

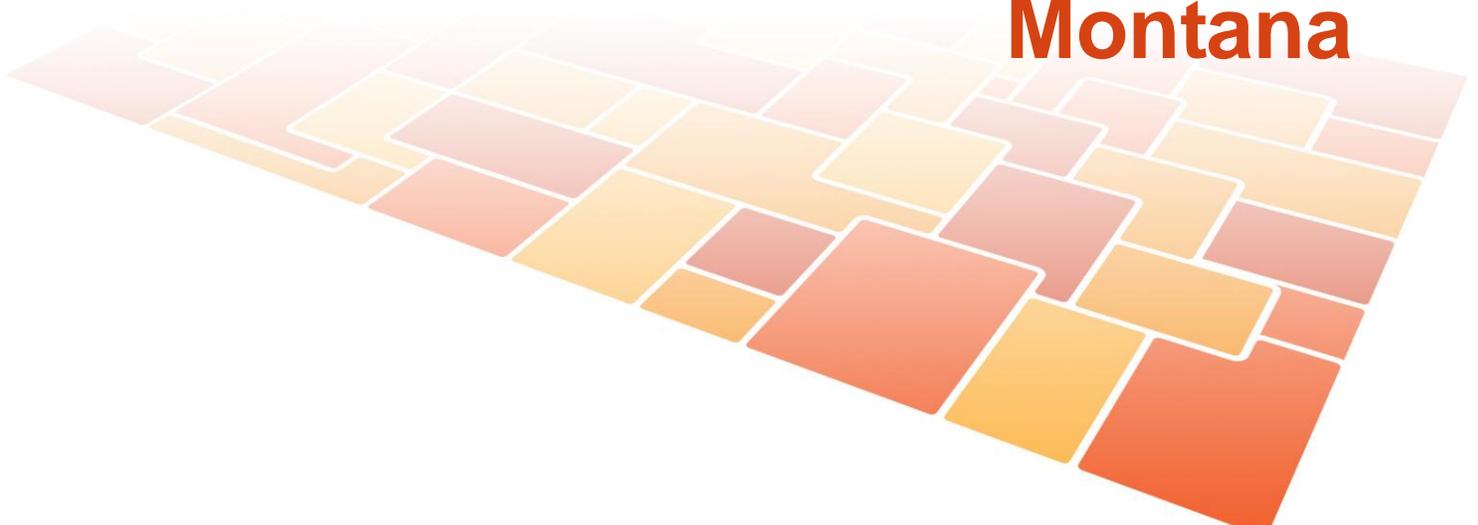


# County Health Rankings

Mobilizing Action Toward Community Health

2011

**Montana**



Robert Wood Johnson Foundation



UNIVERSITY OF WISCONSIN

**Population Health Institute**

*Translating Research into Policy and Practice*



## Introduction

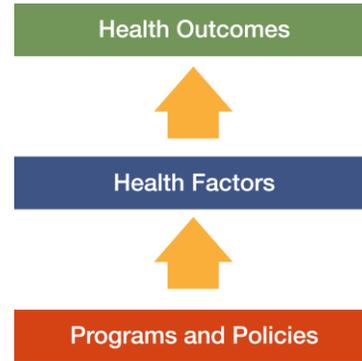
Where we live matters to our health. The health of a community depends on many different factors, including quality of health care, individual behavior, education and jobs, and the environment. We can improve a community's health through programs and policies. For example, people who live in communities with ample park and recreation space are more likely to exercise, which reduces heart disease risk. 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.

The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 2011 *County Health Rankings*, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the second year in a row, counties can get a snapshot of how healthy their residents are by comparing their overall health and the factors that influence their health with other counties in their state. This allows communities to see county-to-county where they are doing well and where they need to improve.

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

All of the *County Health Rankings* are based upon 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. These health factors and their outcomes may also be affected by community-based programs and policies designed to alter their distribution in the community. Counties can improve health outcomes by addressing all health factors with effective, evidence-based programs and policies.

