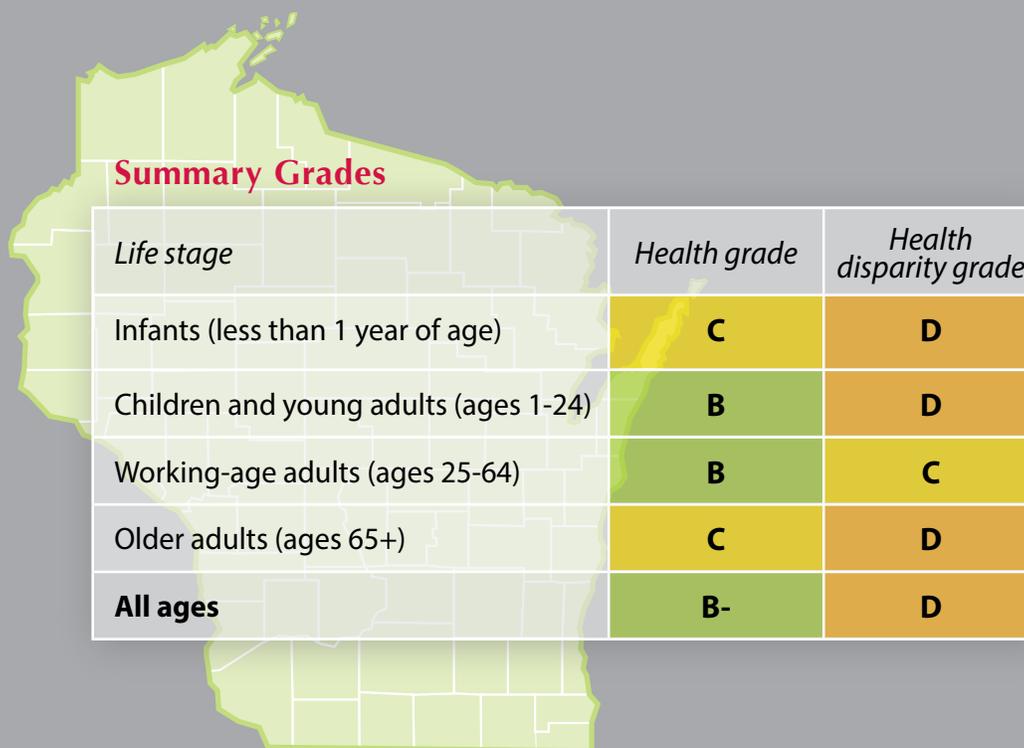

Health of Wisconsin



REPORT CARD 2013



School of Medicine
and Public Health

UNIVERSITY OF WISCONSIN-MADISON

University of Wisconsin Population Health Institute
Department of Population Health Sciences

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Executive Summary

December 2013

The *Health of Wisconsin Report Card* measures the state's progress towards meeting two overarching goals of the Healthiest Wisconsin 2020 State Health Plan: to improve health for all and to eliminate health disparities.

As part of its mission to translate research for policy and practice, the University of Wisconsin Population Health Institute has prepared the *Health of Wisconsin Report Card* to provide Wisconsin's residents with an assessment of the state's health. The first *Health of Wisconsin Report Card* was released in 2007. An updated version was prepared in 2010.

Wisconsin's grade for overall health has remained the same since 2007—a B-. The health disparities grade of D in 2013 is a reflection that Wisconsin could be doing more to reduce health disparities. As with the previous versions, the *Health of Wisconsin Report Card 2013* continues to draw attention to the weaknesses of our current efforts to promote the health of all Wisconsin residents.

Wisconsin has improved the overall death rate for every age group examined in the report and has also made improvements in health-related quality of life. However, since Wisconsin is not improving faster than other states, its grades remain the same. There has also been some notable improvement in death rates for many subgroups, including African American and Native American infants, children and young adults. But, there is more to be done to reduce the persistent disparities between vulnerable and less vulnerable residents of our state.

The findings from this report are a call to action for the state to work on improving health for *all* residents. Engaging people in all Wisconsin communities, and across all health, political, and economic sectors within the state will be necessary to improve health for all and reduce the disparities in health outcomes experienced by many.

