



University of Wisconsin  
Population Health Institute  
UNIVERSITY OF WISCONSIN  
SCHOOL OF MEDICINE AND PUBLIC HEALTH

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### Land Acknowledgment Statement



The UW Population Health Institute occupies Ho-Chunk Land, a place their nation has called Teejop (Day-JOPE) since time immemorial. In 1832, the Ho-Chunk were forced to surrender this territory. Decades of ethnic cleansing followed when both the federal and state government repeatedly, but unsuccessfully, sought to forcibly remove the Ho-Chunk people from Wisconsin.

This history of colonization informs our shared future of building partnerships that prioritize respect and meaningful engagement. The staff of the Institute respect the inherent sovereignty of the Ho-Chunk Nation, along with the eleven other First Nations of Wisconsin. We operationalize our values by considering the many legacies of violence, erasure, displacement, migration, and settlement.

## ► Letter from UWPHI Director

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The University of Wisconsin Population Health Institute (UWPHI) is pleased to present the *2021 Wisconsin Population Health and Equity Report Card*. With funding from the Wisconsin Partnership Program, UWPHI developed the *Report Card* to draw attention to how Wisconsin's health compares to the nation as a whole by measuring the state's progress toward improving health and eliminating disparities. The first *Report Card* was released in 2007 and was updated in 2010, 2013, and 2016. The *Report Card* underscores UWPHI's commitment to translate research about population health for use in policy and practice.

We evolved the content and format to reflect important progress in the field of population health and equity. The report now includes:

- 1) Quantitative data on how long and well people live in Wisconsin and disparities among specific groups and places.
- 2) Qualitative data and stories aimed at illuminating context about what produces overall health and equity.
- 3) Evidence-informed policies and practices to address unfair, avoidable, and systematic differences in health outcomes.

These changes highlight how selected policies and systems have given advantages to certain groups and places while creating obstacles to health and well-being for others. The *Report Card* is intended to spark curiosity and commitment to explore new ways of understanding the health of the people of Wisconsin. We believe it is possible to use data, evidence, and stories to find common ground, cultivate social solidarity, and build the power needed to ensure everyone in Wisconsin has an opportunity to thrive.



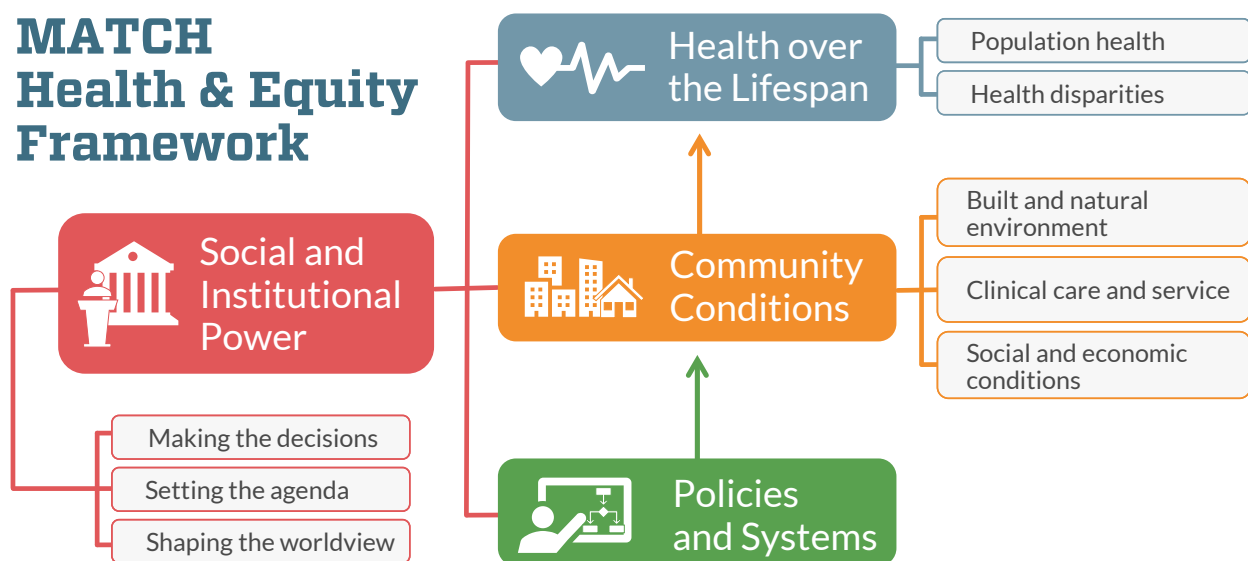
### **Sheri Johnson, PhD**

Director, Population Health Institute  
Associate Professor (CHS)  
Department of Population Health Sciences  
University of Wisconsin School of Medicine and Public Health

## ► Introduction

The *2021 Wisconsin Population Health and Equity Report Card* is a call to action to better understand the health of our communities and implement strategies to create conditions that allow all people to have a fair and just chance to lead the healthiest lives possible.

The *2021 Report Card* reflects the UWPHI Mobilizing Action Toward Community Health (MATCH) Framework for Health Equity, which highlights the role of social and institutional power in health and health disparities. This framework focuses on who has the ability to make decisions, set agendas, and shape worldviews. The attention to power shifts the focus from individual behavior to our collective capacity to design and implement policies and systems that shape the community conditions that influence health.



We invite everyone to reflect on the shared values we have in Wisconsin and the opportunities we have to make Wisconsin a great place for all families and individuals to live, work, and play.<sup>1</sup> Some values that shape this belief are:

- **Everyone deserves respect and dignity.** Our worth comes from being alive — regardless of where we come from and what we look like, and what we do. Across many beliefs, dignity and autonomy continues in death, as well.
- **Everyone deserves a fair shot at thriving.** The social, environmental, and economic policies and systems we make have the greatest influence on our opportunities to thrive. It is our job to transform our social fabric for health equity — so physical, mental, and social health and well-being are possible for everyone.
- **In Wisconsin, we do not leave anyone behind.** Our well-being is bound to each other, and we take care of each other. It is our collective responsibility to cultivate strong, healthy communities.

<sup>1</sup> Framing Subcommittee (2022). Governor's Health Equity Council (GHEC). Voted out of Subcommittee on January 10, 2022

- **We believe all Wisconsinites should have a say in decisions that affect our lives.** Everyone brings knowledge that should guide public decision-making. Meaningful inclusion leads to better decisions — and people thrive when we see ourselves as valued members of our communities.
- **We know making Wisconsin better for all of us means we have to change what we do and how we do things. Change is both a process and an outcome.** We are committed, hopeful, honest, and brave about the risks, transformation, and time it will take from each of us.
- **Making all our communities healthy and safe starts with us.** We have what it takes to transform Wisconsin so that everyone has what they need to provide for themselves and their families. We are facing complex issues, and we will need to address them individually, in our communities, and in our institutions. We collectively have the knowledge, resources, and the power to change our communities and our state so that we can all thrive.



















As we reimagine, reinvent, and transform our systems to create a future for all of us to reach our fullest potential, we will be better positioned to ensure all our policies and systems support everyone's opportunity to thrive.

The *2021 Report Card* features two overall grades for health and for health disparities. It also includes five population health and equity policy priority areas:

- Ensuring access to quality health care
- Expanding safe and affordable housing
- Increasing economic resources for children and families
- Expanding broadband infrastructure
- Increasing civic engagement

Policy priority areas cover data, evidence, and examples that illustrate the current state of the issue and opportunities to take action to improve health and equity. For each of these priority areas, a variety of policy approaches have been implemented around the country with proven success. In other words, we know what it takes to transform Wisconsin so that everyone is better off. The next step is to work together — and build our power — to make it happen.

