



UNIVERSITY OF WISCONSIN

Population Health Institute

Translating Research into Policy and Practice

2006 Wisconsin County Health Rankings Full Report

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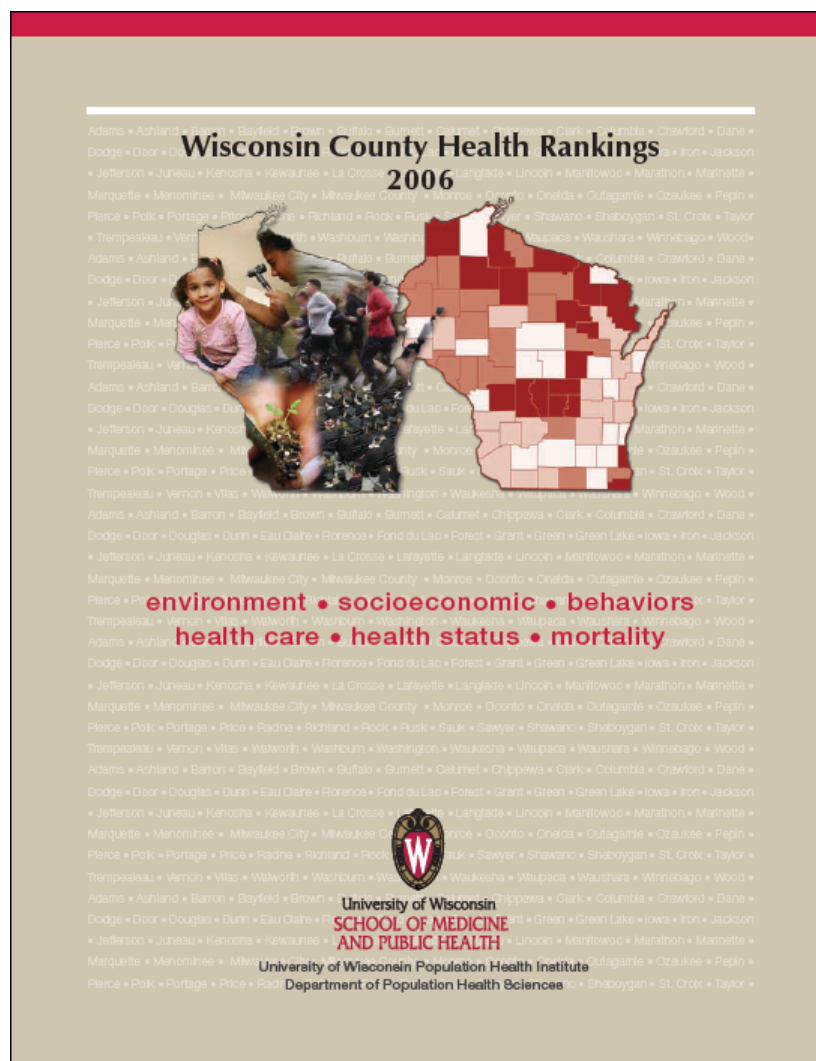
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AND PUBLIC HEALTH**

2006 Wisconsin County Health Rankings Full Report

University of Wisconsin Population Health Institute



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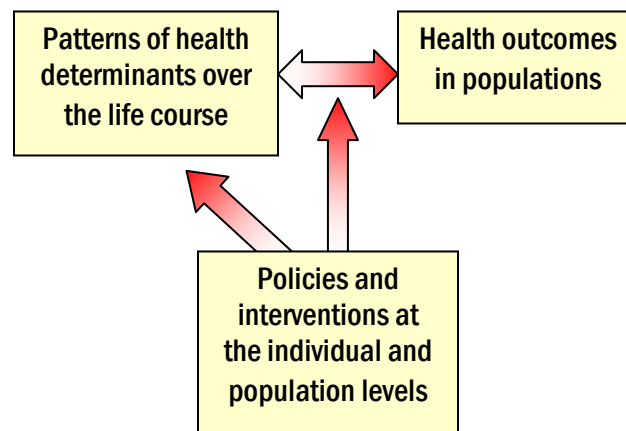
INTRODUCTION

This report is a companion to the 2006 *Wisconsin County Health Rankings*,¹ an annual publication intended to summarize the current health of each county's population and the current distribution of key factors that determine future health. This report is meant to be a comprehensive report that supplements the 2006 *Rankings* by explaining in detail where the data are collected from, how each measure is defined, and what methods are used to rank the health of Wisconsin places. The *Rankings* are a vital part of our mission to stimulate, create, and communicate useful public health and health policy research and analysis.

The University of Wisconsin Population Health Institute recognizes that creating rankings is controversial, as the 73 places (72 counties and the City of Milwaukee) included in the *Rankings* represent varying populations, environments, and resources. Each place has particular strengths, weaknesses, and public health challenges. We hope that our efforts to summarize and communicate this information to a broad audience will add value to Wisconsin's public health and health policy discussions. In addition, it is our hope that the *Wisconsin County Health Rankings* will provide an opportunity for every community to identify areas of potential health improvement and aid in drawing additional resources to the amelioration of these problems.

Through the ranking of Wisconsin's counties, high and low performers in each area are identified. Strong performers can serve as role models for lower ranked places and provide insight in program planning and refinement. However, it remains important for every place to consider the unique challenges presented by its population in program implementation.

The 2006 *Wisconsin County Health Rankings* is based upon the following model of population health improvement.

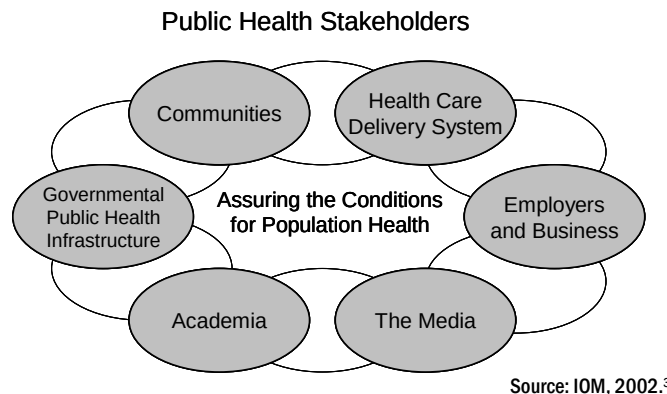


Source: Kindig and Stoddart, 1996.²

This model shows that health outcomes in a population are the result of a set of health determinants and the distribution of these determinants across the population. These determining factors may be positively or negatively affected by interventions or policies that alter their distribution in the community. Thus, counties and cities have the ability to improve the health of their communities through the implementation of effective policies.

Our goal is that the information included in the 2006 *Wisconsin County Health Rankings* will engage community stakeholders in taking action to improve public health in Wisconsin, as well as provide a model for others to follow in monitoring population health. Governmental public health organizations are just one of many stakeholders accountable for the health of Wisconsin residents. In the Institute

of Medicine model, many partners have been identified as having overlapping interests and resources. For example, “Communities” can include various different entities, including schools and law enforcement. This approach emphasizes the need for collaboration across the various sectors in order to successfully improve population health.



Health outcomes in populations are often reported in terms of mortality statistics such as life expectancy and years of potential life lost, since these statistics are relatively easy to track. However, models of individual and population health do not merely include measures of longevity, but also quality of life. For this reason, we have created an outcomes component that equally weights the number of years lived and the quality of life.

It would be impossible to include all of the determinants of a population’s health in the *Wisconsin County Health Rankings*. Instead, we have selected a finite number of population health determinants for inclusion. This selection was based upon the health priorities of the Wisconsin State Health Plan, scientific validity, importance, and availability of data at the county level.

The *Wisconsin County Health Rankings* ranks Wisconsin places according to their summary measures of health outcomes and health determinants as well as by individual components of outcomes and determinants. Places receive a rank for each population health component. Places having high rankings (e.g., 1 or 2) are estimated to be the “healthiest.”

The summary health outcomes ranking is based on an equal weighting of two measures: mortality and general health status. The health determinants ranks are based on weighted scores of four major components:

1. **Health Care** – includes measures of access and whether people are receiving recommended treatment
2. **Health Behaviors** – includes measures that reflect healthy lifestyles and personal health-related decisions
3. **Socioeconomic Factors** – includes measures or proxies of socioeconomic status known to be associated with health
4. **Physical Environment** – includes measures of environmental quality and pollution

The weights for each component are based upon a review of the literature regarding how these measures combine. Because of the methodological difficulties involved with measuring the contribution of each component in an empirical fashion, an estimate was made drawing on the

relevant literature and the opinion of experts. Each of these four health determinant components is based, in turn, on multiple population health categories and measures.

Estimates for health measures were calculated from the most recently available data. For many measures, an average of several years of recent data was used to obtain more stable estimates. However, estimates of health are not measured perfectly and minor differences in the rankings among places should be interpreted cautiously. For example, the data used for these rankings are not precise enough to indicate that a place ranked 40th is meaningfully healthier than a place ranked 45th.

SELECTION OF POPULATION HEALTH MEASURES

We focus on two categories of health measures—health outcomes and health determinants. Outcomes are intended to measure the current state of health in a place, while determinants are viewed as predictors of future health outcomes. Thirty measures of health outcomes and determinants were selected using the following criteria:

- the measure is a direct or proxy measure of an important aspect of population health
- the data are reasonably valid
- the data are publicly available
- the data are available at the county level
- the data are current and updated periodically

Health Outcomes: two components were used to represent health outcomes—mortality and health status while alive. Death and health status are each assessed with a single measure (years of potential life lost and self-reported health status). While more specific health outcomes could be included here, these two address both length and quality of life.

Health Determinants: the selection of determinant measures was largely guided by the Wisconsin state health plan priorities. However, we do not include measures specifically intended to measure specific diseases—the only disease-specific measure included (poor diabetic care) is one that serves as a proxy for the quality of care in a place. We divided the 28 health determinant measures into four major components: health care, health behaviors, socioeconomic factors related to health, and the physical environment. Each of these four major components is comprised of multiple categories of health measures.

RANKING METHODOLOGY

Each of the 2 health outcomes measures and 28 health determinants measures were estimated for each place. The mean and standard deviation of each of the health measures were calculated across the 72 counties; the data for Milwaukee City were not included in the calculation of county mean and standard deviation values because data for the city are also included in Milwaukee County. Each of the 73 places were then assigned a Z-score for each measure, representing the number of standard deviation units that a place is from the mean of all Wisconsin counties. To avoid an overall rank being strongly influenced by one extreme component score, we truncated Z-scores at (-3.0) or (3.0) if the actual score fell outside of this range. Weighted averages of the truncated scores were used to calculate the overall summary outcomes and determinants rankings and the rankings for the four major categories of determinants, in accordance with the weights given in the following table (see Table 1). If ties occur in assigning ranks for any individual measure (i.e., if the z-scores and underlying data were identical), then the same rank is given to the places that are tied; for example, if the top two places are tied, these two would each be given a rank of one, while the third placeholder would be given a rank of three.

This is the first year that we have censored measures with a sample size of less than 50 respondents. These measures appear as not reported (NR) in this report and in the County Health Snapshots. However, all available data (including the censored values) are used to create the component and overall determinant ranks. For example, although an individual measure for cigarette smoking may be censored for the county, the available estimate will still be used in calculating the overall determinants score, while the value for cigarette smoking will not be reported and the county or city will not be ranked on this measure. In addition, places with no data available were assigned the mean value of all the counties for this measure when calculating component and overall determinant ranks.

DATA SOURCES

Table 1 lists each of the health outcome and determinant components, the categories within each component, the specific measures, their respective weightings (percent of total score), and the sources of data used to compile the *Rankings*. Each major source of data is described below.

BRFSS

The Behavioral Risk Factor Surveillance System (BRFSS) is a national random digit dial (RDD) telephone survey. Data obtained from the BRFSS are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land line telephone. For the *Wisconsin County Health Rankings*, data from the BRFSS are used to measure various health behaviors and quality of life. All data from the BRFSS are weighted by population and the health status measure was age-adjusted. Although statewide results are available online at www.cdc.gov/brfss/, county-level data were obtained directly from DHFS for use in the *Wisconsin County Health Rankings* to obtain several measures of health behaviors and general health status.

Census

The U.S. Census Bureau takes a census of the entire United States every 10 years, as mandated by the U.S. Constitution. While mainly used for apportionment of the representatives for the U.S. House of Representatives, the census has evolved to serve many other purposes, including population-

Table 1: Overview of Data Used in the Rankings

COMPONENT Category	Measure	Percent of Total Score	Data Source	Years of Data Used
HEALTH OUTCOMES				
Mortality	Years of Potential Life Lost	50	WISH	2002-2004
Morbidity	General Health Status	50	BRFSS, FHS	1998-2005
HEALTH DETERMINANTS				
HEALTH CARE		10		
Access to Care	No Health Insurance	1.67	FHS	1998-2004
	Did Not Receive Needed Health Care	1.67	FHS	1998-2004
	No Recent Dentist Visit	1.67	FHS	1998-2004
Quality of Outpatient Care	Poor Diabetic Care	2.5	Metastar	2002-2004
	No Biennial Mammography	2.5	Metastar	2002-2004
HEALTH BEHAVIORS		40		
Tobacco	Cigarette Smoking	6	BRFSS	1999-2005
	Smoking During Pregnancy	6	WISH	2001-2004
Diet and Exercise	Physical Inactivity	4	BRFSS	2000, 2003, 2005
	Obesity	6	BRFSS	1999-2005
	Less Than 5 a Day	3	BRFSS	2000-2005
Alcohol Use	Binge Drinking	10	BRFSS	1999-2005
	Motor Vehicle Crash Deaths	1.5	WISH, CODES	2001-2004
High Risk Sexual Behavior	Teen Birth Rate	1	WISH	2001-2004
	Sexually Transmitted Disease	1	DHFS	2001-2004
Violence	Violent Crime	1.5	OJA	2001-2004
SOCIOECONOMIC FACTORS		40		
Education	High School Noncompletion	6.67	DPI	2003-2004
	No High School Education	6.67	Census	2000
Income	Unemployment Rate	6.67	Census	2000
	Children in Poverty	6.67	Census	2000
Social Disruption	Divorce	6.67	Census	2000
	Single Parent Households	6.67	Census	2000
PHYSICAL ENVIRONMENT		10		
Air Quality	Cancer Risk	0.83	EPA	1999
	Respiratory Hazard Index	0.83	EPA	1999
	Fine Particulate Matter in Air	0.83	DNR	2003-2005
	Ozone Level	0.83	DNR	2003-2005
Water Quality	Nitrate Levels in Water	3.33	DNR	2005
Lead Risk	Housing with Increased Lead Risk	1.67	Census	2000
	Lead Poisoned Children	1.67	DHFS	2004

based research. For the *Wisconsin County Health Rankings*, census data are used to obtain measures of socioeconomic factors and housing. Census data are available online at www.census.gov.

CODES

The Wisconsin Crash Outcome Data Evaluation System (CODES) Project is a research project run by the Center for Health Systems Research and Analysis (CHSRA) at the University of Wisconsin-Madison. CODES is the result of a collaboration between the Wisconsin Department of Transportation (DOT) and the Wisconsin Department of Health and Family Services (DHFS). CODES data are used in the *Wisconsin County Health Rankings* to obtain motor vehicle crash deaths in the City of Milwaukee.

DHFS

The Wisconsin Department of Health and Family Services (DHFS) is the state department that is responsible for, among other things, public health in Wisconsin. Organized into five divisions including the Division of Public Health, the Department collects a wealth of data. For the *Wisconsin County Health Rankings*, DHFS data is used to obtain rates of sexually transmitted disease from the Bureau of Health Information and Policy, Division of Public Health. The DHFS website containing data on sexually transmitted disease in Wisconsin is available at www.dhfs.wisconsin.gov/communicable/std/index.htm.

DNR

The Wisconsin Department of Natural Resources (DNR) is the state department committed to the preservation, protection, effective management, and maintenance of the natural resources in Wisconsin. The Department collects environmental data on Wisconsin, and these data are used in the *Wisconsin County Health Rankings* to provide measures of the physical environment. The data can be accessed at www.dnr.state.wi.us/org/water/dwg.

DPI

The Wisconsin Department of Public Instruction (DPI) is responsible for compiling the Wisconsin Successful School Guide (WINSS), which serves as a resource for school performance and student achievement in Wisconsin. For the *Wisconsin County Health Rankings*, WINSS data are used to obtain the high school noncompletion rates across Wisconsin. These data are available online at www.dpi.state.wi.us/sig/index.html.

EPA

The United States Environmental Protection Agency (EPA) undertook a large project in 1999 to map out air toxics across the United States, calling it the National Air Toxics Assessment (NATA). Based on these data, the EPA used statistical models to create estimates of the risk of disease based on toxic emissions. These data are available online at www.epa.gov/ttn/atw/nata1999/tables.html.

FHS

The Wisconsin Family Health Survey (FHS) is an annual survey carried out by the Wisconsin Department of Health and Family Services (DHFS), Division of Public Health, Bureau of Health Information and Policy. Conducted at the University of Wisconsin Survey Center, this survey is used to assess health coverage, health status, health-related activity limitations, chronic conditions, and health services utilization. Although statewide results are available online at www.dhfs.wisconsin.gov/stats/familyhealthsurvey.htm, county-level data are purchased directly from DHFS for use in the *Wisconsin County Health Rankings* to obtain several measures of health care access and general health status.

Metastar

Metastar is a private quality improvement organization that collects data in various areas of health care quality, obtained from the Centers for Medicare and Medicaid Services (CMS). The CMS data used for the *Wisconsin County Health Rankings* are acquired from Metastar to obtain measures of health care quality.

OJA

The Wisconsin Office of Justice Assistance (OJA) is the state agency for federal justice and homeland security grants, and administers these funds across the state to reduce crime and prepare and respond to terrorism, among other things. The OJA annually publishes the Crime and Arrests Reports, and these data are used in the *Wisconsin County Health Rankings* to obtain measures of violent crime. These data are available at <http://oja.state.wi.us>.

WISH

The Wisconsin Interactive Statistics on Health (WISH) database is prepared and maintained by the Department of Health and Family Services (DHFS), Division of Public Health, Bureau of Health Information and Policy. WISH reports many different public health indicators, and is used in the *Wisconsin County Health Rankings* to obtain various measures of health behaviors and mortality outcomes. These data are available at www.dhfs.wisconsin.gov/wish.

OVERVIEW OF MEASURES SECTION

The following section of this report contains two pages of detailed information for each of the measures used in the *Rankings*. The first page defines the measure, lists the data source and reason for inclusion, describes how each measure is incorporated into the *Rankings*, and provides summary statistics for the state. When applicable, a target is provided for each measure based on the Healthy People 2010 (HP2010) objectives and targets. The first page also displays the measure data in a state map with the 72 counties shaded by quartile.

The second page for each measure contains a table of the detailed data for all 73 places. In addition to the measure value, z-score, and rank, sample sizes and confidence intervals are included in the tables when applicable. Differences in values and ranks between counties for the individual measures must be interpreted with caution. We hope that the confidence intervals and additional information provided on these two pages for each measure will help to put values for specific counties in context.

MEASURES USED IN THE RANKINGS

<i>YEARS OF POTENTIAL LIFE LOST</i>	11
<i>GENERAL HEALTH STATUS</i>	13
<i>NO HEALTH INSURANCE</i>	15
<i>DID NOT RECEIVE NEEDED HEALTH CARE</i>	17
<i>NO RECENT DENTIST VISIT</i>	19
<i>POOR DIABETIC CARE</i>	21
<i>NO BIENNIAL MAMMOGRAPHY</i>	23
<i>CIGARETTE SMOKING</i>	25
<i>SMOKING DURING PREGNANCY</i>	27
<i>PHYSICAL INACTIVITY</i>	29
<i>OBESITY</i>	31
<i>LESS THAN 5 A DAY</i>	33
<i>BINGE DRINKING</i>	35
<i>MOTOR VEHICLE CRASH DEATHS</i>	37
<i>TEEN BIRTH RATE</i>	39
<i>SEXUALLY TRANSMITTED DISEASE</i>	41
<i>VIOLENT CRIME</i>	43
<i>HIGH SCHOOL NONCOMPLETION</i>	45
<i>NO HIGH SCHOOL EDUCATION</i>	47
<i>UNEMPLOYMENT RATE</i>	49
<i>CHILDREN IN POVERTY</i>	51
<i>DIVORCE</i>	53
<i>SINGLE PARENT HOUSEHOLDS</i>	55
<i>CANCER RISK</i>	57
<i>RESPIRATORY HAZARD INDEX</i>	59
<i>FINE PARTICULATE MATTER IN AIR</i>	61
<i>OZONE LEVEL</i>	63
<i>NITRATE LEVELS IN WATER</i>	65
<i>HOUSING WITH INCREASED LEAD RISK</i>	67
<i>LEAD POISONED CHILDREN</i>	69

YEARS OF POTENTIAL LIFE LOST

ABOUT THE MEASURE

WHAT IT IS:	Years of Potential Life Lost (YPLL) is a measure of premature mortality in a county. Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 50 would contribute 25 years of life to the YPLL index. The YPLL is age-adjusted to the 2000 U.S. population to allow comparison between counties, and reported as a rate per 100,000 people. Three-year averages are used to create a more robust estimate of mortality in counties with a smaller population.
WHERE IT COMES FROM:	Death counts are obtained from the Wisconsin Interactive Statistics on Health (WISH) Database, provided by the Bureau of Health Information and Policy, Division of Public Health, Department of Health and Family Services, using the Mortality (broad causes of death) Data Query to obtain the data by age-adjusted YPLL. Death counts for the City of Milwaukee were obtained from the City of Milwaukee Department of Public Health. Death counts are based on death certificates.
REASONS FOR RANKING:	YPLL is a widely used measure of the rate and distribution of premature mortality that allows one to target resources to high risk areas and investigate further into the causes of death. ⁴

RANKING METHODOLOGY

Summary Measure:	Health Outcomes (Mortality)
Weight in Health Outcomes:	50%
Years of data used:	2002-2004
Changes from last year:	YPLL rates were previously calculated using data from CDC WONDER.

