



County Health Rankings

Mobilizing Action Toward Community Health

2010
Ohio



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.

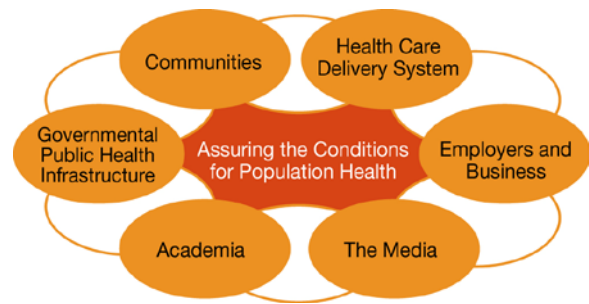
The problem is that there are big differences in health across communities, with some places being much healthier than others. And up to now, it has been hard to get a standard way to measure how healthy a county is and see where they can improve.

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute are pleased to present the 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.



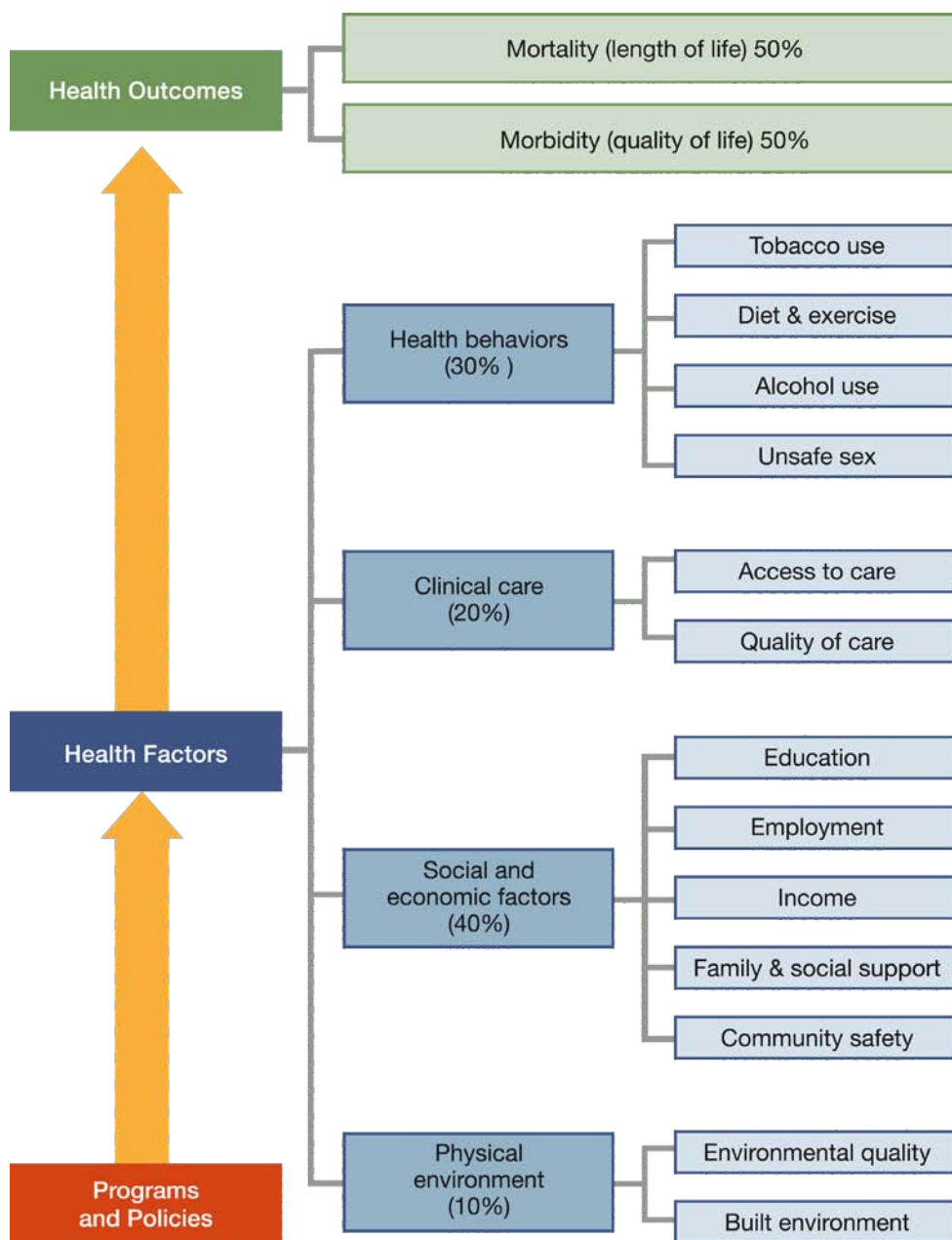
Institute of Medicine, 2002

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 Ohio 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.