To compile the *Rankings*, we built on our prior work in Wisconsin, obtained input from a team of expert advisors, and worked closely with staff from the National Center for Health Statistics. Together we selected a number of population health measures based on scientific relevance, importance, and availability of data at the county level.

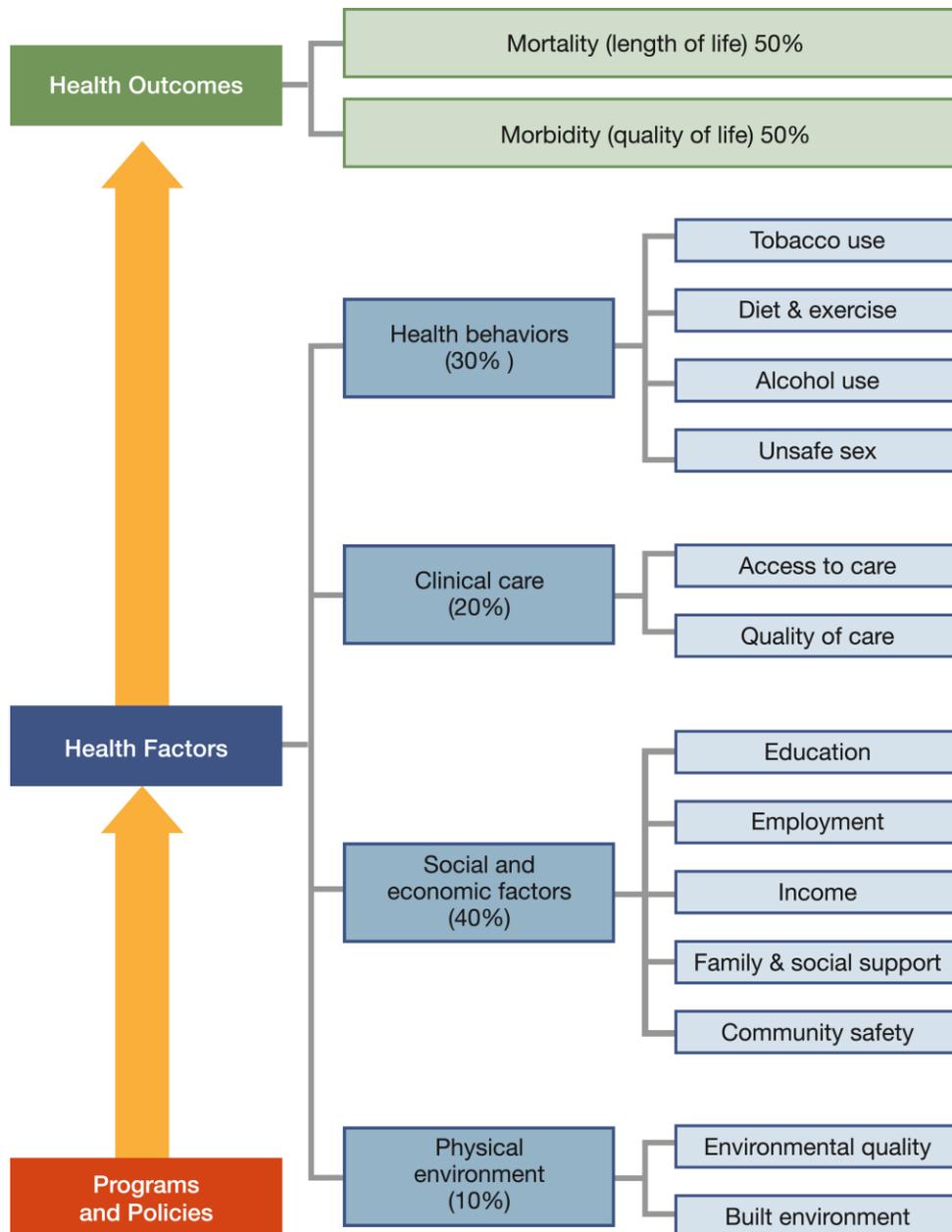
For a more detailed explanation of our approach, the methods used to compile the *Rankings*, information on the action steps communities can take to improve their health, and examples of communities in action, see [www.countyhealthrankings.org](http://www.countyhealthrankings.org)



## The Rankings

This report ranks Montana counties according to their summary measures of **health outcomes** and **health factors**, as well as the components used to create each summary measure. The figure below depicts the structure of the *Rankings* model. Counties receive a rank for each population health component; 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.