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	3,886-11,760 YPLL per 100,000
Overall in Wisconsin:	5,839 YPLL per 100,000
Comparable HP2010 Target:	None

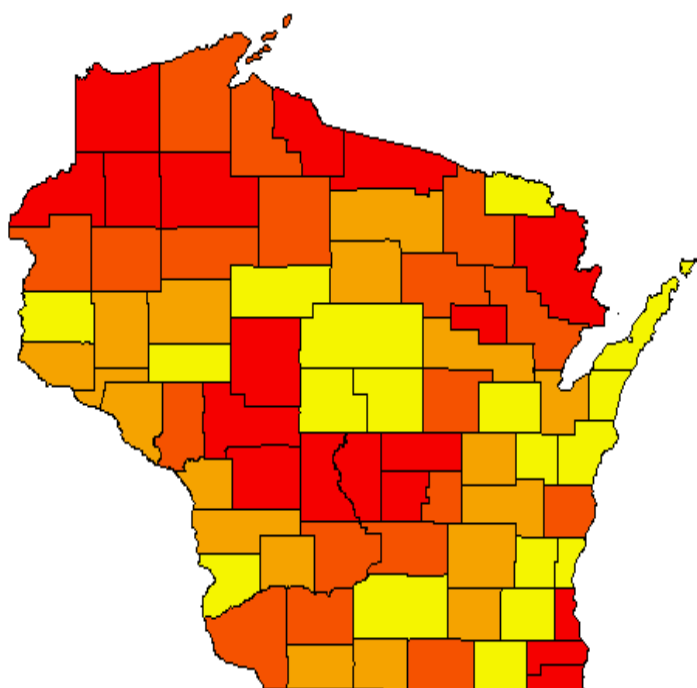


TABLE LEGEND →

Deaths	Number of documented deaths occurring from 2002 to 2004
Aggregate Population	Sum of population from 2002-2004 by year
YPLL	Years of potential life lost before 75 years
YPLL Rate	Age-adjusted YPLL rate per 100,000
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure - Average of 72 Wisconsin counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having less mortality.

Place	Deaths	Aggregate Population	YPLL	YPLL Rate	95% CI	Z-Score	Rank (of 73)
Adams	677	61,678	4,678	6,657	6460 - 6853	0.64	59
Ashland	611	50,632	3,321	6,395	6182 - 6608	0.42	54
Barron	1,410	138,044	8,579	6,255	6128 - 6383	0.31	49
Bayfield	429	46,049	3,118	6,308	6085 - 6529	0.35	51
Brown	4,697	706,727	36,031	5,124	5073 - 5175	-0.63	19
Buffalo	386	41,912	2,450	5,659	5438 - 5880	-0.19	35
Burnett	579	48,927	3,934	7,746	7509 - 7983	1.54	68
Calumet	754	131,164	5,204	4,006	3900 - 4112	-1.56	2
Chippewa	1,495	174,634	9,202	5,183	5079 - 5286	-0.58	21
Clark	1,053	102,420	6,900	6,795	6641 - 6948	0.75	62
Columbia	1,500	162,709	10,002	6,069	5953 - 6185	0.15	43
Crawford	516	51,988	2,742	4,972	4785 - 5158	-0.76	15
Dane	7,967	1,344,278	62,581	4,708	4672 - 4743	-0.98	8
Dodge	2,637	263,319	14,863	5,534	5447 - 5621	-0.29	33
Door	895	86,433	4,504	5,072	4926 - 5218	-0.67	16
Douglas	1,352	131,370	9,566	7,087	6948 - 7225	1.00	64
Dunn	830	124,195	6,285	5,378	5252 - 5502	-0.42	28
Eau Claire	2,090	286,045	12,312	4,529	4453 - 4605	-1.13	6
Florence	155	15,564	845	4,905	4566 - 5244	-0.81	14
Fond du Lac	2,630	296,706	15,382	5,138	5058 - 5217	-0.62	20
Forest	312	30,233	2,015	6,266	5992 - 6538	0.32	50
Grant	1,467	150,466	9,243	6,156	6034 - 6277	0.22	47
Green	969	104,216	5,676	5,347	5211 - 5483	-0.45	26
Green Lake	724	58,043	3,851	6,372	6173 - 6570	0.40	52
Iowa	582	70,288	4,264	6,016	5840 - 6191	0.11	42
Iron	268	20,612	1,586	7,596	7234 - 7957	1.42	67
Jackson	617	58,678	4,427	7,451	7239 - 7663	1.30	66
Jefferson	1,777	235,243	12,717	5,351	5260 - 5441	-0.44	27
Juneau	852	75,784	5,767	7,203	7019 - 7387	1.09	65
Kenosha	3,810	466,515	29,687	6,409	6338 - 6479	0.43	55
Kewaunee	540	62,125	3,290	5,115	4941 - 5287	-0.64	18
La Crosse	2,656	326,974	16,742	5,270	5193 - 5347	-0.51	23
Lafayette	444	48,956	2,669	5,494	5291 - 5695	-0.32	31
Langlade	724	63,210	4,064	6,155	5967 - 6341	0.22	46
Lincoln	927	90,542	5,138	5,523	5374 - 5671	-0.30	32
Manitowoc	2,337	250,413	12,018	4,739	4655 - 4822	-0.95	9
Marathon	2,861	386,195	19,768	5,109	5039 - 5178	-0.64	17
Marinette	1,499	131,436	9,343	7,033	6894 - 7170	0.95	63
Marquette	502	44,816	3,833	8,065	7812 - 8316	1.81	70
Menominee	107	13,806	1,628	11,760	1122 - 2296	3.00	73
Milwaukee City	15,387	1,694,598	548,486	10,577	-	3.00	72
Milwaukee County	26,128	2,810,543	225,724	8,153	8120 - 8184	1.88	71
Monroe	1,255	126,697	8,612	6,668	6531 - 6805	0.65	60
Oconto	971	111,934	6,785	5,885	5747 - 6022	0.00	41
Oneida	1,178	112,391	6,666	5,568	5433 - 5701	-0.26	34
Outagamie	3,383	503,494	23,495	4,740	4681 - 4798	-0.95	10
Ozaukee	1,823	254,627	10,908	4,140	4062 - 4217	-1.45	3
Pepin	248	22,506	1,190	5,274	4981 - 5565	-0.51	24
Pierce	711	114,640	5,870	5,332	5201 - 5461	-0.46	25
Polk	1,233	130,483	7,877	5,802	5675 - 5929	-0.07	38
Portage	1,334	204,886	8,566	4,199	4112 - 4285	-1.40	4
Price	603	47,330	2,987	6,202	5985 - 6419	0.26	48
Racine	4,479	575,222	38,363	6,587	6522 - 6650	0.58	56
Richland	543	54,466	2,996	5,482	5290 - 5672	-0.33	30
Rock	3,910	465,302	28,961	6,117	6048 - 6185	0.19	45
Rusk	525	46,255	2,999	6,102	5883 - 6319	0.18	44
Sauk	1,527	214,133	10,181	4,767	4677 - 4857	-0.08	37
Sawyer	549	172,980	10,195	5,783	5673 - 5893	1.70	69
Shawano	1,324	50,556	4,124	7,931	7695 - 8166	-0.10	36
Sheboygan	3,121	124,621	7,459	5,766	5636 - 5895	0.00	40
St. Croix	1,361	344,412	20,342	5,882	5803 - 5961	-0.93	13
Taylor	533	59,283	2,701	4,504	4337 - 4671	-1.15	5
Trempealeau	862	82,675	4,845	5,827	5667 - 5986	-0.05	39
Vernon	866	86,176	4,853	5,474	5322 - 5625	-0.34	29
Vilas	723	65,772	4,457	6,624	6433 - 6814	0.61	58
Walworth	2,474	288,659	14,091	4,759	4681 - 4836	-0.93	11
Washburn	527	49,812	3,427	6,685	6465 - 6903	0.66	61
Washington	2,615	367,927	17,349	4,615	4546 - 4682	-1.05	7
Waukesha	8,291	1,117,801	45,218	3,886	3850 - 3922	-1.66	1
Waupaca	1,988	158,625	10,208	6,388	6267 - 6508	0.42	53
Waushara	814	73,174	5,349	6,612	6432 - 6792	0.60	57
Winnebago	3,842	480,955	25,363	5,268	5204 - 5330	-0.51	22
Wood	2,042	227,741	10,997	4,760	4672 - 4847	-0.93	12

GENERAL HEALTH STATUS

ABOUT THE MEASURE

WHAT IT IS:	General Health Status is a measure of self-reported health-related quality of life in a population. This measure is based on answers to the question, "In general, would you say that your health is excellent, very good, good, fair, or poor?" The percentage reported in the <i>Rankings</i> is the percentage of people reporting fair or poor health. This measure is age-adjusted to the 2000 U.S. population.
WHERE IT COMES FROM:	These data are obtained from two random digit dial telephone surveys: the Behavioral Risk Factor Surveillance System (BRFSS), a national survey, and the Family Health Survey (FHS), a Wisconsin-based survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. FHS data for adults aged 18 and over are combined with the BRFSS data to increase sample size. The data are age-adjusted and weighted by population. BRFSS and FHS data are analyzed separately, then combined and weighted by sample size to give the overall measure.
REASONS FOR RANKING:	People reporting fair or poor health provide an estimate of the health-related quality of life, or morbidity, of a population.

RANKING METHODOLOGY

Summary Measure:	Health Outcomes (Morbidity)
Weight in Health Outcomes:	50%
Years of data used:	1999-2005 (BRFSS), 1998-2004 (FHS)
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	5.6-19.6% fair or poor health
Overall in Wisconsin:	12.5% fair or poor health
Comparable HP2010 Target:	None

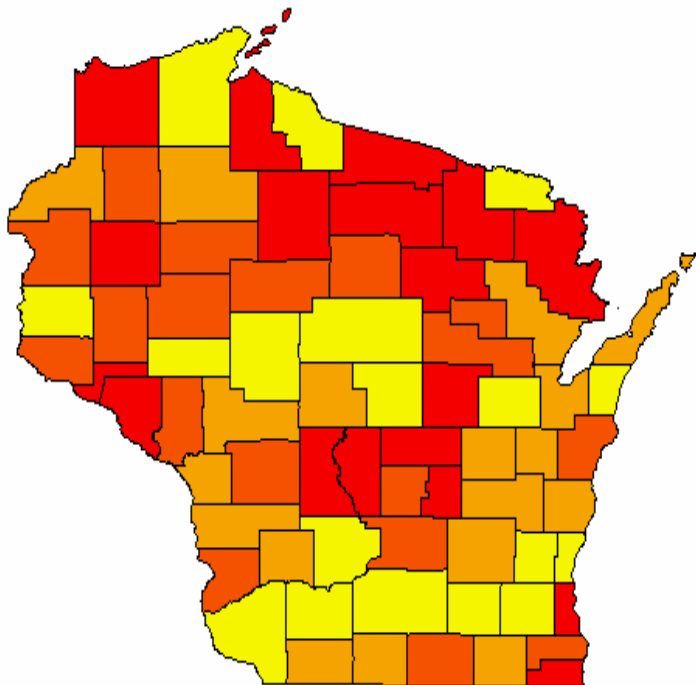


TABLE LEGEND →

Sample Size	Number of respondents on the BRFSS and FHS
% Fair/Poor	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure - Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties being healthier.

Place	Sample Size	% Fair/Poor	95% CI	Z-Score	Rank (of 73)
Adams	304	18.60	14.1 - 23.1	2.15	70
Ashland	212	14.60	9.7 - 19.4	0.70	57
Barron	520	14.46	11.4 - 17.5	0.67	55
Bayfield	219	8.23	4.5 - 11.9	-1.61	4
Brown	2,505	12.11	10.8 - 13.4	-0.20	33
Buffalo	166	15.34	9.7 - 20.9	0.96	61
Burnett	188	11.02	6.5 - 15.6	-0.60	22
Calumet	477	12.21	9.2 - 15.2	-0.16	34
Chippewa	672	14.12	11.4 - 16.8	0.52	52
Clark	380	10.21	7.1 - 13.3	-0.88	14
Columbia	609	14.28	11.4 - 17.1	0.60	54
Crawford	214	13.82	9.1 - 18.5	0.42	50
Dane	4,531	9.46	8.6 - 10.3	-1.14	7
Dodge	956	11.43	9.4 - 13.5	-0.45	24
Door	382	11.46	8.2 - 14.7	-0.41	25
Douglas	461	15.21	11.9 - 18.5	0.92	60
Dunn	419	12.44	9.2 - 15.7	-0.09	37
Eau Claire	923	8.88	7.0 - 10.8	-1.35	6
Florence	60	5.58	0.0 - 11.5	-2.55	1
Fond du Lac	1,160	12.29	10.4 - 14.2	-0.13	36
Forest	121	18.98	11.8 - 26.1	2.29	72
Grant	538	9.87	7.3 - 12.4	-0.99	10
Green	440	11.87	8.8 - 15.0	-0.27	30
Green Lake	255	15.43	10.9 - 20.0	0.99	64
Iowa	258	8.73	5.2 - 12.2	-1.43	5
Iron	90	10.39	4.0 - 16.8	-0.81	16
Jackson	209	11.66	7.2 - 16.1	-0.34	28
Jefferson	742	10.40	8.2 - 12.6	-0.81	17
Juneau	285	19.62	14.9 - 24.3	2.51	73
Kenosha	1,215	15.35	13.3 - 17.4	0.99	63
Kewaunee	256	10.28	6.5 - 14.1	-0.85	15
La Crosse	1,183	10.79	9.0 - 12.6	-0.67	19
Lafayette	165	11.82	6.8 - 16.9	-0.31	29
Langlade	247	15.12	10.6 - 19.7	0.89	58
Lincoln	375	13.59	10.1 - 17.1	0.34	46
Manitowoc	1,014	13.10	11.0 - 15.2	0.16	43
Marathon	1,442	9.70	8.1 - 11.3	-1.07	8
Marinette	575	15.66	12.6 - 18.7	1.10	66
Marquette	239	13.79	9.3 - 18.2	0.42	49
Menominee	34	12.82	1.4 - 24.3	0.05	41
Milwaukee City	10,499	18.31	17.6 - 19.1	2.04	69
Milwaukee County	14,056	15.34	14.7 - 15.9	0.96	61
Monroe	473	14.19	11.0 - 17.4	0.56	53
Oconto	485	10.84	8.0 - 13.7	-0.67	20
Oneida	462	15.48	12.1 - 18.8	1.03	65
Outagamie	1,810	9.86	8.5 - 11.3	-0.99	9
Ozaukee	800	7.63	5.7 - 9.5	-1.82	2
Pepin	90	14.52	7.1 - 22.0	0.67	56
Pierce	387	12.75	9.4 - 16.1	0.05	40
Polk	462	13.42	10.2 - 16.6	0.27	44
Portage	776	10.07	7.9 - 12.2	-0.92	12
Price	198	18.78	13.2 - 24.3	2.22	71
Racine	1,888	12.83	11.3 - 14.4	0.05	42
Richland	211	11.49	7.1 - 15.9	-0.41	26
Rock	1,498	13.63	11.9 - 15.4	0.34	47
Rusk	199	12.70	8.0 - 17.4	0.02	38
Sauk	606	10.52	8.0 - 13.0	-0.78	18
Sawyer	195	10.94	6.5 - 15.4	-0.63	21
Shawano	451	12.72	9.6 - 15.9	0.02	39
Sheboygan	1,374	11.65	9.9 - 13.4	-0.34	27
St. Croix	707	10.04	7.8 - 12.3	-0.96	11
Taylor	226	13.68	9.1 - 18.3	0.38	48
Trempealeau	358	13.89	10.2 - 17.5	0.45	51
Vernon	303	11.38	7.7 - 15.0	-0.45	23
Vilas	348	17.95	13.8 - 22.1	1.90	68
Walworth	779	11.99	9.7 - 14.3	-0.23	32
Washburn	197	13.51	8.6 - 18.4	0.31	45
Washington	1,046	10.13	8.3 - 12.0	-0.92	13
Waukesha	2,974	8.18	7.2 - 9.2	-1.61	3
Waupaca	582	16.46	13.4 - 19.5	1.39	67
Waushara	361	15.15	11.4 - 18.9	0.92	59
Winnebago	1,725	12.23	10.6 - 13.8	-0.16	35
Wood	960	11.98	9.9 - 14.1	-0.23	31

NO HEALTH INSURANCE

ABOUT THE MEASURE	
WHAT IT IS:	No Health Insurance is the percentage of the population reporting that they do not have health insurance coverage of any kind, including prepaid plans, HMOs, or government plans such as Medicare or Medicaid, at the time of the survey.
WHERE IT COMES FROM:	This measure is based on data from the Family Health Survey, a statewide random-sample survey of household residents.
REASONS FOR RANKING:	Lack of health insurance is a strong barrier to health care access.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Care (Access to Care)
Weight in Health Determinants:	1.67%
Years of data used:	1998-2004
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	2.1-20.9%
Overall in Wisconsin:	6.1%
Comparable HP2010 Target:	0%

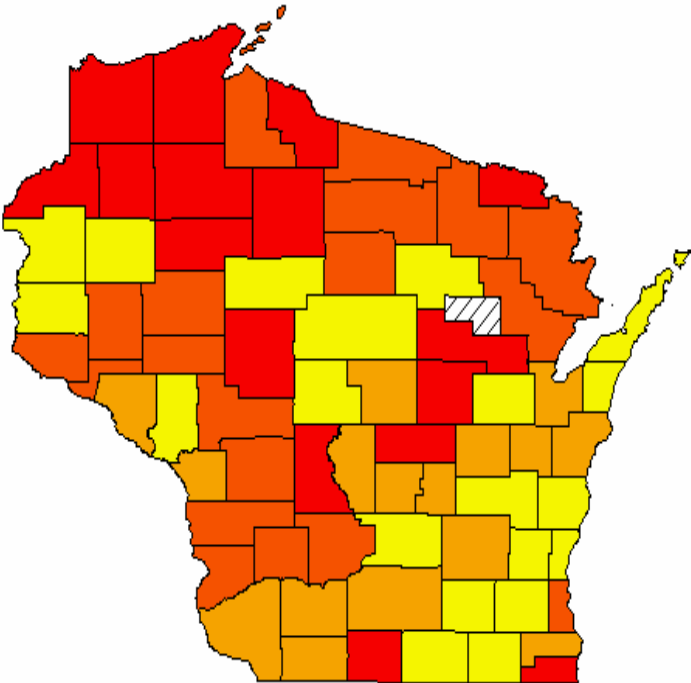


TABLE LEGEND →	
Sample Size	Number of respondents to this question on the FHS
% Uninsured	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having less uninsured. Hatched counties are not reported (NR).

Place	Sample Size	% Uninsured	95% CI	Z-Score	Rank (of 72)
Adams	218	6.3	2.9 - 9.5	-0.31	33
Ashland	150	9.0	4.3 - 13.7	0.50	52
Barron	425	5.0	2.8 - 7.1	-0.69	18
Bayfield	161	12.4	7.1 - 17.5	1.51	68
Brown	2,134	6.3	5.2 - 7.3	-0.31	33
Buffalo	125	6.3	1.9 - 10.5	-0.31	33
Burnett	150	11.5	6.2 - 16.7	1.24	64
Calumet	410	5.7	3.4 - 7.9	-0.49	26
Chippewa	522	9.2	6.6 - 11.7	0.55	53
Clark	292	11.5	7.7 - 15.2	1.24	64
Columbia	491	4.1	2.3 - 5.8	-0.96	10
Crawford	177	7.5	3.5 - 11.5	0.05	43
Dane	3,540	5.1	4.3 - 5.8	-0.66	21
Dodge	752	5.8	4.1 - 7.5	-0.46	27
Door	310	4.4	2.0 - 6.7	-0.87	12
Douglas	386	10.7	7.5 - 13.8	1.00	61
Dunn	338	8.8	5.7 - 11.9	0.44	51
Eau Claire	729	8.1	6.0 - 10.0	0.23	46
Florence	60	14.6	5.4 - 23.7	2.16	71
Fond du Lac	966	4.9	3.5 - 6.3	-0.72	16
Forest	89	7.8	2.0 - 13.4	0.14	45
Grant	414	5.9	3.5 - 8.2	-0.43	29
Green	372	11.1	7.8 - 14.3	1.12	63
Green Lake	210	5.9	2.6 - 9.1	-0.43	29
Iowa	213	5.8	2.5 - 8.9	-0.46	27
Iron	65	20.9	10.8 - 31.0	3.00	72
Jackson	168	7.1	3.1 - 11.0	-0.07	40
Jefferson	596	3.4	1.8 - 4.8	-1.17	6
Juneau	216	9.7	5.6 - 13.7	0.70	57
Kenosha	1,067	9.6	7.7 - 11.3	0.67	56
Kewaunee	225	4.3	1.6 - 7.0	-0.90	11
La Crosse	919	5.1	3.6 - 6.5	-0.66	21
Lafayette	135	5.3	1.4 - 9.1	-0.60	24
Langlade	186	2.1	0.1 - 4.2	-1.56	1
Lincoln	303	6.4	3.5 - 9.1	-0.28	37
Manitowoc	807	5.2	3.6 - 6.7	-0.63	23
Marathon	1,164	4.9	3.6 - 6.1	-0.72	16
Marinette	462	9.4	6.6 - 12.1	0.61	54
Marquette	222	6.0	2.8 - 9.1	-0.40	32
Menominee	31	NR	NR	1.51	NR
Milwaukee City	8,553	9.9	9.2 - 10.4	0.76	59
Milwaukee County	11,263	7.6	7.0 - 8.0	0.08	44
Monroe	414	8.7	5.9 - 11.4	0.41	50
Oconto	377	7.2	4.5 - 9.8	-0.04	41
Oneida	375	6.4	3.9 - 8.9	-0.28	37
Outagamie	1,549	2.9	2.0 - 3.7	-1.32	3
Ozaukee	629	3.4	1.9 - 4.8	-1.17	6
Pepin	69	8.2	1.5 - 14.7	0.26	47
Pierce	345	9.4	6.2 - 12.4	0.61	54
Polk	352	4.4	2.1 - 6.5	-0.87	12
Portage	630	6.3	4.3 - 8.2	-0.31	33
Price	152	9.7	4.9 - 14.5	0.70	57
Racine	1,460	5.9	4.6 - 7.1	-0.43	29
Richland	176	7.4	3.4 - 11.3	0.02	42
Rock	1,189	4.7	3.4 - 5.9	-0.78	15
Rusk	160	12.9	7.6 - 18.2	1.65	69
Sauk	460	6.8	4.4 - 9.1	-0.16	39
Sawyer	146	13.2	7.6 - 18.8	1.74	70
Shawano	340	12.2	8.6 - 15.7	1.45	67
Sheboygan	1,104	3.7	2.5 - 4.8	-1.08	8
St. Croix	613	5.0	3.2 - 6.7	-0.69	18
Taylor	174	3.8	0.9 - 6.7	-1.05	9
Trempealeau	309	2.1	0.4 - 3.7	-1.56	1
Vernon	242	8.3	4.7 - 11.7	0.29	48
Vilas	294	8.3	5.1 - 11.5	0.29	48
Walworth	588	5.0	3.2 - 6.8	-0.69	18
Washburn	137	10.3	5.1 - 15.5	0.88	60
Washington	865	3.2	2.0 - 4.4	-1.23	5
Waukesha	2,490	3.1	2.4 - 3.8	-1.26	4
Waupaca	434	10.8	7.8 - 13.8	1.03	62
Wauzara	241	11.5	7.4 - 15.6	1.24	64
Winnebago	1,390	5.5	4.2 - 6.7	-0.54	25
Wood	783	4.6	3.1 - 6.1	-0.81	14

