WHAT WORKS?

Strategies to Improve Rural Health

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countyhealthrankings.org/whatworks

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

A Robert Wood Johnson Foundation program

UNIVERSITY OF WISCONSIN Population Health Institute
SCHOOL OF MEDICINE AND PUBLIC HEALTH

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Creating Healthier Rural Communities

The *County Health Rankings & Roadmaps* program helps communities identify and implement solutions that make it easier for people to be healthy in their neighborhoods, schools, and workplaces. Ranking the health of nearly every county in the nation, the *County Health Rankings* illustrate what we know when it comes to what is keeping people healthy or making people sick. The *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 program to communities across the nation.

Each year, the *County Health Rankings* bring actionable data to counties across the country, serving as a call to action to improve local health. The 2016 *Rankings* include an in-depth examination of the differences in health between rural and urban counties, with some revealing findings:

- Rural counties have had the highest rates of premature death for many years, lagging far behind other counties.

- While urban counties continue to show improvement, overall rates of premature death are worsening in rural counties.

- Nearly one in five rural counties has experienced worsening premature death rates over the past decade.

There is no single factor that explains the significant differences in health between rural and other types of counties. So where do you start? And how do you know what is going to make a difference for your community?

This report outlines key steps toward building healthy communities—rural, urban, and anywhere in between—along with some specific policies and programs that can improve health. Policies and programs that have been tested in rural communities are highlighted throughout the report.

You can find more information about policies and programs that can improve health on our website, countyhealthrankings.org/whatworks.

What Influences Health?

Health is about more than what happens at the doctor's office. The places where we live, learn, work, and play, the choices we make, and the opportunities we have all matter to our physical, mental, and social well-being.

Health Behaviors

Tobacco Use

Tobacco use is the leading cause of preventable death in the United States. It affects not only those who choose to use it, but also people who live and work around tobacco.

Diet & Exercise

The environments where we live, learn, work, and play affect access to healthy food and opportunities for physical activity which, along with genetic factors and personal choices, shape health and risk of overweight and obesity.

Alcohol & Drug Use

When consumed in excess, alcohol is harmful to the health and well-being of those that drink as well as their families, friends, and communities. Prescription drug misuse and illicit drug use also have substantial health, economic, and social consequences.

Sexual Activity

Unplanned pregnancies and sexually transmitted infections, often the result of risky sexual behavior, have lasting effects on health and well-being, especially for adolescents.

Clinical Care

Access to Care

Access to affordable, quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care, but does not ensure access on its own—it is also necessary for providers to offer affordable care, be available to treat patients, and be in relatively close proximity to patients.

Quality of Care

High quality health care is timely, safe, effective, and affordable—the right care for the right person at the right time. High quality care in outpatient and inpatient settings can help protect and improve health and reduce the likelihood of receiving unnecessary or inappropriate care.

Social & Economic Factors

Education

Better educated individuals live longer, healthier lives than those with less education, and their children are more likely to thrive. This is true even when factors like income are taken into account.

Employment & Income

As income increases or decreases, so does health. Employment provides income that shapes choices about housing, education, child care, food, medical care, and more. Employment also often includes benefits that can support healthy lifestyle choices. Unemployment and under employment limit these choices and the ability to accumulate savings and assets that can help cushion in times of economic distress.

Family & Social Support

People with greater social support, less isolation, and greater interpersonal trust live longer and healthier lives than those who are socially isolated. Neighborhoods richer in social capital provide residents with greater access to support and resources than those with less social capital.

Community Safety

Unintentional injuries such as traffic crashes, falls, and poisonings are the fourth leading cause of death in the US and the leading cause for those between the ages of 1 and 44. Unintentional injuries and violence affect health and quality of life in the short and long-term, for those directly and indirectly affected.

Physical Environment

Air & Water Quality

Clean air and safe water are prerequisites for health. Poor air or water quality can be particularly detrimental to vulnerable populations such as the very young, the elderly, and those with chronic health conditions.

Housing & Transit

The housing options and transit systems that shape our communities' built environments affect where we live and how we get from place to place. The choices we make about housing and transportation, and the opportunities underlying these choices, also affect our health.