Overview of the Report Card

A major goal of the Wisconsin Partnership Program at the University of Wisconsin School of Medicine and Public Health is to help Wisconsin become the healthiest state with less disparity. To increase our understanding of the health of Wisconsin and, in particular, differences in health among subpopulations, we have developed the *Health of Wisconsin Report Card* and continue to update it in order to draw attention to how Wisconsin's health compares relative to the nation as a whole. We examine our health outcomes and give Wisconsin grades on our health and health disparity.

The image on the front cover gives two overall grades for the *Health of Wisconsin*: a B- for overall health and a D for *health disparities*. What do these grades represent and how did we determine them?

Grading Health

Our grade for *health* is based on two ways of measuring health:

- 1) length of life and
- 2) quality of life.

We measure length of life by examining death rates. We examined death rates for four distinct age groups: infants (less than 1 year old), children and young adults (ages 1-24), working-age adults (ages 25-64), and older adults (ages 65 and over).

Measuring health-related quality of life is clearly more difficult than simply counting how many people die. Researchers have found that asking people how healthy they feel provides valuable information. Asking for this information reveals how healthy people feel right now and also provides a good indication of their future health. Across the country, people are surveyed and asked how many days in the past month they have felt physically or mentally unhealthy. When their responses are combined, researchers can calculate the average number of unhealthy days per month for the subgroups of interest. We looked at unhealthy days among the two adult age groups (working-age adults and older adults).

When we grade the *health* (length and quality of life) of Wisconsin's population in comparison to the health of the population of other states, Wisconsin gets a B-. This average grade is dominated by the health of the largest population groups. However, reporting just an average grade for the state masks the fact that the state is failing in terms of the health of several of its subgroups.

Grading Health Disparities

In order to present a more complete picture of health in Wisconsin, we developed a *health disparity* grade based on the health of different groups of people. To do this, we examined the health of subgroups of the population within each life stage based on four characteristics:

Gender	Geography	Socioeconomic Status	Race/Ethnicity
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Data on health by gender and geography are readily available but data on socioeconomic status, such as income, and race and ethnicity are not always available or reliable. We chose education as our measure of socioeconomic status and reported on health for as many racial and ethnic subgroups as possible where the data were sufficiently reliable. Racial/ethnic subgroups where data were not reliable were given an "Incomplete" (I) grade. For each life stage, we graded the health of each Wisconsin subgroup in comparison to the health of the total population in that age group in other states.

To measure the disparity among subgroups within each life stage, we compared the health grade of each Wisconsin subgroup to the grade of the healthiest subgroup of the same age in Wisconsin. We used these comparisons to calculate disparity scores and grades for length of life and health-related quality of life. Taking account of the differences in health between subgroups, Wisconsin gets a D for *health disparity*.

Summary Grades

We compile these grades for *health and health disparity* for each life stage and display them in a summary table below. To give Wisconsin its two overall grades of B- and D, we averaged the health and health disparities grades for each of the four life stages. Detailed report cards for each of the four life stages appear on pages 4-10 and more detailed information on our data sources and methods is provided on pages 12-13 and on our website <http://uwphi.pophealth.wisc.edu/programs/match/healthiest-state/report-card/2013/index.htm>

<i>Life stage</i>	<i>Health grade</i>	<i>Health disparity grade</i>
Infants (less than 1 year of age)	C	D
Children and young adults (ages 1-24)	B	D
Working-age adults (ages 25-64)	B	C
Older adults (ages 65+)	C	D
All ages	B-	D

Improving These Grades

The goal of the *Health of Wisconsin Report Card* is to stimulate discussion about how the state can become healthier and reduce disparities across age groups. These grades are a guide to improvement, revealing differences in the opportunity to live a long and healthy life across our state.