*NR stands for Not Reported, due to the sample size being less than 50

DID NOT RECEIVE NEEDED HEALTH CARE

ABOUT THE MEASURE

WHAT IT IS:	Did Not Receive Needed Health Care is the percentage of the population reporting that they did not get needed health care (medical care or surgery) that they felt they should have had in the twelve months prior to being interviewed.
WHERE IT COMES FROM:	This measure is based on data from the Family Health Survey, a statewide random-sample survey of household residents.
REASONS FOR RANKING:	Not receiving needed medical care may contribute to chronic conditions and cause more serious health problems in the future.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Care (Access to Care)
Weight in Health Determinants:	1.67%
Years of data used:	1998-2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	0.0-5.0%
Overall in Wisconsin:	2.2%
Comparable HP2010 Target:	7% of families

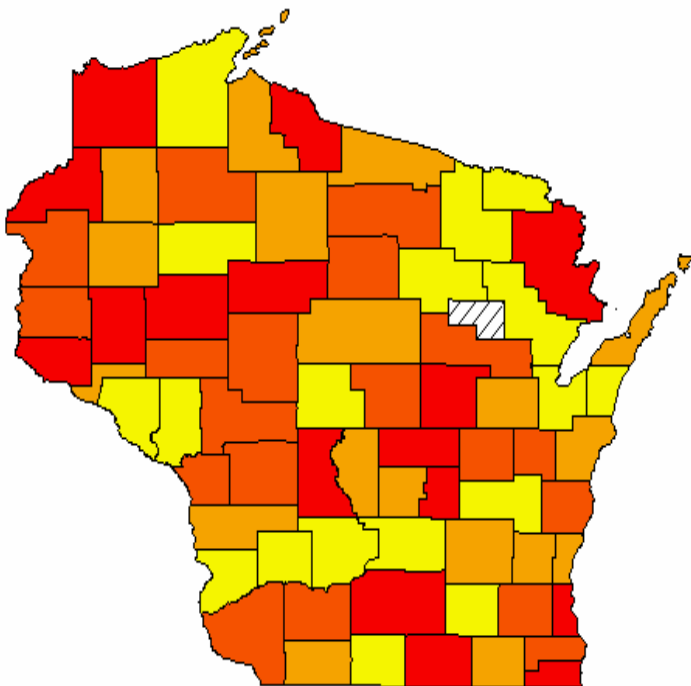


TABLE LEGEND →

Sample Size	Number of respondents to this question on the FHS
% Not Received Care	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having less people with unmet health care needs. Hatched counties are not reported (NR).

Place	Sample Size	% Not Received Care	95% CI	Z-Score	Rank (of 72)
Adams	219	1.8	0.1 - 3.6	-0.14	28
Ashland	153	1.8	0.1 - 3.9	-0.14	28
Barron	429	1.6	0.3 - 2.8	-0.33	21
Bayfield	161	0.4	0.1 - 1.2	-1.46	5
Brown	2,148	1.2	0.6 - 1.6	-0.71	12
Buffalo	126	0.4	0.1 - 1.5	-1.46	5
Burnett	150	2.9	0.1 - 5.6	0.90	63
Calumet	411	2.0	0.6 - 3.3	0.05	37
Chippewa	522	3.1	1.6 - 4.6	1.09	66
Clark	292	2.1	0.4 - 3.8	0.14	42
Columbia	491	1.2	0.2 - 2.2	-0.71	12
Crawford	177	1.4	0.1 - 3.1	-0.52	16
Dane	3,542	2.8	2.2 - 3.3	0.80	62
Dodge	753	1.7	0.7 - 2.6	-0.23	24
Door	310	1.8	0.2 - 3.2	-0.14	28
Douglas	386	2.9	1.2 - 4.6	0.90	63
Dunn	339	2.7	0.9 - 4.5	0.71	57
Eau Claire	729	2.0	0.9 - 3.0	0.05	37
Florence	60	0.0	-	-1.84	1
Fond du Lac	968	1.4	0.6 - 2.1	-0.52	16
Forest	90	0.0	-	-1.84	1
Grant	417	2.0	0.6 - 3.3	0.05	37
Green	372	0.8	0.1 - 1.6	-1.08	8
Green Lake	210	2.7	0.4 - 4.8	0.71	57
Iowa	213	2.1	0.1 - 4.0	0.14	42
Iron	65	4.7	0.1 - 9.9	2.59	70
Jackson	168	2.5	0.1 - 4.8	0.52	53
Jefferson	596	1.2	0.2 - 2.0	-0.71	12
Juneau	216	5.0	2.0 - 7.9	2.88	71
Kenosha	1,067	2.7	1.6 - 3.6	0.71	57
Kewaunee	225	0.6	0.1 - 1.5	-1.27	7
La Crosse	923	2.0	1.0 - 2.8	0.05	37
Lafayette	135	1.7	0.1 - 3.9	-0.23	24
Langlade	186	1.4	0.1 - 3.1	-0.52	16
Lincoln	303	2.0	0.4 - 3.6	0.05	37
Manitowoc	808	1.6	0.7 - 2.4	-0.33	21
Marathon	1,166	1.5	0.8 - 2.2	-0.42	19
Marinette	465	3.5	1.7 - 5.1	1.46	67
Marquette	222	1.9	0.1 - 3.7	-0.05	34
Menominee	31	NR	NR	-1.84	NR
Milwaukee City	8,595	3.5	3.0 - 3.8	1.46	67
Milwaukee County	11,317	3.0	2.6 - 3.2	0.99	65
Monroe	416	2.5	0.9 - 4.0	0.52	53
Oconto	377	0.8	0.1 - 1.7	-1.08	8
Oneida	375	2.5	0.8 - 4.0	0.52	53
Outagamie	1,551	1.6	0.9 - 2.2	-0.33	21
Ozaukee	631	1.5	0.5 - 2.4	-0.42	19
Pepin	69	1.7	0.1 - 4.7	-0.23	24
Pierce	345	4.6	2.3 - 6.8	2.50	69
Polk	352	2.2	0.6 - 3.7	0.24	47
Portage	634	2.2	1.0 - 3.3	0.24	47
Price	152	1.7	0.1 - 3.8	-0.23	24
Racine	1,463	2.1	1.3 - 2.8	0.14	42
Richland	176	0.0	-	-1.84	1
Rock	1,191	2.7	1.7 - 3.6	0.71	57
Rusk	160	0.0	-	-1.84	1
Sauk	460	1.2	0.1 - 2.2	-0.71	12
Sawyer	146	2.4	0.1 - 4.9	0.43	51
Shawano	340	2.2	0.6 - 3.8	0.24	47
Sheboygan	1,110	2.1	1.2 - 2.9	0.14	42
St. Croix	614	2.4	1.1 - 3.6	0.43	51
Taylor	176	5.0	1.7 - 8.3	2.88	71
Trempealeau	310	1.0	0.1 - 2.1	-0.89	10
Vernon	242	1.8	0.1 - 3.4	-0.14	28
Vilas	295	1.9	0.2 - 3.4	-0.05	34
Walworth	588	1.8	0.7 - 2.9	-0.14	28
Washburn	137	1.8	0.1 - 4.1	-0.14	28
Washington	866	1.9	0.9 - 2.8	-0.05	34
Waukesha	2,496	2.2	1.6 - 2.8	0.24	47
Waupaca	435	2.6	1.0 - 4.1	0.61	56
Waushara	241	2.7	0.6 - 4.7	0.71	57
Winnebago	1,399	2.1	1.3 - 2.8	0.14	42
Wood	786	1.0	0.2 - 1.6	-0.89	10

*NR stands for Not Reported, due to the sample size being less than 50

NO RECENT DENTIST VISIT

ABOUT THE MEASURE

WHAT IT IS:	No Recent Dentist Visit is the percentage of the population that reports that they did not see a dentist in the last six months prior to being interviewed.
WHERE IT COMES FROM:	This measure is based on data from the Family Health Survey, a statewide random-sample survey of household residents.
REASONS FOR RANKING:	Dental hygiene is not only important to maintain for oral health, but it is also related to various other health problems, including cardiovascular health.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Care (Access to Care)
Weight in Health Determinants:	1.67%
Years of data used:	1998-2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	33.6-65.7%
Overall in Wisconsin:	44.9%
Comparable HP2010 Target:	44%

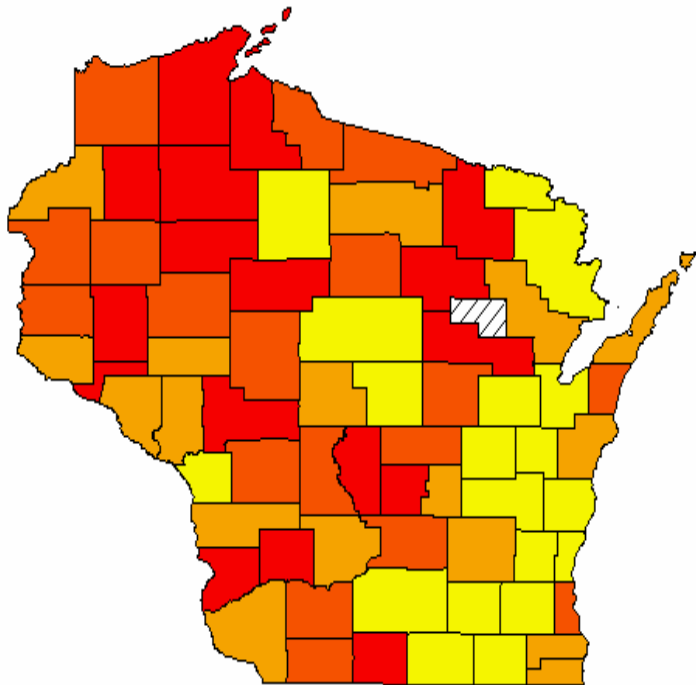


TABLE LEGEND →

Sample Size	Number of respondents to this question on the FHS
% No Dentist Visit	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure - Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having less people with no recent dentist visit. Hatched counties are not reported (NR).

Place	Sample Size	% No Dentist Visit	95% CI	Z-Score	Rank (of 72)
Adams	218	56.3	49.5 - 62.9	1.11	64
Ashland	152	63.7	55.9 - 71.5	2.14	70
Barron	428	52.4	47.5 - 57.1	0.57	52
Bayfield	160	53.3	45.3 - 61.1	0.69	55
Brown	2,131	40.4	38.2 - 42.5	-1.10	10
Buffalo	126	47.5	38.5 - 56.3	-0.11	32
Burnett	150	47.7	39.5 - 55.8	-0.09	35
Calumet	403	37.8	32.9 - 42.6	-1.46	4
Chippewa	519	49.0	44.6 - 53.4	0.10	41
Clark	289	51.8	45.8 - 57.6	0.48	50
Columbia	490	49.0	44.4 - 53.4	0.10	41
Crawford	175	55.2	47.6 - 62.6	0.96	58
Dane	3,520	39.6	37.9 - 41.2	-1.21	6
Dodge	749	42.8	39.1 - 46.3	-0.77	21
Door	309	42.9	37.2 - 48.4	-0.75	22
Douglas	384	49.3	44.2 - 54.4	0.14	43
Dunn	338	59.7	54.3 - 65.0	1.58	69
Eau Claire	718	45.1	41.3 - 48.8	-0.45	26
Florence	60	40.2	27.5 - 52.8	-1.13	9
Fond du Lac	960	41.4	38.2 - 44.6	-0.96	14
Forest	89	57.6	47.0 - 68.0	1.29	67
Grant	414	48.2	43.3 - 53.1	-0.02	36
Green	366	55.9	50.6 - 61.0	1.06	62
Green Lake	209	46.5	39.6 - 53.4	-0.25	30
Iowa	212	49.3	42.4 - 56.2	0.14	43
Iron	65	49.5	37.0 - 61.8	0.16	46
Jackson	167	59.4	51.7 - 66.9	1.54	68
Jefferson	589	38.6	34.5 - 42.5	-1.35	5
Juneau	215	52.9	46.1 - 59.7	0.64	53
Kenosha	1,063	47.5	44.4 - 50.5	-0.11	32
Kewaunee	224	48.9	42.2 - 55.6	0.08	39
La Crosse	919	41.2	37.9 - 44.4	-0.99	12
Lafayette	135	49.3	40.6 - 57.8	0.14	43
Langlade	185	55.5	48.1 - 62.7	1.00	61
Lincoln	302	51.3	45.5 - 57.0	0.42	48
Manitowoc	803	42.9	39.4 - 46.4	-0.75	22
Marathon	1,161	42.2	39.3 - 45.1	-0.85	18
Marinette	463	42.2	37.6 - 46.8	-0.85	18
Marquette	220	57.0	50.2 - 63.6	1.21	65
Menominee	30	NR	NR	1.72	NR
Milwaukee City	8,513	55.4	54.3 - 56.5	0.99	60
Milwaukee County	11,218	50.4	49.4 - 51.3	0.29	47
Monroe	413	52.0	47.0 - 56.9	0.51	51
Oconto	372	47.3	42.0 - 52.4	-0.14	31
Oneida	372	45.3	40.1 - 50.4	-0.42	27
Outagamie	1,541	36.4	33.9 - 38.8	-1.66	2
Ozaukee	628	33.6	29.7 - 37.3	-2.05	1
Pepin	69	57.5	45.5 - 69.3	1.28	66
Pierce	344	42.5	37.1 - 47.8	-0.81	20
Polk	351	48.7	43.3 - 54.0	0.05	38
Portage	632	39.7	35.8 - 43.6	-1.20	8
Price	152	41.2	33.2 - 49.2	-0.99	12
Racine	1,443	45.6	42.9 - 48.2	-0.38	28
Richland	176	65.5	58.3 - 72.6	2.39	71
Rock	1,177	41.7	38.7 - 44.5	-0.92	15
Rusk	160	55.2	47.3 - 63.0	0.96	58
Sauk	458	43.5	38.8 - 48.0	-0.67	24
Sawyer	146	56.0	47.7 - 64.2	1.07	63
Shawano	339	54.2	48.8 - 59.6	0.82	57
Sheboygan	1,101	40.6	37.6 - 43.5	-1.07	11
St. Croix	612	48.9	44.8 - 52.9	0.08	39
Taylor	173	65.7	58.4 - 72.9	2.42	72
Trempealeau	307	46.0	40.3 - 51.6	-0.32	29
Vernon	242	47.5	41.0 - 53.8	-0.11	32
Vilas	293	51.6	45.7 - 57.4	0.46	49
Walworth	582	41.7	37.6 - 45.8	-0.92	15
Washburn	137	53.8	45.2 - 62.2	0.76	56
Washington	860	39.6	36.2 - 42.9	-1.21	6
Waukesha	2,477	37.3	35.3 - 39.2	-1.53	3
Waupaca	435	53.1	48.3 - 57.9	0.67	54
Waushara	238	48.3	41.8 - 54.7	0.00	37
Winnebago	1,391	41.8	39.1 - 44.4	-0.91	17
Wood	780	44.9	41.3 - 48.4	-0.48	25

*NR stands for Not Reported, due to the sample size being less than 50

POOR DIABETIC CARE

ABOUT THE MEASURE

WHAT IT IS:	Poor Diabetic Care is a measure of the percentage of diabetic Medicare and Medicaid recipients between the ages of 65 and 74 that did not receive recommended care. This measure is based on the average of three separate place-level indicators: the percent of diabetics that did not have a retinal eye exam, the percent of diabetics who did not receive lipid profiles, and the percent of diabetics who did not receive HbA1c testing. The three measures were equally weighted to create the overall Poor Diabetic Care measure. If one of the measures was not available, an average of the two available measures was used, and if only one measure was available, this measure was reported as the overall Poor Diabetic Care measure.
WHERE IT COMES FROM:	Metastar, a private quality improvement organization, provides Medicare data based on national quality initiatives built on recommendations from the Centers for Medicare and Medicaid Services (CMS).
REASONS FOR RANKING:	These indicators are valid and reliable measures of the quality of care received by the diabetic Medicare population, and are a proxy for the quality of health care received in the area.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Care (Quality of Outpatient Care)
Weight in Health Determinants:	2.5%
Years of data used:	2002-2004
Changes from last year:	In 2005, each diabetic care value was reported separately. In 2006, these are combined into one measure and reported as percent not receiving recommended care.

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	9.2-20.3%
Overall in Wisconsin:	15.6%
Comparable HP2010 Target:	None

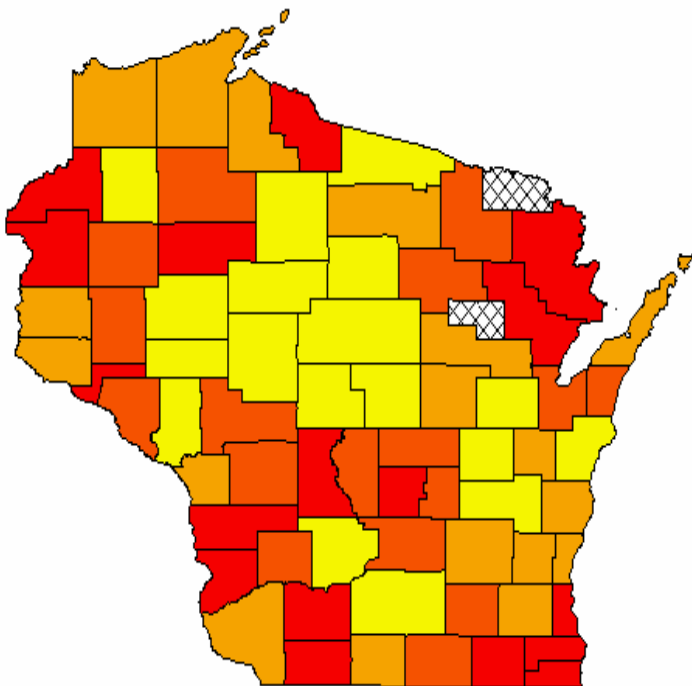


TABLE LEGEND →

% Poor Diabetic Care	See above
% No Eye Exam	Percentage of diabetics that did not receive a recommended eye exam
% No Lipid Profile	Percentage of diabetics that did not receive a recommended lipid profile
% No HbA1c	Percentage of diabetics that did not receive recommended HbA1c testing
Z-Score	$(\text{Measure} - \text{Average of 72 WI counties}) / (\text{Standard Deviation})$

← MAP

The counties are shaded by quartile, with lighter counties having better diabetic quality of care. Measures for double-hatched counties were not available (NA).