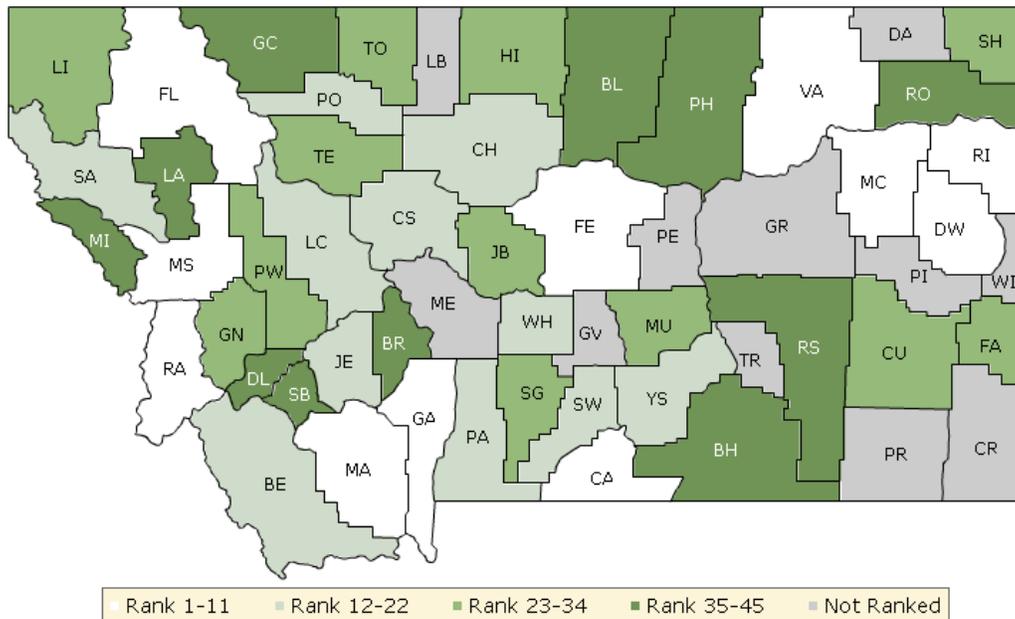


County Health Rankings model ©2010 UWPHI

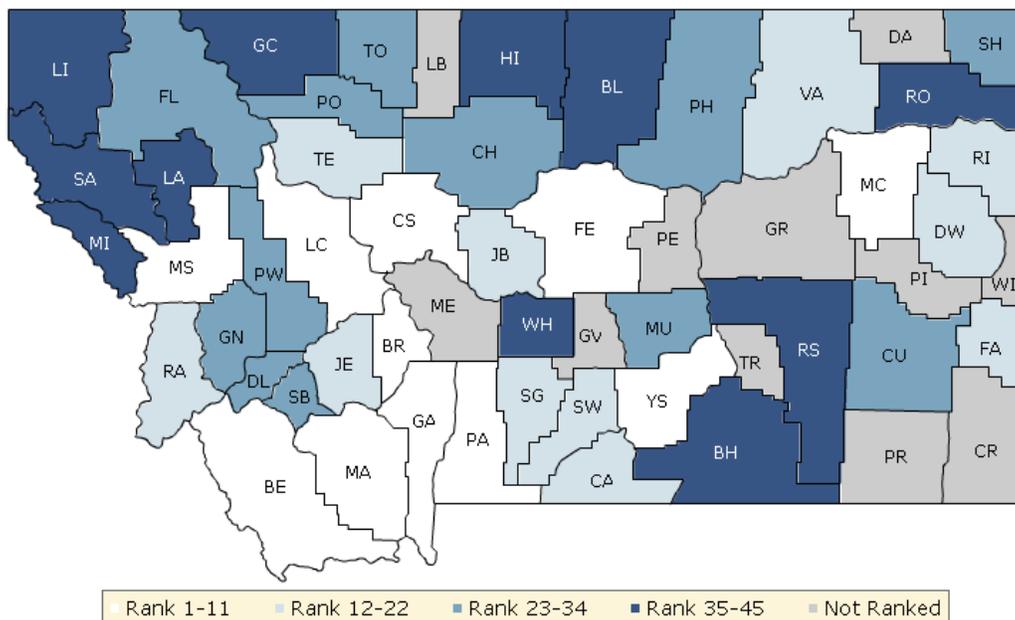
The maps on this page display Montana's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