### Data Visualization Symbols and Colors Used in this Report

Symbols	Education	Symbols	Race/Ethnicity	Symbols	Community Type
	College Graduate		American Indian and Alaska Native (AIAN)		Large Metro (Milwaukee)
	Some College		Asian		Smaller Metro
	High School Graduate		Black		Suburban
	Did Not Complete High School		Hispanic		Rural
			White		
<div> <div>States</div> <div>  Iowa            Minnesota            Wisconsin            Best            Worst         </div> </div>					

## ► Wisconsin Health Grades: Overall Health

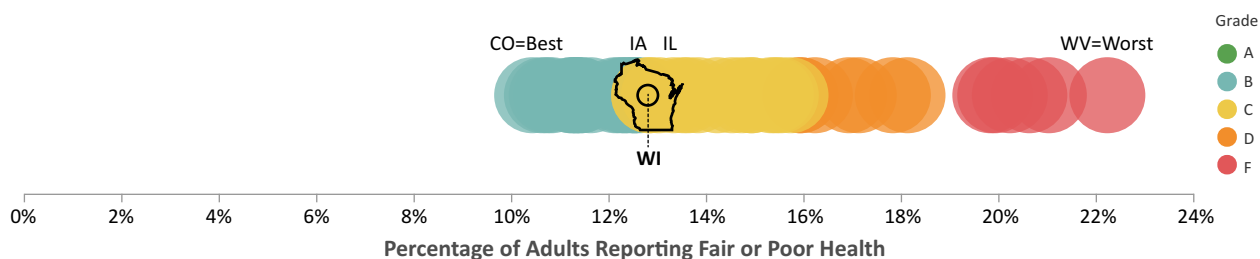
The health of Wisconsin is graded on two dimensions compared to all other states:

- Overall health of the entire state
- Health disparities within Wisconsin<sup>2</sup>

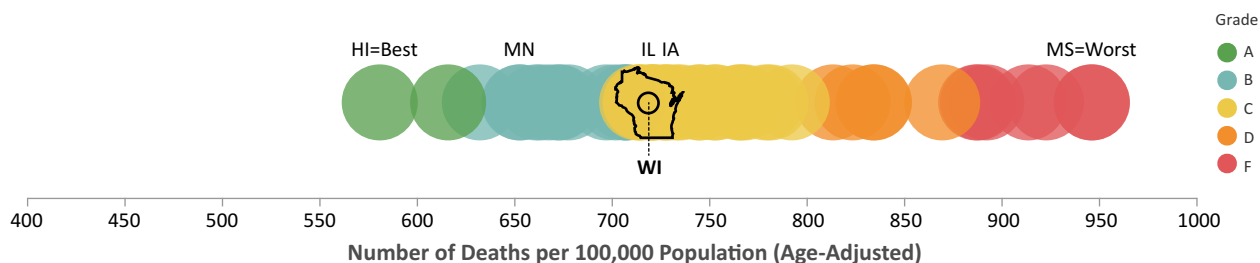
Health grades compare Wisconsin to all other states using two measures for length and quality of life. How long we live is measured by age-adjusted mortality; quality of life is measured by the percent of individuals reporting either fair or poor health status. Of note, the most recently available data for age-adjusted mortality and for fair or poor health do not incorporate the effects of the COVID-19 pandemic on current mortality and quality of life.

- **Wisconsin receives a C for the health of our population based on measures of length and quality of life.** Wisconsin has an age-adjusted mortality rate of 720.2 per 100,000 and 12.8% of Wisconsinites reported fair or poor health.
- When compared to its neighboring Midwestern states, Wisconsin is in the middle of the pack. Minnesota has consistently better health than Wisconsin with an age-adjusted mortality rate of 651 per 100,000 and 10.6% of the population reporting fair or poor health. Iowa and Illinois have comparable overall health to Wisconsin with age-adjusted mortality rates of 727.8 and 719.3 per 100,000, respectively, while 12.6% of the population in Iowa and 13.3% in Illinois report fair or poor health.
- Across the US, the states in most need of improvement are Mississippi with an age-adjusted mortality rate of 948.6 per 100,000 and West Virginia with 22.2% reporting fair or poor health. The states with the best average health are Hawaii with an age-adjusted mortality rate of 577.8 per 100,000 and Colorado with 10.4% of the population reporting fair or poor health.

### Wisconsin's Fair or Poor Health Grade: C



### Wisconsin's Mortality Grade: C



- **According to data from the last five years prior to the COVID-19 pandemic, Wisconsin saw little change in mortality or self-rated health among residents.** For example, between 2016 and 2019, age-adjusted mortality in Wisconsin increased by 0.5% (or an increase of 3.7 deaths per 100,000).

<sup>2</sup> Health disparities refer to measurable differences in health outcomes, such as mortality rate differences. Health inequities go beyond simple differences, adding a dimension of unfairness and injustice.

## ► Wisconsin Health Grades: Disparity

While Wisconsin gets an overall health grade of C, measurable differences exist among population groups across the state in length and quality of life. We use the term disparities to describe these measurable differences in health. The disparity grades examine differences in health among three different subgroups in the state: race or ethnicity, education level, and geographic region.



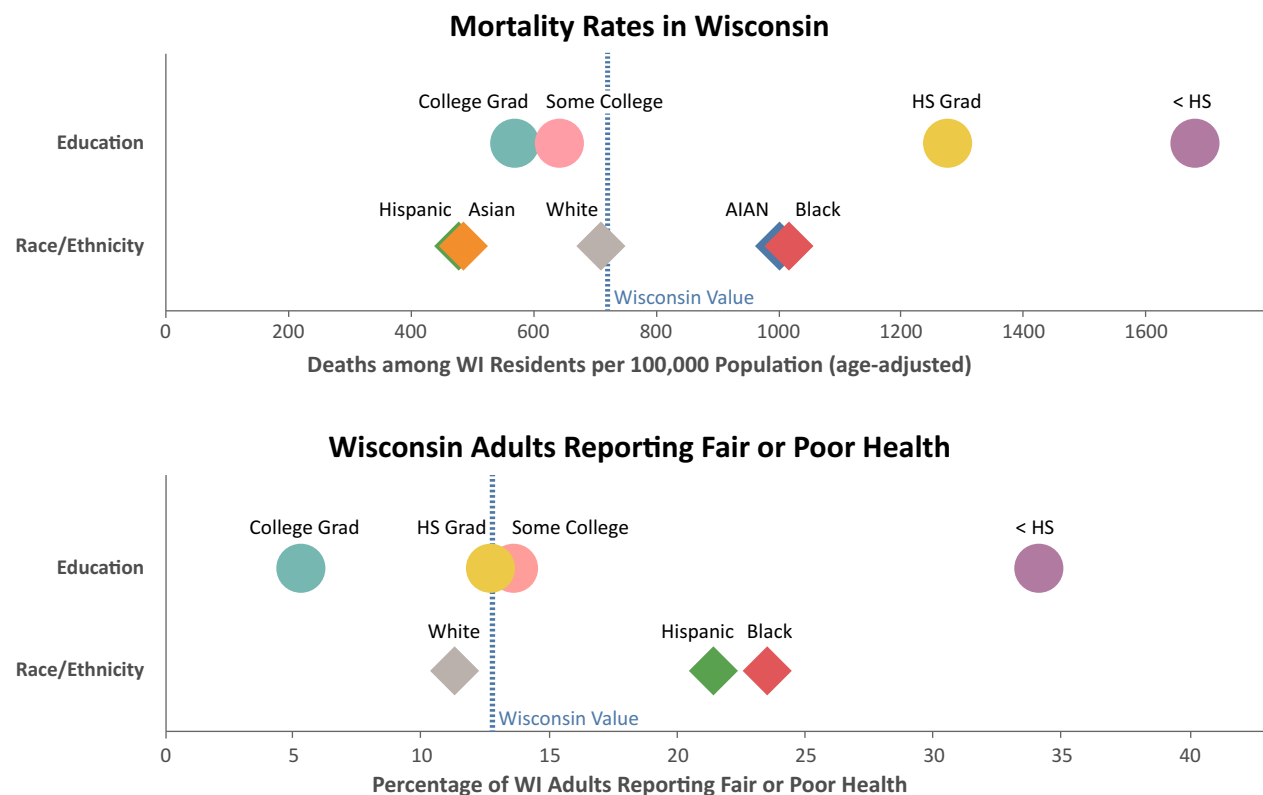
Race and ethnicity are social constructs, which shift in response to sociopolitical contexts. Education level refers to the years of formal schooling achieved by an individual, which also reflects the context of opportunity. Geographic unit of analysis (urbanicity) reflects how places are impacted by social, economic, and political decisions over time, including resource allocation. American Indian and Alaska Natives (AIAN) are the only federally recognized political minority in the United States. Tribes have government-to-government relationship with the United States.

The table below shows the overall health grade and markdown due to disparities in living long and well among population groups in Wisconsin. The size of the gaps among groups in length and quality of life for Wisconsin compared to other states determines the degree to which the overall grade is marked down. For example, the large gaps in health among Wisconsinites with different education levels means that our overall health grade of C is marked down to an F in length and quality of life compared to other states.