Place	% Poor Diabetic Care	% No Eye Exam	% No Lipid Profile	% No HbA1c	Z-Score	Rank (of 73)
Adams	15.7	24.4	10.2	12.5	0.76	52
Ashland	12.7	10.6	18.1	9.4	-0.34	24
Barron	14.5	21.6	11.4	10.4	0.32	46
Bayfield	13.1	18.4	11.4	9.5	-0.19	28
Brown	15.0	22.7	13.4	8.9	0.51	48
Buffalo	14.3	21.5	10.4	11.1	0.25	43
Burnett	17.3	28.7	14.9	8.3	1.35	60
Calumet	12.8	21.2	8.9	8.2	-0.30	26
Chippewa	9.9	17.6	5.9	6.2	-1.37	3
Clark	10.4	16.4	8.4	6.4	-1.19	7
Columbia	14.3	22.6	13.1	7.2	0.25	43
Crawford	17.4	22.3	12.5	NA	1.39	61
Dane	11.8	15.6	10.8	9.0	-0.67	14
Dodge	13.3	19.6	11.4	8.8	-0.12	30
Door	13.2	23.9	9.0	6.6	-0.16	29
Douglas	12.8	23.2	9.4	5.9	-0.30	26
Dunn	13.7	26.2	8.6	6.1	0.03	37
Eau Claire	10.5	18.5	6.1	6.8	-1.15	8
Florence	NA	NA	NA	NA	0.00	NA
Fond du Lac	12.0	18.8	10.2	7.1	-0.60	15
Forest	14.1	22.1	11.4	8.7	0.17	40
Grant	12.5	18.1	12.6	6.6	-0.42	22
Green	12.6	24.6	6.6	6.6	-0.38	23
Green Lake	15.1	20.1	10.1	NA	0.54	49
Iowa	18.6	16.1	21.2	NA	1.83	67
Iron	20.0	20.0	NA	NA	2.35	70
Jackson	14.4	26.1	9.8	7.2	0.28	45
Jefferson	13.8	21.1	11.1	9.3	0.06	38
Juneau	19.5	32.8	15.6	10.2	2.16	69
Kenosha	16.6	32.2	8.1	9.5	1.09	56
Kewaunee	15.3	20.3	13.6	11.9	0.62	50
La Crosse	13.3	19.1	12.4	8.4	-0.12	30
Lafayette	18.2	26.4	NA	10.0	1.68	64
Langlade	14.1	26.3	7.8	8.2	0.17	40
Lincoln	11.6	21.4	7.5	5.8	-0.75	11
Manitowoc	12.1	20.0	10.7	5.5	-0.56	17
Marathon	9.4	15.0	7.8	5.5	-1.56	2
Marinette	16.7	31.4	9.0	9.6	1.13	57
Marquette	18.6	29.0	14.8	11.9	1.83	67
Menominee	NA	NA	NA	NA	0.00	NA
Milwaukee City	17.4	27.7	13.2	11.3	1.39	61
Milwaukee County	16.9	27.4	12.3	11.0	1.21	59
Monroe	13.9	22.1	10.6	9.1	0.10	39
Oconto	18.5	24.3	13.7	17.6	1.79	66
Oneida	12.4	18.6	11.0	7.6	-0.45	21
Outagamie	10.5	16.7	8.6	6.2	-1.15	8
Ozaukee	13.5	19.1	10.8	10.7	-0.05	34
Pepin	20.3	NA	NA	20.3	2.46	71
Pierce	13.4	20.5	9.6	10.0	-0.08	32
Polk	16.3	24.1	16.5	8.4	0.98	54
Portage	10.1	18.3	7.3	4.5	-1.30	5
Price	10.3	11.9	8.6	NA	-1.23	6
Racine	17.6	30.7	10.3	11.9	1.46	63
Richland	14.2	22.9	11.5	8.4	0.21	42
Rock	14.7	21.8	13.8	8.5	0.39	47
Rusk	16.8	16.8	NA	NA	1.17	58
Sauk	9.9	15.9	8.3	5.5	-1.37	3
Sawyer	15.7	24.2	7.3	NA	0.76	52
Shawano	13.6	24.5	9.7	6.6	-0.01	36
Sheboygan	12.7	23.2	10.3	4.6	-0.34	24
St. Croix	12.2	18.4	10.6	7.6	-0.53	19
Taylor	12.0	13.5	10.5	NA	-0.60	15
Trempealeau	11.6	18.1	NA	5.0	-0.75	11
Vernon	18.2	24.4	11.9	NA	1.68	64
Vilas	10.7	15.7	7.7	8.7	-1.08	10
Walworth	16.5	28.3	11.9	9.4	1.06	55
Washburn	11.7	18.2	10.0	6.8	-0.71	13
Washington	13.4	20.2	11.2	8.6	-0.08	32
Waukesha	13.5	21.2	9.6	9.6	-0.05	34
Waupaca	12.3	18.5	8.7	9.8	-0.49	20
Waushara	15.3	24.5	10.6	10.9	0.62	50
Winnebago	12.1	20.5	8.6	7.1	-0.56	17
Wood	9.2	13.0	9.4	5.2	-1.63	1

*NA stands for Not Available, due to the measure not being publicly available for that county

NO BIENNIAL MAMMOGRAPHY

ABOUT THE MEASURE	
WHAT IT IS:	No Biennial Mammography is a measure of the percentage of female Medicare recipients between the ages of 65 and 74 that did not receive a recommended mammogram.
WHERE IT COMES FROM:	Metastar, a private quality improvement organization, provides Medicare data based on national quality initiatives built on recommendations from the Centers for Medicare and Medicaid Services (CMS). Metastar uses claims data for the Medicare fee-for-service population to calculate its indicator of the percentage of recipients undergoing mammograms. This measure includes women on Medicare aged 65-74.
REASONS FOR RANKING:	Mammography plays a central role in diagnosing breast cancer at an early stage. Improving mammography rates can lead to earlier identification of breast cancer, and can improve the survival rate of the disease in the population.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Care (Quality of Outpatient Care)
Weight in Health Determinants:	2.5%
Years of data used:	2002-2004
Changes from last year:	In 2005, mammography was reported as percent screened. In 2006, it is reported as percent not screened.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	21.7-51.9%
Overall in Wisconsin:	30.7%
Comparable HP2010 Target:	30%

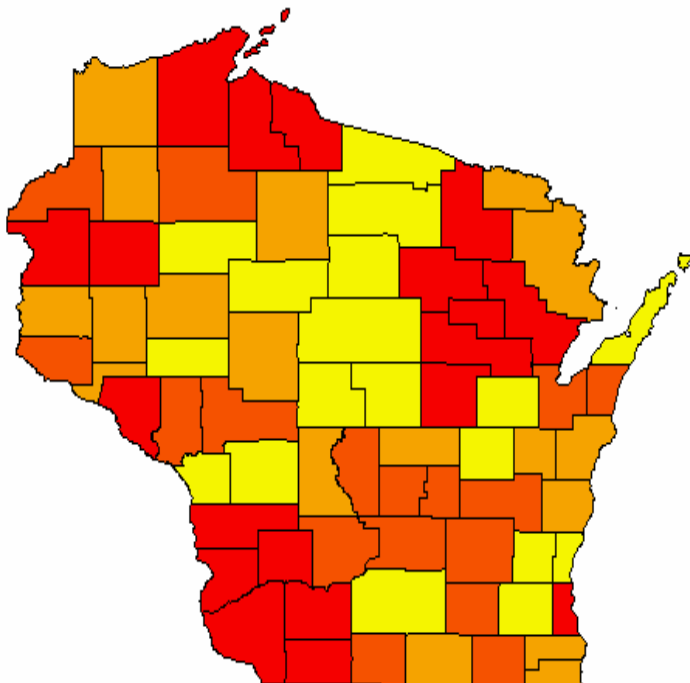


TABLE LEGEND →	
% Not Screened	See above
Z-Score	$(\text{Measure} - \text{Average of 72 WI counties}) / (\text{Standard Deviation})$
← MAP	The counties are shaded by quartile, with lighter counties having better mammography rates.

Place	% Not Screened	Z-Score	Rank (of 73)
Adams	34.0	0.25	49
Ashland	49.2	2.81	71
Barron	37.4	0.82	65
Bayfield	36.2	0.62	62
Brown	32.0	-0.08	38
Buffalo	34.7	0.37	55
Burnett	34.2	0.29	52
Calumet	31.6	-0.15	35
Chippewa	30.9	-0.27	30
Clark	31.3	-0.20	33
Columbia	34.5	0.34	53
Crawford	43.6	1.86	69
Dane	27.8	-0.79	14
Dodge	33.2	0.12	43
Door	25.3	-1.21	7
Douglas	30.3	-0.37	25
Dunn	29.0	-0.59	20
Eau Claire	21.7	-1.81	1
Florence	29.6	-0.49	22
Fond du Lac	31.9	-0.10	37
Forest	39.8	1.23	67
Grant	35.8	0.55	60
Green	33.4	0.15	45
Green Lake	33.5	0.17	46
Iowa	47.6	2.54	70
Iron	36.2	0.62	62
Jackson	33.1	0.10	42
Jefferson	32.5	0.00	40
Juneau	30.5	-0.34	27
Kenosha	30.8	-0.29	28
Kewaunee	34.5	0.34	53
La Crosse	28.1	-0.74	15
Lafayette	40.8	1.39	68
Langlade	36.8	0.72	64
Lincoln	28.4	-0.69	17
Manitowoc	28.8	-0.62	19
Marathon	26.7	-0.97	9
Marinette	30.8	-0.29	28
Marquette	33.6	0.18	48
Menominee	51.9	3.00	73
Milwaukee City	34.0	0.25	49
Milwaukee County	34.9	0.40	56
Monroe	27.7	-0.81	13
Oconto	35.9	0.57	61
Oneida	24.7	-1.31	4
Outagamie	28.7	-0.64	18
Ozaukee	27.2	-0.89	11
Pepin	31.7	-0.13	36
Pierce	32.6	0.02	41
Polk	35.5	0.50	59
Portage	24.2	-1.39	3
Price	30.4	-0.35	26
Racine	31.3	-0.20	33
Richland	50.2	2.97	72
Rock	29.5	-0.50	21
Rusk	27.2	-0.89	11
Sauk	32.0	-0.08	38
Sawyer	33.5	0.17	46
Shawano	35.3	0.47	58
Sheboygan	30.1	-0.40	24
St. Croix	29.6	-0.49	22
Taylor	28.3	-0.71	16
Trempealeau	33.2	0.12	43
Vernon	38.5	1.01	66
Vilas	24.8	-1.29	6
Walworth	34.0	0.25	49
Washburn	30.9	-0.27	30
Washington	27.1	-0.91	10
Waukesha	24.7	-1.31	4
Waupaca	35.2	0.45	57
Waushara	31.0	-0.25	32
Winnebago	26.2	-1.06	8
Wood	22.0	-1.76	2

CIGARETTE SMOKING

ABOUT THE MEASURE	
WHAT IT IS:	Cigarette Smoking is a measure of the percentage of the population that reports having smoked at least 100 cigarettes in their lifetime and that they currently smoke.
WHERE IT COMES FROM:	Data are obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national random digit dial telephone survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. The data are weighted by population.
REASONS FOR RANKING:	Cigarette smoking has been shown to cause a variety of health problems including cancer, cardiovascular disease, and respiratory diseases.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Behaviors (Tobacco)
Weight in Health Determinants:	6%
Years of data used:	1999-2005
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	10.5-36.0%
Overall in Wisconsin:	22.7%
Comparable HP2010 Target:	12%

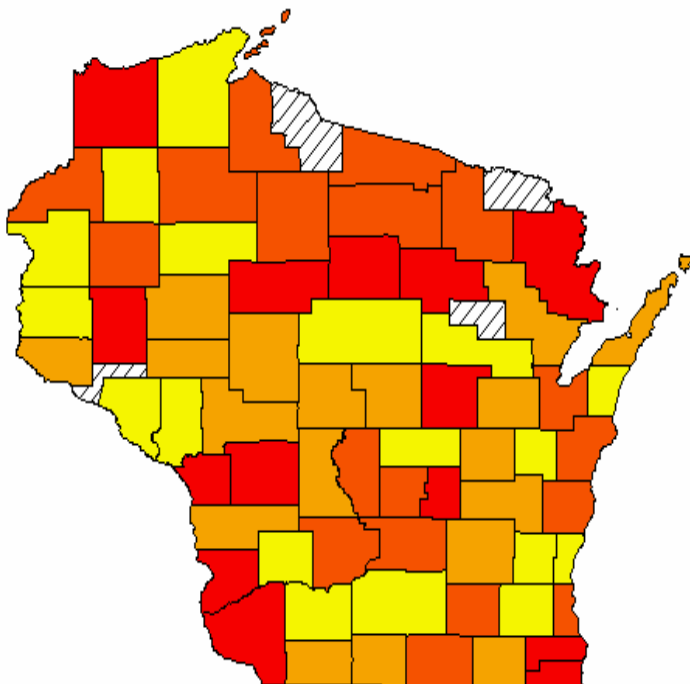


TABLE LEGEND →	
Sample Size	Number of respondents to this question on the BRFSS
% Smokers	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having lower smoking rates. Hatched counties are not reported (NR).

Place	Sample Size	% Smoking	95% CI	Z-Score	Rank (of 69)
Adams	137	25.0	17.7 - 32.2	0.51	49
Ashland	89	24.3	15.4 - 33.2	0.36	44
Barron	215	24.5	18.7 - 30.2	0.40	45
Bayfield	103	13.4	6.78 - 19.9	-1.98	3
Brown	982	23.5	20.8 - 26.1	0.19	39
Buffalo	75	10.5	3.58 - 17.4	-2.61	1
Burnett	76	23.8	14.2 - 33.3	0.25	40
Calumet	200	19.5	14.0 - 25.0	-0.67	12
Chippewa	284	22.9	17.9 - 27.7	0.06	36
Clark	164	20.4	14.2 - 26.6	-0.48	19
Columbia	249	23.0	17.8 - 28.2	0.08	37
Crawford	89	32.6	22.8 - 42.2	2.15	68
Dane	1,863	18.8	17.0 - 20.5	-0.82	8
Dodge	400	21.1	17.0 - 25.0	-0.33	24
Door	159	22.4	15.9 - 28.9	-0.05	35
Douglas	182	28.2	21.6 - 34.7	1.20	62
Dunn	179	28.1	21.5 - 34.6	1.18	60
Eau Claire	389	20.8	16.7 - 24.8	-0.39	20
Florence	19	NR	NR	-0.31	NR
Fond du Lac	458	21.7	17.9 - 25.4	-0.20	29
Forest	53	24.8	13.1 - 36.3	0.47	47
Grant	234	27.1	21.4 - 32.8	0.96	58
Green	192	21.9	16.0 - 27.7	-0.16	33
Green Lake	102	29.5	20.6 - 38.3	1.48	65
Iowa	114	14.1	7.74 - 20.5	-1.83	4
Iron	42	NR	NR	-1.77	NR
Jackson	86	21.4	12.7 - 30.0	-0.26	25
Jefferson	308	24.5	19.6 - 29.2	0.40	45
Juneau	122	21.5	14.2 - 28.7	-0.24	27
Kenosha	487	31.8	27.6 - 35.9	1.97	67
Kewaunee	101	12.2	5.79 - 18.5	-2.24	2
La Crosse	506	26.8	22.9 - 30.6	0.90	57
Lafayette	75	21.4	12.0 - 30.6	-0.26	25
Langlade	95	30.4	21.1 - 39.6	1.67	66
Lincoln	138	28.0	20.5 - 35.5	1.16	59
Manitowoc	438	24.9	20.8 - 28.9	0.49	48
Marathon	623	19.5	16.4 - 22.6	-0.67	12
Marinette	232	29.1	23.2 - 34.9	1.39	64
Marquette	72	24.2	14.2 - 34.0	0.34	42
Menominee	14	NR	NR	-0.07	NR
Milwaukee City	4,621	28.2	26.9 - 29.5	1.20	62
Milwaukee County	6,149	25.9	24.8 - 27.0	0.71	53
Monroe	188	36.0	29.1 - 42.8	2.88	69
Oconto	204	21.8	16.1 - 27.4	-0.18	31
Oneida	170	24.1	17.6 - 30.5	0.32	41
Outagamie	725	20.9	17.9 - 23.8	-0.37	21
Ozaukee	338	16.2	12.2 - 20.1	-1.38	6
Pepin	41	NR	NR	-0.65	NR
Pierce	161	21.8	15.4 - 28.2	-0.18	31
Polk	195	19.3	13.7 - 24.8	-0.71	11
Portage	299	21.0	16.3 - 25.6	-0.35	23
Price	82	25.3	15.9 - 34.7	0.58	51
Racine	865	26.7	23.7 - 29.6	0.88	56
Richland	89	19.5	11.2 - 27.7	-0.67	12
Rock	639	26.0	22.5 - 29.3	0.73	54
Rusk	77	20.0	11.0 - 28.9	-0.56	17
Sauk	261	24.2	18.9 - 29.3	0.34	42
Sawyer	79	23.4	14.0 - 32.7	0.17	38
Shawano	197	19.7	14.1 - 25.2	-0.63	15
Sheboygan	555	25.1	21.5 - 28.7	0.53	50
St. Croix	277	20.0	15.2 - 24.6	-0.56	17
Taylor	94	28.1	19.0 - 37.1	1.18	60
Trempealeau	141	19.8	13.1 - 26.3	-0.61	16
Vernon	130	22.1	15.0 - 29.2	-0.11	34
Vilas	127	25.8	18.2 - 33.4	0.68	52
Walworth	366	21.6	17.4 - 25.8	-0.22	28
Washburn	87	16.6	8.79 - 24.4	-1.30	7
Washington	427	19.2	15.4 - 22.9	-0.74	10
Waukesha	1,193	16.0	13.8 - 18.0	-1.42	5
Waupaca	273	26.2	20.9 - 31.4	0.77	55
Waushara	168	18.8	12.8 - 24.6	-0.82	8
Winnebago	693	21.7	18.6 - 24.8	-0.20	29
Wood	398	20.9	16.8 - 24.8	-0.37	21

*NR stands for Not Reported, due to the sample size being less than 50

SMOKING DURING PREGNANCY

ABOUT THE MEASURE	
WHAT IT IS:	Smoking During Pregnancy measures the percentage of the women in the population who smoked during their pregnancy. Women giving birth in a hospital are asked about their smoking status after delivering the baby. This variable also serves as an indicator of tobacco use and exposure in the population.
WHERE IT COMES FROM:	These data are obtained from the Wisconsin Interactive Statistics on Health (WISH) database Birth Counts Query, from the Department of Health and Family Services, Division of Public Health, Bureau of Health Information and Policy.
REASONS FOR RANKING:	Smoking during pregnancy has been shown to be associated with low birth weight, a higher risk of miscarriages, and Sudden Infant Death Syndrome (SIDS).

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Behaviors (Tobacco)
Weight in Health Determinants:	6%
Years of data used:	2001-2004
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	6.9-41.6%
Overall in Wisconsin:	14.6%
Comparable HP2010 Target:	1%

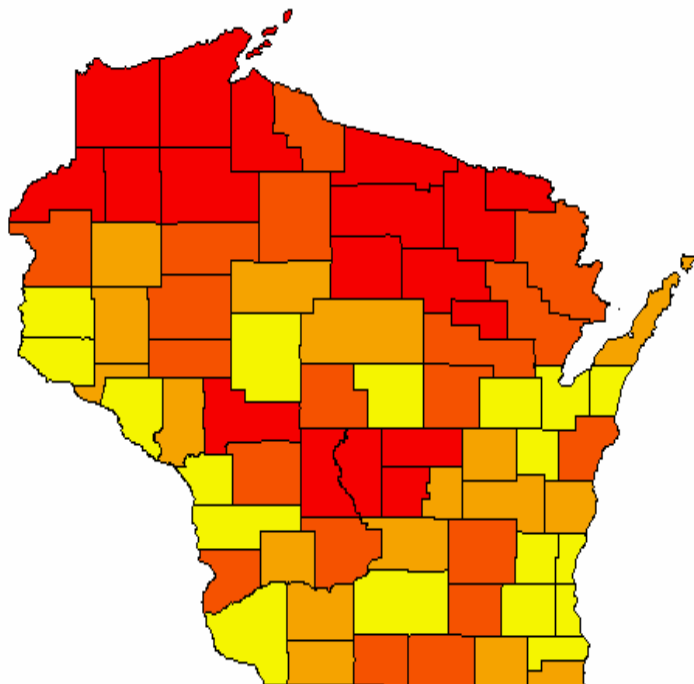


TABLE LEGEND →	
Number of Births	Total number of births
Smoked During Pregnancy	Number of mothers reporting that they smoked during pregnancy
% Pregnant Smokers	Number of pregnant smokers / total number of births * 100
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having lower maternal smoking rates.

Place	Number of Births	Smoked During Pregnancy	% Pregnant Smokers	Z-Score	Rank (of 73)
Adams	662	204	30.8	1.83	69
Ashland	793	244	30.8	1.83	69
Barron	2,053	362	17.6	-0.22	35
Bayfield	537	138	25.7	1.04	63
Brown	13,089	1,908	14.6	-0.69	18
Buffalo	608	84	13.8	-0.81	15
Burnett	609	196	32.2	2.05	71
Calumet	2,504	243	9.7	-1.45	4
Chippewa	2,767	592	21.4	0.37	52
Clark	2,140	282	13.2	-0.91	12
Columbia	2,556	427	16.7	-0.36	30
Crawford	785	155	19.7	0.10	44
Dane	22,801	2,086	9.1	-1.54	3
Dodge	3,819	675	17.7	-0.21	37
Door	985	159	16.1	-0.46	26
Douglas	1,974	467	23.7	0.73	59
Dunn	1,832	323	17.6	-0.22	35
Eau Claire	4,459	805	18.1	-0.14	39
Florence	146	33	22.6	0.56	57
Fond du Lac	4,549	786	17.3	-0.27	33
Forest	430	139	32.3	2.06	72
Grant	2,269	307	13.5	-0.86	13
Green	1,575	289	18.3	-0.11	41
Green Lake	912	151	16.6	-0.38	29
Iowa	1231	184	14.9	-0.64	21
Iron	185	40	21.6	0.40	54
Jackson	906	234	25.8	1.05	64
Jefferson	3,874	693	17.9	-0.18	38
Juneau	1128	340	30.1	1.72	68
Kenosha	8,495	1260	14.8	-0.66	20
Kewaunee	968	126	13.0	-0.94	10
La Crosse	5,019	707	14.1	-0.77	16
Lafayette	790	121	15.3	-0.58	24
Langlade	879	241	27.4	1.30	66
Lincoln	1262	303	24.0	0.77	60
Manitowoc	3,510	738	21.0	0.31	49
Marathon	6,114	909	14.9	-0.64	21
Marinette	1,662	359	21.6	0.40	54
Marquette	633	171	27.0	1.24	65
Menominee	370	154	41.6	3.00	73
Milwaukee City	44,194	5973	13.5	-0.86	13
Milwaukee County	58,487	7,288	12.5	-1.02	8
Monroe	2,363	486	20.6	0.24	46
Oconto	1,567	334	21.3	0.35	51
Oneida	1239	286	23.1	0.63	58
Outagamie	9,130	1183	13.0	-0.94	10
Ozaukee	3,549	244	6.9	-1.89	1
Pepin	342	51	14.9	-0.64	21
Pierce	1,741	199	11.4	-1.19	6
Polk	1,928	399	20.7	0.26	48
Portage	2,931	415	14.2	-0.75	17
Price	536	97	18.1	-0.14	39
Racine	10,159	1,482	14.6	-0.69	18
Richland	847	144	17.0	-0.32	32
Rock	8,051	1,530	19.0	0.00	43
Rusk	665	142	21.4	0.37	52
Sauk	2,917	599	20.5	0.23	45
Sawyer	694	208	30.0	1.71	67
Shawano	1,878	394	21.0	0.31	49
Sheboygan	5,477	872	15.9	-0.49	25
St. Croix	4,066	435	10.7	-1.30	5
Taylor	958	167	17.4	-0.25	34
Trempealeau	1311	222	16.9	-0.33	31
Vernon	1,599	203	12.7	-0.98	9
Vilas	757	186	24.6	0.87	61
Walworth	4,604	746	16.2	-0.44	27
Washburn	666	164	24.6	0.87	61
Washington	5,919	675	11.4	-1.19	6
Waukesha	17,362	1302	7.5	-1.79	2
Waupaca	2,352	485	20.6	0.24	46
Waushara	978	218	22.3	0.51	56
Winnebago	7,280	1195	16.4	-0.41	28
Wood	3,419	641	18.7	-0.05	42

PHYSICAL INACTIVITY

ABOUT THE MEASURE	
WHAT IT IS:	Physical Inactivity is a measure of the percentage of the population that reports levels of activity that do not meet the recommended levels of moderate physical activity (30 minutes per day of moderate physical activity for five or more days a week) or vigorous physical activity (20 minutes per day of vigorous physical activity for three or more days of week).
WHERE IT COMES FROM:	Data obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national random digit dial telephone survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. The data are weighted by population.
REASONS FOR RANKING:	Regular physical activity has been shown to prevent or reduce the severity of coronary heart disease (CHD), heart attack, diabetes, obesity, cancer, and a variety of other health problems.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Behaviors (Diet and Exercise)
Weight in Health Determinants:	4%
Years of data used:	2000, 2003, 2005
Changes from last year:	There was a slight change in the calculation of physical inactivity from 2005. See the <i>2005 Wisconsin County Health Rankings Full Report</i> .