Getting Started

Finding policies and programs that will work for your community requires a firm understanding of local priorities, needs, assets, and values. To get started:
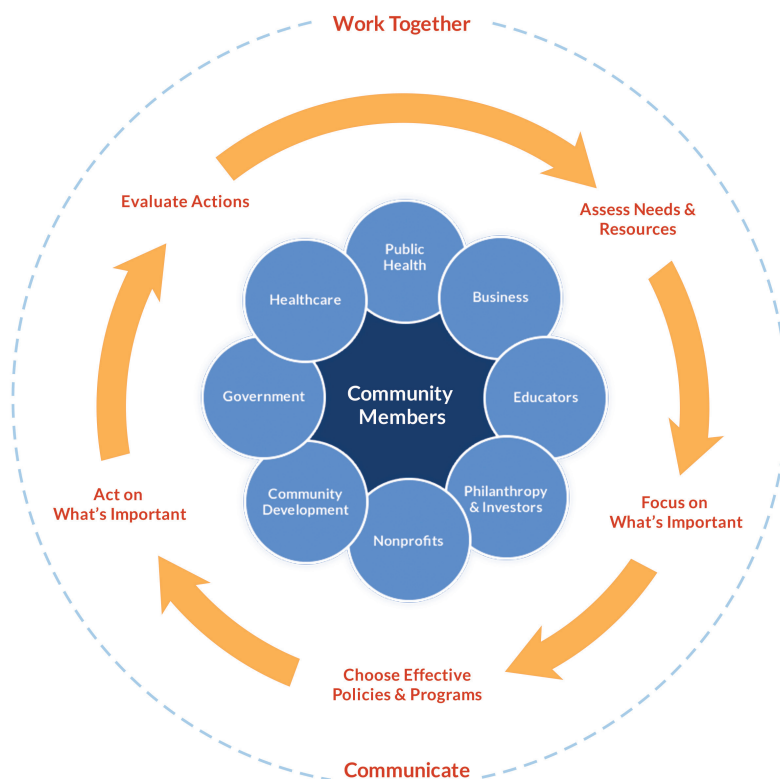
- **Think broadly about the factors that influence health**. Considering the upstream factors that lead to longer, healthier lives can help identify root causes of your community's challenges. These upstream drivers include education and income and the many other factors described in this report.

- **Assess needs and resources**. Take stock of your community's needs, resources, strengths, assets, and values. Understand what helps and what can deter progress toward improving health in your community.

- **Focus on what's most important**. Once you've accounted for your community's needs and resources, it's time to decide which problem(s) to tackle. Without focus, all issues seem equally important. Taking time to set priorities will ensure that you direct your valuable and limited resources to the most important issues.

- **Choose the right policies and programs for your community**. Taking time to choose policies and programs that have been shown to work in real life and that are a good fit for your community's priorities and culture will maximize your chances of success. Focusing on policy, systems, and environmental changes—or implementing programs in a systematic way—can lead to the most substantial improvements over time.

Each step of the way, you'll want to:

- **Engage a variety of stakeholders**. Harnessing the collective power of local leaders, partners, and community members, including those who experience the worst conditions for good health, is key to making change.

- **Communicate**. Consider how you will get your most important messages to the people who matter. Have plans to communicate with others in your community, and with your partners, and put those plans in action.

Efforts to ensure that everyone—especially those disproportionately affected by poor health outcomes—has a say in your community health improvement work can help to close gaps in health outcomes and improve health for all.

Visit the *Roadmaps to Health* Action Center at countyhealthrankings.org/roadmaps/action-center for more guidance about implementing your selected strategies and evaluating your successes.
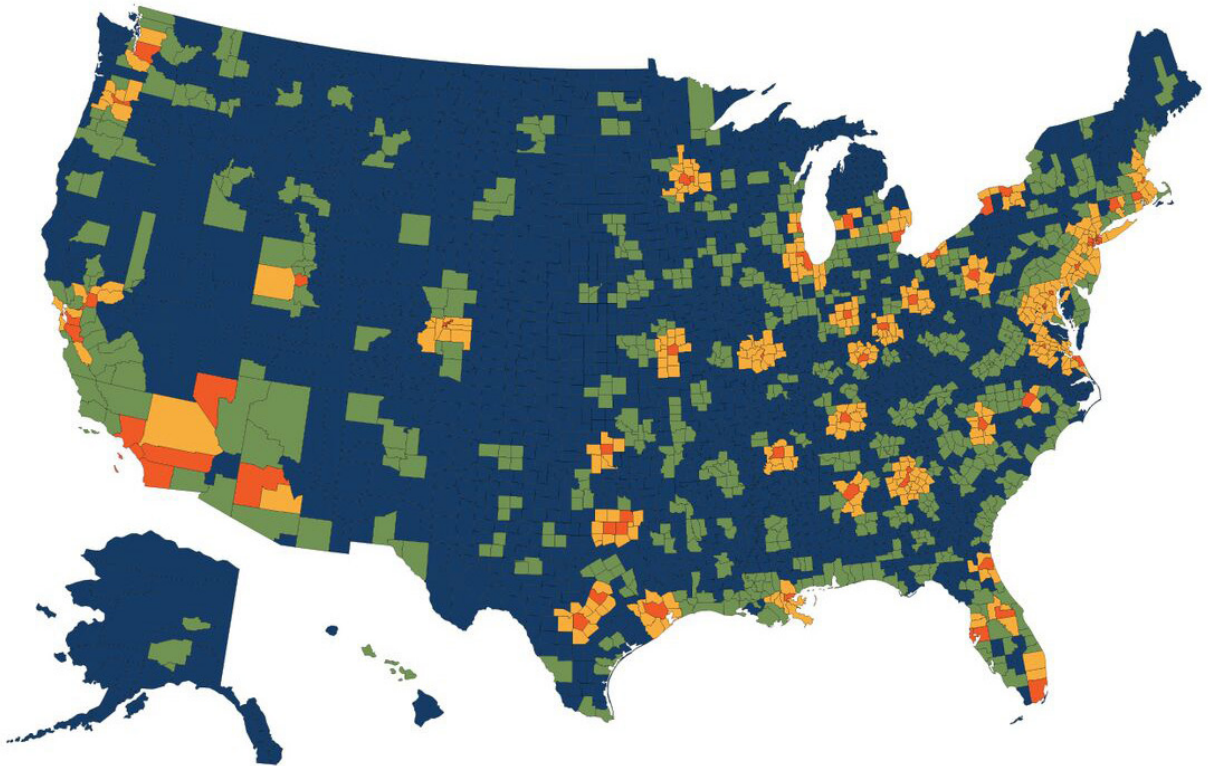
Counties Categorized by Level of Urbanization