The *Report Card* is part of a series of reports published as part of the “Making Wisconsin The Healthiest State” project. Three other reports and an online database are also available from our website:

<http://uwphi.pophealth.wisc.edu/programs/match/healthiest-state/index.htm>

- *Opportunities to Make Wisconsin the Healthiest State* – highlights the factors that determine our health:
 - The way we act
 - Our social and physical environment
 - Our health care and public health system
- *Wisconsin Health Trends: Progress Report* – presents statewide data on 10-year trends for leading health outcomes and factors in Wisconsin.
- *What Works: Policies and Programs to Improve Wisconsin’s Health* and www.whatworksforhealth.wisc.edu – helps public and private policy makers find policies and programs that have been proven to work.

Wisconsin's Report Card for Infant Health



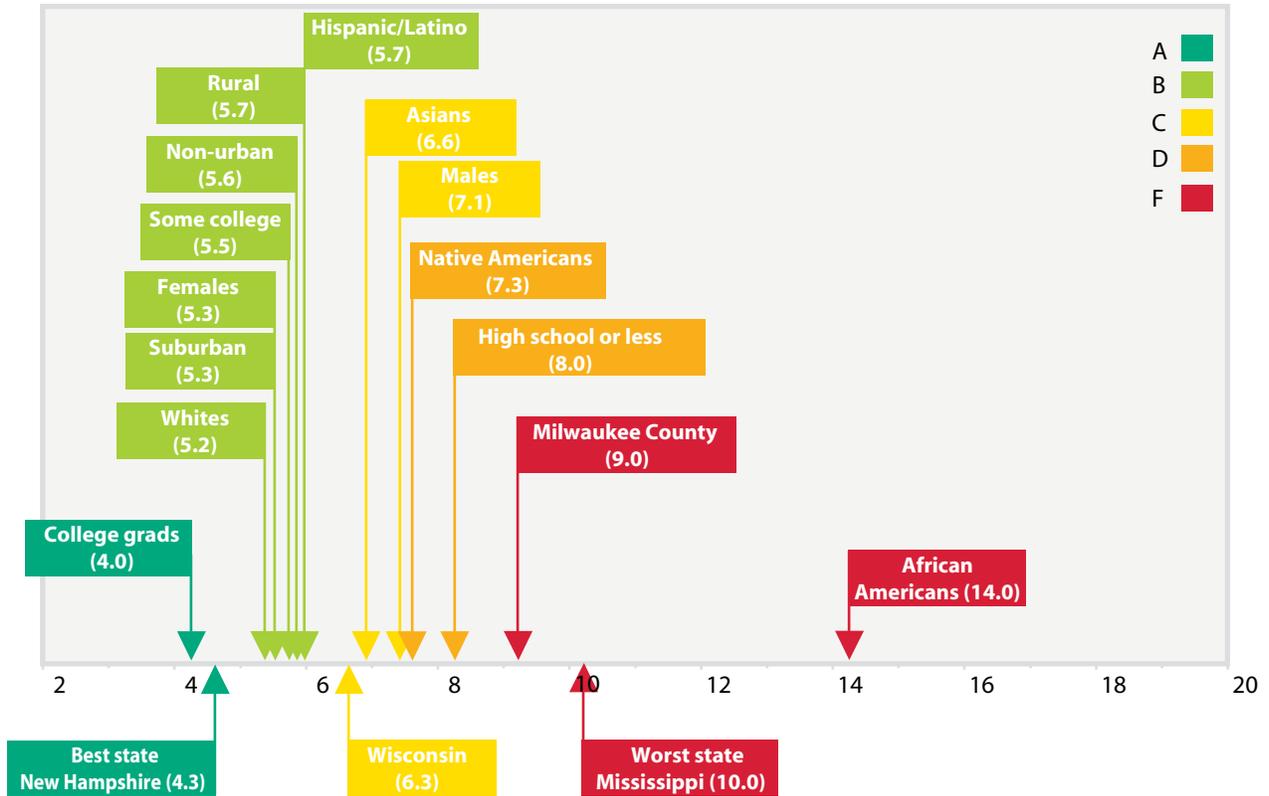
		Percent of Population	Death Rate (Per 1000)	Grades			
Infants (< 1 year)		100%	6.3			C	
Gender	Male	51%	7.1			C	
	Female	49%	5.3		B		
Education of mother	High school or less	42%	8.0				D
	Some college/technical school	26%	5.5		B		
	College graduate	32%	4.0	A			
Type of county	Large urban (Milwaukee County)	21%	9.0				F
	Suburban/urban	30%	5.3		B		
	Non-urban	36%	5.6		B		
	Rural	12%	5.7		B		
Race/ethnicity	African American/Black	10%	14.0				F
	Asian	4%	6.6			C	
	Hispanic/Latino	10%	5.7		B		
	Native American	2%	7.3				D
	White non-Hispanic	74%	5.2		B		