Maps help locate the healthiest and least healthy counties in the state. The health factors map appears similar to the health outcomes map, showing how health factors and health outcomes are closely related.

### HEALTH OUTCOMES



### HEALTH FACTORS



## 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 are what influences the health of the county.

Rank	Health Outcomes	Rank	Health Factors
1	Gallatin	1	Gallatin
2	Carbon	2	McCone
3	Fergus	3	Lewis and Clark
4	Missoula	4	Fergus
5	Ravalli	5	Missoula
6	Madison	6	Beaverhead
7	Valley	7	Yellowstone
8	McCone	8	Park
9	Richland	9	Madison
10	Dawson	10	Cascade
11	Flathead	11	Broadwater
12	Pondera	12	Judith Basin
13	Stillwater	13	Jefferson
14	Beaverhead	14	Richland
15	Yellowstone	15	Teton
16	Jefferson	16	Fallon
17	Park	17	Ravalli
18	Sanders	18	Carbon
19	Wheatland	19	Stillwater
20	Lewis and Clark	20	Sweet Grass
21	Chouteau	21	Dawson
22	Cascade	22	Valley
23	Teton	23	Flathead
24	Judith Basin	24	Chouteau
25	Toole	25	Silver Bow
26	Sweet Grass	26	Custer
27	Sheridan	27	Phillips
28	Hill	28	Musselshell
29	Fallon	29	Toole
30	Custer	30	Sheridan
31	Musselshell	31	Deer Lodge
32	Lincoln	32	Pondera
33	Granite	33	Granite
34	Powell	34	Powell
35	Silver Bow	35	Wheatland
36	Phillips	36	Lincoln
37	Lake	37	Mineral
38	Rosebud	38	Hill
39	Blaine	39	Lake
40	Broadwater	40	Sanders
41	Mineral	41	Rosebud
42	Deer Lodge	42	Blaine
43	Big Horn	43	Roosevelt
44	Glacier	44	Glacier
45	Roosevelt	45	Big Horn

**Not Ranked:** Carter, Daniels, Garfield, Golden Valley, Liberty, Meagher, Petroleum, Powder River, Prairie, Treasure, Wibaux

## Health Outcomes Rankings

The summary health outcomes ranking is based on measures of mortality and morbidity. Each county's ranks for mortality and morbidity are displayed here. The mortality rank, representing length of life, is based on a measure of premature death: the years of potential life lost prior to age 75.

The morbidity rank is based on measures that represent health-related quality of life and birth outcomes. We combine four morbidity measures: self-reported fair or poor health, poor physical health days, poor mental health days, and the percent of births with low birthweight.