There are various ways to define "rural." The figures presented in this report use a classification adapted from the National Center for Health Statistics' rural-urban classification based on Metropolitan Statistical Area (MSA) designations. Although counties are classified into one category on the map above and table to the right, many counties include areas that are urban and areas that are rural (e.g., counties classified as Large Urban Metro often include a mix of areas that are urban and rural). Thinking carefully about the ranges of population density in your community can help you best use the steps and strategies in this report to improve health locally.

Category	Definition	Total Population	Number of Counties
Large Urban Metro	Central urban core counties within an MSA with more than 1 million people	96 m	68
Large Suburban Metro	Non-central fringe counties within an MSA with more than 1 million people	77 m	368
Smaller Metro	Counties within an MSA with between 50,000 and 1 million people	94 m	731
Rural	Non-metropolitan rural counties with less than 50,000 people	46 m	1,974

Adapted from the 2013 National Center for Health Statistics' urban-rural classification based on Metropolitan Statistical Area (MSA) designations.

Finding a Strategy that Works

Once you know your goal, it's time to choose a policy or program that will help you achieve it. A good first step is to explore strategies that have worked in other communities or are recommended by unbiased experts. With evidence ratings, literature summaries, and implementation resources for over 360 strategies (i.e., policies, programs, systems and environmental changes), *What Works for Health* (WWFH) is a great place to start. WWFH is available online at: countyhealthrankings.org/whatworks.

In WWFH, you will find in-depth information for a variety of policies and programs that can improve the many factors that influence health, including health behaviors, clinical care, the physical environment, and social and economic circumstances. For each policy and program you will find:

- Beneficial outcomes (i.e., the benefits the strategy has been shown to achieve as well as other outcomes it may affect)

- Key points from relevant literature (e.g., populations affected, key components of successful implementation, cost-related information, etc.)

- Implementation examples and resources, toolkits, and other information to help you get started

- An indication of the strategy's likely impact on the gaps or disparities in outcomes that are experienced by different groups of people (e.g., members of different racial and ethnic or socio-economic groups)

You can use WWFH to find ideas to support important initiatives in your community, such as:

- Preparing and strengthening the local workforce

- Reducing injuries

- Improving access to high quality health care

- Improving diet and increasing exercise

The following sections outline examples of policies and programs that communities around the country are using to support each of these goals. Many of these strategies have been tested or implemented in rural areas.

WWFH includes six evidence of effectiveness ratings. Each strategy is rated based on the quantity, quality, and findings of relevant research. Ratings include:

- **Scientifically Supported (SS)**: Strategies with this rating are most likely to make a difference. These strategies have been tested in multiple robust studies with consistently positive results.

- **Some Evidence (SE)**: Strategies with this rating are likely to work, but further research is needed to confirm effects. These strategies have been tested more than once and results trend positive overall.

- **Expert Opinion (EO)**: Strategies with this rating are recommended by credible, impartial experts but have limited research documenting effects; further research, often with stronger designs, is needed to confirm effects.

- **Insufficient Evidence (IE)**: Strategies with this rating have limited research documenting effects. These strategies need further research, often with stronger designs, to confirm effects.

- **Mixed Evidence (Mixed)**: Strategies with this rating have been tested more than once and results are inconsistent; further research is needed to confirm effects.

- **Evidence of Ineffectiveness (EI)**: Strategies with this rating are not good investments. These strategies have been tested in multiple studies with consistently negative or harmful results.

What's Working to Prepare and Strengthen Local Workforces?

A strong local economy supports employment opportunities and healthy lifestyle choices for individuals and families, and is linked to lower rates of poverty and unemployment. Poverty and unemployment rates are higher in rural areas than in urban and suburban areas. Employers, educational institutions, and community members can work together to increase job skills for residents, enhance local employment opportunities, and set children on a path towards academic and financial success. Examples include:

Best   **Worst**

Unemployment
Bureau of Labor Statistics, 2014

| 5.7% | 5.9% | 6.1% | 6.3% | 6.5% |

(S · U · M · R)

Children in Poverty
Small Area Income and Poverty Estimates, 2014

| 16% | 18% | 20% | 22% | 24% | 26% |

(S · M · U · R)

U Large Urban   **S** Large Suburban   **M** Smaller Metro   **R** Rural
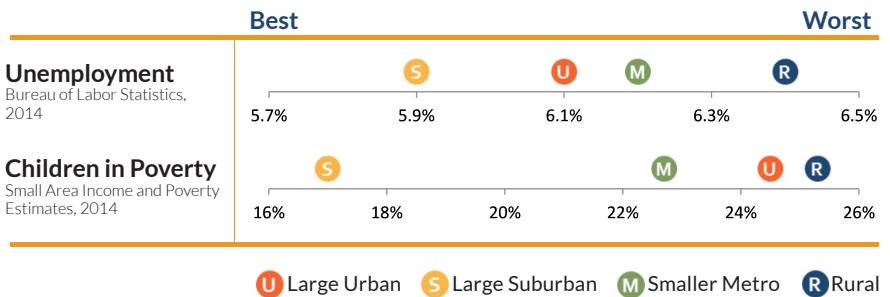
- **Career Academies (SS)**
  Establish small learning communities in high schools focused on fields such as health care, finance, technology, communications, or public service