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	13.5-66.0%
Overall in Wisconsin:	46.8%
Comparable HP2010 Target:	20%

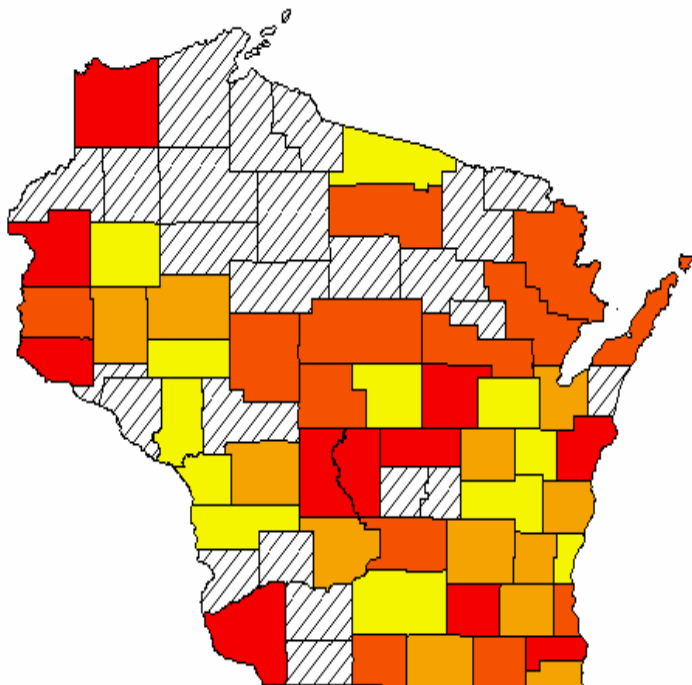


TABLE LEGEND →	
Sample Size	Number of respondents to this question on the BRFSS
% Inactive	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties) / (Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having lower physical inactivity. Hatched counties are not reported (NR).

Place	Sample Size	% Inactive	95% CI	Z-Score	Rank (of 49)
Adams	61	55.8	43.3 - 68.2	1.14	46
Ashland	34	NR	NR	0.58	NR
Barron	97	38.4	28.6 - 48.0	-1.06	3
Bayfield	49	NR	NR	-0.59	NR
Brown	407	45.7	40.8 - 50.5	-0.14	19
Buffalo	34	NR	NR	-0.78	NR
Burnett	31	NR	NR	0.30	NR
Calumet	84	36.3	25.9 - 46.5	-1.32	2
Chippewa	120	46.2	37.3 - 55.1	-0.07	20
Clark	73	50.2	38.7 - 61.6	0.43	33
Columbia	112	47.2	37.9 - 56.4	0.05	25
Crawford	41	NR	NR	1.45	NR
Dane	744	42.5	38.9 - 46.0	-0.54	10
Dodge	174	44.8	37.4 - 52.1	-0.25	16
Door	83	48.5	37.7 - 59.2	0.22	28
Douglas	76	53.3	42.1 - 64.5	0.82	42
Dunn	79	46.3	35.3 - 57.3	-0.06	21
Eau Claire	181	40.7	33.5 - 47.8	-0.77	5
Florence	9	NR	NR	-3.00	NR
Fond du Lac	202	42.6	35.7 - 49.4	-0.53	11
Forest	23	NR	NR	-0.06	NR
Grant	111	51.3	41.9 - 60.5	0.57	40
Green	82	50.8	40.0 - 61.6	0.51	37
Green Lake	44	NR	NR	2.42	NR
Iowa	40	NR	NR	-2.23	NR
Iron	15	NR	NR	-0.01	NR
Jackson	37	NR	NR	0.96	NR
Jefferson	135	56.8	48.4 - 65.1	1.26	49
Juneau	60	56.4	43.8 - 68.9	1.21	48
Kenosha	229	43.8	37.3 - 50.1	-0.38	13
Kewaunee	44	NR	NR	0.24	NR
La Crosse	201	41.7	34.8 - 48.5	-0.64	7
Lafayette	29	NR	NR	-1.25	NR
Langlade	39	NR	NR	-1.33	NR
Lincoln	45	NR	NR	0.76	NR
Manitowoc	198	55.9	48.9 - 62.7	1.15	47
Marathon	286	48.1	42.2 - 53.8	0.17	27
Marinette	102	50.6	40.8 - 60.2	0.48	36
Marquette	34	NR	NR	0.97	NR
Menominee	4	NR	NR	2.22	NR
Milwaukee City	1,860	51.0	48.7 - 53.2	0.53	38
Milwaukee County	2,452	50.3	48.3 - 52.2	0.44	34
Monroe	87	47.0	36.5 - 57.5	0.03	23
Oconto	87	49.0	38.5 - 59.5	0.28	30
Oneida	83	50.0	39.2 - 60.7	0.40	32
Outagamie	313	42.4	36.9 - 47.9	-0.55	9
Ozaukee	156	39.6	31.9 - 47.2	-0.91	4
Pepin	15	NR	NR	1.35	NR
Pierce	76	53.7	42.4 - 64.9	0.87	43
Polk	83	52.8	42.1 - 63.5	0.76	41
Portage	139	33.8	25.9 - 41.7	-1.64	1
Price	31	NR	NR	-1.72	NR
Racine	391	53.7	48.7 - 58.6	0.87	43
Richland	38	NR	NR	-0.16	NR
Rock	286	44.9	39.1 - 50.6	-0.24	17
Rusk	33	NR	NR	-0.99	NR
Sauk	104	44.7	35.1 - 54.3	-0.26	15
Sawyer	34	NR	NR	-0.69	NR
Shawano	89	47.3	36.9 - 57.6	0.06	26
Sheboygan	249	46.9	40.7 - 53.1	0.01	22
St. Croix	117	48.9	39.8 - 57.9	0.27	29
Taylor	45	NR	NR	-0.49	NR
Trempealeau	64	42.2	30.0 - 54.2	-0.58	8
Vernon	56	42.9	29.9 - 55.8	-0.49	12
Vilas	53	41.0	27.7 - 54.2	-0.73	6
Walworth	171	50.3	42.8 - 57.7	0.44	34
Washburn	37	NR	NR	0.51	NR
Washington	202	47.0	40.0 - 53.8	0.03	23
Waukesha	441	44.5	39.8 - 49.0	-0.29	14
Waupaca	124	51.1	42.3 - 59.9	0.54	39
Waushara	77	55.0	43.8 - 66.1	1.03	45
Winnebago	300	44.9	39.3 - 50.5	-0.24	17
Wood	172	49.8	42.3 - 57.3	0.38	31

*NR stands for Not Reported, due to the sample size being less than 50

OBESITY

ABOUT THE MEASURE	
WHAT IT IS:	Obesity is a measure of the percentage of the population that has a body mass index (weight in kilograms divided by height in meters squared) greater than or equal to 30 kg/m ² . This measure is based on answers to the questions, "About how much do you weigh without shoes?" and "About how tall are you without shoes?"
WHERE IT COMES FROM:	Data obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national random digit dial telephone survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. The data are weighted by population.
REASONS FOR RANKING:	Obesity is a strong determinant of various health problems including hypertension, diabetes, coronary heart disease (CHD), stroke, sleep apnea, and a variety of others.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Behaviors (Diet and Exercise)
Weight in Health Determinants:	6%
Years of data used:	1999-2005
Changes from last year:	In 2005, both overweight and obesity were included. For 2006, we only use obesity in the <i>Rankings</i> .

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	15.9-54.8%
Overall in Wisconsin:	22.1%
Comparable HP2010 Target:	15%

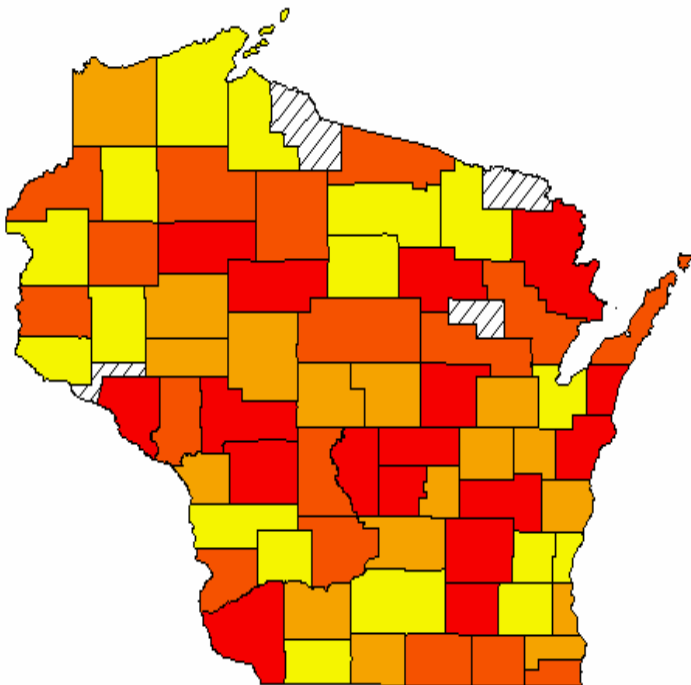


TABLE LEGEND →	
Sample Size	Number of respondents to these questions on the BRFSS
% Obese	See above
% Overweight	% of the population with BMI ≥ 25
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having less people that are obese. Hatched counties are not reported (NR).

Place	Sample Size	% Overweight	% Obese	95% CI	Z-Score	Rank (of 69)
Adams	132	67.4	29.6	21.7 - 37.3	1.05	64
Ashland	83	60.0	20.6	11.8 - 29.2	-0.60	16
Barron	206	59.0	25.1	19.1 - 30.9	0.22	49
Bayfield	98	63.0	16.5	9.12 - 23.8	-1.36	2
Brown	950	58.1	20.3	17.7 - 22.8	-0.66	15
Buffalo	71	61.3	26.2	15.9 - 36.4	0.43	55
Burnett	74	62.6	24.3	14.5 - 34.0	0.08	41
Calumet	196	62.6	22.6	16.7 - 28.4	-0.24	26
Chippewa	275	56.0	21.4	16.5 - 26.2	-0.46	21
Clark	160	61.3	21.3	14.9 - 27.6	-0.47	20
Columbia	239	64.4	20.9	15.7 - 26.0	-0.55	19
Crawford	86	75.1	24.8	15.7 - 33.9	0.17	44
Dane	1,795	53.4	18.7	16.8 - 20.4	-0.95	7
Dodge	383	65.5	29.2	24.6 - 33.7	0.98	62
Door	156	62.5	24.1	17.4 - 30.8	0.04	38
Douglas	171	61.2	22.4	16.1 - 28.6	-0.27	25
Dunn	173	59.5	19.9	13.9 - 25.8	-0.73	12
Eau Claire	376	56.3	21.7	17.5 - 25.8	-0.40	23
Florence	19	NR	NR	NR	0.17	NR
Fond du Lac	445	66.7	25.5	21.4 - 29.5	0.30	52
Forest	52	75.3	18.9	8.28 - 29.5	-0.92	8
Grant	228	68.4	29.4	23.4 - 35.2	1.02	63
Green	187	56.5	22.0	16.0 - 27.9	-0.35	24
Green Lake	102	63.8	23.5	15.2 - 31.6	-0.07	34
Iowa	110	64.4	23.1	15.2 - 30.9	-0.14	31
Iron	41	NR	NR	NR	-0.99	NR
Jackson	84	51.6	26.7	17.1 - 36.1	0.52	56
Jefferson	300	62.3	28.3	23.2 - 33.3	0.81	59
Juneau	116	62.2	24.8	16.9 - 32.6	0.17	44
Kenosha	468	61.8	24.6	20.7 - 28.5	0.13	42
Kewaunee	96	69.4	26.7	17.8 - 35.5	0.52	56
La Crosse	486	56.0	21.4	17.7 - 25.0	-0.46	21
Lafayette	74	51.8	15.9	7.60 - 24.2	-1.47	1
Langlade	88	65.5	38.1	27.9 - 48.2	2.62	68
Lincoln	131	63.7	18.9	12.1 - 25.5	-0.92	8
Manitowoc	420	61.1	26.1	21.9 - 30.3	0.41	53
Marathon	603	61.3	25.2	21.6 - 28.6	0.24	50
Marinette	218	62.1	27.0	21.1 - 32.9	0.57	58
Marquette	69	63.1	30.5	19.5 - 41.3	1.22	67
Menominee	14	NR	NR	NR	3.00	NR
Milwaukee City	1,860	51.0	51.0	48.7 - 53.2	3.00	69
Milwaukee County	5,945	56.8	20.7	19.7 - 21.7	-0.58	18
Monroe	180	73.5	30.0	23.3 - 36.7	1.13	65
Oconto	200	65.6	24.9	18.9 - 30.9	0.19	46
Oneida	169	53.6	17.1	11.4 - 22.7	-1.25	5
Outagamie	699	55.6	22.7	19.6 - 25.8	-0.22	27
Ozaukee	327	57.6	17.2	13.0 - 21.2	-1.23	6
Pepin	41	NR	NR	NR	-0.31	NR
Pierce	154	53.1	16.7	10.7 - 22.5	-1.32	3
Polk	186	59.4	18.9	13.2 - 24.5	-0.92	8
Portage	284	60.5	23.1	18.1 - 27.9	-0.14	31
Price	81	53.5	24.0	14.7 - 33.3	0.02	37
Racine	838	57.7	23.0	20.1 - 25.8	-0.16	30
Richland	82	63.7	20.6	11.8 - 29.3	-0.60	16
Rock	624	60.4	24.2	20.8 - 27.5	0.06	39
Rusk	75	70.3	26.1	16.1 - 36.0	0.41	53
Sauk	250	62.1	25.0	19.6 - 30.3	0.21	47
Sawyer	77	63.0	25.4	15.7 - 35.1	0.28	51
Shawano	188	67.1	23.6	17.5 - 29.6	-0.05	35
Sheboygan	527	62.6	22.8	19.2 - 26.3	-0.20	28
St. Croix	271	59.2	23.6	18.5 - 28.7	-0.05	35
Taylor	93	63.5	30.0	20.6 - 39.3	1.13	65
Trempealeau	137	65.7	24.2	17.0 - 31.4	0.06	39
Vernon	126	50.3	20.0	12.9 - 26.9	-0.71	14
Vilas	125	55.6	24.7	17.1 - 32.2	0.15	43
Walworth	353	58.3	25.0	20.5 - 29.5	0.21	47
Washburn	84	62.6	19.9	11.3 - 28.4	-0.73	12
Washington	417	59.6	18.9	15.1 - 22.6	-0.92	8
Waukesha	1,157	55.7	16.9	14.7 - 19.0	-1.28	4
Waupaca	267	65.7	28.4	22.9 - 33.8	0.83	60
Waushara	165	63.2	29.0	22.0 - 35.8	0.94	61
Winnebago	667	61.7	22.9	19.6 - 26.0	-0.18	29
Wood	383	59.5	23.2	18.9 - 27.3	-0.12	33

*NR stands for Not Reported, due to the sample size being less than 50

LESS THAN 5 A DAY

ABOUT THE MEASURE

WHAT IT IS:	Less Than 5 a Day is a measure of the percentage of the population that consumes less than 5 servings of fruits and/or vegetables per day. This measure is obtained from the answers to questions asking about what types of food are eaten daily.
WHERE IT COMES FROM:	Data obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national random digit dial telephone survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. The data are weighted by population.
REASONS FOR RANKING:	There is strong evidence that a diet with a sufficient level of fruits and vegetables can lower the risk of heart disease and stroke. In addition, many health problems such as birth defects, immune deficiencies, and blindness can be caused by insufficient fruit and vegetable consumption.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Behaviors (Diet and Exercise)
Weight in Health Determinants:	3%
Years of data used:	2000-2005
Changes from last year:	The name of this measure was changed from “Inadequate Fruit and Vegetable Consumption” in 2005.

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	62.4-90.1%
Overall in Wisconsin:	77.9%
Comparable HP2010 Target:	25% (2+ serving of fruits a day) 50% (3+ servings of vegetables a day)

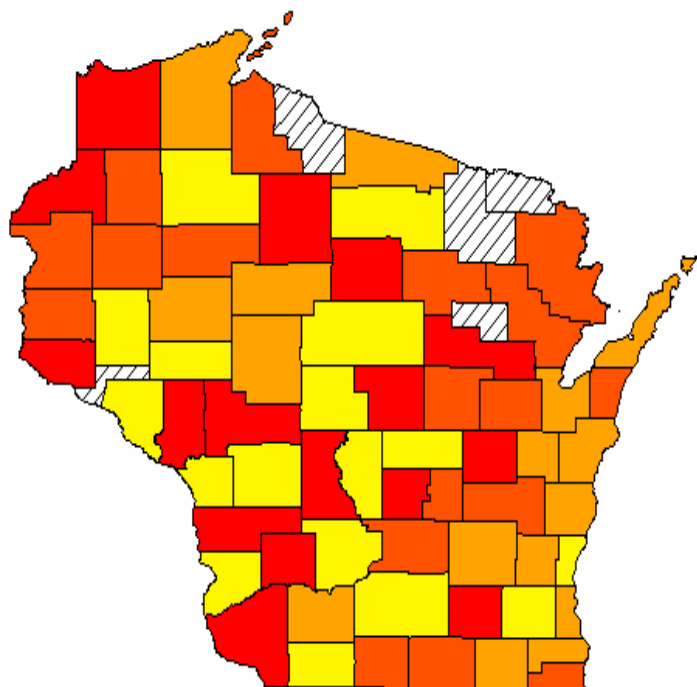


TABLE LEGEND →

Sample Size	Number of respondents to these questions on the BRFSS
% Less than 5 a day	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties) / (Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having more people with nutritious dietary habits. Hatched counties are not reported (NR).