	Mortality	Fair or Poor Health
<b>Wisconsin's Health Grades</b>	<b>C</b>	<b>C</b>
<b>Adjusted for: Rural/Urban Disparities</b>	<b>D</b>	<b>C</b>
<b>Adjusted for: Racial/Ethnic Disparities</b>	<b>D</b>	<b>D</b>
<b>Adjusted for: Educational Disparities</b>	<b>F</b>	<b>F</b>

A strong and growing body of research shows that these differences in health outcomes are the result of community conditions and policies and systems that shape health and opportunity. The neighborhoods we live in – along with past and present housing, education, and employment policies – create opportunities for some, but roadblocks for others.

The graphics below provide more information on the differences among or between groups within Wisconsin to better understand the nature of these health disparities.



- While the overall mortality rate is 720 deaths per 100,000, a closer look within Wisconsin reveals that among racial and ethnic groups, mortality ranges from 477 deaths per 100,000 for Hispanic Wisconsinites to 1,016 deaths per 100,000 for Black Wisconsinites.
- Among Wisconsinites with a college education, there are 568 deaths per 100,000, while those with less than high school education experience a mortality rate of 1,679 per 100,000.
- Among levels of urbanization in Wisconsin, the mortality rate ranges from 659 per 100,000 for suburban counties to 822 per 100,000 for our large urban county of Milwaukee.
- Similar findings are displayed for fair or poor health. Though 12.8% of Wisconsinites report fair or poor health overall, 11.3% of Wisconsinites who identify as White report fair or poor health compared to 23.5% of Wisconsinites who identify as Black.
- Self-reported fair or poor health is lowest among college educated Wisconsinites (5.3%) and highest among those with less than high school education (34.1%).
- Among Wisconsin counties, self-reported fair or poor health ranges from 12.7% for suburban counties to 19.7% for our large urban county of Milwaukee.

The grades on page 7 show raw numerical differences, but they do not tell the whole story. Health inequities go beyond simple differences, adding a dimension of unfairness and injustice. These disparity measures obscure the structural and historical drivers of health inequities, including for example, disinvestment, historical traumas of settler colonization and enslavement, and segregation.

The field of health equity measurement is building capacity to better describe the ways that unjust policy decisions are linked to unfair differences in length and quality of life. This is why the following equity policy pages also feature stories to provide context and enrich our understanding.



## ► **2021 Report Card Policy Priorities**

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Wisconsinites have long-experienced inequities - or differences in health and opportunity that are systematic, avoidable, unnecessary, unfair, and unjust - which have been magnified by COVID-19. The pandemic further illuminated the need to address these inequities.

As shown in the MATCH Framework on page 4, policy and system changes impact overall health and equity. The policy priorities included in the *2021 Report Card* were developed through a series of engagements led by the Community Resilience and Response Task Force (CRRTF) as well as a series of interviews with partners and diverse audiences to understand the perspectives, goals, and policy areas of importance to Wisconsin leaders.

During the first part of the pandemic, CRRTF — a collaboration between Wisconsin's Department of Health Services, the UWPHI, the University of Wisconsin Division of Extension, and the Governor's Office — integrated a focus on community resilience, equity, and mental health across Wisconsin's COVID-19 response. Recognizing that racial and rural inequities existed prior to COVID-19, CRRTF also supported communities in considering equitable policy and practice decisions.

Alongside the overall health and disparity grades, the *2021 Report Card* presents evidence-informed policies and practices that can be implemented at local and state levels to advance equity in five policy priority areas:

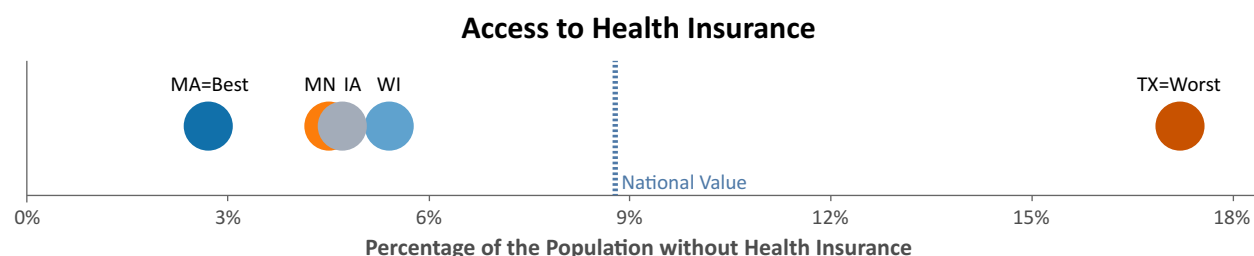
- Ensuring access to quality health care
- Expanding safe and affordable housing
- Increasing economic resources for children and families
- Expanding broadband infrastructure
- Increasing civic engagement

Policy areas cover the following information:

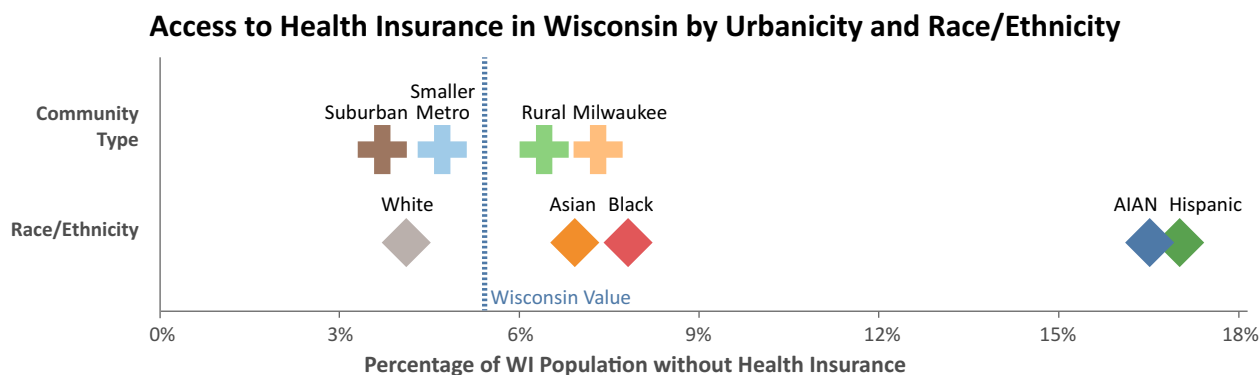
- Background information about why the policy area is important
- National and state-level data, where available
- A call to action that includes evidence-informed policies and practices that can be implemented at local and state levels
- Communities in action from the Wisconsin Healthy Communities Designation program

## ► Ensuring Access to Quality Health Care

The ways we shape and resource policies, programs, and service delivery influence people's ability to access services to meet their health care needs. Access to affordable, quality health care is important to physical and mental health. Health insurance helps individuals and families access needed primary care, specialists, and emergency care. It also helps in finding and paying for care. Health insurance reforms, such as the Affordable Care Act, have extended coverage to many previously uninsured individuals. From 2013 to 2015, uninsurance rates declined 52.5% in states that expanded Medicaid. States that did not adopt expansion, such as Wisconsin, saw only a 30.6% decline in uninsured rates. However, insurance by itself does not remove all barriers to care. Language barriers, distance to care, cost, and quality of treatment present further obstacles. Throughout the COVID-19 pandemic, testing and vaccines for COVID-19 have been provided to uninsured individuals at no cost. Still, due to under-employment and unemployment, fewer people have had access to employer-provided health insurance than before the pandemic. Currently available data does not reflect this trend.

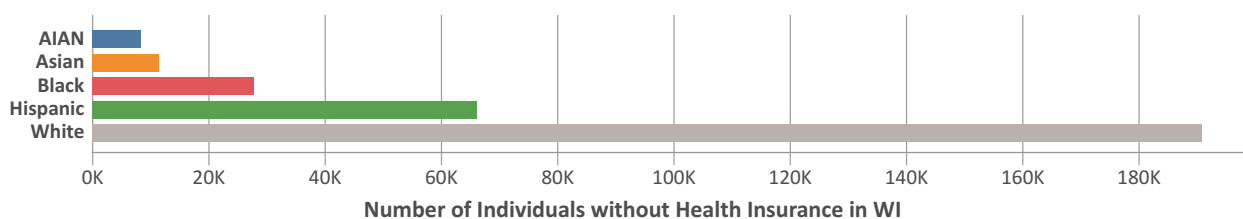


- National data shows that 8.8% of the population were without health insurance in 2019. Wisconsin fared slightly better at 5.4% without health insurance. Across states, rates of people without health insurance range from 2.7% in Massachusetts to 17.2% in Texas.