- **College access programs (SS) ***
  Help underrepresented students prepare academically for college, complete applications, and enroll, especially first generation applicants and students from low income families

- **Dropout prevention programs (SS)**
  Provide supports such as mentoring, counseling, or vocational training, or undertake school environment changes to help students complete high school

- **Flexible scheduling (SS)**
  Offer employees control over an aspect of their schedule through arrangements such as self-scheduled shift work, flex time, and compressed work weeks

- **Preschool education programs (SS)**
  Provide center-based programs that support cognitive and social-emotional growth among children who are not old enough to enter formal schooling

- **Rural transportation systems (EO) ***
  Establish transportation services for areas with low population densities, using publicly funded buses and vans on a set schedule, dial-a-ride transit, volunteer ridesharing, etc.

- **School-based social and emotional instruction (SS) ***
  Implement focused efforts to help children recognize and manage emotions, set and reach goals, appreciate others' perspectives, and maintain relationships; also called social and emotional learning (SEL)
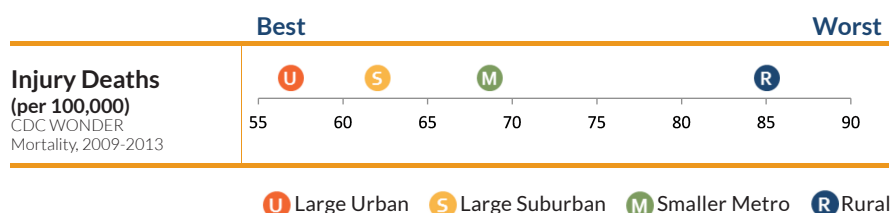
- **Transitional jobs (SS)**
  Establish time-limited, subsidized, paid job opportunities to provide a bridge to unsubsidized employment

* What Works for Health materials include rural-focused resources or studies

What's Working to Reduce Injuries?

Unintentional injuries such as traffic crashes, falls, and poisonings are the fourth leading cause of death in the US and the leading cause for those between the ages of 1 and 44. Injury death rates are highest in rural areas, largely due to traffic accidents, drug overdoses, and other unintentional injuries. Communities can help protect their residents by adopting and implementing policies and programs to prevent unintentional injuries and violence of all types. Examples include:

	Best						Worst
Injury Deaths (per 100,000) CDC WONDER Mortality, 2009-2013	U	S	M				R
	55	60	65	70	75	80	85	90

U Large Urban **S** Large Suburban **M** Smaller Metro **R** Rural

- **Breath testing checkpoints (SS)**
  Implement checkpoints where law enforcement officers can stop drivers suspected of drinking and driving and assess their level of alcohol impairment; also called sobriety checkpoints

- **Enhanced seat belt enforcement programs (SS) ***
  Add publicity and other strategies (e.g., supplemental patrols, increased officers, etc.) to efforts to enforce existing seat belt laws

- **Multi-component fall prevention interventions for older adults (SS)**
  Provide a fixed, multi-component set of fall prevention interventions to older adults, usually in community settings

- **Naloxone access (SE)**
  Train and authorize all first responders to administer naloxone and permit prescribing to people likely to encounter those who might overdose

- **Risk assessments & personalized approaches to fall prevention among older adults (SS)**
  Conduct assessments that gauge older adults' risk of falling and develop personalized approaches to help prevent falls
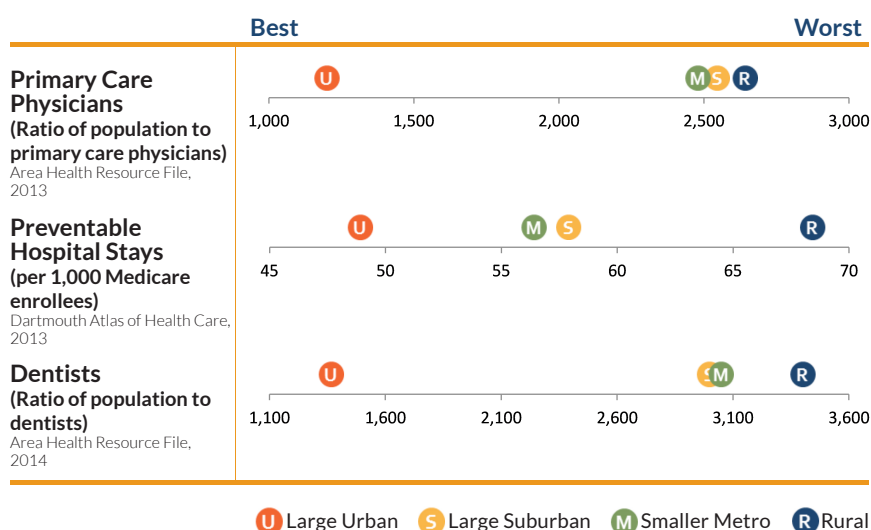
- **Speed enforcement detection devices (SE)**
  Use devices such as speed cameras, radar, etc. to enforce speed limits; devices can be permanent fixtures or be used manually by law enforcement officers

* What Works for Health materials include rural-focused resources or studies

What's Working to Improve Access to High Quality Health Care?