Place	Sample Size	% Less Than 5 a Day	95% CI	Z-Score	Rank (of 68)
Adams	121	73.5	65.6 - 81.3	-1.25	4
Ashland	83	79.4	70.6 - 88.0	0.11	37
Barron	198	80.3	74.7 - 85.8	0.32	42
Bayfield	89	76.8	68.0 - 85.5	-0.49	19
Brown	889	78.2	75.4 - 80.9	-0.16	29
Buffalo	65	62.4	50.6 - 74.1	-3.00	1
Burnett	70	83.2	74.4 - 91.9	0.99	60
Calumet	189	77.5	71.5 - 83.4	-0.32	25
Chippewa	251	76.9	71.6 - 82.1	-0.46	20
Clark	150	77.5	70.7 - 84.1	-0.32	25
Columbia	224	81.5	76.4 - 86.6	0.60	47
Crawford	79	75.6	66.1 - 85.0	-0.76	12
Dane	1,690	75.1	73.0 - 77.1	-0.88	10
Dodge	372	77.4	73.1 - 81.6	-0.35	24
Door	143	78.3	71.5 - 85.0	-0.14	30
Douglas	164	86.0	80.7 - 91.3	1.64	66
Dunn	165	75.6	69.0 - 82.1	-0.76	12
Eau Claire	352	74.3	69.7 - 78.8	-1.06	8
Florence	17	NR	NR	1.29	NR
Fond du Lac	410	79.4	75.4 - 83.2	0.11	37
Forest	49	NR	NR	1.11	NR
Grant	214	83.0	77.9 - 88.0	0.94	59
Green	175	80.8	74.9 - 86.6	0.44	45
Green Lake	92	81.5	73.6 - 89.4	0.60	47
Iowa	98	78.6	70.4 - 86.6	-0.07	33
Iron	36	NR	NR	-1.73	NR
Jackson	77	83.8	75.6 - 92.0	1.13	63
Jefferson	275	82.1	77.5 - 86.6	0.74	53
Juneau	109	82.4	75.2 - 89.5	0.81	55
Kenosha	438	79.3	75.4 - 83.0	0.09	36
Kewaunee	95	81.6	73.8 - 89.4	0.62	49
La Crosse	447	76.5	72.5 - 80.3	-0.55	16
Lafayette	69	73.7	63.2 - 84.0	-1.20	5
Langlade	86	81.9	73.8 - 90.0	0.69	51
Lincoln	123	82.4	75.6 - 89.1	0.81	55
Manitowoc	396	77.1	73.0 - 81.2	-0.42	21
Marathon	578	74.9	71.3 - 78.4	-0.92	9
Marinette	208	81.8	76.5 - 87.0	0.67	50
Marquette	66	86.1	77.7 - 94.4	1.66	67
Menominee	14	NR	NR	-0.28	NR
Milwaukee City	4,154	77.7	76.4 - 78.9	-0.28	27
Milwaukee County	5,528	77.1	75.9 - 78.1	-0.42	21
Monroe	169	72.4	65.6 - 79.1	-1.50	3
Oconto	180	79.9	73.9 - 85.7	0.23	39
Oneida	154	76.4	69.7 - 83.1	-0.58	15
Outagamie	665	79.1	76.0 - 82.1	0.05	35
Ozaukee	298	71.2	66.0 - 76.3	-1.78	2
Pepin	35	NR	NR	-1.78	NR
Pierce	150	85.5	79.8 - 91.1	1.52	65
Polk	174	80.3	74.4 - 86.2	0.32	42
Portage	276	82.5	77.9 - 86.9	0.83	58
Price	70	82.4	73.5 - 91.3	0.81	55
Racine	816	79.0	76.2 - 81.8	0.02	34
Richland	80	90.1	83.5 - 96.6	2.58	68
Rock	582	79.9	76.6 - 83.1	0.23	39
Rusk	68	79.9	70.4 - 89.4	0.23	39
Sauk	223	76.5	70.9 - 82.0	-0.55	16
Sawyer	74	74.1	64.0 - 84.0	-1.11	7
Shawano	184	82.3	76.7 - 87.8	0.78	54
Sheboygan	507	78.5	74.8 - 82.0	-0.09	32
St. Croix	243	80.3	75.3 - 85.3	0.32	42
Taylor	89	76.6	67.8 - 85.4	-0.53	18
Trempealeau	129	84.4	78.1 - 90.7	1.27	64
Vernon	119	83.5	76.8 - 90.2	1.06	62
Vilas	118	77.8	70.3 - 85.3	-0.25	28
Walworth	342	78.4	74.0 - 82.7	-0.12	31
Washburn	79	80.8	72.1 - 89.5	0.44	45
Washington	384	77.2	72.9 - 81.3	-0.39	23
Waukesha	1,070	73.9	71.2 - 76.4	-1.15	6
Waupaca	246	81.9	77.1 - 86.7	0.69	51
Waushara	154	75.2	68.3 - 82.0	-0.85	11
Winnebago	618	83.4	80.5 - 86.3	1.04	61
Wood	354	75.7	71.2 - 80.1	-0.74	14

*NR stands for Not Reported, due to the sample size being less than 50

BINGE DRINKING

ABOUT THE MEASURE

WHAT IT IS:	Binge Drinking is a measure of the percentage of the population that drinks more than five alcoholic beverages in one day, at least once per month. This measure is obtained from answers to the question "Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on an occasion?"
WHERE IT COMES FROM:	Data obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a national random digit dial telephone survey. BRFSS data are representative of the total non-institutionalized Wisconsin population over 18 years of age living in households with a land-line telephone. The data are weighted by population.
REASONS FOR RANKING:	Alcohol abuse can have lasting effects on organs such as the liver, heart, brain, and stomach, and also can cause short-term psychosocial problems, including violence and drunk driving.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Behaviors (Alcohol Use)
Weight in Health Determinants:	10%
Years of data used:	1999-2005
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	6.8-41.4%
Overall in Wisconsin:	24.4%
Comparable HP2010 Target:	6.0%

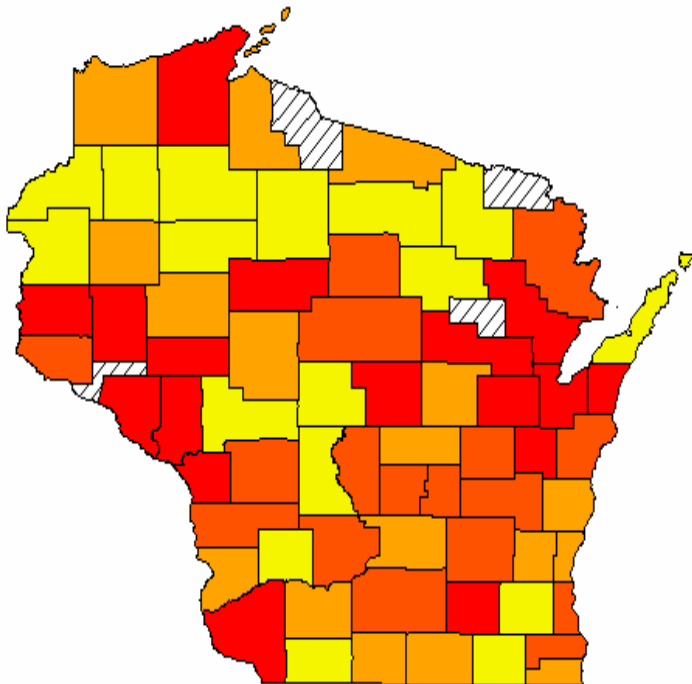


TABLE LEGEND →

Sample Size	Number of respondents to this question on the BRFSS
% Binge Drinking	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$, where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having lower binge drinking rates. Hatched counties are not reported (NR).

Place	Sample Size	% Binge Drinking	95% CI	Z-Score	Rank (of 69)
Adams	134	25.8	18.3 - 33.1	0.37	46
Ashland	88	21.9	13.2 - 30.5	-0.28	25
Barron	213	24.1	18.3 - 29.8	0.09	34
Bayfield	101	27.5	18.8 - 36.2	0.66	55
Brown	981	28.7	25.8 - 31.5	0.86	58
Buffalo	75	29.3	19.0 - 39.6	0.96	60
Burnett	72	15.8	7.40 - 24.2	-1.29	5
Calumet	201	31.9	25.4 - 38.3	1.39	66
Chippewa	283	23.2	18.3 - 28.1	-0.06	29
Clark	163	20.7	14.4 - 26.9	-0.48	20
Columbia	247	21.4	16.3 - 26.5	-0.36	23
Crawford	89	20.5	12.0 - 28.8	-0.51	18
Dane	1,856	24.9	22.8 - 26.8	0.22	42
Dodge	397	24.4	20.2 - 28.6	0.14	37
Door	158	18.9	12.8 - 25.0	-0.78	13
Douglas	181	23.7	17.5 - 29.9	0.02	30
Dunn	178	32.1	25.2 - 38.9	1.43	67
Eau Claire	385	31.4	26.7 - 36.0	1.31	65
Florence	19	NR	NR	-2.28	NR
Fond du Lac	457	24.5	20.5 - 28.4	0.16	39
Forest	52	18.6	8.01 - 29.1	-0.83	10
Grant	233	28.2	22.4 - 34.0	0.77	57
Green	193	20.5	14.8 - 26.2	-0.51	18
Green Lake	100	26.6	17.9 - 35.2	0.51	49
Iowa	114	23.9	16.1 - 31.7	0.06	32
Iron	42	NR	NR	-1.38	NR
Jackson	84	18.0	9.76 - 26.1	-0.93	9
Jefferson	307	27.3	22.3 - 32.3	0.62	53
Juneau	121	19.0	11.9 - 25.9	-0.76	14
Kenosha	483	22.0	18.2 - 25.6	-0.26	26
Kewaunee	103	27.6	18.9 - 36.2	0.67	56
La Crosse	502	27.4	23.5 - 31.3	0.64	54
Lafayette	75	16.0	7.71 - 24.3	-1.26	6
Langlade	95	17.3	9.73 - 24.9	-1.04	8
Lincoln	136	27.1	19.6 - 34.6	0.59	51
Manitowoc	436	27.1	22.9 - 31.3	0.59	51
Marathon	621	25.3	21.9 - 28.7	0.29	44
Marinette	230	25.0	19.4 - 30.6	0.24	43
Marquette	71	24.3	14.3 - 34.2	0.12	35
Menominee	14	NR	NR	0.96	NR
Milwaukee City	4,598	25.3	24.0 - 26.5	0.29	44
Milwaukee County	6,125	24.4	23.3 - 25.4	0.14	37
Monroe	187	26.4	20.0 - 32.6	0.47	48
Oconto	202	29.1	22.8 - 35.3	0.93	59
Oneida	169	20.0	14.0 - 26.0	-0.59	17
Outagamie	720	32.1	28.7 - 35.5	1.43	67
Ozaukee	335	21.8	17.4 - 26.2	-0.29	24
Pepin	41	NR	NR	2.98	NR
Pierce	159	25.8	18.9 - 32.5	0.37	46
Polk	195	17.0	11.7 - 22.2	-1.09	7
Portage	299	30.7	25.4 - 35.9	1.19	63
Price	82	14.5	6.90 - 22.1	-1.51	4
Racine	862	24.8	21.9 - 27.6	0.21	41
Richland	88	19.7	11.4 - 28.0	-0.64	15
Rock	634	23.8	20.4 - 27.1	0.04	31
Rusk	77	6.8	1.18 - 12.4	-2.79	1
Sauk	261	24.3	19.1 - 29.5	0.12	35
Sawyer	78	8.1	2.03 - 14.1	-2.58	2
Shawano	198	29.5	23.1 - 35.8	0.99	61
Sheboygan	552	23.0	19.5 - 26.5	-0.09	27
St. Croix	276	33.9	28.2 - 39.4	1.73	69
Taylor	92	29.6	20.2 - 38.9	1.01	62
Trempealeau	142	31.0	23.4 - 38.6	1.24	64
Vernon	130	24.7	17.2 - 32.0	0.19	40
Vilas	123	21.1	13.9 - 28.3	-0.41	22
Walworth	366	18.8	14.8 - 22.8	-0.79	11
Washburn	86	13.8	6.52 - 21.1	-1.63	3
Washington	425	21.0	17.1 - 24.9	-0.43	21
Waukesha	1,193	18.8	16.6 - 21.0	-0.79	11
Waupaca	274	23.9	18.8 - 29.0	0.06	32
Waushara	166	23.1	16.6 - 29.5	-0.08	28
Winnebago	689	26.8	23.5 - 30.1	0.54	50
Wood	397	19.8	15.8 - 23.6	-0.63	16

*NR stands for Not Reported, due to the sample size being less than 50

MOTOR VEHICLE CRASH DEATHS

ABOUT THE MEASURE	
WHAT IT IS:	Motor Vehicle Crash Deaths is a measure of the average annual mortality rate per 100,000 in the population due to motor vehicle crashes.
WHERE IT COMES FROM:	These data are obtained from the Wisconsin Interactive Statistics on Health (WISH) database from the Department of Health and Family Services, Division of Public Health, Bureau of Health Information and Policy. The death counts are queried from the Injury-Related Mortality Module, using all motor vehicle traffic crash deaths as external causes. Milwaukee City data are obtained from the CODES project. With the exception of the Milwaukee City rate, all other rates are age-adjusted.
REASONS FOR RANKING:	Because alcohol use is a factor in many motor vehicle crash deaths, this measure is a proxy for alcohol use while driving, and may also reflect the safety of the traffic system.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Health Behaviors (Alcohol Use)
Weight in Health Determinants:	1.5%
Years of data used:	2001-2004
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	7.7-75.0 deaths per 100,000
Overall in Wisconsin:	14.3 deaths per 100,000
Comparable HP2010 Target:	9.2 deaths per 100,000

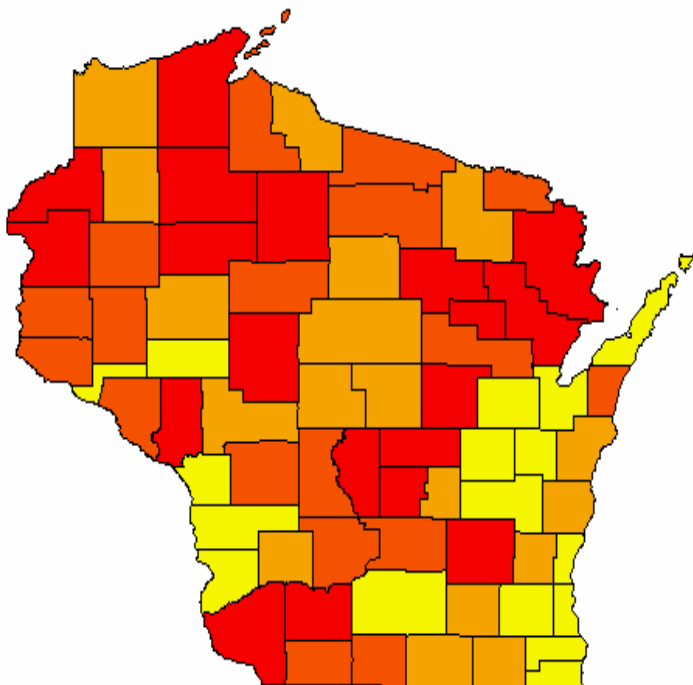


TABLE LEGEND →	
Number of Deaths	Deaths due to motor vehicle crashes
Aggregate Population	Local population from 2001-2004
Death Rate	Age-adjusted number of deaths per 100,000
95% CI	95% confidence interval, reported by WISH
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having fewer deaths due to motor vehicle crashes.

Place	Number of Deaths	Aggregate Population	Deaths per 100,000	95% CI	Z-Score	Rank (of 73)
Adams	29	81,946	37.6	24.3 - 50.9	1.65	69
Ashland	13	67,523	19.2	8.7 - 29.6	-0.10	41
Barron	42	183,527	22.4	15.5 - 29.2	0.20	53
Bayfield	14	61,186	24.3	11.9 - 36.7	0.38	58
Brown	111	936,895	11.7	9.47 - 13.9	-0.82	10
Buffalo	10	55,886	17.9	6.8 - 29.0	-0.23	37
Burnett	26	64,909	42.5	26.6 - 58.4	2.11	71
Calumet	22	173,090	13.3	7.9 - 18.7	-0.67	17
Chippewa	34	230,824	14.6	9.7 - 19.5	-0.54	26
Clark	42	136,398	30.8	21.4 - 40.1	1.00	64
Columbia	47	216,013	21.8	15.6 - 28.1	0.15	51
Crawford	8	69,311	11.4	3.5 - 19.4	-0.84	9
Dane	178	1,780,430	9.6	8.1 - 11.0	-1.02	5
Dodge	88	350,189	24.2	19.0 - 29.3	0.37	57
Door	15	114,849	12.3	5.9 - 18.7	-0.76	13
Douglas	26	175,089	14.4	8.8 - 20.0	-0.56	24
Dunn	36	164,866	21.0	14.0 - 28.0	0.07	49
Eau Claire	42	380,439	10.6	7.4 - 14.0	-0.92	8
Florence	5	20,697	22.1	1.9 - 42.4	0.18	52
Fond du Lac	48	395,067	12.1	8.6 - 15.5	-0.78	12
Forest	5	40,233	13.9	2.4 - 25.4	-0.61	20
Grant	52	200,634	23.3	16.6 - 30.0	0.29	55
Green	24	138,270	18.1	10.9 - 25.1	-0.21	39
Green Lake	11	77,334	14.0	5.7 - 22.3	-0.60	22
Iowa	31	93,380	33.5	21.7 - 45.2	1.25	68
Iron	5	27,475	17.6	1.9 - 33.3	-0.26	36
Jackson	11	77,977	13.9	5.7 - 22.2	-0.60	21
Jefferson	50	313,553	15.4	11.0 - 19.8	-0.46	29
Juneau	21	100,532	21.1	12.1 - 30.0	0.07	50
Kenosha	78	618,569	12.5	9.7 - 15.3	-0.74	14
Kewaunee	17	82,560	19.5	10.0 - 29.0	-0.08	44
La Crosse	44	434,959	9.4	6.5 - 12.3	-1.04	4
Lafayette	13	65,173	20.0	9.1 - 30.8	-0.03	46
Langlade	24	84,212	25.0	14.3 - 35.7	0.45	59
Lincoln	21	120,476	16.4	9.2 - 23.6	-0.37	34
Manitowoc	48	333,728	14.2	10.1 - 18.3	-0.58	23
Marathon	81	513,504	15.7	12.2 - 19.1	-0.44	30
Marinette	47	175,075	27.9	20.0 - 35.7	0.72	60
Marquette	23	59,512	41.0	24.7 - 57.3	1.97	70
Menominee	13	18,410	75.0	35.4 - 14.6	3.00	73
Milwaukee City	240	2,387,896	10.1	-	-0.97	6
Milwaukee County	309	3,750,345	8.1	7.2 - 9.1	-1.16	2
Monroe	29	168,272	18.0	11.6 - 24.5	-0.22	38
Oconto	47	148,475	32.2	23.1 - 41.4	1.14	65
Oneida	30	149,568	20.2	12.9 - 27.4	-0.01	47
Outagamie	81	667,879	12.6	9.9 - 15.3	-0.73	15
Ozaukee	26	338,005	7.7	4.8 - 10.7	-1.20	1
Pepin	4	29,768	13.4	-	-0.65	18
Pierce	34	152,001	22.5	14.9 - 30.1	0.21	54
Polk	55	172,861	32.6	24.1 - 41.2	1.17	67
Portage	41	272,772	14.5	10.0 - 19.0	-0.55	25
Price	17	63,144	28.7	15.4 - 41.9	0.80	62
Racine	98	765,305	13.0	10.4 - 15.6	-0.69	16
Richland	12	72,614	16.1	6.84 - 25.3	-0.40	32
Rock	105	619,216	17.0	13.7 - 20.3	-0.31	35
Rusk	15	61,630	24.1	11.8 - 36.4	0.37	56
Sauk	44	229,209	19.3	13.6 - 25.0	-0.09	42
Sawyer	25	66,978	42.9	27.2 - 58.6	2.15	72
Shawano	33	165,736	19.9	13.1 - 26.7	-0.03	45
Sheboygan	74	458,496	15.8	12.1 - 19.4	-0.43	31
St. Croix	52	280,171	19.1	14.0 - 24.3	-0.11	40
Taylor	16	79,038	19.4	9.7 - 29.1	-0.08	43
Trempealeau	30	109,977	28.6	18.5 - 38.6	0.79	61
Vernon	14	114,650	11.9	5.6 - 18.2	-0.80	11
Vilas	17	87,213	20.7	11.1 - 30.3	0.04	48
Walworth	60	381,562	15.1	11.2 - 19.0	-0.49	28
Washburn	10	66,123	16.3	6.6 - 26.0	-0.38	33
Washington	64	487,661	13.5	10.2 - 16.7	-0.65	19
Waukesha	126	1,483,810	8.7	7.2 - 10.2	-1.11	3
Waupaca	65	210,873	30.4	22.9 - 37.9	0.96	63
Waushara	30	96,716	32.2	20.9 - 43.6	1.14	65
Winnebago	71	639,148	10.4	7.9 - 12.9	-0.94	7
Wood	46	303,655	14.9	10.5 - 19.3	-0.51	27

TEEN BIRTH RATE

ABOUT THE MEASURE

WHAT IT IS:	Teen Birth Rate is a measure of the average annual birth rate per 1,000 females aged 15-19.
WHERE IT COMES FROM:	These data are obtained from the Wisconsin Interactive Statistics on Health (WISH) database Teen Births Query, from the Department of Health and Family Services, Division of Public Health, Bureau of Health Information and Policy.
REASONS FOR RANKING:	Pregnant teens and teen mothers are at a higher risk of acquiring STDs, repeat pregnancy, and lower likelihood of completing school. Children born to teen mothers are more likely to be born with low birth weight and are at a higher risk of infanticide or child abuse.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Behaviors (High Risk Sexual Behavior)
Weight in Health Determinants:	1%
Years of data used:	2001-2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	9.4-98.4 births per 1,000 teens
Overall in Wisconsin:	32.3 births per 1,000 teens
Comparable HP2010 Target:	None

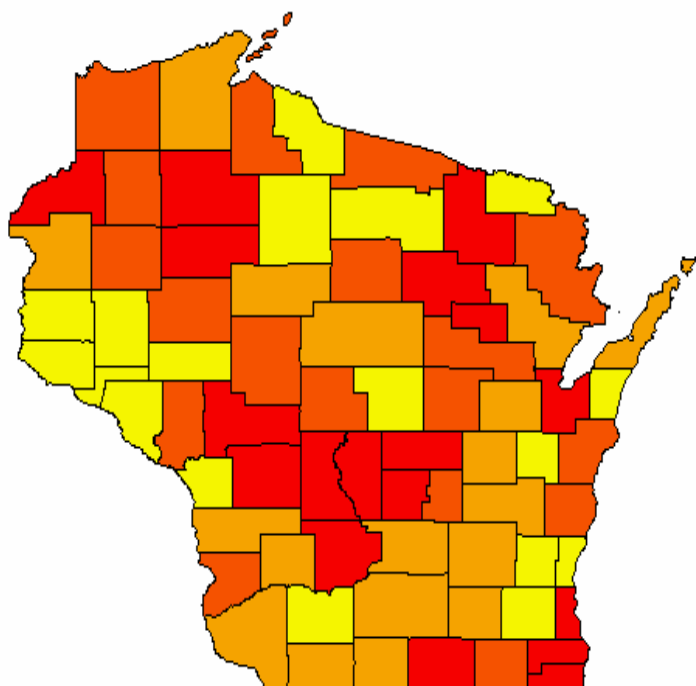


TABLE LEGEND →

Females Age 15-19	Number of females aged 15-19 from 2001 to 2004
Teen Births per 1,000	See above
95% CI	95% confidence interval, reported by WISH
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having lower teen birth rates.

