

# **Tennessee**





#### 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 2010 County Health Rankings, a collection of 50 reports that reflect the overall health of counties in every state across the country. For the first time, 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 will allow them 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.



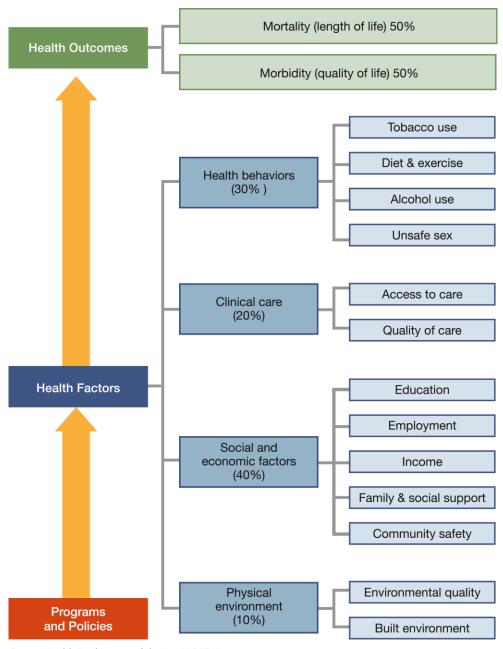
Institute of Medicine, 2002

To compile the Rankings, we built on our prior work in Wisconsin, worked closely with staff from the Centers for Disease Control and Prevention and Dartmouth College, and obtained input from a team of expert advisors. 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 the choice of measures, see www.countyhealthrankings.org.

## **The Rankings**

This report ranks Tennessee 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.



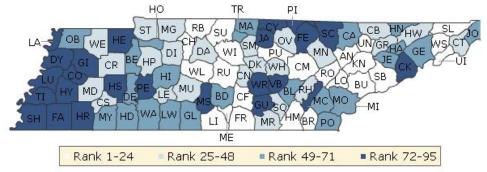
County Health Rankings model ©2010 UWPHI

The maps on this page display Tennessee'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** HO TR PI RB MG DΑ DI WL MD BD Rank 1-24 Rank 25-48 Rank 49-71 ■ Rank 72-95

### **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	Williamson	1	Williamson
2	Sumner	2	Knox
3	Rutherford	3	Washington
4	Moore	4	Unicoi
5	Blount	5	Hamilton
6	Wilson	6	Moore
7	Franklin	7	Roane
8	Chester	8	Anderson
9	Knox	9	Rutherford
10	Montgomery	10	Sumner
11	Robertson	11	Bradley
12	Putnam	12	Cheatham
13	Bradley	13	Wilson
14	Cannon	14	Sullivan
15	Bledsoe	15	Sevier
16	Maury	16	Blount
17	Davidson	17	Putnam
18	Bedford	18	Loudon
19	Fayette	19	Cumberland
20	Cheatham	20	Franklin
21	Weakley	21	Lincoln
22	Crockett	22	Union
23	Sevier	23	Robertson
24	Giles	24	Coffee
25	Loudon	25	Smith
26	Hamilton	26	Madison
27	Jefferson	27	Claiborne
28	Monroe	28	Chester
29	Hamblen	29	DeKalb
30	Grainger	30	Morgan
31	Dickson	31	Rhea
32	Roane	32	Lewis
33	Hawkins	33	Overton
34	Washington	34	Grainger
35	Lawrence	35	Davidson
36	Anderson	36	Hawkins
37	Sullivan	37	Cannon
38	Smith	38	Weakley
39	Lincoln	39	Dickson
40	Madison	40	Humphreys

Dank	Haalth Outsamas	Doub	Haalth Fastana
Rank 41	Health Outcomes Greene	Rank 41	Health Factors  Montgomery
42	Humphreys	42	Carter
43	Tipton	43	Marion
44	Cumberland	44	Carroll
45	Coffee	45	Maury
46	White	46	Stewart
47	Unicoi	47	
48	Marshall	48	Sequatchie White
49	Carter	49	Obion
		50	Decatur
50	Morgan		
51 52	Macon McMinn	51 52	Johnson McMinn
53	Van Buren	53	Jefferson
54	McNairy	54	Giles
55	Wayne	55	Bedford
56	Obion	56	Hamblen
57	Shelby	57	Trousdale
58	Pickett	58	Campbell
59	Overton	59	Hickman
60	Warren	60	Lawrence
61	Stewart	61	McNairy
62	Meigs	62	Hancock
63	Sequatchie	63	Greene
64	Dyer	64	Macon
65	Gibson	65	Hardin
66	Clay	66	Benton
67	Haywood	67	Polk
68	Hickman	68	Wayne
69	Perry	69	Monroe
70	Houston	70	Houston
71	Union	71	Bledsoe
72	Claiborne	72	Van Buren
73	Jackson	73	Cocke
74	Decatur	74	Meigs
75	Henry	75	Henderson
76	Henderson	76	Crockett
77	Hardin	77	Jackson
78	Scott	78	Marshall
79	Marion	79	Henry
80	DeKalb	80	Warren
81	Lake	81	Grundy
82	Campbell	82	Fayette
83	Polk	83	Scott
84	Trousdale	84	Gibson
85	Lauderdale	85	Dyer
86	Johnson	86	Pickett
87	Rhea	87	Tipton
88	Cocke	88	Clay
89	Carroll	89	Fentress
90	Hancock	90	Perry
-	-	-	•