Rank	Mortality	Rank	Morbidity
1	Gallatin	1	Gallatin
2	Beaverhead	2	McCone
3	Missoula	3	Pondera
4	Carbon	4	Valley
5	Fergus	5	Madison
6	Lewis and Clark	6	Fergus
7	Ravalli	7	Carbon
8	Dawson	8	Ravalli
9	Yellowstone	9	Richland
10	Madison	10	Wheatland
11	Cascade	11	Flathead
12	Powell	12	Missoula
13	Flathead	13	Stillwater
14	Sanders	14	Chouteau
15	Richland	15	Jefferson
16	Park	16	Teton
17	Jefferson	17	Park
18	Valley	18	Judith Basin
19	Stillwater	19	Dawson
20	Hill	20	Sanders
21	Chouteau	21	Toole
21	Fallon	22	Sweet Grass
21	Granite	23	Custer
21	Judith Basin	24	Sheridan
21	McCone	25	Rosebud
21	Phillips	26	Fallon
21	Sheridan	27	Yellowstone
21	Sweet Grass	28	Hill
21	Teton	29	Musselshell
21	Toole	30	Cascade
21	Wheatland	31	Blaine
32	Lincoln	32	Big Horn
33	Musselshell	33	Lincoln
34	Pondera	34	Silver Bow
35	Custer	35	Lewis and Clark
36	Mineral	36	Beaverhead
37	Silver Bow	37	Roosevelt
38	Lake	38	Granite
39	Deer Lodge	39	Lake
40	Blaine	40	Phillips
41	Broadwater	41	Broadwater
42	Rosebud	42	Glacier
43	Glacier	43	Powell
44	Big Horn	44	Deer Lodge
45	Roosevelt	45	Mineral

## Health Factors Rankings

The summary health factors ranking is based on four factors: health behaviors, clinical care, social and economic, and physical environment factors. In turn, each of these factors is based on several measures. Health behaviors include measures of smoking, diet and exercise, alcohol use, and risky sex behavior. Clinical

care includes measures of access to care and quality of care. Social and economic factors include measures of education, employment, income, family and social support, and community safety. The physical environment includes measures of environmental quality and the built environment.

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
1	Gallatin	1	Fergus	1	McCone	1	Deer Lodge
2	McCone	2	Yellowstone	2	Lewis and Clark	2	Glacier
3	Park	3	Lewis and Clark	3	Fallon	3	Lewis and Clark
4	Beaverhead	4	Cascade	4	Gallatin	4	Fergus
5	Phillips	5	Silver Bow	5	Teton	5	Gallatin
6	Ravalli	6	Powell	6	Missoula	6	Hill
7	Broadwater	7	Flathead	7	Richland	7	Teton
8	Judith Basin	8	Lincoln	8	Yellowstone	8	Richland
9	Missoula	9	Missoula	9	Sweet Grass	9	Roosevelt
10	Fergus	10	Custer	10	Dawson	10	Flathead
11	Madison	11	Deer Lodge	11	Madison	11	Ravalli
12	Musselshell	12	Jefferson	12	Carbon	12	Madison
13	Sweet Grass	13	Valley	13	Toole	13	Lincoln
14	Stillwater	14	Gallatin	14	Stillwater	14	Chouteau
15	Jefferson	15	Beaverhead	15	Chouteau	15	Dawson
16	Lewis and Clark	16	Park	16	Cascade	16	Fallon
17	Flathead	17	Carbon	17	Broadwater	17	Yellowstone
18	Chouteau	18	Lake	18	Valley	18	Cascade
19	Sanders	19	Ravalli	19	Beaverhead	19	Granite
20	Custer	20	Richland	20	Sheridan	20	Missoula
21	Cascade	21	Judith Basin	21	Park	21	Judith Basin
22	Granite	22	Dawson	22	Fergus	22	Beaverhead
23	Lincoln	23	McCone	23	Jefferson	23	McCone
24	Yellowstone	24	Broadwater	24	Judith Basin	24	Sanders
25	Carbon	25	Toole	25	Phillips	25	Jefferson
26	Sheridan	26	Wheatland	26	Pondera	25	Pondera
27	Fallon	27	Rosebud	27	Hill	27	Valley
28	Valley	28	Pondera	28	Wheatland	28	Sheridan
29	Silver Bow	29	Granite	29	Silver Bow	29	Broadwater
30	Teton	30	Teton	30	Custer	30	Powell
31	Richland	31	Stillwater	31	Ravalli	31	Blaine
32	Mineral	32	Sanders	32	Flathead	31	Phillips
33	Dawson	33	Musselshell	33	Musselshell	31	Toole
34	Deer Lodge	34	Madison	34	Deer Lodge	34	Mineral
35	Powell	35	Sweet Grass	35	Granite	35	Musselshell
36	Pondera	36	Fallon	36	Powell	36	Lake
37	Toole	37	Chouteau	37	Rosebud	37	Rosebud
38	Wheatland	38	Sheridan	38	Blaine	38	Silver Bow
39	Lake	39	Mineral	39	Mineral	39	Custer
40	Hill	40	Roosevelt	40	Lake	40	Wheatland
41	Rosebud	41	Hill	41	Lincoln	41	Stillwater
42	Blaine	42	Blaine	42	Glacier	42	Carbon
43	Roosevelt	43	Glacier	43	Big Horn	43	Park
44	Big Horn	44	Phillips	44	Sanders	44	Big Horn
45	Glacier	45	Big Horn	45	Roosevelt	45	Sweet Grass

