County Health Rankings & Roadmaps

A Healthier Nation, County by County

2012 *Rankings*
North Dakota

Robert Wood Johnson Foundation

UNIVERSITY OF WISCONSIN
Population Health Institute
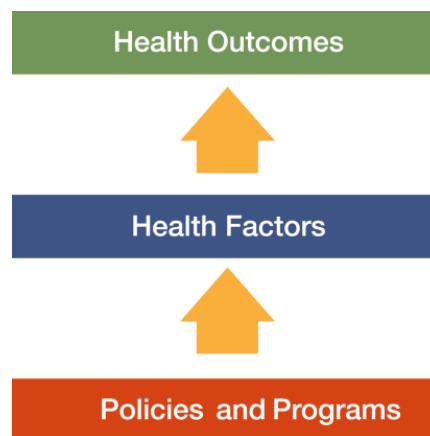*Translating Research into Policy and Practice*

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.
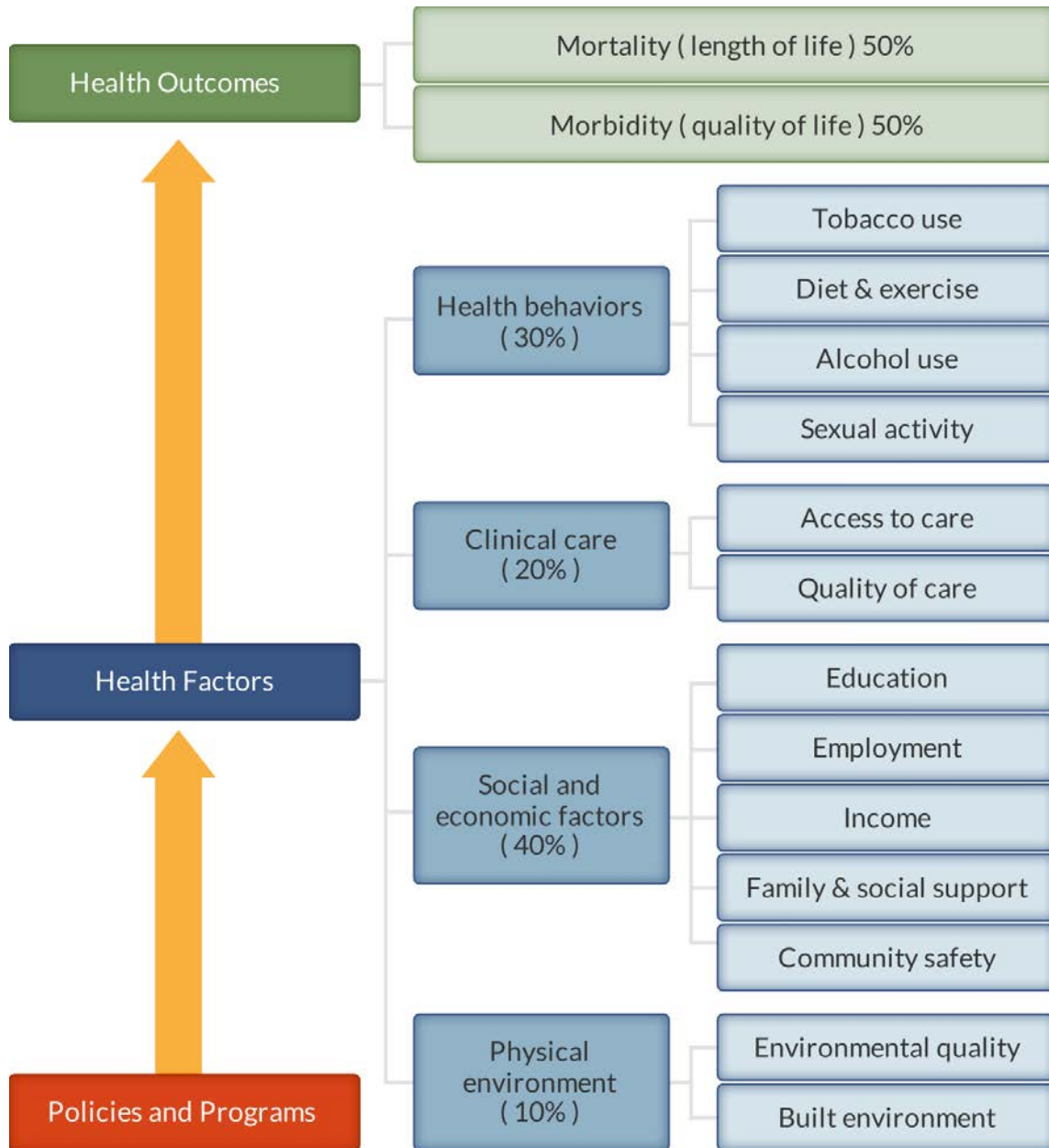

Roadmaps to Health Action Center

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 North Dakota 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.