Health Grade **C**

Health Disparity Grade **D**

Infant Health (Less than 1 year of age)

Wisconsin Infant Death Rates
(Ages <1, rates per 1,000 population)



- Overall, Wisconsin receives a grade of C for infant health and ranks 23rd nationally for its infant death rate.
- Wisconsin continues to fail in its efforts to promote health for infants who live in Milwaukee County and African American infants.
- Wisconsin receives a barely passing grade of D for its efforts to promote the health of Native American infants and infants whose mothers have no education beyond high school.

Wisconsin's Report Card for Child and Young Adult Health



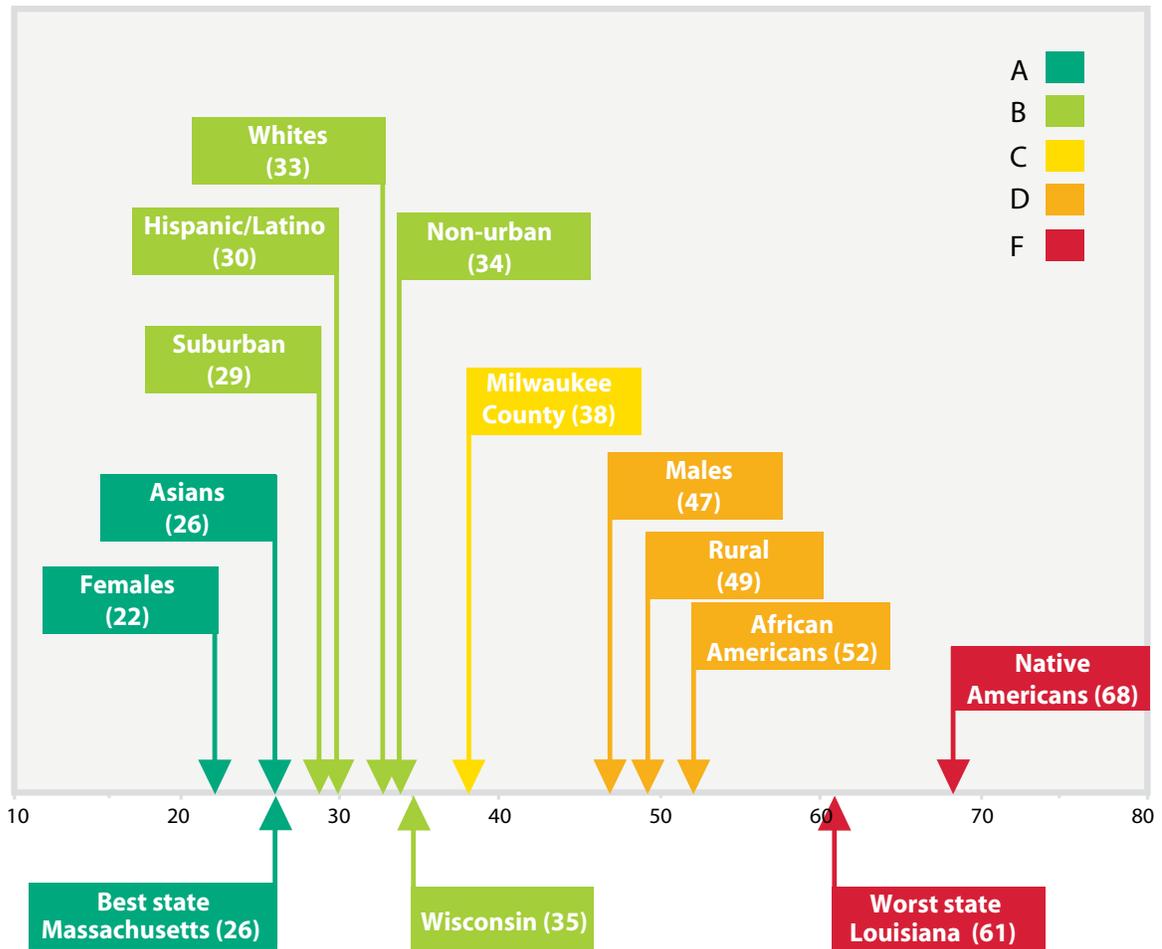
		Percent of Population	Death Rate (Per 100000)	Grades			
Children and Young Adults (1-24)		100%	35		B		
Gender	Male	51%	47				D
	Female	49%	22	A			
Type of county	Large urban (Milwaukee County)	18%	38			C	
	Suburban/urban	32%	29		B		
	Non-urban	38%	34		B		
	Rural	12%	49				D
Race/ethnicity	African American/Black	9%	52				D
	Asian	3%	26	A			
	Hispanic/Latino	9%	30		B		
	Native American	1%	68				F
	White non-Hispanic	77%	33		B		