## 2011 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
<b>HEALTH OUTCOMES</b>			
<b>Mortality</b>	Premature death	National Center for Health Statistics	2005-2007
<b>Morbidity</b>	Poor or fair health	Behavioral Risk Factor Surveillance System	2003-2009
	Poor physical health days	Behavioral Risk Factor Surveillance System	2003-2009
	Poor mental health days	Behavioral Risk Factor Surveillance System	2003-2009
	Low birthweight	National Center for Health Statistics	2001-2007
<b>HEALTH FACTORS</b>			
<b>HEALTH BEHAVIORS</b>			
<b>Tobacco</b>	Adult smoking	Behavioral Risk Factor Surveillance System	2003-2009
<b>Diet and Exercise</b>	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2008
<b>Alcohol Use</b>	Excessive drinking	Behavioral Risk Factor Surveillance System	2003-2009
	Motor vehicle crash death rate	National Center for Health Statistics	2001-2007
<b>High Risk Sexual Behavior</b>	Sexually transmitted infections	National Center for Hepatitis, HIV, STD and TB Prevention	2008
	Teen birth rate	National Center for Health Statistics	2001-2007
<b>CLINICAL CARE</b>			
<b>Access to Care</b>	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2007
	Primary care providers	Health Resources & Services Administration	2008
<b>Quality of Care</b>	Preventable hospital stays	Medicare/Dartmouth Institute	2006-2007
	Diabetic screening	Medicare/Dartmouth Institute	2006-2007
	Mammography screening	Medicare/Dartmouth Institute	2006-2007
<b>SOCIOECONOMIC FACTORS</b>			
<b>Education</b>	High school graduation	National Center for Education Statistics <sup>1</sup>	2006-2007
	Some college	American Community Survey	2005-2009
<b>Employment</b>	Unemployment	Bureau of Labor Statistics	2009
<b>Income</b>	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2008
<b>Family and Social Support</b>	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2009
	Single-parent households	American Community Survey	2005-2009
<b>Community Safety</b>	Violent crime <sup>2</sup>	Uniform Crime Reporting, Federal Bureau of Investigation	2006-2008
<b>PHYSICAL ENVIRONMENT</b>			
<b>Air Quality</b> <sup>3</sup>	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2006
<b>Built Environment</b>	Access to healthy foods	Census Zip Code Business Patterns	2008
	Access to recreational facilities	Census County Business Patterns	2008

<sup>1</sup> State data sources for KY, NH, NC, PA, SC, and UT (2008-2009).

<sup>2</sup> Homicide rate (2001-2007) from National Center for Health Statistics for AK, AZ, AR, CO, CT, GA, ID, IN, IA, KS, KY, LA, MN, MS, MT, NE, NH, NM, NC, ND, OH, SD, UT, and WV. State data source for IL.

<sup>3</sup> Not available for AK and HI.

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