Rank	Health Outcomes	Rank	Health Factors
91	Lewis	91	Shelby
92	Benton	92	Lake
93	Hardeman	93	Hardeman
94	Fentress	94	Haywood
95	Grundy	95	Lauderdale

## **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	Williamson	1	Williamson
2	Moore	2	Cannon
3	Rutherford	3	Franklin
4	Sumner	4	Smith
5	Wilson	5	Robertson
6	Chester	6	Crockett
7	Blount	7	Sumner
8	Knox	8	Clay
9	Montgomery	9	Bedford
10	Bledsoe	10	Blount
11	Bradley	11	Cheatham
12	Hamilton	12	Putnam
13	Putnam	13	Lawrence
14	Franklin	14	Maury
15	Weakley	15	Decatur
16	Robertson	16	Rutherford
17	Davidson	17	Davidson
18	Maury	18	Houston
19	Fayette	18	Perry
20	Sevier	20	Coffee
21	Cumberland	21	Loudon
22	Dickson	22	Fayette
23	Giles	23	Knox
24	Anderson	24	Grainger
25	Bedford	25	Montgomery
26	Hawkins	26	Jefferson
27	White	27	Bradley
28	Carter	28	Unicoi
29	Monroe	29	Wilson
30	Hamblen	30	Chester
31	Sequatchie	31	Hancock
32	Lincoln	32	Giles
33	Humphreys	33	Wayne
34	Cheatham	34	Overton
35	Washington	35	Jackson
36	Cannon	36	Sevier
37	Roane	37	DeKalb
38	Tipton	38	Henderson
39	Loudon	39	Roane
40	Madison	40	Sullivan

Rank	Mortality	Rank	Morbidity
41	Sullivan	41	Hamblen
42	Greene	42	Weakley
43	Jefferson	43	Macon
44	McMinn	44	Monroe
45	Grainger	45	Bledsoe
46	Crockett	46	Washington
47	Morgan	47	Scott
48	Obion	48	Trousdale
49	Van Buren	49	Hawkins
50	Warren	50	Marshall
51	Stewart	51	Dickson
52	Pickett	52	McNairy
53	Marshall	53	Greene
54	Dyer	54	Shelby
55	Lake	55	Haywood
56	Marion	56	Anderson
57	McNairv	57	Madison
58	Union	58	Meigs
59	Lawrence	59	Gibson
60	Shelby	60	Tipton
61	Macon	61	Henry
62	Hickman	62	Morgan
63		63	Lincoln
64	Meigs	64	Pickett
65	Campbell Gibson	65	Van Buren
66	Coffee	66	Cocke
67	Unicoi	67	Humphreys Hardin
68	Wayne	68	
69	Lauderdale	69 70	Moore Hamilton
70	Claiborne	_	
71	Haywood	71	Claiborne
72	Overton	72	Obion
73	Johnson	73	Hickman
74	Rhea	74	McMinn
75	Smith	75	Dyer
76	Henry	76	Stewart
77	Polk	77	Carroll
78	Hardeman	78	Warren
79	Hardin	79	White
80	Jackson	80	Cumberland
81	Perry	81	Union
82	Houston	82	Carter
83	Scott	83	Polk
84	Clay	84	Fentress
85	Henderson	85	Johnson
86	Cocke	86	Sequatchie
87	Lewis	87	Rhea
88	Carroll	88	Lauderdale
89	Trousdale	89	Lewis
90	Decatur	90	Benton

Rank	Mortality	Rank	Morbidity
91	DeKalb	91	Campbell
92	Benton	92	Marion
93	Hancock	93	Lake
94	Grundy	94	Grundy
95	Fentress	95	Hardeman