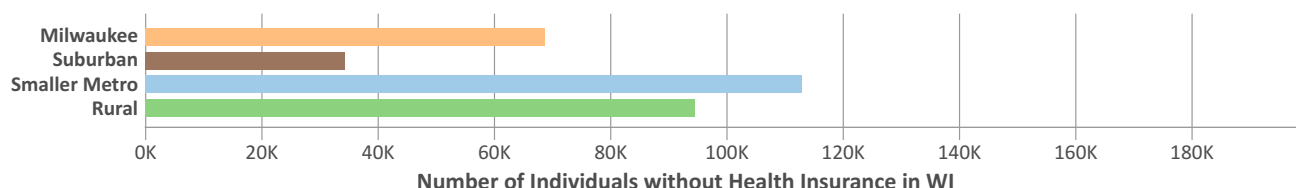


- Wide variation exists among groups in Wisconsin in uninsurance rates. About 4.1% of Wisconsinites who identify as White are without health insurance, compared to 17% among Wisconsinites who identify as Hispanic.
- The highest rates of uninsurance were in Milwaukee County (7.3%) and in rural counties (6.4%), while suburban counties had the lowest rate (3.7%).
- The total number of uninsured Wisconsinites who identify as White is 190,000, which is greater than all other racial and ethnic groups combined. Rural and smaller metro counties have the largest numbers of uninsured Wisconsinites.

### Total Number of Individuals without Health Insurance in Wisconsin by Race/Ethnicity



### Total Number of Individuals without Health Insurance in Wisconsin by Urbanicity



### Call to Action

Access to affordable, quality health care is a priority for everyone. State and national policies to increase access to insurance can benefit people of all races, ethnicities, and geographies. Strategies proven to reduce barriers can increase access to care and improve health and well-being. While coverage alone does not guarantee access, it is an essential first step. Recommendations include:

- Expanding BadgerCare Plus in Wisconsin to make affordable coverage available to an additional 90,000 residents by increasing eligibility to adults at 138 percent of the poverty level.
- [Providing health insurance outreach and support](#) and [engaging community health workers](#) to assist individuals at high risk for poor health outcomes and whose employers do not offer affordable coverage or who are self-employed or unemployed.
- Increasing support for [non-profit health care organizations](#) (often called community health centers) and delivering comprehensive care to uninsured, underinsured, and patients who are medically vulnerable regardless of ability to pay.
- [Tailoring health care](#) to patients' norms, beliefs, and values, as well as their language and literacy skills by [increasing health care providers' skills and knowledge](#) to understand and respond to cultural differences and value diversity.
- [Delivering consultative, diagnostic, and treatment services remotely](#) to patients living in areas with limited access to care or who require frequent monitoring.



### Wisconsin Communities in Action

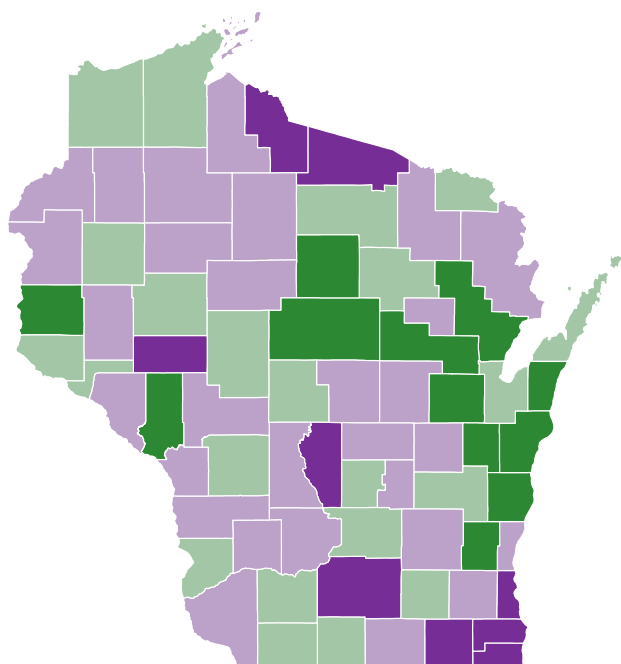
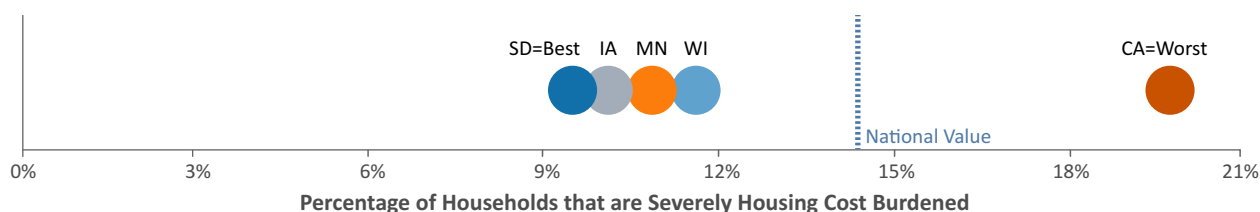
Jefferson County, Wisconsin: In 2020, three clinics in Jefferson and Dodge counties merged to form Rock River Community Clinic (RRCC) to serve people who are medically underserved within their communities. The RRCC was established with support from an ongoing initiative in Jefferson County called the Rock River Health Care Network (RRHCN) that focuses on advance access to primary care for individuals of lower-income. The RRHCN was awarded a \$900,000 grant to advance health equity in Jefferson and Dodge Counties. One of its first activities was to assist RRCC in installing an electronic health record system and developing more robust clinical systems, including operationalizing a community-based health center.

## ► Expanding Safe and Affordable Housing

Safe and affordable housing matters to our health. Housing costs have outpaced income, particularly for low-wage workers, requiring families to spend more than half of their income on housing. They not only struggle to find safe, secure homes, but also face trade-offs to meet basic needs. Across and within counties, stark differences exist in opportunities to live in safe, affordable homes, especially for people with lower incomes and people who experience racism.

These differences have been laid bare during the COVID-19 crisis and emerge from long-standing, deep-rooted and unfair systems. Policies and practices such as redlining, restrictive zoning rules, and predatory bank lending practices have reinforced residential segregation and barriers to opportunity. According to data on residential segregation of Black and White residents, Wisconsin is the second-most segregated state in the country. Milwaukee is considered “hyper-segregated,” with the majority of Black people living in the urban core while suburban areas are populated primarily by White people. Segregation has been accompanied by disinvestment in Black communities, further lowering housing values, weakening schools, and reducing access to healthy foods and health care. Racial residential segregation has led to people of color with lower income and wealth through lack of good jobs and unfair lending practices such as redlining, which have been significant obstacles to home ownership and wealth accumulation.

### Severely Housing Cost Burdened Households

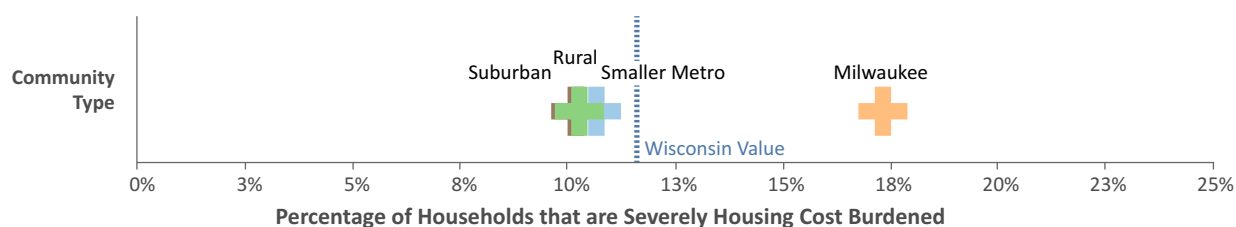


Severe Housing Cost Burden Among WI Counties



- In Wisconsin, recent data show that 11.6% of households experience severe housing cost burden (i.e., spending more than half of their income on housing). Minnesota (10.8%) and Iowa (10.1%) fare better than Wisconsin. South Dakota has the lowest proportion of cost burdened households (9.5%), while California has the highest (19.7%).
- Within Wisconsin, the severity of the housing cost burden depends on the population density. In Milwaukee County, 17.7% of households experience housing cost-burden compared to a smaller share in suburban, smaller metropolitan, and rural counties (10.2%, 10.6%, and 10.2%, respectively).
- Data show a pattern across and within counties. More segregated counties have higher rates of severe housing cost burden, especially for households headed by Black residents. In Milwaukee, about 17% of households headed by Black residents and 8% of households headed by White residents are severely housing cost burdened.