Health Grade **B**

Health Disparity Grade **D**

Child and Young Adult Health (Ages 1 through 24)

Wisconsin Child and Young Adult Death Rates
(Ages 1-24, rates per 100,000 population)



- Overall, Wisconsin receives a grade of B for child and young adult health and ranks 15th nationally for its death rate.
- Wisconsin is failing in its efforts to promote health for children and young adults who are Native American.
- Wisconsin receives a barely passing grade of D for its efforts to promote health for male, rural and African American children and young adults.

Wisconsin's Report Card for Working-Age Adult Health

Death Rate		Percent of Population	Death Rate (Per 100000)	Grades			
Working-Age Adults (25-64)		100%	280		B		
Gender	Male	50%	348			C	
	Female	50%	211	A			
Education	High school or less	44%	435				D
	Some college/technical school	31%	233	A			
	College graduate	25%	196	A			
Type of county	Large urban (Milwaukee County)	16%	402				D
	Suburban/urban	33%	230	A			
	Non-urban	37%	267		B		
	Rural	14%	300		B		
Race/ethnicity	African American/Black	6%	576				F
	Asian	2%	170	A			
	Hispanic/Latino	5%	191	A			
	Native American	1%	617				F
	White non-Hispanic	86%	266		B		

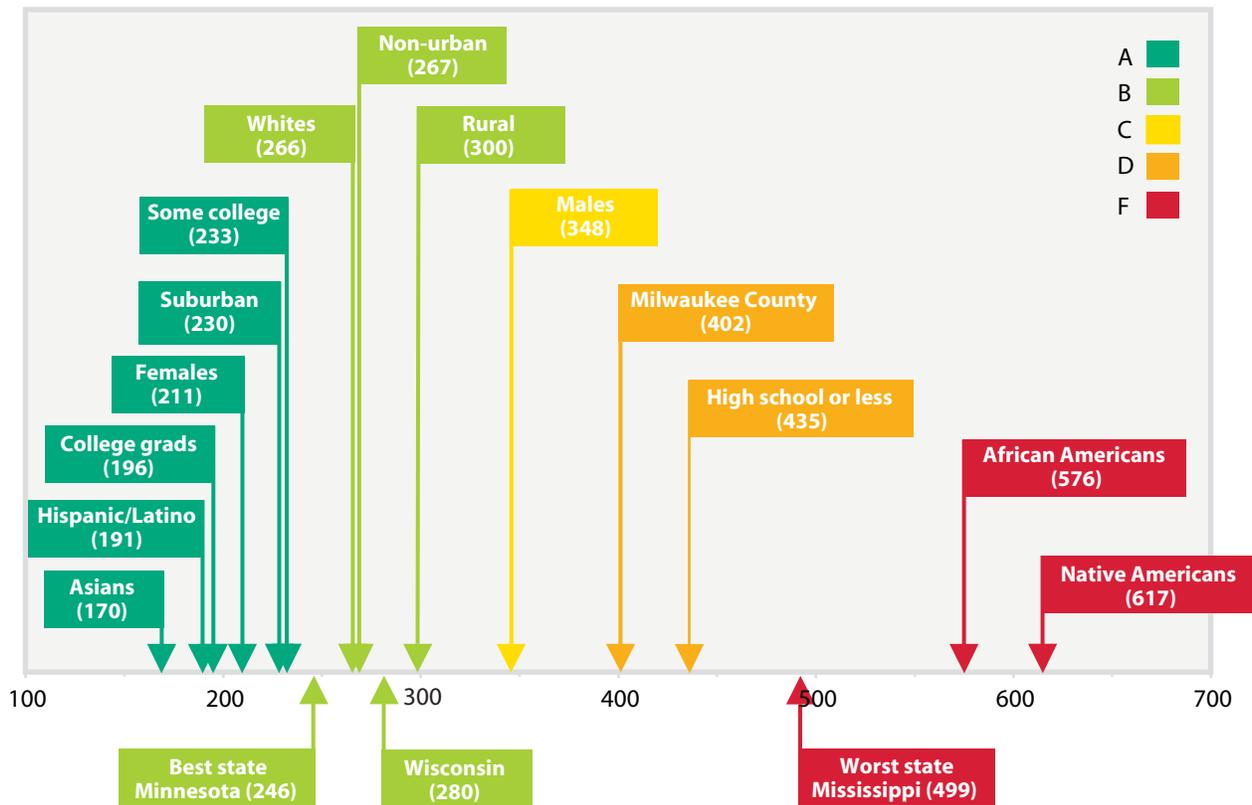
Unhealthy Days		Percent of Population	Unhealthy Days per Month	Grades			
Working-Age Adults (25-64)		100%	5.5		B		
Gender	Male	50%	4.7	A			
	Female	50%	6.2			C	
Education	High school or less	44%	6.5				D
	Some college/technical school	31%	6.3			C	
	College graduate	25%	3.8	A			
Type of county	Large urban (Milwaukee County)	16%	6.8				D
	Suburban/urban	33%	5.3		B		
	Non-urban	37%	5.1		B		
	Rural	14%	5.1		B		
Race/ethnicity	African American/Black	6%	8.3				F