Health Outcomes
- Mortality (length of life) 50%
- Morbidity (quality of life) 50%

Health Factors

Health behaviors (30%)
- Tobacco use
- Diet & exercise
- Alcohol use
- Sexual activity

Clinical care (20%)
- Access to care
- Quality of care

Social and economic factors (40%)
- Education
- Employment
- Income
- Family & social support
- Community safety

Physical environment (10%)
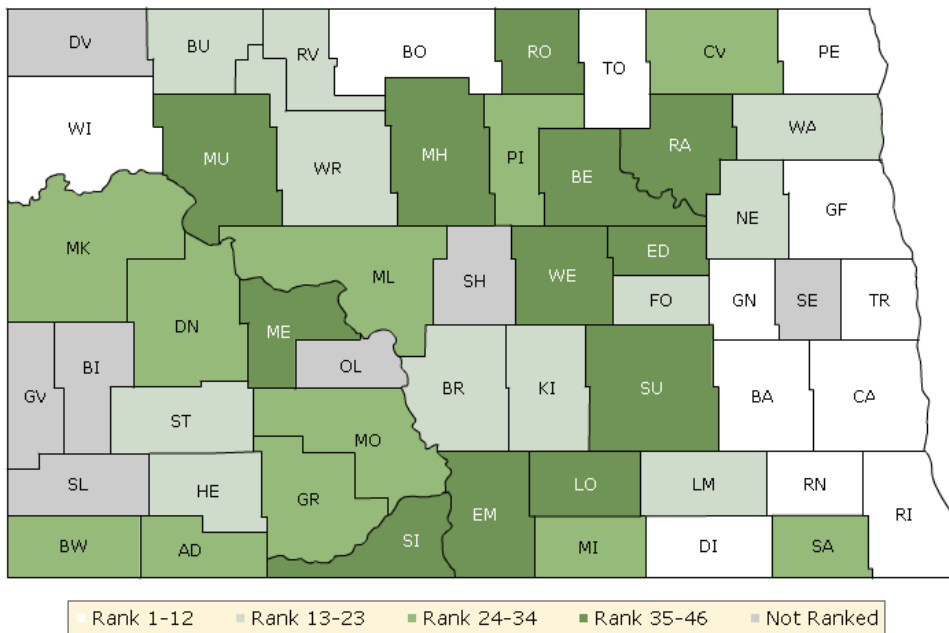- Environmental quality
- Built environment

Policies and Programs

County Health Rankings model ©2012 UWPHI

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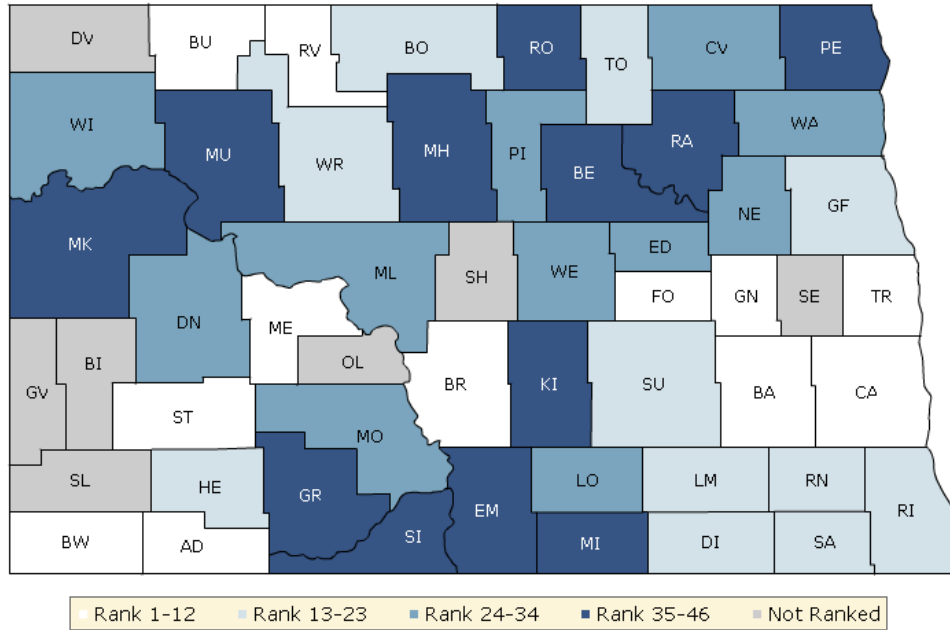tate. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