## Severely Housing Cost Burdened Households in Wisconsin by Urbanicity



### Call to Action

How can we preserve stable, safe, and affordable homes and improve economic and social well-being for residents? A comprehensive, strategic approach that draws from a range of evidence-informed strategies can be implemented. The way forward requires policies, programs, and systems changes that respond to community-specific needs, promotes inclusive and connected neighborhoods, reduces displacement, and enables opportunity for better health for all residents. Recommendations include:

- Fostering more inclusive and connected communities through [inclusionary zoning](#), mixed income development, and access to [living wage jobs](#) and [civic spaces](#).
- Increasing access to resources that secure affordable housing, such as [Housing Choice Vouchers](#) or [housing trust funds](#).
- Ensuring housing quality and climate-resilient, accessible housing stock through [home environment assessments](#), [lead paint abatement programs](#), [weatherization assistance](#), and [housing rehabilitation loan & grant programs](#).
- Creating and preserving safe and affordable housing by enabling capital resource flow through acquisitions, management and financing of land, [tax credits](#), [block grants](#) and zoning changes that reduce housing production costs.
- Ensuring basic needs are met and improving access to social services to increase housing stability and reduce homelessness through [rapid re-housing programs](#), [supportive housing](#), [eviction prevention strategies](#), and income supports such as [Earned Income Tax Credits](#).



### Wisconsin Communities in Action

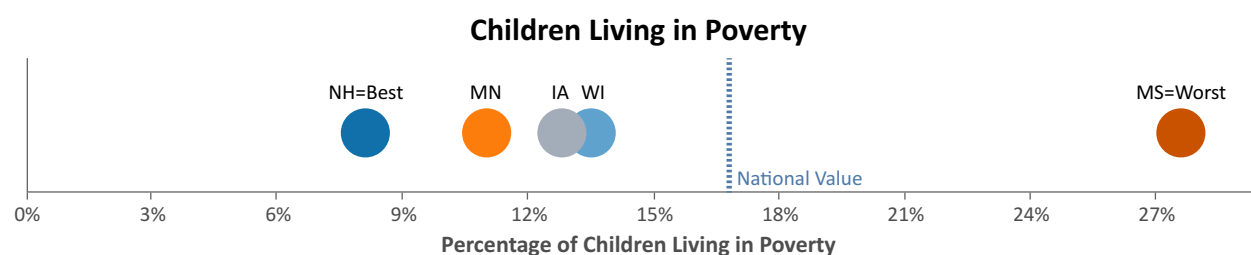
Eau Claire, Wisconsin: Since the 2018 update to the City of Eau Claire Housing Code, the housing inspection program has reached more than 68,000 residents. From May 2018 to May 2021, staff completed 725 inspections and 2,473 re-inspections.

At the time of the inspections, property owners, managers, and occupants are educated on maintaining a healthy and safe home. The housing staff work with property owners to address housing code violations and encourage ongoing communication. Information is also provided on financial help to assist property owners with repairs.

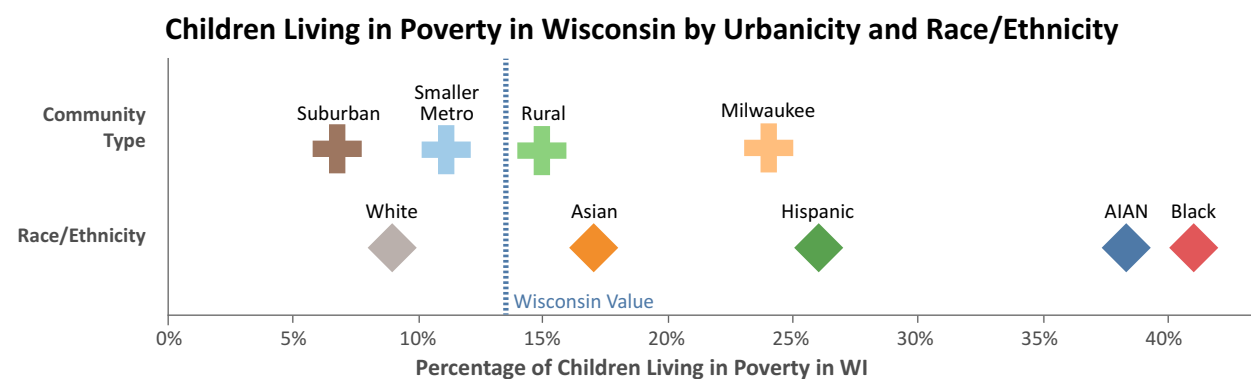
Each year, staff issue a news release and use social media to communicate when they will engage the community via a housing survey and how the program will help ensure housing is safe and adequate. Staff also reach out to neighborhood associations to let them know when the housing survey is being conducted in their areas. The Eau Claire City-County Health Department uses the survey data to prioritize specific neighborhoods and identify properties with the highest safety and health concerns.

## ► Increasing Economic Resources for Children and Families

Household income and jobs that pay a living wage shape our opportunities and choices about housing, education, childcare, food, medical care, and more. Opportunities for better health decrease for households with lower income, whether in rural or urban areas. Structural racism in the form of redlining that continues through a pattern of disinvestment and discriminatory hiring practices have kept lower income and families of color segregated from economic opportunities. Further, disinvestment in rural and urban economies, including reduction of manufacturing sector jobs, has affected social and economic conditions across regions of our state. Children are particularly vulnerable to the impacts of lower household income, which can lead to lasting effects on academic achievement, earning potential, and health into adulthood. The COVID-19 pandemic has exacerbated barriers to opportunity, including increased unemployment. Of note, the temporary Child Tax Credit (CTC) implemented in response to the pandemic likely reduced poverty substantially and closed gaps between racial groups. One study showed that families planned to use the CTC for “emergency savings, routine expenses, essential items, purchasing more or better food, and paying for health care and childcare” expenses.

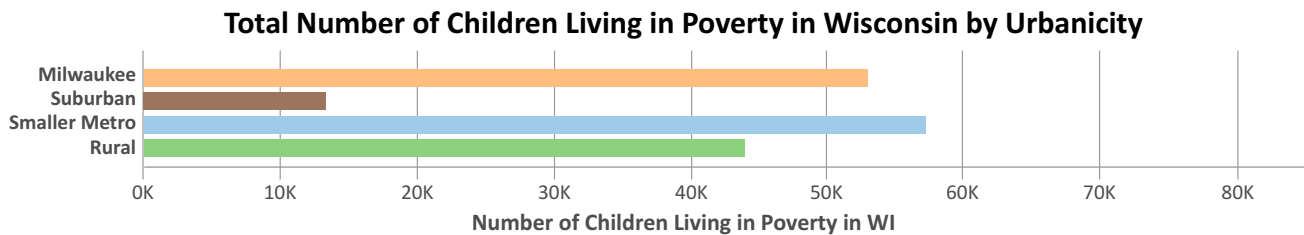
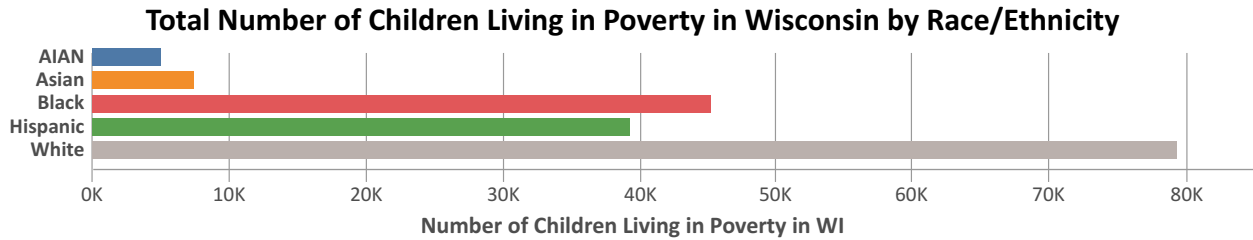


- National data show that 16.8% of children under 18 lived in poverty in 2019. Wisconsin fared slightly better at 13.5%. Minnesota (11%) and Iowa (12.8%) fare better than Wisconsin. The range spans from 8.1% in New Hampshire to 27.6% in Mississippi.



- Racial inequities persist in Wisconsin. Poverty rates are higher for American Indian and Alaska Native, Asian/Pacific Islander, Black, and Hispanic children compared to White children. In Wisconsin, the average annual income for White or Asian households is about \$10,000 higher than for American Indian and Alaska Native, Black, or Hispanic households. American Indian and Alaska Native and Black people continue to experience higher unemployment rates compared to White, Asian, or Hispanic households. Initial data show that the pandemic maintained, and potentially worsened, the unemployment gap.
- Within Wisconsin, the highest rates of children living in poverty are in Milwaukee and rural areas (24% and 15%, respectively) compared to small metropolitan and suburban counties (11% and 7%, respectively). Patterns of racial inequity exist across rural and urban communities. Rates are typically highest for all racial and ethnic groups of color in rural counties and Milwaukee. For example, while 15% of children in rural Wisconsin live in poverty, 26% of Black children in rural Wisconsin live in poverty.