	Asian	2%	I				
	Hispanic/Latino	5%	8.9				F
	Native American	1%	8.0				F
	White non-Hispanic	86%	5.2		B		

Health Grade **B**

Health Disparity Grade **C**

Working-Age Adult Health (Ages 25 through 64)

Wisconsin Working-Age Adult Death Rates
(Ages 25-64, rates per 100,000 population)



- Overall, Wisconsin receives a grade of B for the health of working-age adults. Wisconsin ranks 8th nationally for its death rate and 11th for unhealthy days.
- Wisconsin receives a grade of C for health disparities among working-age adults.
- Wisconsin is failing in its efforts to reduce death among working-age adults who are African American or Native American. Wisconsin is also failing in its efforts to improve health-related quality of life for African American, Native American, and Hispanic/Latino working-age adults.
- Wisconsin receives a barely passing grade of D for its efforts to reduce death and unhealthy days among working-age adults who live in Milwaukee County or those who have a high school diploma or less.

Wisconsin's Report Card for Older Adult Health

Death Rate		Percent of Population	Death Rate (Per 100000)	Grades			
Older Adults (65+)		100%	4362			C	
Gender	Male	43%	5161				F
	Female	57%	3812	A			
Education	High school or less	71%	4881				D
	Some college/technical school	16%	3856	A			
	College graduate	13%	4487			C	
Type of county	Large urban (Milwaukee County)	14%	4654			C	
	Suburban/urban	29%	4242		B		
	Non-urban	38%	4328			C	
	Rural	19%	4415			C	
Race/ethnicity	African American/Black	3%	5253				F
	Asian	1%	2880	A			
	Hispanic/Latino	1%	2606	A			
	Native American	<1%	6385				F
	White non-Hispanic	95%	4353			C	