# **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.

	Lloolth		Clinical		Social & Foonamia		Physical
Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
1	Williamson	1	Washington	1	Williamson	1	Bledsoe
2	Unicoi	2	Hamilton	2	Wilson	1	Macon
3	Bradley	3	Sullivan	3	Moore	3	Sequatchie
4	Cumberland	4	Madison	4	Rutherford	4	Moore
5	Knox	5	Williamson	5	Knox	4	Perry
6	Putnam	6	Knox	6	Sumner	6	Lewis
7	Hamilton	7	Anderson	7	Cheatham	7	Roane
8	Union	8	Davidson	8	Loudon	8	Houston
9	Lewis	9	Cocke	9	Lincoln	9	DeKalb
10	Sevier	10	Blount	10	Blount	9	Grainger
11	Cannon	11	Hawkins	11	Washington	9	Hancock
12	Claiborne	12	Sumner	12	Robertson	9	Scott
13	Roane	13	Dyer	13	Franklin	13	Campbell
14	Anderson	14	Dickson	14	Roane	14	Marion
15	Wayne	15	Shelby	15	Coffee	15	Cumberland
16	Moore	16	Rutherford	16	Montgomery	16	Fentress
17	Sumner	17	Unicoi	17	Unicoi	17	Grundy
18	Overton	18	Maury	18	Anderson	18	Benton
19	Grainger	19	Rhea	19	Sullivan	19	Stewart
20	Grundy	20	Bradley	20	Sevier	20	Pickett
21	Smith	21	Lauderdale	21	Dickson	21	Hawkins
22	DeKalb	22	Roane	22	Hamilton	22	Monroe
23	Decatur	23	Sevier	23	Stewart	22	Rhea
24	Morgan	24	McMinn	24	Humphreys	24	Carter
25	Davidson	25	Johnson	25	Maury	25	Decatur
26	Washington	26	Marion	26	Bradley	26	Cannon
27	Madison	27	Loudon	27	Obion	26	White
28	Blount	28	Montgomery	28	Smith	28	Franklin
29	Weakley	29	Chester	29	Chester	29	Cheatham
30	Hardin	30	Lincoln	30	Putnam	30	Chester
31	Sullivan	31	Jefferson	31	Polk	30	Weakley
32	Rutherford	32	Union	32	Jefferson	32	Johnson
33	Bedford	33	Greene	33	Carter	33	Marshall
34	Carroll	34	Gibson	34	Rhea	34	Greene
35	Cheatham	35	Campbell	35	Weakley	35	Warren
36	Humphreys	36	Giles	36	Bedford	36	Hickman
37	Hancock	37	Franklin	37	Trousdale	37	Carroll
38	Scott	38	Morgan	38	Giles	38	Bradley
39	Campbell	39	Cheatham	39	Hawkins	39	Smith
40	Wilson	40	White	40	Union	40	Morgan

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
41	Hamblen	41	Lake	41	DeKalb	41	Coffee
42	Meigs	42	Sequatchie	42	Grainger	42	Lawrence
43	Fentress	43	Carter	43	Cannon	43	Trousdale
44	Loudon	44	Claiborne	44	Marshall	44	Claiborne
45	Chester	45	Wilson	45	Hickman	45	Crockett
46	White	46	Tipton	46	Fayette	46	Overton
47	Robertson	47	Putnam	47	Marion	47	Wayne
48	Van Buren	48	Hancock	48	Hamblen	48	Unicoi
49	Lawrence	49	Lawrence	49	McMinn	49	McMinn
50	Johnson	50	Benton	50	Morgan	50	Hardeman
51	Jackson	51	Cumberland	51	Crockett	51	Bedford
52	Coffee	52	McNairy	52	Cumberland	52	Sevier
53	Houston	53	Carroll	53	Carroll	53	Gibson
54	Trousdale	54	Obion	54	Tipton	54	Henderson
55	Macon	55	Overton	55	Overton	55	Anderson
56	Crockett	56	Hardin	56	Dyer	56	Jefferson
57	Marion	57	Meigs	57	Houston	57	Washington
58	Pickett	58	Lewis	58	Decatur	58	Giles
59	Hickman	59	Haywood	59	Davidson	59	Fayette
60	Rhea	60	Monroe	60	McNairy	60	Putnam
61	Benton	61	DeKalb	61	Warren	61	McNairy
62	Clay	62	Henry	62	Jackson	62	Meigs
63	Franklin	63	Scott	63	Claiborne	63	Lauderdale
64	Greene	64	Robertson	64	Macon	64	Van Buren
65	Carter	65	Hamblen	65	Henderson	65	Rutherford
66	Perry	66	Marshall	66	White	66	Dickson
67	Stewart	67	Coffee	67	Henry	67	Cocke
68	McNairy	68	Hardeman	68	Sequatchie	68	Humphreys
69	Sequatchie	69	Henderson	69	Lawrence	69	Haywood
70	Monroe	70	Humphreys	70	Johnson	70	Wilson
71	Bledsoe	71	Van Buren	71	Gibson	71	Robertson
72	Maury	72	Smith	72	Bledsoe	72	Lincoln
73	Henry	73	Hickman	73	Monroe	73	Williamson
74	McMinn	74	Weakley	74	Wayne	74	Tipton
75	Obion	75	Warren	75	Madison	75	Hamblen
76	Polk	76	Polk	76	Greene	76	Clay
77	Hawkins	77	Grainger	77	Van Buren	77	Union
78	Lincoln	78	Stewart	78	Lewis	78	Sullivan
79	Montgomery	79	Trousdale	79	Hardin	79	Jackson
80	Cocke	80	Cannon	80	Clay	80	Obion
81	Henderson	81	Jackson	81	Benton	81	Polk
82	Fayette	82	Moore	82	Hardeman	82	Henry
83	Shelby	83	Pickett	83	Meigs	83	Hardin
84	Warren	84	Grundy	84	Campbell	84	Madison
85	Dickson	85	Decatur	85	Hancock	85	Hamilton
86	Giles	86	Fayette	86	Cocke	86	Maury
87	Jefferson	87	Bledsoe	87	Lake	87	Loudon
88	Marshall	88	Macon	88	Shelby	88	Sumner
89	Gibson	89	Crockett	89	Perry	89	Montgomery
90	Haywood	90	Houston	90	Grundy	90	Dyer