- The total number of White children living in poverty is greater than any other racial and ethnic group. This reflects the fact that the White population is the largest among Wisconsinites. Similarly, the total number of children living in poverty is highest in Wisconsin's smaller metro counties (more than 57,000), while more than 13,000 children live in poverty in Wisconsin suburbs.



## Call to Action

In a nation with immense economic wealth, no child should grow up in poverty, regardless of where they live, how they look, or their family circumstances. State and national policies for reducing poverty can benefit all groups and areas in the state. Recommendations include:

- Increasing or supplementing income and supporting asset development in low-income households through efforts like expanding BadgerCare Plus, making permanent the [2021 Child Tax Credit](#), [expanded earned income tax credits](#), [jobs that pay a living wage](#), and [subsidized asset accumulation programs](#).
- Investing in education from early childhood through adulthood – such as [publicly-funded pre-kindergarten](#) or [career and technical education](#) – that can help students develop social and work-ready skills that will advance their education and career potential.



## Wisconsin Communities in Action

Oconto Falls, Wisconsin: Hospital Sisters Health System (HSHS) operates six hospitals across Wisconsin in Oconto Falls, Chippewa Falls, Eau Claire, Sheboygan, and Green Bay, and nine hospitals in Illinois.

In October of 2021, HSHS increased the minimum wage for staff to \$15 an hour. Nearly 3,000 of the approximately 13,000 employees across Wisconsin and Illinois will benefit from the rate increase.

“We truly hope this rate increase helps reinforce how much we respect and care about the important work these colleagues are doing around the clock,” said HSHS President and CEO, Damond Boatwright.

“Some of these colleagues are the ones helping keep patient rooms clean. Some help nourish our patients and their loved ones by preparing and serving food in our ministries. They help get our patients registered and checked in when they arrive for care. And others help with important clinical work that truly makes our organization able to provide the great care that we do.”

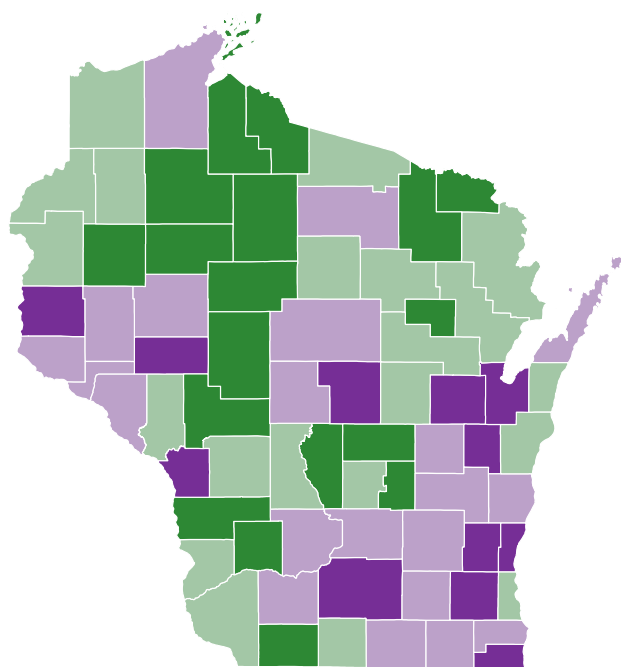
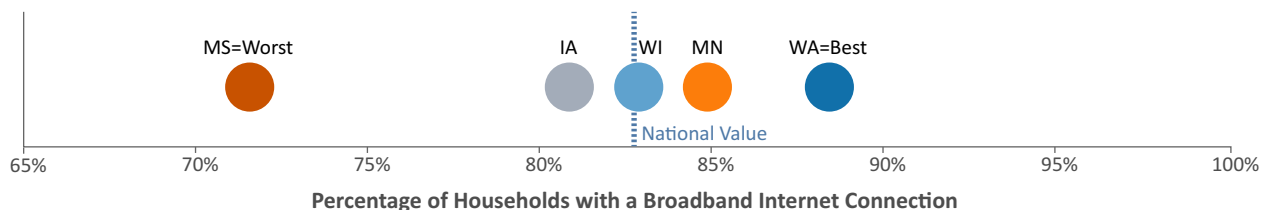
## ► Expanding Broadband Infrastructure

Reliable, high-speed internet improves access to education, employment, and health care opportunities and is associated with increased economic development. Broadband access can foster social connectedness, strengthen community support, and decrease loneliness. The COVID-19 pandemic highlighted the critical need for broadband access.

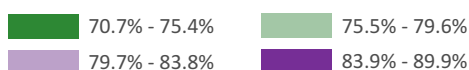
In 2020, the federal government passed the Broadband DATA Act to improve access and speeds by 2025. An estimated 19 million Americans lack access to reliable internet. Over half of U.S. counties (57%) experience speeds below the federally defined standard (25 Mbps down/3 Mbps up). This percentage jumps to 65% in rural counties.

In Wisconsin, it is estimated that 88% of urban residents live in areas with broadband infrastructure, while only 79% of rural households and 32% of households on tribal lands are in areas where broadband is available. However, even where infrastructure may be present, access to broadband may continue to be lacking. Low-income neighborhoods in urban areas have been systematically excluded from broadband services through “digital redlining”, where major network providers systematically exclude lower-income neighborhoods from broadband service—deploying only sub-standard, low-speed home internet.

### Households with a Broadband Internet Connection



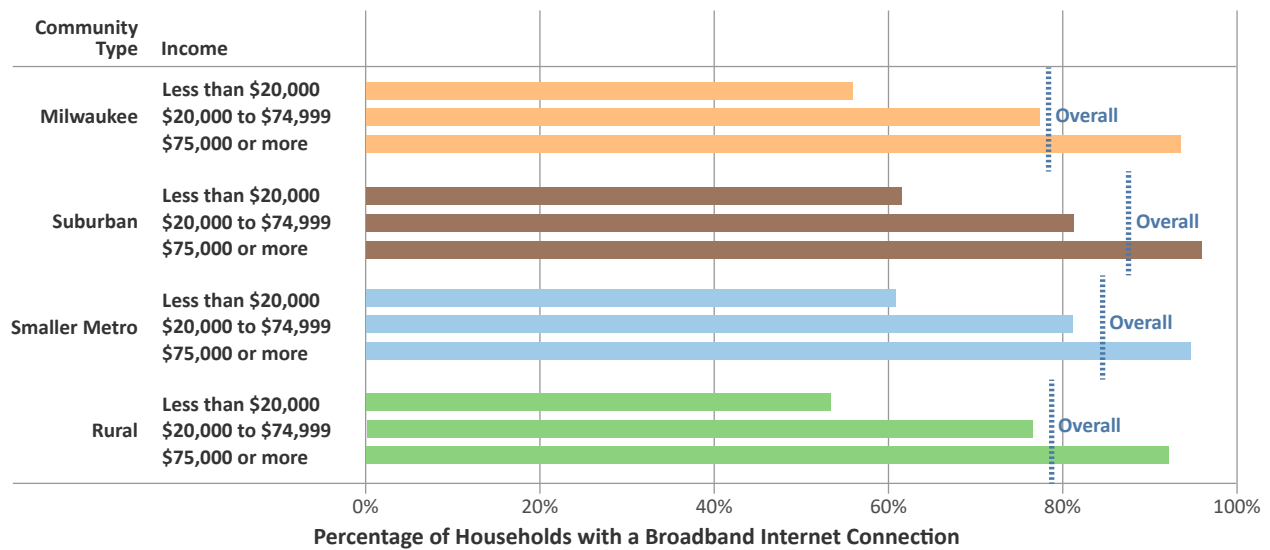
#### Broadband Access Among WI Counties



- Nearly 83% of Wisconsin households have a broadband internet connection, close to the national average of 82.7%. Iowa and Minnesota have similar access at 80.8% and 84.8%, respectively. Washington has the highest broadband access at 88.3% and Mississippi has the lowest at 71.5%.
- Among Wisconsin counties, there is considerable variation. Waukesha County has the highest access at 90%, while Ashland County has the lowest at 71%.
- Significant differences exist based on income. Higher income equals more broadband access across rural and urban counties. Households earning less than \$20,000 annually are more likely to go without access than higher-income households. This is true whether the household is in rural Wisconsin or Milwaukee County. About 50% to 60% of households earning less than \$20,000 lack access to broadband internet.