Place	Females Age 15-19	Teen Births per 1,000	95% CI	Z-Score	Rank (of 73)
Adams	2,025	46.4	37.2 - 55.6	1.36	70
Ashland	2,735	28.9	22.6 - 35.2	0.02	44
Barron	6,729	30.6	26.5 - 34.7	0.16	49
Bayfield	1,983	22.7	16.1 - 29.3	-0.45	25
Brown	33,982	34.0	32.0 - 36.0	0.42	56
Buffalo	1,935	19.1	13.0 - 25.2	-0.72	12
Burnett	2,061	38.3	30.0 - 46.6	0.74	59
Calumet	6,428	18.1	14.7 - 21.3	-0.80	9
Chippewa	8,367	27.9	24.3 - 31.4	-0.05	40
Clark	5,502	27.4	23.1 - 31.8	-0.09	38
Columbia	7,263	23.0	19.5 - 26.4	-0.42	27
Crawford	2,472	30.7	23.9 - 37.6	0.17	50
Dane	65,873	20.4	19.2 - 21.5	-0.62	19
Dodge	11,753	26.5	23.5 - 29.4	-0.16	36
Door	3,406	22.0	17.0 - 27.0	-0.50	22
Douglas	6,209	31.4	27.0 - 35.7	0.22	52
Dunn	8,401	17.9	15.0 - 20.7	-0.82	8
Eau Claire	18,674	18.2	16.2 - 20.1	-0.79	10
Florence	585	12.0	3.15 - 20.8	-1.26	5
Fond du Lac	14,464	25.2	22.6 - 27.8	-0.25	35
Forest	1,456	44.6	34.0 - 55.3	1.22	66
Grant	8,803	21.1	18.1 - 24.1	-0.57	20
Green	4,690	24.7	20.2 - 29.2	-0.29	32
Green Lake	2,553	27.8	21.4 - 34.2	-0.06	39
Iowa	3,333	20.1	15.3 - 24.9	-0.64	17
Iron	849	9.4	2.92 - 15.9	-1.46	1
Jackson	2,464	39.8	32.0 - 47.5	0.85	63
Jefferson	12,613	22.7	20.0 - 25.3	-0.45	24
Juneau	3,339	38.9	32.3 - 45.5	0.79	60
Kenosha	22,399	39.3	36.7 - 41.9	0.82	62
Kewaunee	3,013	19.6	14.6 - 24.5	-0.68	14
La Crosse	20,126	20.0	18.0 - 22.0	-0.65	16
Lafayette	2,591	23.2	17.3 - 29.0	-0.41	28
Langlade	2,857	39.2	32.0 - 46.3	0.81	61
Lincoln	3,915	29.9	24.5 - 35.2	0.10	48
Manitowoc	11,996	28.8	25.7 - 31.8	0.01	43
Marathon	18,933	24.7	22.4 - 26.9	-0.30	31
Marinette	6,347	28.2	24.1 - 32.3	-0.03	41
Marquette	1,995	43.1	34.2 - 52.0	1.11	65
Menominee	854	98.4	78.3 - 18.3	3.00	73
Milwaukee City	98,620	81.0	-	3.00	72
Milwaukee County	133,659	64.7	63.3 - 66.0	2.75	71
Monroe	6,313	37.2	32.5 - 41.9	0.66	58
Oconto	5,286	25.2	20.9 - 29.4	-0.26	33
Oneida	4,645	20.2	16.1 - 24.3	-0.63	18
Outagamie	24,458	24.0	22.1 - 26.0	-0.34	30
Ozaukee	12,030	9.5	7.7 - 11.2	-1.45	2
Pepin	1,179	19.5	11.6 - 27.4	-0.69	13
Pierce	8,080	10.3	8.07 - 12.5	-1.39	3
Polk	6,143	25.2	21.3 - 29.2	-0.25	34
Portage	12,940	19.9	17.4 - 22.3	-0.66	15
Price	2,063	18.4	12.6 - 24.2	-0.77	11
Racine	26,552	46.1	43.5 - 48.6	1.34	69
Richland	2,760	22.8	17.2 - 28.4	-0.44	26
Rock	21,697	44.9	42.1 - 47.7	1.25	68
Rusk	2,192	32.9	25.3 - 40.3	0.33	55
Sauk	7,762	35.3	31.1 - 39.4	0.51	57
Sawyer	2,253	44.8	36.2 - 53.4	1.24	67
Shawano	5,685	28.5	24.1 - 32.8	0.00	42
Sheboygan	15,677	31.4	28.6 - 34.1	0.21	51
St. Croix	9,896	16.3	13.7 - 18.8	-0.94	7
Taylor	3,018	23.5	18.1 - 28.9	-0.38	29
Trempealeau	3,685	29.6	24.1 - 35.1	0.08	47
Vernon	4,321	21.3	16.9 - 25.6	-0.55	21
Vilas	2,442	29.1	22.4 - 35.7	0.04	45
Walworth	13,549	31.6	28.6 - 34.5	0.23	53
Washburn	2,111	32.7	25.1 - 40.3	0.31	54
Washington	16,152	15.7	13.8 - 17.6	-0.98	6
Waukesha	50,683	11.6	10.6 - 12.5	-1.29	4
Waupaca	7,234	29.3	25.4 - 33.2	0.06	46
Waushara	3,123	42.3	35.2 - 49.3	1.04	64
Winnebago	24,620	22.1	20.2 - 23.9	-0.50	23
Wood	10,749	26.6	23.5 - 29.7	-0.15	37

SEXUALLY TRANSMITTED DISEASE

ABOUT THE MEASURE

WHAT IT IS:	Sexually Transmitted Disease is a measure of the average annual number of reported cases of chlamydia, gonorrhea, syphilis, and genital herpes as the crude rate per 100,000 in the population. The reported rate is not age-adjusted.
WHERE IT COMES FROM:	These data are obtained from the Communicable Disease Resources section focusing on Sexually Transmitted Disease (STD) in the Wisconsin Department of Health and Family Services (DHFS).
REASONS FOR RANKING:	If left untreated, many STDs can develop into more serious health problems. In addition, STDs are generally quite contagious, and the prevalence of STDs is a proxy for high risk sexual behavior.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Behaviors (High Risk Sexual Behavior)
Weight in Health Determinants:	1%
Years of data used:	2001-2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	39-2,238 cases per 100,000
Overall in Wisconsin:	483 cases per 100,000
Comparable HP2010 Target:	Only available for specific STDs.

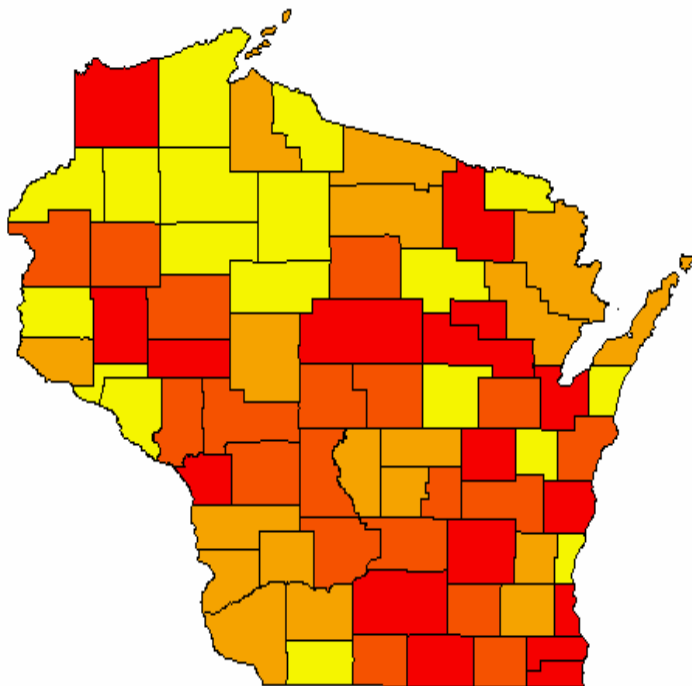


TABLE LEGEND →

Aggregate Population Sum of the population from 2001 to 2004 by year

Cases per 100,000 See above

Z-Score (Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having lower STD rates.

Place	Aggregate Population	Cases per 100,000	Z-Score	Rank (of 73)
Adams	82,132	115.7	-0.48	19
Ashland	67,584	161.3	-0.31	34
Barron	183,724	217.7	-0.09	49
Bayfield	61,397	53.7	-0.73	5
Brown	939,946	420.8	0.71	63
Buffalo	55,685	93.4	-0.57	11
Burnett	64,920	92.4	-0.58	10
Calumet	173,848	75.9	-0.64	9
Chippewa	231,198	170.8	-0.27	38
Clark	136,272	121.1	-0.46	21
Columbia	216,227	189.6	-0.20	43
Crawford	69,120	167.8	-0.28	36
Dane	1,786,791	430.3	0.74	64
Dodge	350,439	500.8	1.02	68
Door	114,766	165.6	-0.29	35
Douglas	174,985	257.7	0.07	56
Dunn	165,044	262.4	0.09	57
Eau Claire	381,250	406.3	0.65	61
Florence	20,595	48.6	-0.75	3
Fond du Lac	395,368	223.1	-0.07	52
Forest	40,415	324.1	0.33	60
Grant	200,228	156.3	-0.33	32
Green	138,594	170.3	-0.27	37
Green Lake	76,989	202.6	-0.14	47
Iowa	93,472	147.6	-0.36	29
Iron	27,527	65.4	-0.68	6
Jackson	78,171	191.9	-0.19	44
Jefferson	309,953	183.6	-0.22	41
Juneau	100,818	255.9	0.06	54
Kenosha	620,786	446.7	0.81	65
Kewaunee	82,559	100.5	-0.54	13
La Crosse	435,530	408.2	0.66	62
Lafayette	65,139	93.6	-0.57	12
Langlade	84,077	72.6	-0.65	7
Lincoln	120,359	221.8	-0.07	51
Manitowoc	333,947	180.9	-0.23	40
Marathon	513,922	272.6	0.13	58
Marinette	175,303	150.6	-0.35	31
Marquette	59,575	137.6	-0.40	24
Menominee	18,464	1,554.4	3.00	72
Milwaukee City	2,387,896	2,237.7	3.00	71
Milwaukee County	3,752,591	1,491.8	3.00	73
Monroe	168,581	253.9	0.05	53
Oconto	148,889	159.9	-0.31	33
Oneida	149,577	118.3	-0.48	20
Outagamie	669,963	256.0	0.06	54
Ozaukee	338,739	101.6	-0.54	14
Pepin	29,879	50.2	-0.74	4
Pierce	152,429	129.2	-0.43	22
Polk	173,231	173.8	-0.26	39
Portage	272,988	220.2	-0.08	50
Price	63,008	107.9	-0.52	17
Racine	766,326	614.8	1.46	69
Richland	72,428	133.9	-0.41	23
Rock	619,601	474.2	0.91	67
Rusk	61,606	107.1	-0.52	16
Sauk	282,466	192.2	-0.19	44
Sawyer	229,051	48.0	-0.75	2
Shawano	67,166	467.5	0.89	66
Sheboygan	165,783	678.0	1.71	70
St. Croix	457,250	73.3	-0.65	7
Taylor	78,997	39.2	-0.79	1
Trempealeau	110,093	216.2	-0.09	48
Vernon	114,696	143.9	-0.38	27
Vilas	87,212	141.0	-0.39	26
Walworth	385,901	191.8	-0.19	44
Washburn	66,347	105.5	-0.52	15
Washington	488,998	144.8	-0.37	28
Waukesha	1,488,088	137.9	-0.40	24
Waupaca	211,174	112.2	-0.50	18
Waushara	97,228	150.2	-0.35	30
Winnebago	640,140	282.1	0.16	59
Wood	303,248	183.7	-0.22	41

VIOLENT CRIME

ABOUT THE MEASURE

WHAT IT IS:	Violent Crime is a measure of the annual number of reported violent crimes per 100,000 adults in the population, averaged from 2001-2004. Crimes that are defined as violent are offenses that involved face-to-face confrontation between victim and perpetrator, including murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault.
WHERE IT COMES FROM:	These data are obtained from the Crime and Arrests Reports, published by the Wisconsin Office of Justice Assistance (OJA).
REASONS FOR RANKING:	Violent crime rates are closely associated with mortality, and have a potential number of other effects on psychological and social health.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Health Behaviors (Violence)
Weight in Health Determinants:	1.5%
Years of data used:	2001-2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	31-1265 crimes per 100,000 adults
Overall in Wisconsin:	293 crimes per 100,000 adults
Comparable HP2010 Target:	None

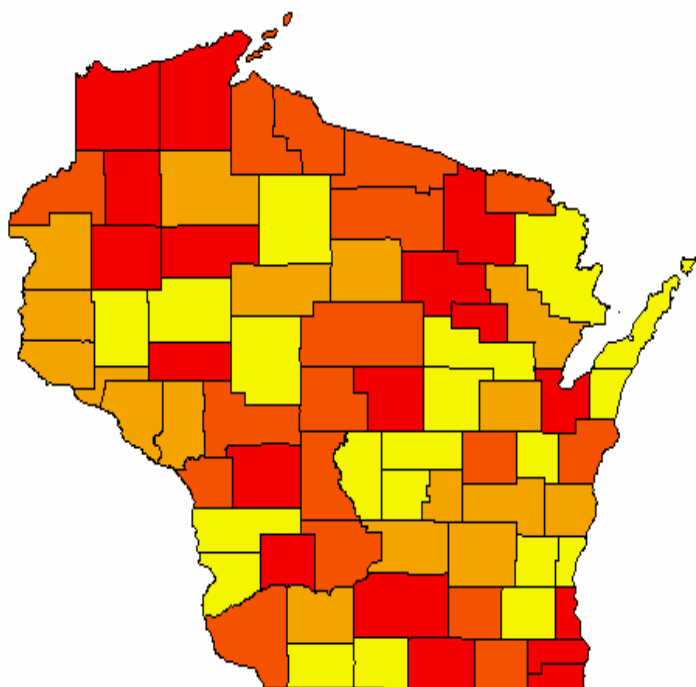


TABLE LEGEND



Crimes per 100,000	See above
Adult Population in 2004	The adult population over 18 years of age in 2004.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having lower violent crime rates.

Place	Adult Population In 2004	Crimes per 100,000 adults	Z-Score	Rank (of 73)
Adams	15,423	31	-0.67	1
Ashland	12,642	128	-0.06	46
Barron	34,672	186	0.31	61
Bayfield	11,603	235	0.62	69
Brown	177,276	186	0.31	61
Buffalo	10,455	95	-0.27	29
Burnett	12,217	142	0.03	54
Calumet	23,599	45	-0.59	4
Chippewa	42,823	72	-0.41	18
Clark	26,401	48	-0.57	7
Columbia	40,757	79	-0.37	23
Crawford	13,038	38	-0.63	2
Dane	335,889	199	0.39	65
Dodge	61,901	75	-0.40	22
Door	21,690	45	-0.59	4
Douglas	32,562	147	0.06	55
Dunn	31,094	70	-0.43	15
Eau Claire	73,158	163	0.16	59
Florence	3,884	109	-0.18	38
Fond du Lac	71,732	81	-0.36	24
Forest	7,598	224	0.55	68
Grant	37,831	137	0.00	49
Green	26,093	52	-0.54	8
Green Lake	14,474	99	-0.24	32
Iowa	17,611	105	-0.21	34
Iron	5,176	137	0.00	49
Jackson	14,659	117	-0.13	43
Jefferson	62,617	127	-0.07	45
Juneau	18,975	141	0.02	52
Kenosha	116,281	171	0.21	60
Kewaunee	15,541	42	-0.60	3
La Crosse	81,664	141	0.02	52
Lafayette	11,982	63	-0.47	12
Langlade	15,814	188	0.32	63
Lincoln	22,552	95	-0.27	29
Manitowoc	63,015	114	-0.15	41
Marathon	95,668	133	-0.03	47
Marinette	32,932	62	-0.48	11
Marquette	11,213	71	-0.42	17
Menominee	3,439	1265	3.00	73
Milwaukee City	699,901	759	3.00	72
Milwaukee County	442,470	626	3.00	71
Monroe	31,756	155	0.11	58
Oconto	28,071	108	-0.19	36
Oneida	28,106	116	-0.14	42
Outagamie	133,714	107	-0.19	35
Ozaukee	63,364	46	-0.58	6
Pepin	5,638	90	-0.30	27
Pierce	30,548	101	-0.23	33
Polk	32,683	92	-0.29	28
Portage	51,357	151	0.09	56
Price	11,886	56	-0.52	9
Racine	142,930	220	0.52	67
Richland	13,483	197	0.38	64
Rock	115,883	213	0.48	66
Rusk	11,556	334	1.25	70
Sauk	52,249	112	-0.16	40
Sawyer	43,574	98	-0.25	31
Shawano	12,685	70	-0.43	15
Sheboygan	31,156	108	-0.19	36
St. Croix	86,008	74	-0.40	21
Taylor	14,805	87	-0.32	25
Trempealeau	20,685	87	-0.32	25
Vernon	21,551	64	-0.47	13
Vilas	16,365	135	-0.02	48
Walworth	74,373	137	0.00	49
Washburn	12,488	151	0.09	56
Washington	92,075	64	-0.47	13
Waukesha	278,161	72	-0.41	18
Waupaca	40,732	72	-0.41	18
Waushara	18,418	60	-0.49	10
Winnebago	120,743	122	-0.10	44
Wood	57,156	111	-0.17	39

HIGH SCHOOL NONCOMPLETION

ABOUT THE MEASURE	
WHAT IT IS:	High School Noncompletion is a measure of the proportion of a cohort of students who did not graduate high school with a regular diploma. It is calculated as the number of students who do not receive a regular diploma divided by the total number of students expected to complete high school. The total number of students expected to complete high school includes all of the cohort dropouts, students who reached the maximum age without completing high school, and those who completed high school with a regular diploma or other credential.
WHERE IT COMES FROM:	These data are obtained from the Wisconsin Department of Public Instruction (DPI), using the Wisconsin Successful School Guide (WINSS) to obtain the number of high school noncompleters.
REASONS FOR RANKING:	There is evidence that people who graduate from high school have longer and healthier lives than those who do not attain a high school degree, and attain substantially higher incomes, affecting their socioeconomic status, which is strongly correlated with health over time.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Socioeconomic Factors (Education)
Weight in Health Determinants:	6.67%
Years of data used:	2003-2004
Changes from last year:	This measure replaced the High School Graduation Rate.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	0.7-37.5%
Overall in Wisconsin:	8.8%
Comparable HP2010 Target:	10%

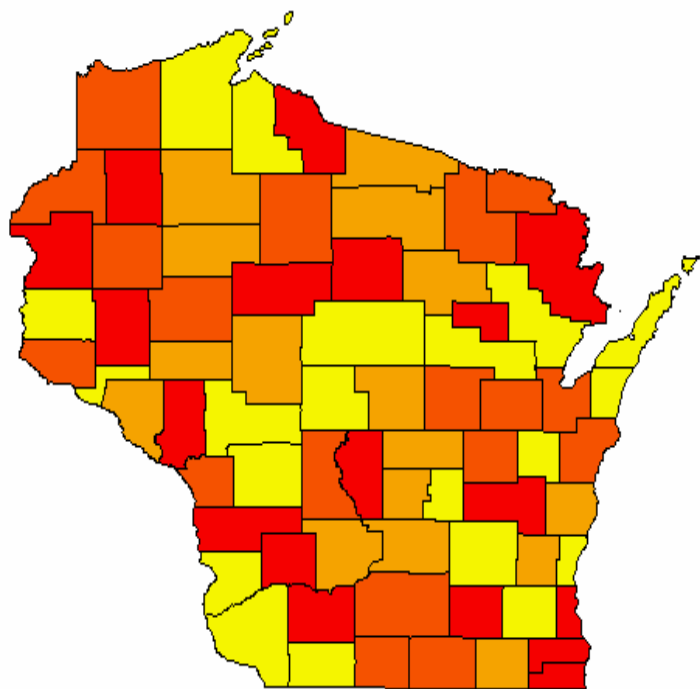


TABLE LEGEND →	
% Noncompletion	See above
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having lower high school noncompleters.

Place	% Noncompletion	Z-Score	Rank (of 73)
Adams	14.4	0.56	57
Ashland	2.4	-0.85	8
Barron	7.4	-0.27	40
Bayfield	3.5	-0.72	17
Brown	7.7	-0.23	42
Buffalo	4.3	-0.63	22
Burnett	10.5	0.10	47
Calumet	1.6	-0.95	4
Chippewa	11.9	0.26	53
Clark	5.4	-0.50	27
Columbia	4.8	-0.57	25
Crawford	3.3	-0.75	15
Dane	12.5	0.33	54
Dodge	2.7	-0.82	13
Door	2.0	-0.90	6
Douglas	10.3	0.08	46
Dunn	16.2	0.77	61
Eau Claire	5.0	-0.55	26
Florence	7.0	-0.31	37
Fond du Lac	14.6	0.58	58
Forest	11.6	0.23	51
Grant	3.3	-0.75	15
Green	11.1	0.17	48
Green Lake	2.6	-0.83	11
Iowa	14.8	0.60	60
Iron	23.8	1.66	66
Jackson	3.9	-0.68	18
Jefferson	14.3	0.55	56
Juneau	11.1	0.17	48
Kenosha	24.1	1.70	67
Kewaunee	2.0	-0.90	6
La Crosse	7.5	-0.25	41
Lafayette	0.7	-1.05	1
Langlade	6.9	-0.32	36
Lincoln	35.3	3.00	72
Manitowoc	7.0	-0.31	37
Marathon	2.5	-0.84	10
Marinette	14.1	0.52	55
Marquette	5.5	-0.49	29
Menominee	34.0	2.86	69
Milwaukee City	34.4	2.91	71
Milwaukee County	18.9	1.09	65
Monroe	1.7	-0.94	5
Oconto	3.9	-0.68	18
Oneida	4.5	-0.61	23
Outagamie	8.1	-0.18	44
Ozaukee	2.6	-0.83	11
Pepin	1.4	-0.97	2
Pierce	7.3	-0.28	39
Polk	18.0	0.98	64
Portage	5.5	-0.49	29
Price	8.6	-0.12	45
Racine	25.1	1.82	68
Richland	17.1	0.88	62
Rock	11.1	0.17	48
Rusk	6.4	-0.38	34
Sauk	5.4	-0.50	27
Sawyer	5.6	-0.48	32
Shawano	3.9	-0.68	18
Sheboygan	6.8	-0.34	35
St. Croix	2.4	-0.85	8
Taylor	17.3	0.90	63
Trempealeau	37.5	3.00	73
Vernon	14.6	0.58	58
Vilas	5.5	-0.49	29
Walworth	4.1	-0.65	21
Washburn	34.3	2.90	70
Washington	5.7	-0.47	33
Waukesha	1.4	-0.97	2
Waupaca	11.8	0.25	52
Waushara	4.6	-0.59	24
Winnebago	7.8	-0.22	43
Wood	2.7	-0.82	13

NO HIGH SCHOOL EDUCATION

ABOUT THE MEASURE	
WHAT IT IS:	No High School Education is a measure of the percentage of the population over age 25 that has not graduated from high school.
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census. Specifically, these data are obtained from Summary File 3 (SF 3), Table P37: Sex by educational attainment for the population 25 years and over.
REASONS FOR RANKING:	While the mechanisms for the effect of education on health are as of yet undetermined, there is an overwhelming amount of evidence that correlate better health outcomes with higher education.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Socioeconomic Factors (Education)
Weight in Health Determinants:	6.67%
Years of data used:	2000
Changes from last year:	This measure was previously reported as the percentage of the population over age 25 that has graduated from high school (Level of Education).