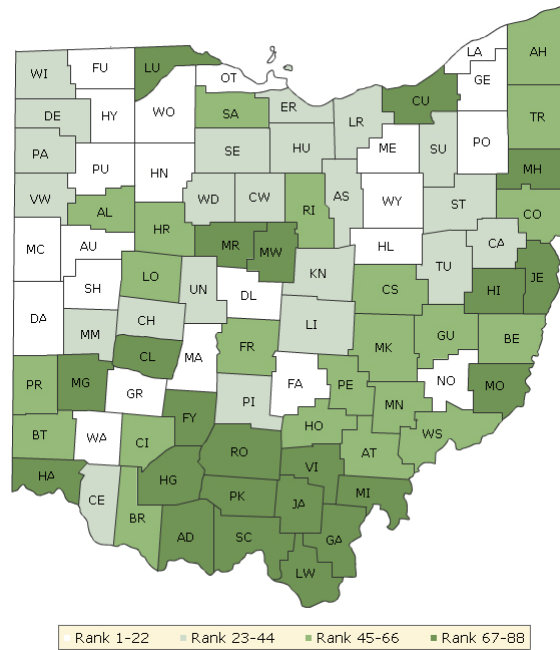


County Health Rankings model ©2010 UWPHI

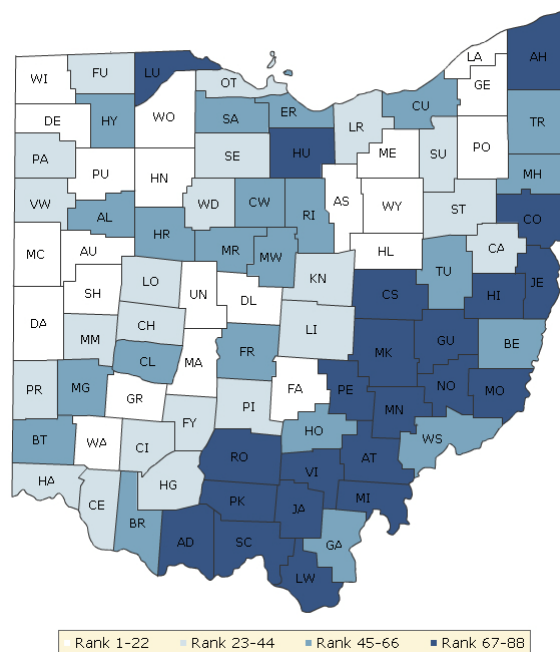
The maps on this page display Ohio's counties divided into groups by health rank. The lighter colors indicate better performance in the respective summary rankings. The green map shows the distribution of summary health outcomes. The blue displays the distribution of the summary rank for health factors.

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	Delaware	1	Delaware
2	Geauga	2	Warren
3	Holmes	3	Geauga
4	Medina	4	Medina
5	Warren	5	Union
6	Auglaize	6	Greene
7	Putnam	7	Holmes
8	Wayne	8	Wood
9	Wood	9	Auglaize
10	Greene	10	Ashland
11	Shelby	11	Fairfield
12	Mercer	12	Wayne
13	Lake	13	Hancock
14	Hancock	14	Putnam
15	Fairfield	15	Mercer
16	Portage	16	Madison
17	Henry	17	Lake
18	Ottawa	18	Darke
19	Noble	19	Portage
20	Madison	20	Defiance
21	Fulton	21	Shelby
22	Darke	22	Williams
23	Williams	23	Miami
24	Ashland	24	Summit
25	Tuscarawas	25	Ottawa
26	Defiance	26	Fulton
27	Paulding	27	Clinton
28	Seneca	28	Seneca
29	Licking	29	Knox
30	Union	30	Champaign
31	Carroll	31	Licking
32	Clermont	32	Wyandot
33	Huron	33	Clermont
34	Miami	34	Preble
35	Van Wert	35	Van Wert
36	Lorain	36	Carroll
37	Champaign	37	Fayette
38	Knox	38	Pickaway
39	Wyandot	39	Hamilton
40	Stark	40	Lorain