Access to affordable, quality health care is important to physical, social, and mental health. High quality care in outpatient and inpatient settings can help protect and improve health and reduce the likelihood of receiving unnecessary or inappropriate care. However, such care can be harder to attain in rural areas than in urban or suburban areas. Adopting and implementing strategies that reduce barriers to care and better match providers to community needs can increase access to high quality care. Examples include:

Best | Worst

Primary Care Physicians
(Ratio of population to primary care physicians)
Area Health Resource File, 2013
1,000 — 1,500 — 2,000 — 2,500 — 3,000

Preventable Hospital Stays
(per 1,000 Medicare enrollees)
Dartmouth Atlas of Health Care, 2013
45 — 50 — 55 — 60 — 65 — 70

Dentists
(Ratio of population to dentists)
Area Health Resource File, 2014
1,100 — 1,600 — 2,100 — 2,600 — 3,100 — 3,600

U Large Urban   S Large Suburban   M Smaller Metro   R Rural

- **Community health workers (SE)**
  Engage professional or lay health workers to provide education, referral and follow-up, case management, home visiting, etc. for those at high risk for poor health outcomes

- **Federally qualified health centers (SS) ***
  Increase support for non-profit health care organizations that receive federal funding and deliver comprehensive care to uninsured, underinsured, and vulnerable patients regardless of ability to pay

- **Higher education financial incentives for health professionals serving underserved areas (SE) ***
  Expand incentives such as scholarships and loans with service requirements and loan repayment or forgiveness programs for health care providers who practice in rural or other underserved areas

- **Rural training in medical education (SS) ***
  Expand medical school training and learning experiences focused on the skills necessary to practice successfully in rural areas

- **School dental programs (SS) ***
  Provide sealants, fluoride treatment, screening, and other basic dental care on school grounds via partnerships with dental professionals

- **Telemedicine (SS) ***
  Deliver consultative, diagnostic, and treatment services remotely for patients who live in areas with limited access to care or would benefit from frequent monitoring; also called telehealth

- **Telemental health services (SE) ***
  Provide mental health care services (e.g., psychotherapy or counseling) via telephone or videoconference

* *What Works for Health materials include rural-focused resources or studies*

What's Working to Improve Diet and Exercise?

Good nutrition is essential for health, growth, and development. Excessive calorie consumption, however, can lead to overweight and obesity and associated health risks, especially when paired with too little physical activity.

Best **Worst**

Adult Obesity
CDC Diabetes Interactive Atlas, 2012

| 25% | 26% | 27% | 28% | 29% | 30% | 31% | 32% |

U Large Urban S Large Suburban M Smaller Metro R Rural

Obesity rates are higher in rural areas than in urban and suburban areas. Increasing opportunities for exercise and access to healthy foods in neighborhoods, schools, and workplaces can help children and adults eat healthy meals and reach recommended daily physical activity levels. Examples of specific strategies to improve diet and increase exercise include:
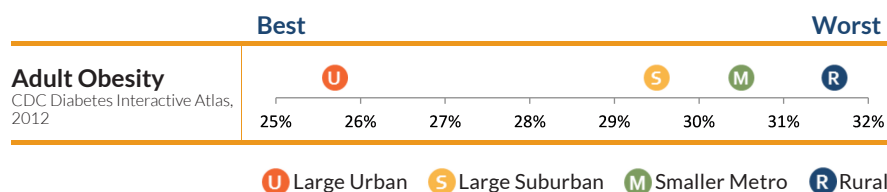
- **Activity programs for older adults (SS) ***
  Offer group educational, social, or physical activities that promote social interactions, regular attendance, and community involvement among older adults

- **Farm to school programs (SE) ***
  Incorporate locally grown foods into school meals and snacks, often with visits from food producers, cooking classes, nutrition and waste reduction efforts, and school gardens

- **Farmers' markets/stands (SE) ***
  Support multiple or single vendor markets where producers sell goods such as fresh fruit and vegetables, meat, dairy items, and prepared foods directly to consumers

- **Healthy food initiatives in food banks (SE)**
  Combine hunger relief efforts with nutrition information and healthy eating opportunities, often with on-site cooking demonstrations, recipe tastings, produce display stands, etc.

- **Places for physical activity (SS) ***
  Modify local environments to support physical activity, increase access to new or existing facilities for physical activity, or build new facilities

- **Prescriptions for physical activity (SS)**
  Provide prescriptions with individually tailored exercise plans, often accompanied by progress checks at office visits, counseling, activity logs, and exercise testing

- **School breakfast programs (SS)**
  Support programs that provide students with a nutritious breakfast in the cafeteria, from grab and go carts in hallways, or in classrooms

- **Screen time interventions for children (SS)**
  Encourage children to spend time away from TV and other screen media, often as part of a multi-faceted effort to increase physical activity and improve nutrition

* What Works for Health materials include rural-focused resources or studies

Choosing the Right Strategy for Your Community

To make sure you pick a strategy that fits your community best, be sure to consider the following questions:

- How similar is your target population (e.g., adolescents, seniors, or people with low incomes) to the population(s) the strategy has been shown to benefit?