Unhealthy Days		Percent of Population	Unhealthy Days per Month	Grades			
Older Adults (65+)		100%	6.3			C	
Gender	Male	43%	6.0		B		
	Female	57%	6.7			C	
Education	High school or less	71%	7.0				D
	Some college/technical school	16%	6.0		B		
	College graduate	13%	5.0	A			
Type of county	Large urban (Milwaukee County)	14%	6.8			C	
	Suburban/urban	29%	6.4			C	
	Non-urban	38%	6.2			C	
	Rural	19%	6.3			C	
Race/ethnicity	African American/Black	3%	8.0				F
	Asian	1%	I				
	Hispanic/Latino	1%	I				
	Native American	<1%	10.3				F
	White non-Hispanic	95%	6.2			C	

Health Grade

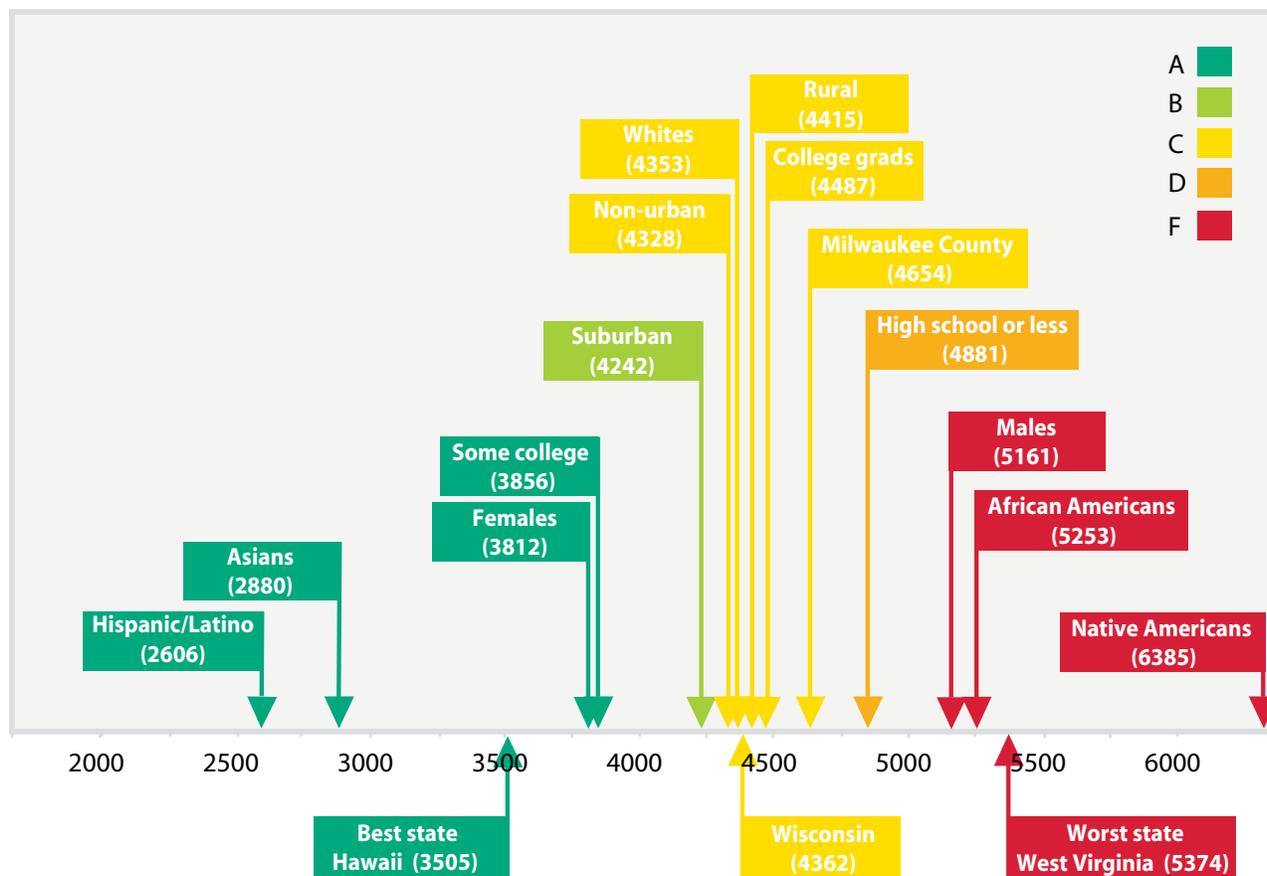
C

Health Disparity Grade

D

Older Adult Health (Ages 65+)