Rank	Health Outcomes	Rank	Health Factors
41	Crawford	41	Highland
42	Pickaway	42	Logan
43	Summit	43	Paulding
44	Erie	44	Stark
45	Athens	45	Brown
46	Sandusky	46	Henry
47	Columbiana	47	Cuyahoga
48	Washington	48	Butler
49	Allen	49	Richland
50	Butler	50	Tuscarawas
51	Richland	51	Washington
52	Brown	52	Sandusky
53	Hardin	53	Morrow
54	Ashtabula	54	Franklin
55	Muskingum	55	Mahoning
56	Preble	56	Marion
57	Morgan	57	Hardin
58	Hocking	58	Trumbull
59	Clinton	59	Belmont
60	Belmont	60	Erie
61	Logan	61	Hocking
62	Coshocton	62	Allen
63	Guernsey	63	Clark
64	Franklin	64	Crawford
65	Perry	65	Montgomery
66	Trumbull	66	Gallia
67	Marion	67	Coshocton
68	Montgomery	68	Perry
69	Hamilton	69	Huron
70	Cuyahoga	70	Columbiana
71	Lucas	71	Harrison
72	Morrow	72	Jefferson
73	Clark	73	Jackson
74	Monroe	74	Guernsey
75	Mahoning	75	Ashtabula
76	Highland	76	Noble
77	Fayette	77	Lucas
78	Ross	78	Muskingum
79	Jefferson	79	Lawrence
80	Pike	80	Athens
81	Harrison	81	Vinton
82	Vinton	82	Morgan
83	Adams	83	Ross
84	Meigs	84	Monroe
85	Jackson	85	Adams
86	Gallia	86	Pike
87	Scioto	87	Meigs
88	Lawrence	88	Scioto

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	Morbidity
1	Delaware	Holmes
2	Geauga	Wayne
3	Medina	Mercer
4	Warren	Geauga
5	Greene	Delaware
6	Carroll	Shelby
7	Putnam	Fulton
8	Wood	Auglaize
9	Lake	Medina
10	Auglaize	Warren
11	Noble	Wood
12	Fairfield	Putnam
13	Paulding	Darke
14	Holmes	Crawford
15	Hancock	Williams
16	Portage	Huron
17	Henry	Seneca
18	Shelby	Hancock
19	Tuscarawas	Knox
20	Ottawa	Lake
21	Erie	Greene
22	Miami	Ottawa
23	Madison	Portage
24	Ashland	Madison
25	Wayne	Brown
26	Lorain	Fairfield
27	Stark	Henry
28	Licking	Defiance
29	Mercer	Van Wert
30	Defiance	Champaign
31	Darke	Hardin
32	Clermont	Union
33	Williams	Ashland
34	Wyandot	Clermont
35	Union	Licking
36	Columbiana	Guernsey
37	Summit	Ashtabula
38	Pickaway	Noble
39	Fulton	Tuscarawas
40	Seneca	Athens

Rank	Mortality	Morbidity
41	Butler	Pickaway
42	Allen	Sandusky
43	Sandusky	Wyandot
44	Van Wert	Washington
45	Athens	Miami
46	Richland	Hocking
47	Washington	Summit
48	Huron	Perry
49	Morgan	Lorain
50	Champaign	Clinton
51	Preble	Paulding
52	Morrow	Highland
53	Belmont	Richland
54	Marion	Allen
55	Muskingum	Butler
56	Coshocton	Logan
57	Knox	Columbiana
58	Franklin	Trumbull
59	Cuyahoga	Pike
60	Crawford	Fayette
61	Hocking	Muskingum
62	Clinton	Stark
63	Lucas	Clark
64	Logan	Montgomery
65	Hamilton	Preble
66	Brown	Hamilton
67	Montgomery	Vinton
68	Trumbull	Franklin
69	Monroe	Carroll
70	Ashtabula	Morgan
71	Mahoning	Lucas
72	Perry	Monroe
73	Hardin	Coshocton
74	Clark	Erie
75	Ross	Belmont
76	Guernsey	Cuyahoga
77	Highland	Jefferson
78	Jefferson	Adams
79	Meigs	Mahoning
80	Harrison	Harrison
81	Fayette	Marion
82	Jackson	Morrow
83	Gallia	Ross
84	Adams	Jackson
85	Lawrence	Meigs
86	Vinton	Gallia
87	Scioto	Scioto
88	Pike	Lawrence