- How similar are your goals to the outcomes the strategy has been shown to change?

- Can you implement the strategy just as it was studied? If not, how will you confirm your approach is effective too?

Involving a broad group of stakeholders, including local data and subject matter experts and members of the community, can help ensure your selected strategy is feasible and suitable for your community's priorities and culture.

More strategies for rural areas

You can search *What Works for Health* (WWFH) for policies and programs that have been tested or implemented in settings like yours, or adapt strategies that have been tested elsewhere but seem like a good 'fit' for your community. Many of the strategies listed on the following pages have been tested or implemented in rural areas.

New policies and programs are added regularly to WWFH, and existing entries are updated. This report reflects content as of June 24, 2016.

Visit countyhealthrankings.org/whatworks to see the most current listings.

Health Behaviors									
		Decision Maker							
	Evidence Rating	Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Tobacco Use									
Cell phone-based tobacco cessation interventions Deliver tobacco cessation advice and motivational messages via text or video message	SS			●	●				●
E-cigarette regulations Regulate the use of e-cigarettes, especially among youth, using licensing, marketing restrictions, smoke-free policies, etc.	EO				●				
Smoke-free policies for indoor areas Implement private sector rules or public sector regulations that prohibit smoking indoors or restrict it to designated areas	SS			●	●				●
Smoke-free policies for multi-unit housing Implement private sector rules or public sector regulations that prohibit smoking in and around multi-unit housing	EO			●	●				●
Smoke-free policies for outdoor areas Implement private sector rules or public sector regulations that prohibit smoking outdoors or restrict it to designated areas	SE			●	●				●
Tobacco access restrictions for minors Actively enforce existing laws, educate retailers, or implement penalties for youth who purchase, use, or possess tobacco products	SE			●	●			●	
Tobacco retail outlet density restrictions Set the number, type, proximity, and density of tobacco retailers, especially near homes and schools, using state or local zoning and licensing regulations	EO	●			●				
Diet & Exercise									
Child-focused advertising restrictions for unhealthy foods & beverages * Restrict child-focused advertising for unhealthy foods and beverages via bans on unhealthy food and drink ads during children's TV programs, product placement in children's movies, etc.	SE		●		●				●
Farm to school programs * Incorporate locally grown foods into school meals and snacks, often with visits from food producers, cooking classes, nutrition and waste reduction efforts, and school gardens	SE		●	●	●	●			
Farmers' markets/stands * Support multiple or single vendor markets where producers sell goods such as fresh fruit and vegetables, meat, dairy items, and prepared foods directly to consumers	SE	●		●	●	●			
Food hubs * Support businesses or organizations that aggregate, distribute, and market local and regional food products (e.g., fresh fruits and vegetables, meat, dairy, grains, and prepared items)	EO			●	●			●	
Healthy food in convenience stores* Encourage convenience stores, corner stores, or gas station markets to carry fresh produce and other healthier food options	SE			●	●			●	
Healthy food initiatives in food banks Combine hunger relief efforts with nutrition information and healthy eating opportunities, often with on-site cooking demonstrations, recipe tastings, produce display stands, etc.	SE		●	●	●			●	●

Health Behaviors (continued)

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Healthy school lunch initiatives Modify the school lunch food environment by prominently displaying, marketing, and increasing the convenience of healthy foods and providing healthy options	SE		●		●	●		●	
Mobile markets * Support fresh food carts or vehicles that travel to neighborhoods on a set schedule to sell fresh fruits and vegetables	EO		●	●	●	●		●	
New grocery stores in underserved areas * Attract new grocery stores that sell a variety of fresh foods, baked goods, packaged, and frozen items to underserved areas via financing initiatives or zoning regulation	EO	●		●	●	●		●	
School breakfast programs Support programs to provide students with a nutritious breakfast in the cafeteria, from grab and go carts in hallways, or in classrooms	SS		●		●	●			
Activity programs for older adults * Offer group educational, social, or physical activities that encourage social interactions, regular attendance, and community involvement among older adults	SS				●		●	●	
Extracurricular activities for physical activity Provide chances for kids and adolescents to be active and play sports at various skill levels via structured or unstructured after- and before-school athletic activities	SE		●		●			●	
Places for physical activity * Modify local environments to support physical activity, increase access to new or existing facilities for physical activity, or build new facilities	SS	●	●	●	●			●	
Prescriptions for physical activity Provide prescriptions with individually tailored exercise plans, often accompanied by progress checks at office visits, counseling, activity logs, and exercise testing	SS						●		●
Screen time interventions for children Encourage children to spend time away from TV and other screen media, often as part of a multi-faceted effort to increase physical activity and improve nutrition	SS		●		●			●	
Worksite obesity prevention interventions Use educational, environmental, and behavioral strategies to improve food choices and physical activity opportunities in worksite settings	SS		●	●	●		●	●	●
Alcohol & Drug Use									
Breath testing checkpoints Implement checkpoints where law enforcement officers can stop drivers suspected of drinking and driving and assess their level of alcohol impairment; also called sobriety checkpoints	SS				●				
Enhanced enforcement of laws prohibiting alcohol sales to minors * Initiate or increase retailer compliance checks for laws that prohibit alcohol sales to minors, often as part of a multi-faceted effort	SS				●				
Ignition interlock devices Strengthen policies that mandate ignition interlock installation in vehicles to prevent operation by a driver with a high blood alcohol concentration	SS				●				
Multi-component community interventions against alcohol-impaired driving Work to reduce alcohol-impaired driving via sobriety checkpoints, responsible beverage service training, education and awareness activities, and other efforts	SS		●	●	●	●	●		●
Naloxone access Train and authorize all first responders to administer naloxone and permit prescribing to people likely to encounter those who might overdose	SE				●			●	●