HEALTH OUTCOMES

Legend: Rank 1-12 | Rank 13-23 | Rank 24-34 | Rank 35-46 | Not Ranked

County	Rank	County	Rank	County	Rank	County	Rank
Adams	29	Emmons	35	Mercer	41	Sioux	46
Barnes	2	Foster	21	Morton	30	Slope	NR
Benson	44	Golden Valley	NR	Mountrail	43	Stark	15
Billings	NR	Grand Forks	3	Nelson	17	Steele	NR
Bottineau	4	Grant	25	Oliver	NR	Stutsman	37
Bowman	26	Griggs	1	Pembina	12	Towner	8
Burke	18	Hettinger	20	Pierce	34	Traill	10
Burleigh	22	Kidder	23	Ramsey	39	Walsh	16
Cass	7	LaMoure	19	Ransom	6	Ward	14
Cavalier	28	Logan	42	Renville	13	Wells	36
Dickey	11	McHenry	38	Richland	5	Williams	9
Divide	NR	McIntosh	27	Rolette	45		
Dunn	33	McKenzie	32	Sargent	31		
Eddy	40	McLean	24	Sheridan	NR		

HEALTH FACTORS

| Rank 1-12 | Rank 13-23 | Rank 24-34 | Rank 35-46 | Not Ranked |

County	Rank	County	Rank	County	Rank	County	Rank
Adams	11	Emmons	37	Mercer	12	Sioux	45
Barnes	5	Foster	7	Morton	31	Slope	NR
Benson	44	Golden Valley	NR	Mountrail	43	Stark	9
Billings	NR	Grand Forks	16	Nelson	26	Steele	NR
Bottineau	19	Grant	42	Oliver	NR	Stutsman	23
Bowman	4	Griggs	2	Pembina	35	Towner	17
Burke	10	Hettinger	15	Pierce	32	Traill	6
Burleigh	1	Kidder	39	Ramsey	38	Walsh	33
Cass	3	LaMoure	13	Ransom	22	Ward	20
Cavalier	24	Logan	29	Renville	8	Wells	28
Dickey	14	McHenry	40	Richland	21	Williams	34
Divide	NR	McIntosh	36	Rolette	46		
Dunn	25	McKenzie	41	Sargent	18		
Eddy	30	McLean	27	Sheridan	NR		

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	Griggs	1	Burleigh
2	Barnes	2	Griggs
3	Grand Forks	3	Cass
4	Bottineau	4	Bowman
5	Richland	5	Barnes
6	Ransom	6	Traill
7	Cass	7	Foster
8	Towner	8	Renville
9	Williams	9	Stark
10	Traill	10	Burke
11	Dickey	11	Adams
12	Pembina	12	Mercer
13	Renville	13	LaMoure
14	Ward	14	Dickey
15	Stark	15	Hettinger
16	Walsh	16	Grand Forks
17	Nelson	17	Towner
18	Burke	18	Sargent
19	LaMoure	19	Bottineau
20	Hettinger	20	Ward
21	Foster	21	Richland
22	Burleigh	22	Ransom
23	Kidder	23	Stutsman
24	McLean	24	Cavalier
25	Grant	25	Dunn
26	Bowman	26	Nelson
27	McIntosh	27	McLean
28	Cavalier	28	Wells
29	Adams	29	Logan
30	Morton	30	Eddy
31	Sargent	31	Morton
32	McKenzie	32	Pierce
33	Dunn	33	Walsh
34	Pierce	34	Williams
35	Emmons	35	Pembina
36	Wells	36	McIntosh
37	Stutsman	37	Emmons
38	McHenry	38	Ramsey
39	Ramsey	39	Kidder
40	Eddy	40	McHenry
41	Mercer	41	McKenzie
42	Logan	42	Grant

Rank	Health Outcomes	Rank	Health Factors
43	Mountrail	43	Mountrail
44	Benson	44	Benson
45	Rolette	45	Sioux
46	Sioux	46	Rolette

Not Ranked: Billings, Divide, Golden Valley, Oliver, Sheridan, Slope, Steele

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

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[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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