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	Clinical Care	Social & Economic Factors	Physical Environment
1	Geauga	Greene	Delaware	Jackson
2	Delaware	Warren	Union	Richland
3	Warren	Hamilton	Warren	Holmes
4	Holmes	Delaware	Geauga	Lorain
5	Medina	Cuyahoga	Medina	Fulton
6	Wood	Montgomery	Putnam	Highland
7	Ashland	Lucas	Auglaize	Fayette
8	Madison	Clinton	Mercer	Morgan
9	Greene	Summit	Lake	Paulding
10	Darke	Hancock	Greene	Ross
11	Seneca	Franklin	Fairfield	Pickaway
12	Hamilton	Defiance	Portage	Hocking
13	Preble	Shelby	Wood	Knox
14	Summit	Licking	Hancock	Williams
15	Wayne	Union	Shelby	Adams
16	Portage	Clermont	Holmes	Union
17	Auglaize	Mahoning	Knox	Belmont
18	Champaign	Williams	Wyandot	Madison
19	Ottawa	Butler	Clermont	Coshocton
20	Carroll	Wayne	Wayne	Vinton
21	Mahoning	Stark	Miami	Pike
22	Defiance	Ashland	Washington	Muskingum
23	Miami	Fayette	Butler	Ashland
24	Fairfield	Clark	Paulding	Noble
25	Highland	Darke	Ashland	Carroll
26	Trumbull	Van Wert	Ottawa	Delaware
27	Cuyahoga	Muskingum	Licking	Auglaize
28	Mercer	Medina	Madison	Logan
29	Lorain	Miami	Tuscarawas	Brown
30	Van Wert	Allen	Defiance	Morrow
31	Lake	Brown	Williams	Scioto
32	Union	Wood	Fulton	Licking
33	Hancock	Fulton	Darke	Erie
34	Brown	Fairfield	Van Wert	Columbiana
35	Athens	Logan	Seneca	Mercer
36	Perry	Champaign	Sandusky	Guernsey
37	Hardin	Marion	Henry	Huron
38	Adams	Lake	Clinton	Warren
39	Pickaway	Highland	Logan	Seneca
40	Williams	Wyandot	Pickaway	Clermont

Rank	Health Behaviors	Clinical Care	Social & Economic Factors	Physical Environment
41	Richland	Portage	Champaign	Marion
42	Gallia	Ross	Morrow	Sandusky
43	Clinton	Geauga	Carroll	Wayne
44	Crawford	Crawford	Preble	Ottawa
45	Fulton	Henry	Stark	Ashtabula
46	Morrow	Richland	Summit	Harrison
47	Putnam	Lorain	Hardin	Putnam
48	Fayette	Auglaize	Belmont	Fairfield
49	Tuscarawas	Ottawa	Erie	Lawrence
50	Pike	Erie	Fayette	Henry
51	Shelby	Knox	Lorain	Meigs
52	Wyandot	Madison	Franklin	Darke
53	Morgan	Gallia	Jefferson	Monroe
54	Noble	Putnam	Athens	Hancock
55	Harrison	Pickaway	Marion	Stark
56	Meigs	Preble	Highland	Geauga
57	Clark	Holmes	Brown	Crawford
58	Paulding	Hocking	Coshocton	Tuscarawas
59	Knox	Sandusky	Richland	Trumbull
60	Henry	Trumbull	Allen	Clinton
61	Coshocton	Guernsey	Monroe	Athens
62	Washington	Huron	Columbiana	Allen
63	Hocking	Ashtabula	Huron	Medina
64	Marion	Mercer	Harrison	Jefferson
65	Belmont	Pike	Hamilton	Mahoning
66	Vinton	Carroll	Lawrence	Preble
67	Licking	Lawrence	Hocking	Hardin
68	Guernsey	Columbiana	Clark	Lake
69	Stark	Perry	Noble	Greene
70	Jefferson	Seneca	Ross	Cuyahoga
71	Logan	Scioto	Trumbull	Shelby
72	Allen	Washington	Gallia	Wood
73	Jackson	Vinton	Perry	Wyandot
74	Montgomery	Tuscarawas	Ashtabula	Montgomery
75	Ashtabula	Paulding	Jackson	Defiance
76	Franklin	Jefferson	Crawford	Champaign
77	Sandusky	Jackson	Cuyahoga	Clark
78	Monroe	Coshocton	Montgomery	Perry
79	Columbiana	Morgan	Guernsey	Miami
80	Butler	Harrison	Mahoning	Franklin
81	Huron	Morrow	Muskingum	Summit
82	Clermont	Hardin	Scioto	Washington
83	Lucas	Belmont	Vinton	Gallia
84	Muskingum	Noble	Lucas	Lucas
85	Erie	Meigs	Morgan	Portage
86	Lawrence	Adams	Adams	Van Wert
87	Ross	Monroe	Meigs	Butler
88	Scioto	Athens	Pike	Hamilton