Rank	Health Behaviors	Rank	Clinical Care	Rank	Social & Economic Factors	Rank	Physical Environment
91	Lake	91	Fentress	91	Pickett	91	Davidson
92	Dyer	92	Bedford	92	Scott	92	Lake
93	Tipton	93	Wayne	93	Fentress	93	Blount
94	Hardeman	94	Clay	94	Haywood	94	Knox
95	Lauderdale	95	Perry	95	Lauderdale	95	Shelby

# 2010 County Health Rankings: Measures, Data Sources, and Years of Data

	Measure	Data Source	Years of Data
HEALTH OUTCOMES	<u> </u>		
Mortality	Premature death	National Center for Health Statistics	2004-2006
Morbidity	Poor or fair health	Behavioral Risk Factor Surveillance System	2002-2008
	Poor physical health days	Behavioral Risk Factor Surveillance System	2002-2008
	Poor mental health days	Behavioral Risk Factor Surveillance System	2002-2008
	Low birthweight	National Center for Health Statistics	2000-2006
HEALTH FACTORS			
HEALTH BEHAVIORS			
Tobacco	Adult smoking	Behavioral Risk Factor Surveillance System	2002-2008
Diet and Exercise	Adult obesity	National Center for Chronic Disease Prevention and Health Promotion	2006-2008
Alcohol Use	Binge drinking	Behavioral Risk Factor Surveillance System	2002-2008
	Motor vehicle crash death rate	National Center for Health Statistics	2000-2006
High Risk Sexual	Chlamydia rate	National Center for Health Statistics	2007
Behavior	Teen birth rate	National Center for Health Statistics	2000-2006
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates, U.S. Census	2005
	Primary care provider rate	Health Resources & Services Administration	2006
Quality of Care	Preventable hospital stays	Medicare/Dartmouth Institute	2005-2006
	Diabetic screening	Medicare/Dartmouth Institute	2003-2006
	Hospice use	Medicare/Dartmouth Institute	2001-2005
SOCIOECONOMIC FAC	TORS		
Education	High school graduation	National Center for Education Statistics <sup>1</sup>	2005-2006
	College degrees	U.S. Census/American Community Survey	2000/2005-2007
Employment	Unemployment	Bureau of Labor Statistics	2008
Income	Children in poverty	Small Area Income and Poverty Estimates, U.S. Census	2007
	Income inequality	U.S. Census/American Community Survey <sup>2</sup>	2000/2005-2007
Family and Social Support	Inadequate social support	Behavioral Risk Factor Surveillance System	2005-2008
	Single-parent households	U.S. Census/American Community Survey	2000/2005-2007
Community Safety	Violent crime <sup>3</sup>	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONME	ENT		
Air Quality⁴	Air pollution-particulate matter days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
	Air pollution-ozone days	U.S. Environmental Protection Agency / Centers for Disease Control and Prevention	2005
Built Environment	Access to healthy foods	Census Zip Code Business Patterns	2006
	Liquor store density	Census County Business Patterns	2006

State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).
 Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, www.ncat.edu/~burkeym/Gini.htm.

<sup>&</sup>lt;sup>3</sup> Homicide rate (2000-2006) 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>&</sup>lt;sup>4</sup> Not available for AK and HI.

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Suggested citation: University of Wisconsin Population Health Institute. County Health Rankings 2010.