Health Behaviors (continued)

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Proper drug disposal programs Establish programs that accept expired, unwanted, or unused medicines from designated users and dispose of them responsibly	EO				●		●		●
Public alcohol availability restrictions * Restrict alcohol availability at public venues (e.g., concerts, street fairs, and sporting events) and in public spaces such as parks and beaches	EO				●				
Sexual Activity									
Comprehensive risk reduction sexual education Provide information about contraception and protection against sexually transmitted infections (STIs) in classroom or community settings	SS		●		●			●	
Intensive case management for pregnant and parenting teens * Provide pregnant or parenting teens with services based upon their needs (e.g., counseling, connections to health care or social services, academic support, etc.)	SE		●		●	●	●	●	●
School-based health clinics with reproductive health services * Provide reproductive health care services such as counseling, contraception, and testing in middle and high school-based health clinics	SE		●				●		
Service learning programs: pregnancy and STIs * Integrate youth community service activities (e.g., volunteering in nursing homes or homeless shelters) with group- or classroom-based programs that build social skills and positive behaviors	SS		●					●	●

Clinical Care

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Access to Care									
Community health workers Engage professional or lay health workers to provide education, referral and follow-up, case management, home visiting, etc. for those at high risk for poor health outcomes	SE				●		●	●	●
Federally qualified health centers (FQHCs) * Increase support for non-profit health care organizations that receive federal funding and deliver comprehensive care to uninsured, underinsured, and vulnerable patients regardless of ability to pay	SS	●			●		●		●
Higher education financial incentives for health professionals serving underserved areas * Expand incentives such as scholarships and loans with service requirements and loan repayment or forgiveness programs for health care providers who practice in rural or other underserved areas	SE				●		●		●
Medical homes Provide continuous, comprehensive, whole person primary care that uses a coordinated team of medical providers across the health care system	SS				●	●	●		
Nurse residency programs * Implement programs that continue education, mentoring, and support for novice nurses following graduation	SE		●		●		●		
Rural training in medical education * Expand medical school training and learning experiences focused on the skills necessary to practice successfully in rural areas	SS		●						
Telemedicine * Deliver consultative, diagnostic, and treatment services remotely for patients who live in areas with limited access to care or would benefit from frequent monitoring; also called telehealth	SS				●		●		●

Clinical Care (continued)

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Telemental health services * Provide mental health care services (e.g., psychotherapy or counseling) via telephone or videoconference	SE				●		●		●
Quality of Care									
Behavioral health primary care integration * Revise health care processes and provider roles to integrate mental health and substance abuse treatment into primary care	SS						●		
Case-managed care for community-dwelling frail elders Use a case management model for frail elderly patients living independently, coordinating aspects of long-term care such as status assessment, monitoring, advocacy, care planning, etc.	SE				●		●		
Chronic disease self-management (CDSM) programs Provide educational and behavioral interventions that support patients' ability to actively manage their condition(s) in everyday life	SS						●		●

Social & Economic Factors

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Education									
Career Academies Establish small learning communities in high schools focused on fields such as health care, finance, technology, communications, or public service	SS		●						
College access programs * Help underrepresented students prepare academically for college, complete applications, and enroll, especially first generation applicants and students from low income families	SS		●		●	●		●	
Community schools * Combine academic, physical health, mental health, and social service resources in schools for students and families via partnerships with community organizations; also called community learning centers	SE		●		●				
Dropout prevention programs Provide supports such as mentoring, counseling, or vocational training, or undertake school environment changes to help students complete high school	SS		●			●			
Preschool education programs Provide center-based programs that support cognitive and social-emotional growth among children who are not old enough to enter formal schooling	SS		●		●				
School-based social and emotional instruction * Implement focused efforts to help children recognize and manage emotions, set and reach goals, appreciate others' perspectives, and maintain relationships; also called social and emotional learning (SEL)	SS		●						
School-wide Positive Behavioral Interventions and Supports (Tier 1) Teach positively stated behavior expectations to all students, often reinforced with prizes or privileges and supported with coaching and data; SWPBIS is tier one of Positive Behavioral Interventions and Supports (PBIS)	SS		●		●				
Summer learning programs Provide academic instruction to students during the summer, often along with enrichment activities such as art or outdoor activities	SS		●					●	
Universal pre-kindergarten * Provide pre-kindergarten (pre-K) education to all 4-year-olds, regardless of family income	SS		●		●				

Social & Economic Factors (continued)