2010 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	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 Behavior	Chlamydia rate	National Center for Health Statistics	2007
	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 FACTORS			
Education	High school graduation	National Center for Education Statistics ¹	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 ²	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 ³	Uniform Crime Reporting, Federal Bureau of Investigation	2005-2007
PHYSICAL ENVIRONMENT			
Air Quality ⁴	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

¹ State data sources for KY, NH, NC, PA, SC, and UT (2007-2008).

² Income inequality estimates for 2000 were calculated by Mark L. Burkey, North Carolina Agricultural & Technical State University, www.ncat.edu/~burkeym/Gini.htm.

³ 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.

⁴ Not available for AK and HI.

CREDITS

Report Editors

University of Wisconsin-Madison
School of Medicine and Public Health
Population Health Institute
Bridget Booske, PhD, MHSA
Jessica Athens, MS
Patrick Remington, MD, MPH

This publication would not have been possible without the following contributions:

Conceptual Development

David Kindig, MD, PhD
Paul Peppard, PhD
Patrick Remington, MD, MPH

Technical Advisors

Amy Bernstein, ScD, Centers for Disease Control and Prevention
Michele Bohm, MPH, Centers for Disease Control and Prevention
Vickie Boothe, MPH, Centers for Disease Control and Prevention
Ethan Burke, MD, MPH, Dartmouth Institute for Health Policy and Clinical Practice

Research Assistance

Clare O'Connor
Karen Odegaard
Hyojun Park
Matthew Rodock

Production and Editing

Chuck Alexander
Alex Field
Joan Fischer
Irene Golembiewski
Jennifer Robinson

Design

Forum One, Alexandria, VA
Media Solutions, UW School of Medicine and Public Health

Metrics Advisory Group

Yukiko Asada, PhD, Associate Professor, Community Health and Epidemiology, Dalhousie University, Halifax, Nova Scotia
Tom Eckstein, MBA, Principal, Arundel Street Consulting Inc, St. Paul, MN
Elliott Fisher, MD, MPH, Director, Center for Population Health, Dartmouth Institute for Health Policy and Clinical Practice, and
Professor of Medicine and Community and Family Medicine, Dartmouth Medical School, Lebanon, NH
Howard Frumkin, MD, MPH, Dr. PH, Director of the National Center for Environmental Health, ATSDR, CDC, Atlanta, GA
Thomas Kottke, MD, MSPH, Medical Director for Evidence-Based Health, HealthPartners, Minneapolis, MN
Ali Mokdad, PhD, Professor of Global Health, Institute for Health Metrics and Evaluation, University of Washington, Seattle, WA
Roy Gibson Parrish, MD, Consultant in Population Health Information Systems, Peacham, VT
Robert M. (Bobby) Pestronk, MPH, Executive Director, National Association of County and City Health Officials (NACCHO),
Washington, DC
Tom Ricketts, PhD, Professor of Health Policy and Administration, University of North Carolina
Steven Teutsch, MD, MPH, Chief Science Officer, Los Angeles County Public Health, Los Angeles, CA
Julie Willems Van Dijk, PhD, RN, former Marathon County, WI Health Officer

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