## Broadband Internet Access in Wisconsin by Urbanization and Household Income



### Call to Action

In addition to broadband infrastructure, internet adoption and digital literacy are key components of equitable access. Adoption includes expanding access to devices people can use to access broadband. All of these aspects of good broadband infrastructure, or lack thereof, are elevated during difficult times such as the COVID-19 pandemic. Expanding access across Wisconsin requires strategies to address infrastructure, affordability, and adoption. Wisconsin communities and state level leaders are already involved in efforts to address these issues, but additional work is required. Recommendations include:

- Focusing on [increased access to broadband via infrastructure projects](#) in unserved and underserved areas. Comprehensive efforts can also address geographic, social and economic factors that affect broadband adoption, such as the cost of internet service and devices and digital literacy skills.
- Supporting gap networks (hyper local networks built to address affordability) through regulation, technical assistance, bulk equipment purchasing, and funding.
- Establishing partnerships with providers, neighboring areas, anchor institutions, and businesses that are essential for communities to expand access.
- Ensuring broadband deployment has a low-cost offer and financially supports digital inclusion in areas that have experienced disinvestment, such as rural and segregated urban areas.



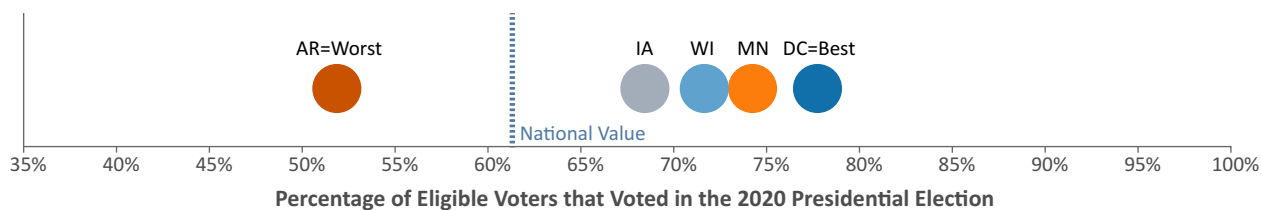
### Wisconsin Communities in Action

**Cable, Wisconsin:** The Town of Cable has prioritized bringing broadband to its rural community. The town partnered with Norvado Communications to provide matching funds for a grant that provided fiber optic access to Cable and surrounding communities. In 2020, Norvado Communications worked with the local school district to provide internet to low-income households. As a result, 97% of students were able to access the internet for at-home online learning.

## ► Increasing Civic Engagement

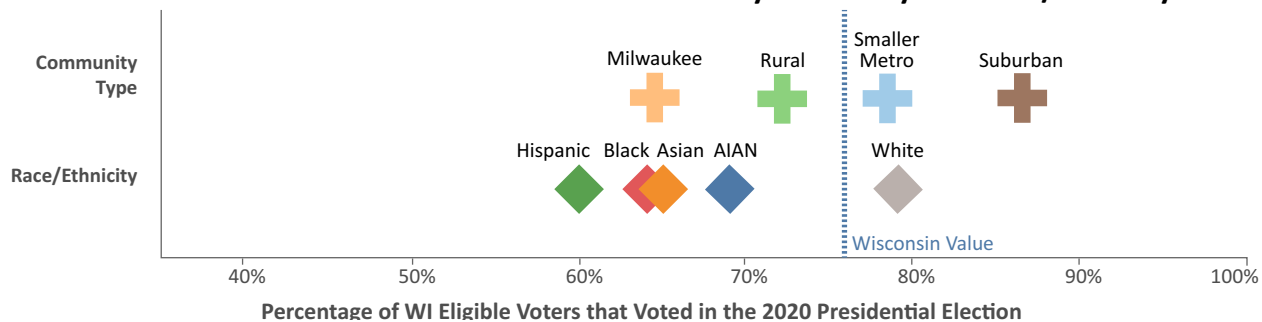
Civic engagement allows individuals and groups to demonstrate their commitment to creating a healthy community. People develop and use their knowledge, skills, and power to cultivate change. Such actions can help improve the conditions that influence health and well-being for all. A civically engaged population demonstrates that people care about their community and are motivated to participate. Civic engagement — such as voting and volunteering — is good for the health of our democracy and the health of our bodies, and minds. People of color, people with disabilities, households with lower income, those without health insurance, and young people are most likely to be among those unregistered to vote and to experience barriers to voting. However, research indicates that states with greater levels of civic participation and more inclusive voting policies, such as automatic and same-day registration, open voter identification (ID) requirements, re-enfranchisement of people with prior felony conviction, and mail voting options experience better health outcomes.

### 2020 Presidential Election Voter Turnout



- In Wisconsin, 71.7% voted in the 2020 presidential election. Minnesota had higher participation at 74.3%, while Iowa had lower turnout at 68.5%. Arkansas had the lowest voter turnout at 51.9%, while Washington D.C. had the highest at 77.8%. Nationwide, 61.3% voted.

### 2020 Presidential Election Voters in Wisconsin by Urbanicity and Race/Ethnicity



- Within Wisconsin, there was considerable variation among rural and urban counties in the 2020 election. Voter turnout was higher in suburban (86.4%), smaller metro counties (78.6%), and rural counties (72.3%). Milwaukee was the lowest (64.6%).
- Voter turnout also varied among racial and ethnic groups in Wisconsin, ranging from 79% of White voters to 60% of Hispanic voters.



## Call to Action

There are ways that we can increase civic engagement. Recommendations include:

- Removing barriers to voting.
- Fostering social connections within communities, cultivating empowered and civically engaged youth and adults through [leadership development](#) and [peer mentoring](#), and [supporting trauma-informed approaches to community building and support](#).
- Prioritizing and supporting community-driven civic engagement efforts.

## ► Data Sources

Measure	Definition	Source (Year)
<b><i>Length and Quality of Life</i></b>		
Mortality	The age-adjusted rate of death per 100,000 population.	CDC WONDER (2015-2019)
Fair or Poor Health	The percentage of adults who consider themselves to be in fair or poor health.	The Behavioral Risk Factor Surveillance System (2020)
<b><i>Ensuring Access to Quality Health Care</i></b>		
Uninsured	The percentage of the population without health insurance coverage.	American Community Survey, 5-year estimates (2015-2019)
<b><i>Expanding Safe and Affordable Housing</i></b>		
Severe Housing Cost Burden	The percentage of households that spend 50% or more of their income on housing.	American Community Survey, 5-year estimates (2015-2019)
Severe Housing Cost Burden	The percentage of households that spend 50% or more of their income on housing.	Comprehensive Housing Affordability Strategy (2014-2018)
Black/White Residential Segregation	The index of dissimilarity where higher values indicate greater residential segregation between Black and White residents of a county.	American Community Survey, 5-year estimates (2015-2019)
<b><i>Increasing Economic Resources for Children and Families</i></b>		
Children in Poverty	The percentage of people under age 18 living in poverty.	American Community Survey, 5-year estimates (2015-2019)
<b><i>Expanding Broadband Infrastructure</i></b>		
Broadband Access	The percentage of households with broadband internet connection.	American Community Survey, 5-year estimates (2015-2019)
<b><i>Increasing Civic Engagement</i></b>		
Voter Turnout	The percentage of voters in the 2020 Presidential Election among total population.	U.S. Census Data (April 2021)
Voter Turnout	The percentage of voters in the 2020 Presidential Election among voting age population.	Wisconsin State Legislature's GIS Open Data Portal (2020)

## ► Technical Notes

### Calculating Grades

The health of Wisconsin is measured using two dimensions: overall health and health disparities. To calculate overall health grades, we use two measures: fair or poor health and mortality. The percentage of those reporting fair or poor health is the prevalence of adults who self-report that their overall health is fair or poor. Mortality is a rate of death due to all causes per 100,000 population (age-adjusted). To assign overall grades, we calculated state means for all 50 states within the U.S. We then calculated a Z-score of the state means. States with Z-scores greater than 1.5 standard deviations below the mean of all states received an "A" grade; states with Z-scores between 1.5 and 0.5 standard deviations below the mean received a grade of "B"; states with Z-scores between 0.5 standard deviations below the mean and 0.5 standard deviations above the mean received a "C"; states with Z-scores between 0.5 and 1.5 above the mean received a "D"; and states with Z-scores greater than 1.5 standard deviations above the mean received an "F." Within each domain, we calculated state-level subgroup means. The table below shows each of the subgroups. Whenever possible, we used the most recently available data for the largest number of subgroups available.