Wisconsin Older Adult Death Rates
(Ages 65+, rates per 100,000 population)



- Overall, Wisconsin receives a grade of C for the health of older adults. Wisconsin ranks 17th nationally for its older adult death rates and 25th for unhealthy days.
- Wisconsin receives a grade of D for health disparities among older adults.
- Wisconsin is failing in its efforts to reduce death for male older adults, Native American older adults and African American older adults. The state is also failing to promote health-related quality of life for older adults who are African American and Native American.
- Wisconsin receives a barely passing grade of D for its efforts to reduce death and promote health-related quality of life for those with a high school diploma or less.

Life Stage Population Sizes and Outcome-specific Cutoff Points for Grades

Age group	2010 Wisconsin Population (%)	Outcome	A	B	C	D	F
Infants	69,446 (1.2%)	Death	<4.7	4.7-5.9	6.0-7.1	7.2-8.4	>8.4
Children/ Young Adults	1,819,302 (32.0%)	Death	<27.2	27.2-36.5	36.6-45.9	46.0-55.3	>55.3
Working-Age Adults	3,020,924 (53.1%)	Death	<240	240-306	307-374	375-441	>441
		Unhealthy Days	<4.8	4.8-5.5	5.6-6.3	6.4-7.1	>7.1
Older Adults	777,314 (13.7%)	Death	<3917	3917-4321	4322-4725	4726-5129	>5129
		Unhealthy Days	<5.5	5.5-6.1	6.2-6.8	6.9-7.5	>7.5

Within the oldest two life stages, we averaged the outcome grades (death and unhealthy days) to determine the life stage health grade, giving each outcome equal weighting.

The life stage health disparity grades are based on a weighted proportion of subgroup grades. Score values are assigned by comparing each subgroup grade to the best subgroup grade and are then converted to percents. The resulting disparity score can range from a value of zero percent disparity when all subgroups have the same grade to 100% disparity where one subgroup grade is an A and all other subgroup grades are Fs. (For the two younger life stages, the disparity score was based solely on available death rates for subgroups, whereas the disparity score for the two older life stages was based on an average of the scores for death and unhealthy days.) We assigned grades to these scores as follows:

A	B	C	D	F
(0-15%)	(15-30%)	(30-45%)	(45-60%)	(> 60%)
Very Good	Good	Fair	Poor	Failing

To determine Wisconsin's health grade, we averaged the four life stage health grades to calculate an overall GPA. We converted the overall GPA back to a grade using the following conversion: < 0.5 (F), 0.75-1.25 (D), 1.5 (C-), 1.75-2.25 (C), 2.5 (B-), 2.75-3.25 (B), 3.5 (A-), 3.75-4.0 (A). Wisconsin's health disparity grade was calculated in the same way, using the four life stage health disparity grades.

Changes in overall grades since 2010

The overall health grade for the state of Wisconsin has remained a B-. The health disparity grade has decreased from a C- to a D indicating that Wisconsin needs to be doing more to reduce health disparities within the state.

Data Sources

Indicator	Data Source	Years
Death by Educational Level	National Center for Health Statistics	2008-2010
Death for all Other Factors	CDC WONDER	2008-2010
Population Counts and Proportions	Wisconsin Interactive Statistics on Health	2010
Wisconsin Infants (<1) Subgroup Death	Wisconsin Interactive Statistics on Health	2008-2010
Working and Older Adult Unhealthy Days	Behavioral Risk Factor Surveillance System	2008-2010

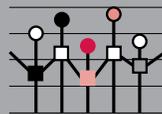


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