Factors |
|---|---|---|---|
| 43 | Barren | 43 | Caldwell |
| 44 | Bracken | 44 | Larue |
| 45 | McCracken | 45 | Union |
| 46 | Ohio | 46 | Livingston |
| 47 | Allen | 47 | Montgomery |
| 48 | Pulaski | 48 | Garrard |
| 49 | Carroll | 49 | Bourbon |
| 50 | Henry | 50 | Owen |
| 51 | Christian | 51 | Meade |
| 52 | Robertson | 52 | Trimble |
| 53 | Union | 53 | Muhlenberg |
| 54 | Mason | 54 | Henry |
| 55 | Green | 55 | Jefferson |
| 56 | Todd | 56 | Green |
| 57 | Breckinridge | 57 | Marion |
| 58 | Grayson | 58 | Breckinridge |
| 59 | Harrison | 59 | Hickman |
| 60 | Adair | 60 | Russell |
| 61 | Mercer | 61 | Simpson |
| 62 | Caldwell | 62 | Butler |
| 63 | Monroe | 63 | Logan |
| 64 | Butler | 64 | Trigg |
| 65 | Greenup | 65 | Webster |
| 66 | Hopkins | 66 | Laurel |
| 67 | Lewis | 67 | Grayson |
| 68 | Clark | 68 | Robertson |
| 69 | Fleming | 69 | Nicholas |
| 70 | Laurel | 70 | Todd |
| 71 | Gallatin | 71 | Fleming |
| 72 | Henderson | 72 | Bracken |
| 73 | Rockcastle | 73 | Pendleton |
| 74 | Grant | 74 | Whitley |
| 75 | Menifee | 75 | Christian |
| 76 | Wayne | 76 | Allen |
| 77 | Livingston | 77 | Clinton |
| 78 | Webster | 78 | Grant |
| 79 | Casey | 79 | Pike |
| 80 | Carlisle | 80 | Johnson |
| 81 | Muhlenberg | 81 | Rockcastle |
| 82 | Ballard | 82 | Hart |
| 83 | Pendleton | 83 | Crittenden |
| 84 | Lincoln | 84 | Carter |
| 85 | Trigg | 85 | Gallatin |
| 86 | Montgomery | 86 | Casey |
| 87 | Metcalfe | 87 | Adair |
| 88 | Boyd | 88 | Lincoln |
| 89 | Crittenden | 89 | Cumberland |
| 90 | Estill | 90 | Estill |

| Rank | Health Outcomes | Rank | Health Factors |
|---|---|---|---|
| 91 | Carter | 91 | Letcher |
| 92 | Powell | 92 | Bath |
| 93 | McLean | 93 | Edmonson |
| 94 | McCreary | 94 | Wayne |
| 95 | Whitley | 95 | Carroll |
| 96 | Elliott | 96 | Monroe |
| 97 | Bath | 97 | Fulton |
| 98 | Clinton | 98 | Metcalfe |
| 99 | Leslie | 99 | Knott |
| 100 | Cumberland | 100 | Harlan |
| 101 | Johnson | 101 | Perry |
| 102 | Breathitt | 102 | Bell |
| 103 | Lawrence | 103 | Lawrence |
| 104 | Bell | 104 | Floyd |
| 105 | Knox | 105 | Knox |
| 106 | Clay | 106 | Powell |
| 107 | Knott | 107 | Breathitt |
| 108 | Lee | 108 | Lewis |
| 109 | Jackson | 109 | Elliott |
| 110 | Nicholas | 110 | Martin |
| 111 | Fulton | 111 | Morgan |
| 112 | Floyd | 112 | Owsley |
| 113 | Letcher | 113 | Menifee |
| 114 | Magoffin | 114 | Jackson |
| 115 | Perry | 115 | Leslie |
| 116 | Pike | 116 | Lee |
| 117 | Harlan | 117 | McCreary |
| 118 | Wolfe | 118 | Wolfe |
| 119 | Martin | 119 | Magoffin |
| 120 | Owsley | 120 | Clay |

## 2012 *County Health Rankings*: Measures, Data Sources, and Years of Data

| | Measure | Data Source | Years of Data |
|---|---|---|---|
| **HEALTH OUTCOMES** | | | |
| **Mortality** | Premature death | National Center for Health Statistics | 2006-2008 |
| **Morbidity** | Poor or fair health | Behavioral Risk Factor Surveillance System | 2004-2010 |
| | Poor physical health days | Behavioral Risk Factor Surveillance System | 2004-2010 |
| | Poor mental health days | Behavioral Risk Factor Surveillance System | 2004-2010 |
| | Low birthweight | National Center for Health Statistics | 2002-2008 |
| **HEALTH FACTORS** | | | |
| **HEALTH BEHAVIORS** | | | |
| **Tobacco Use** | Adult smoking | Behavioral Risk Factor Surveillance System | 2004-2010 |
| **Diet and Exercise** | Adult obesity | National Center for Chronic Disease Prevention and Health Promotion | 2009 |
| | Physical inactivity | National Center for Chronic Disease Prevention and Health Promotion | 2009 |
| **Alcohol Use** | Excessive drinking | Behavioral Risk Factor Surveillance System | 2004-2010 |
| | Motor vehicle crash death rate | National Center for Health Statistics | 2002-2008 |
| **Sexual Activity** | Sexually transmitted infections | National Center for Hepatitis, HIV, STD and TB Prevention | 2009 |
| | Teen birth rate | National Center for Health Statistics | 2002-2008 |
| **CLINICAL CARE** | | | |
| **Access to Care** | Uninsured | Small Area Health Insurance Estimates | 2009 |
| | Primary care physicians | Health Resources & Services Administration | 2009 |
| **Quality of Care** | Preventable hospital stays | Medicare/Dartmouth Institute | 2009 |
| | Diabetic screening | Medicare/Dartmouth Institute | 2009 |
| | Mammography screening | Medicare/Dartmouth Institute | 2009 |
| **SOCIAL AND ECONOMIC FACTORS** | | | |
| **Education** | High school graduation | National Center for Education Statistics and state-specific sources[1] | 2008-2010 |
| | Some college | American Community Survey | 2006-2010 |
| **Employment** | Unemployment | Bureau of Labor Statistics | 2010 |
| **Income** | Children in poverty | Small Area Income and Poverty Estimates | 2010 |
| **Family and Social Support** | Inadequate social support | Behavioral Risk Factor Surveillance System | 2006-2010 |
| | Children in single-parent households | American Community Survey | 2006-2010 |
| **Community Safety** | Violent crime rate[2] | Federal Bureau of Investigation | 2007-2009 |
| **PHYSICAL ENVIRONMENT** | | | |
| **Environmental Quality**[3] | Air pollution-particulate matter days | U.S. Environmental Protection Agency | 2007 |
| | Air pollution-ozone days | U.S. Environmental Protection Agency | 2007 |
| **Built Environment** | Access to recreational facilities | Census County Business Patterns | 2009 |
| | Limited access to healthy foods[4] | U.S. Department of Agriculture | 2006 |
| | Fast food restaurants | Census County Business Patterns | 2009 |

[1] NCES used for AK, AL, AR, CA, CT, FL, HI, ID, KY, MT, ND, NJ, OK, SD and TN

[2] State data source for IL.

[3] Not available for AK and HI.

[4] Access to Healthy Foods (2009) from Census Zip Code Business Patterns for AK and HI.

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