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Employment & Income									
Basic education & work training programs for hard-to-employ adults Provide basic skills (e.g., reading, math, writing, English language, or soft skills) and industry-specific training with other supports; often called career pathway and bridge programs or career ladders	EO		●	●	●			●	
Flexible scheduling Offer employees control over an aspect of their schedule through arrangements such as self-scheduled shift work, flex time, and compressed work weeks	SS			●					
Paid sick leave ordinances Require employers under a local jurisdiction to provide paid time off to employees for use when ill or injured	EO	●		●	●				
Transitional jobs Establish time-limited, subsidized, paid jobs intended to provide a bridge to unsubsidized employment	SS			●	●			●	
Vocational training for adults Support acquisition of job-specific skills through education, certification programs, or on-the-job training, often with personal development resources and other supports	SS			●	●			●	
Family & Social Support									
Early childhood home visiting programs Provide parents with information, support, and training regarding child health, development, and care from prenatal stages through early childhood via trained home visitors	SS				●	●	●	●	●
Extracurricular activities for social engagement * Support organized social, academic, or physical activities for school-aged youth outside of the school day	SS		●		●			●	
Intergenerational communities * Create communities that promote interaction and cooperation between individuals of different ages and focus on the needs of all residents, especially children and older adults	EO			●	●	●	●	●	
Community Safety									
Car seat distribution & education programs * Provide parents with car seats free of charge, via loan or low cost rental, often with installation support	SS				●		●	●	
Child bicycle helmet promotion programs Promote child bicycle helmet use via health education, media campaigns, or provision of free or low-cost helmets	SS		●	●			●	●	
Enhanced seat belt enforcement programs * Add publicity and other strategies (e.g., supplemental patrols, increased officers, etc.) to efforts to enforce existing seat belt laws	SS				●				
Multi-component fall prevention interventions for older adults Provide a fixed, multi-component set of fall prevention interventions to older adults, usually in community settings	SS				●		●		●
Risk assessments & personalized approaches to fall prevention among older adults Conduct assessments that gauge older adults' risk of falling and develop personalized approaches to help prevent falls	SS				●		●		●
Rollover protection structures (ROPS) * Use metal bars, frames, or crush proof cabs that prevent tractors from rolling over and crushing their drivers	SE			●	●				●
Sports-related brain injury education Educate coaches, athletes, and parents about the severity of sports-related brain injuries or concussions, proper prevention, detection, and treatment	EO		●					●	

Physical Environment

	Evidence Rating	Decision Maker							
		Community Development	Education	Employers or Business	Government	Grantmakers	Health Care Professionals or Advocates	Non-Profit Leaders	Public Health Professionals or Advocates
Housing & Transit									
Healthy home environment assessments * Train volunteers, professionals, or paraprofessionals to help residents assess and remediate environmental home health risks and recommend low cost changes (e.g., improved ventilation, integrated pest management, etc.)	SS	●			●				●
Housing rehabilitation loan & grant programs * Provide funding, primarily to low or median income families, to repair, improve, or modernize dwellings and remove health or safety hazards	SS	●			●				
Housing trust funds * Support funds that help create or maintain low income housing, subsidize rental housing, and assist low income homebuyers and non-profit housing developers	EO	●		●	●				
Weatherization Assistance Program (WAP) Provide assistance to low income families to make their homes more energy efficient and to permanently reduce their energy bills	SE	●			●				
Rural transportation systems * Establish transportation services for areas with low population densities, using publicly funded buses and vans on a set schedule, dial-a-ride transit, volunteer ridesharing, etc.	EO	●		●	●				
Air & Water Quality									
Conservation tillage practices * Encourage methods of soil cultivation that keep at least one-third of cultivated soil covered with the previous year's crop residue (e.g., mulch till, ridge till, strip till, or no-till)	SS		●	●	●				
Integrated pest management (IPM) for agriculture & outdoor use * Support a four-tiered approach to outdoor pest control that minimizes potential hazards to people, property, and the environment	SS		●	●	●			●	
Multi-component groundwater management programs * Address soil and water quality concerns via regular groundwater monitoring, education about risks to groundwater, water quotas and taxes, and other efforts	SE			●	●			●	
Nutrient management plans * Support site-specific plans for crop production that match nutrient applications to crop needs, typically with agricultural best management practices	SS		●	●	●				

* What Works for Health materials include rural-focused resources or studies

Strategies often affect health in multiple ways (e.g., school breakfast programs have been shown to increase academic achievement and healthy food consumption). Visit our website to learn more about the specific outcomes and health factors each strategy has been shown to affect and the decision makers who can help move the strategy forward: countyhealthrankings.org/whatworks.

Credits

This publication features many strategies in *What Works for Health* (WWFH), an online resource that provides communities with information to help select and implement evidence-informed strategies (i.e., policies, programs, systems and environmental changes) that can help improve health behaviors, clinical care, the physical environment, and the social & economic factors that affect health.

WWFH began in Wisconsin with the support of the Wisconsin Partnership Program, UW School of Medicine and Public Health: whatworksforhealth.wisc.edu. It is now also part of the *County Health Rankings & Roadmaps* program: countyhealthrankings.org/whatworks.

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SCHOOL OF MEDICINE AND PUBLIC HEALTH