### Wisconsin Health Grade Measures

	Fair or Poor Health <sup>A</sup>	Mortality <sup>B</sup>
<b>Source &amp; Years of Data</b>	The Behavioral Risk Factor Surveillance System (2020)	CDC WONDER (2015-2019)
<b>Race/Ethnicity</b>	<ul style="list-style-type: none"><li>• Black</li><li>• White</li><li>• AIAN</li><li>• Asian</li><li>• Native Hawaiian and Other Pacific Islanders (NHOPI)</li><li>• Multiracial</li><li>• Hispanic</li></ul>	<ul style="list-style-type: none"><li>• Black</li><li>• White</li><li>• AIAN</li><li>• Asian</li></ul>
<b>Education</b>	<ul style="list-style-type: none"><li>• Less than high school education</li><li>• High school diploma or equivalent</li><li>• Some post high school education</li><li>• Four year college degree or higher</li></ul>	<ul style="list-style-type: none"><li>• Less than high school education</li><li>• High school diploma or equivalent</li><li>• Some post high school education</li><li>• Four year college degree or higher</li></ul>
<b>Urbanicity</b>	<ul style="list-style-type: none"><li>• Large Urban Metro<sup>B</sup></li><li>• Large Suburban Metro<sup>B</sup></li><li>• Smaller Metro<sup>B</sup></li><li>• Rural<sup>B</sup></li></ul>	<ul style="list-style-type: none"><li>• Large Urban Metro</li><li>• Large Suburban Metro</li><li>• Smaller Metro</li><li>• Rural</li></ul>

<sup>A</sup> Crude prevalence unless otherwise noted

<sup>B</sup> Age-adjusted

After calculating state-level means for each race, education level, and urbanicity, as listed above, we then calculated population-weighted between group variance (BGV) for each subgroup category. BGV is an absolute measure of disparity. It measures the sum of the population-weighted difference or distance from each subgroup to the state mean. Eight BGV values were calculated, one for each subgroup category for each domain, fair or poor health and mortality. To “adjust” the overall grades, we rescaled BGV to have a value between 0 and 1. For each state, we multiplied the state mean mortality rate and the state mean prevalence of fair or poor health by 1+rescaled BGV. We then recalculated state Z-scores using mean and standard deviation of all 50 states for mortality and fair or poor health. For each domain and each subgroup, the distribution of state Z-scores was graded using previously described cut points.

## Racial and Ethnic Population Subgroups

We recognize that “race” or “ethnicity” are social categories, meaning how society may identify individuals based on their cultural ancestry. As Dr. Camara Jones notes, “the variable ‘race’ is not a biological construct that reflects innate differences, but a social construct that precisely captures the impacts of racism.”

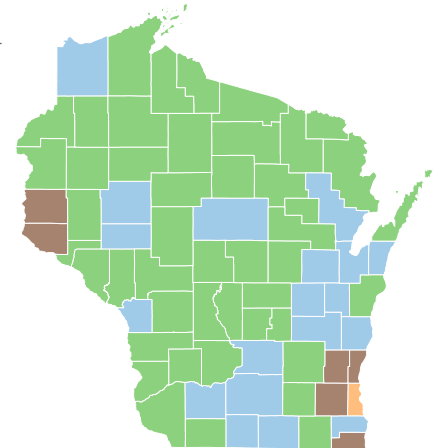
We are bound by data collection and categorization of race and ethnicity according to the U.S. Census Bureau definitions, in adherence with the 1997 Office of Management and Budget standards as follows:

- Hispanic includes those who identify as Mexican, Puerto Rican, Cuban, Central or South American, other Hispanic, or Hispanic of unknown origin and can be of any racial background.
- White includes people who identify as White and do not identify as Hispanic.
- Black includes people who identify as Black or African American and do not identify as Hispanic.
- American Indian and Alaska Native includes people who identify as American Indian or Alaska Native and do not identify as Hispanic.
- Asian includes people who identify as Asian or Pacific Islander and do not identify as Hispanic.

Our analyses by race and ethnicity use several different sources that are inconsistent in how data for those who identify as Hispanic are included or excluded from racial groups. Our analyses also do not consistently capture those reporting more than one race or multiracial, those who do not report their race, or who identify as NHOPI. This categorization masks variation within racial and ethnic groups and can hide historical context that underlies health differences.

## Geographic Categories

We adapt the National Center for Health Statistics urban-rural classification based on Metropolitan Statistical Area (MSA) designations in order to assign counties to urbanicity categories. For counties categorized as Large Urban, Large Suburban, Smaller Metro, and Rural, there may be urban, suburban, or rural areas within any county. Large Urban counties can include suburbs as well as city centers. Large Suburban counties may also include rural areas. These characteristics should be taken into consideration when looking more closely at individual counties.



Community Type	Definition	Total WI Population	Number of WI Counties
<b>Large Urban Metro (Milwaukee County)</b>	Central urban core counties with a Metropolitan Statistical Area with more than 1 million people	945,726	1
<b>Large Suburban Metro</b>	Noncentral fringe counties within a Metropolitan Statistical Area with more than 1 million people	932,455	6
<b>Smaller Metro</b>	Counties within a Metropolitan Statistical Area with between 50,000 and 1 million people	2,442,222	19
<b>Rural</b>	Nonmetropolitan rural counties with less than 50,000 people	1,502,031	46

## ► Additional Information

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The *2021 Report Card* was informed by several inputs, including a review of the literature. References will be made available upon request.



**Call to Action:** For information on the approaches and other specific strategies that can make a difference, visit What Works for Health at: <http://whatworksforhealth.wisc.edu/>.



**Wisconsin Communities in Action:** For information on the featured communities and their strategies, visit the Wisconsin Healthy Communities Designation Program website at: <https://www.wihealthycommunities.org/>.

## ► More About the UWPHI

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The University of Wisconsin Population Health Institute (UWPHI) is part of the School of Medicine and Public Health, closely aligned with the Department of Population Health Sciences. We accelerate capacity to create equitable conditions for everyone to be healthy by advancing knowledge, practice, policy and system change across sectors. By providing evidence-informed strategies, actionable data and other resources tailored to myriad sectors, we equip people with the tools and resources that grow community power and build equitable systems, structures, and policies.

UWPHI values partnerships and facilitating the exchange of expertise about health between and among those within the university and our many partners. Through these exchanges, we expand our understanding of what drives health and equity. And by shifting narrative and sharing stories that name what works — and what is needed — to ensure everyone’s well-being, we support nationwide efforts that improve health and advance our understanding of what it takes to achieve health equity. We believe that only by working together toward a world in which we value one another and honor our connectedness will we achieve the healthiest possible conditions for all of us to thrive.

## ► Funding and Suggested Citation

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## ► Glossary of Terms

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### **Population Health**

The health outcomes of a group of individuals, including the distribution of such outcomes within the group. The field of population health includes health outcomes, patterns of health determinants, and policies and interventions that link them.

### **Health-Related Quality of Life**

A non-mortality health outcome such as morbidity, disease burden or disability.

### **Health Disparity**

This term describes numerical or statistical differences in health outcomes, such as mortality rate differences.

### **Health Equity**

Assurance of the conditions for optimal health for all people. Achieving health equity requires valuing all individuals and populations equally, recognizing and rectifying historical injustice, and providing resources according to need.

### **Health Inequity**

Differences in health outcomes that are systematic, avoidable, unnecessary, unfair, and unjust.

### **Community Conditions**

The determinants or factors that impact health outcomes. In the MATCH Framework for Health Equity (page 4) they include clinical care and services, social and economic conditions, and the built and natural environment.

### **Power**

In the words of Dr. Martin Luther King Jr., “Power is the ability to achieve a purpose. Whether or not it is good or bad depends upon the purpose.” Power is inherently related to asserting individual and collective will.

### **Structural Racism**

A system in which public policies, institutional practices, cultural representations, and other norms work in various, often reinforcing ways to perpetuate racial group inequity.

### **Oppression**

The systematic subjugation of one social group by a more powerful social group for the social, economic, and political benefit of the more powerful social group.

### **Common Ground**

A basis of mutual interest or agreement.

### **Social Solidarity**

Emphasizes the interdependence between individuals in a society, which allows individuals to feel that they can enhance the lives of others. It is a core principle of collective action and is founded on shared values and beliefs among different groups in society.

### **Redlining**

Race-based forcible displacement policies such as redlining limited where people of color could live and their standard of living. The practice of redlining effectively denied Black people access to bank loans at favorable rates.

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