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	7.8-25.2%
Overall in Wisconsin:	14.9%
Comparable HP2010 Target:	None

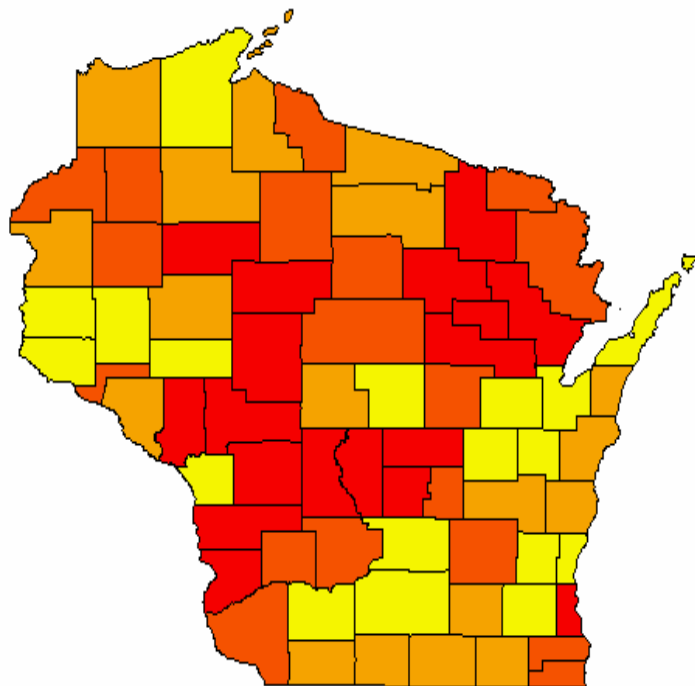


TABLE LEGEND →	
% With No HS Degree	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$, where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having a higher proportion of high school graduates.

Place	% With No HS Degree	95% CI	Z-Score	Rank (of 73)
Adams	23.3	21.7 - 24.9	1.95	71
Ashland	15.9	14.3 - 17.4	-0.07	32
Barron	17.6	16.6 - 18.6	0.40	49
Bayfield	13.1	11.6 - 14.4	-0.83	13
Brown	13.7	13.2 - 14.0	-0.67	16
Buffalo	15.9	14.2 - 17.5	-0.07	32
Burnett	17.2	15.6 - 18.8	0.29	45
Calumet	12.7	11.7 - 13.5	-0.94	12
Chippewa	15.7	14.9 - 16.5	-0.12	29
Clark	24.6	23.3 - 25.9	2.30	72
Columbia	13.8	13.0 - 14.6	-0.64	18
Crawford	18.7	17.1 - 20.3	0.70	56
Dane	7.8	7.6 - 8.0	-2.27	1
Dodge	17.7	16.9 - 18.3	0.42	51
Door	12.2	11.2 - 13.2	-1.08	11
Douglas	14.1	13.2 - 15.0	-0.56	19
Dunn	13.4	12.3 - 14.3	-0.75	14
Eau Claire	11.1	10.5 - 11.6	-1.38	7
Florence	16.3	13.5 - 18.9	0.04	38
Fond du Lac	15.8	15.1 - 16.4	-0.09	30
Forest	21.5	19.2 - 23.6	1.46	67
Grant	16.5	15.5 - 17.4	0.10	41
Green	15.9	14.8 - 16.9	-0.07	32
Green Lake	18.1	16.6 - 19.5	0.53	53
Iowa	11.5	10.4 - 12.6	-1.27	9
Iron	16.3	14.0 - 18.5	0.04	38
Jackson	21.0	19.4 - 22.5	1.32	63
Jefferson	15.3	14.5 - 16.0	-0.23	25
Juneau	21.5	20.1 - 22.9	1.46	67
Kenosha	16.5	15.9 - 16.9	0.10	41
Kewaunee	16.0	14.6 - 17.3	-0.04	35
La Crosse	10.3	9.8 - 10.8	-1.59	5
Lafayette	14.5	12.9 - 15.9	-0.45	21
Langlade	19.1	17.6 - 20.5	0.80	58
Lincoln	18.4	17.2 - 19.6	0.61	54
Manitowoc	15.4	14.7 - 16.1	-0.20	27
Marathon	16.2	15.6 - 16.7	0.01	37
Marquette	17.5	16.5 - 18.4	0.37	48
Marquette	21.2	19.5 - 22.8	1.38	65
Menominee	21.8	18.0 - 25.4	1.54	70
Milwaukee City	25.2	24.8 - 25.4	2.47	73
Milwaukee County	19.8	19.5 - 19.9	1.00	61
Monroe	18.9	17.8 - 20.0	0.75	57
Oconto	19.4	18.2 - 20.4	0.89	60
Oneida	14.9	13.9 - 15.8	-0.34	23
Outagamie	11.9	11.4 - 12.3	-1.16	10
Ozaukee	8.1	7.6 - 8.6	-2.19	3
Pepin	17.4	14.9 - 19.7	0.34	47
Pierce	10.4	9.4 - 11.3	-1.57	6
Polk	14.1	13.1 - 15.0	-0.56	19
Portage	13.5	12.8 - 14.2	-0.72	15
Price	17.6	16.0 - 19.1	0.40	49
Racine	17.1	16.6 - 17.5	0.26	44
Richland	17.9	16.3 - 19.4	0.48	52
Rock	16.1	15.5 - 16.5	-0.01	36
Rusk	20.9	19.1 - 22.6	1.29	62
Sauk	16.5	15.6 - 17.3	0.10	41
Sawyer	15.3	13.8 - 16.7	-0.23	25
Shawano	18.5	17.5 - 19.5	0.64	55
Sheboygan	15.6	14.9 - 16.1	-0.15	28
St. Croix	8.4	7.8 - 9.0	-2.11	4
Taylor	21.7	20.0 - 23.2	1.51	69
Trempealeau	19.1	17.8 - 20.3	0.80	58
Vernon	21.1	19.8 - 22.4	1.35	64
Vilas	14.6	13.3 - 15.7	-0.42	22
Walworth	15.8	15.1 - 16.4	-0.09	30
Washburn	16.3	14.7 - 17.7	0.04	38
Washington	11.2	10.7 - 11.7	-1.35	8
Waukesha	8.0	7.8 - 8.2	-2.22	2
Waupaca	17.3	16.4 - 18.2	0.31	46
Waushara	21.2	19.7 - 22.5	1.38	65
Winnebago	13.7	13.2 - 14.1	-0.67	16
Wood	15.2	14.5 - 15.9	-0.26	24

UNEMPLOYMENT RATE

ABOUT THE MEASURE	
WHAT IT IS:	Unemployment Rate is a measure of the percentage of adults in the population who are unemployed.
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census. Specifically, these data are obtained from Summary File 3 (SF 3), Table P44: Family type by employment status.
REASONS FOR RANKING:	Employment has been shown to correlate positively with health, and is associated with slower declines in health status over time. (See Ross CE, Mirowski J. Does Employment Affect Health? <i>Journal of Health and Social Behavior</i> . 1995;36(3):230-243.)

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Socioeconomic Factors (Income)
Weight in Health Determinants:	6.67%
Years of data used:	2000
Changes from last year:	This is a new measure for 2006.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	2.3-11.6% unemployed
Overall in Wisconsin:	4.8% unemployed
Comparable HP2010 Target:	None

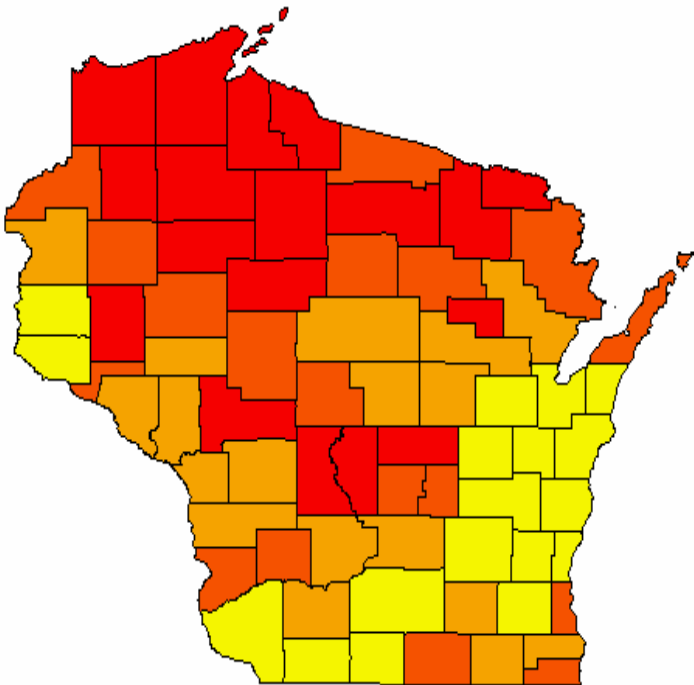


TABLE LEGEND →	
% Unemployed	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$ where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having a lower unemployment rate.

Place	% Unemployed	95% CI	Z-Score	Rank (of 73)
Adams	8.5	6.8 - 10.1	1.44	67
Ashland	7.2	5.4 - 8.9	0.79	60
Barron	6.0	5.0 - 6.9	0.18	48
Bayfield	10.3	8.2 - 12.3	2.35	71
Brown	3.9	3.5 - 4.2	-0.88	15
Buffalo	4.6	3.0 - 6.0	-0.52	22
Burnett	5.8	4.2 - 7.3	0.08	43
Calumet	2.4	1.8 - 3.0	-1.63	2
Chippewa	5.6	4.7 - 6.4	-0.02	40
Clark	5.6	4.5 - 6.7	-0.02	40
Columbia	4.3	3.5 - 5.0	-0.67	19
Crawford	6.6	4.9 - 8.1	0.49	52
Dane	3.6	3.3 - 3.8	-1.03	10
Dodge	3.6	3.0 - 4.1	-1.03	10
Door	6.6	5.4 - 7.8	0.49	52
Douglas	8.2	7.0 - 9.2	1.29	66
Dunn	7.0	5.8 - 8.1	0.69	57
Eau Claire	5.1	4.4 - 5.7	-0.27	27
Florence	7.6	4.4 - 10.6	0.99	62
Fond du Lac	3.9	3.3 - 4.4	-0.88	15
Forest	10.0	7.4 - 12.4	2.20	70
Grant	4.2	3.4 - 4.9	-0.72	18
Green	3.5	2.7 - 4.3	-1.08	7
Green Lake	5.5	4.1 - 6.8	-0.07	37
Iowa	4.9	3.7 - 6.1	-0.37	26
Iron	10.3	7.2 - 13.2	2.35	71
Jackson	7.7	6.0 - 9.3	1.04	63
Jefferson	4.3	3.6 - 4.9	-0.67	19
Juneau	7.5	6.1 - 8.9	0.94	61
Kenosha	5.7	5.1 - 6.1	0.03	42
Kewaunee	2.9	1.9 - 3.8	-1.38	5
La Crosse	5.1	4.5 - 5.7	-0.27	27
Lafayette	2.9	1.7 - 3.9	-1.38	5
Langlade	6.5	5.0 - 7.8	0.44	51
Lincoln	6.3	5.1 - 7.4	0.33	49
Manitowoc	3.8	3.2 - 4.3	-0.93	14
Marathon	4.5	3.9 - 4.9	-0.57	21
Marinette	5.8	4.8 - 6.7	0.08	43
Marquette	5.5	3.9 - 6.9	-0.07	37
Menominee	11.6	7.2 - 15.9	3.00	73
Milwaukee City	7.7	7.3 - 8.0	1.04	63
Milwaukee County	5.8	5.5 - 6.0	0.08	43
Monroe	5.4	4.4 - 6.3	-0.12	36
Oconto	4.6	3.6 - 5.4	-0.52	22
Oneida	6.7	5.5 - 7.7	0.54	55
Outagamie	3.5	3.1 - 3.8	-1.08	7
Ozaukee	2.3	1.8 - 2.7	-1.68	1
Pepin	5.5	3.2 - 7.8	-0.07	37
Pierce	3.7	2.8 - 4.5	-0.98	13
Polk	5.1	4.1 - 5.9	-0.27	27
Portage	4.6	3.9 - 5.3	-0.52	22
Price	9.3	7.4 - 11.2	1.85	69
Racine	5.3	4.8 - 5.7	-0.17	34
Richland	5.8	4.3 - 7.3	0.08	43
Rock	6.4	5.8 - 6.9	0.39	50
Rusk	7.8	6.0 - 9.6	1.09	65
Sauk	5.3	4.4 - 6.0	-0.17	34
Sawyer	7.1	5.4 - 8.8	0.74	58
Shawano	5.2	4.2 - 6.1	-0.22	31
Sheboygan	2.6	2.1 - 2.9	-1.53	3
St. Croix	2.7	2.1 - 3.1	-1.48	4
Taylor	8.9	7.1 - 10.6	1.65	68
Trempealeau	5.1	3.9 - 6.1	-0.27	27
Vernon	5.2	4.0 - 6.3	-0.22	31
Vilas	6.6	5.1 - 7.9	0.49	52
Walworth	5.2	4.5 - 5.8	-0.22	31
Washburn	7.1	5.4 - 8.7	0.74	58
Washington	3.6	3.1 - 4.0	-1.03	10
Waukesha	3.5	3.2 - 3.8	-1.08	7
Waupaca	4.6	3.8 - 5.4	-0.52	22
Waushara	6.7	5.3 - 8.0	0.54	55
Winnebago	3.9	3.4 - 4.3	-0.88	15
Wood	5.8	5.0 - 6.4	0.08	43

CHILDREN IN POVERTY

ABOUT THE MEASURE	
WHAT IT IS:	Children in Poverty is a measure of the percentage of children under 18 that are below 200% of the poverty level.
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census. Specifically, these data are obtained from Summary File 3 (SF 3), Table P87: Poverty status in 1999 by age.
REASONS FOR RANKING:	Evidence shows that children from disadvantaged backgrounds have slower cognitive development and increased behavioral problems, which may remain with them for the rest of their lives. (See Duncan GJ, Brooksgunn J, Klebanov PK. Economic Deprivation and Early-Childhood Development. <i>Child Development</i> . 1994;65(2):296-318.)

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Socioeconomic Factors (Income)
Weight in Health Determinants:	6.67%
Years of data used:	2000
Changes from last year:	This is a new measure for 2006.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	2.7-39.9%
Overall in Wisconsin:	11.2%
Comparable HP2010 Target:	None

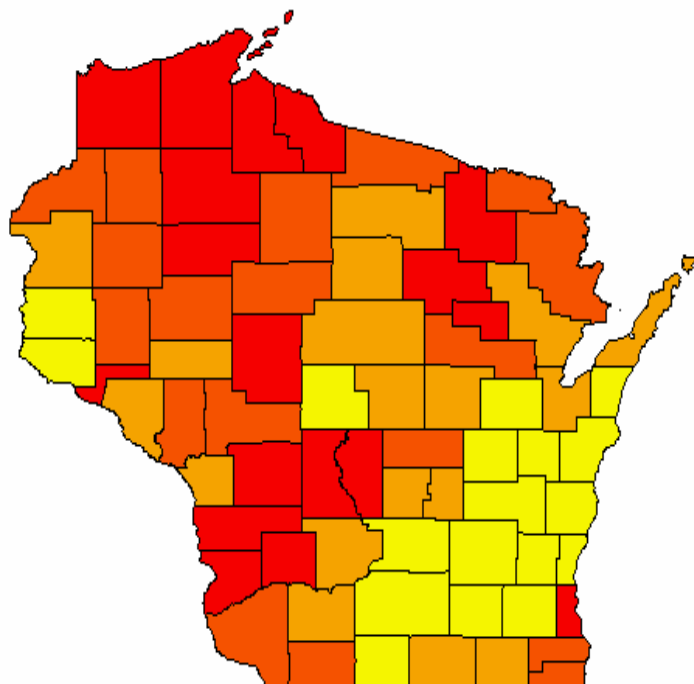


TABLE LEGEND →	
% in Poverty	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$ where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having a lower percentage of children in poverty.

Place	% in Poverty	95% CI	Z-Score	Rank (of 73)
Adams	14.6	12.0 - 17.0	0.68	62
Ashland	13.6	11.2 - 15.8	0.49	58
Barron	10.9	9.5 - 12.1	0.00	42
Bayfield	17.0	14.2 - 19.6	1.12	66
Brown	8.2	7.7 - 8.7	-0.50	22
Buffalo	8.2	6.1 - 10.2	-0.50	22
Burnett	12.2	9.6 - 14.6	0.23	48
Calumet	4.6	3.7 - 5.4	-1.16	5
Chippewa	11.3	10.1 - 12.5	0.07	44
Clark	18.6	16.8 - 20.3	1.41	68
Columbia	6.2	5.2 - 7.1	-0.87	10
Crawford	13.1	10.8 - 15.3	0.40	55
Dane	7.5	7.1 - 7.8	-0.63	16
Dodge	6.7	5.9 - 7.4	-0.78	12
Door	9.5	7.8 - 11.1	-0.26	33
Douglas	13.8	12.2 - 15.3	0.53	60
Dunn	12.1	10.6 - 13.6	0.22	47
Eau Claire	9.6	8.7 - 10.5	-0.24	35
Florence	12.4	8.1 - 16.6	0.27	50
Fond du Lac	6.6	5.9 - 7.3	-0.80	11
Forest	18.7	15.2 - 22.1	1.43	69
Grant	12.9	11.4 - 14.2	0.36	54
Green	5.2	4.1 - 6.2	-1.05	6
Green Lake	9.2	7.3 - 11.0	-0.32	31
Iowa	8.1	6.5 - 9.6	-0.52	19
Iron	15.6	11.1 - 20.0	0.86	64
Jackson	10.6	8.5 - 12.5	-0.06	40
Jefferson	6.9	6.0 - 7.7	-0.74	13
Juneau	13.1	11.2 - 15.0	0.40	55
Kenosha	9.9	9.2 - 10.5	-0.19	38
Kewaunee	6.0	4.5 - 7.4	-0.91	9
La Crosse	9.7	8.8 - 10.5	-0.23	36
Lafayette	12.5	10.3 - 14.7	0.29	52
Langlade	13.3	11.1 - 15.3	0.44	57
Lincoln	8.1	6.6 - 9.4	-0.52	19
Manitowoc	7.8	7.0 - 8.6	-0.58	17
Marathon	8.9	8.1 - 9.5	-0.37	28
Marinette	10.5	9.1 - 11.8	-0.08	39
Marquette	9.1	6.8 - 11.2	-0.34	30
Menominee	39.9	34.7 - 45.0	3.00	73
Milwaukee City	32.0	31.4 - 32.4	3.00	72
Milwaukee County	23.7	23.3 - 24.0	2.35	71
Monroe	17.5	15.9 - 19.0	1.21	67
Oconto	8.9	7.6 - 10.2	-0.37	28
Oneida	8.6	7.2 - 9.9	-0.43	25
Outagamie	5.7	5.2 - 6.2	-0.96	8
Ozaukee	2.7	2.2 - 3.2	-1.51	1
Pepin	13.7	10.1 - 17.1	0.51	59
Pierce	5.6	4.5 - 6.6	-0.98	7
Polk	8.3	7.1 - 9.4	-0.48	24
Portage	8.6	7.6 - 9.5	-0.43	25
Price	12.3	9.9 - 14.6	0.25	49
Racine	11.9	11.2 - 12.5	0.18	46
Richland	13.8	11.5 - 16.1	0.53	60
Rock	9.5	8.8 - 10.1	-0.26	33
Rusk	15.4	12.8 - 18.0	0.82	63
Sauk	9.2	8.0 - 10.2	-0.32	31
Sawyer	16.7	14.0 - 19.3	1.06	65
Shawano	10.7	9.3 - 12.0	-0.04	41
Sheboygan	7.1	6.4 - 7.7	-0.70	15
St. Croix	4.3	3.6 - 4.9	-1.22	3
Taylor	12.7	10.6 - 14.7	0.33	53
Trempealeau	9.8	8.1 - 11.3	-0.21	37
Vernon	23.0	20.9 - 25.1	2.22	70
Vilas	11.8	9.6 - 13.9	0.16	45
Walworth	8.6	7.8 - 9.4	-0.43	25
Washburn	12.4	9.9 - 14.7	0.27	50
Washington	4.5	3.9 - 4.9	-1.18	4
Waukesha	3.1	2.8 - 3.3	-1.44	2
Waupaca	8.1	7.0 - 9.1	-0.52	19
Waushara	10.9	9.0 - 12.7	0.00	42
Winnebago	7.0	6.4 - 7.6	-0.72	14
Wood	7.8	6.9 - 8.6	-0.58	17

DIVORCE

ABOUT THE MEASURE	
WHAT IT IS:	Divorce is a measure of the percentage of people aged 15 and over in the population who report being divorced.
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census. Specifically, these data are obtained from Summary File 3 (SF 3), Table P18: Sex by marital status for the population 15 years and over.
REASONS FOR RANKING:	Divorce has been shown to have adverse health effects on mental and social health, including anxiety, depression, and increased risk of alcohol abuse. (See Richards M, Hardy R, Wadsworth M. The effects of divorce and separation on mental health in a national UK birth cohort. <i>Psychological Medicine</i> . 1997;27:1121-1128.)

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Socioeconomic Factors (Social Disruption)
Weight in Health Determinants:	6.67%
Years of data used:	2000
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	6.7-11.4%
Overall in Wisconsin:	9.0%
Comparable HP2010 Target:	None

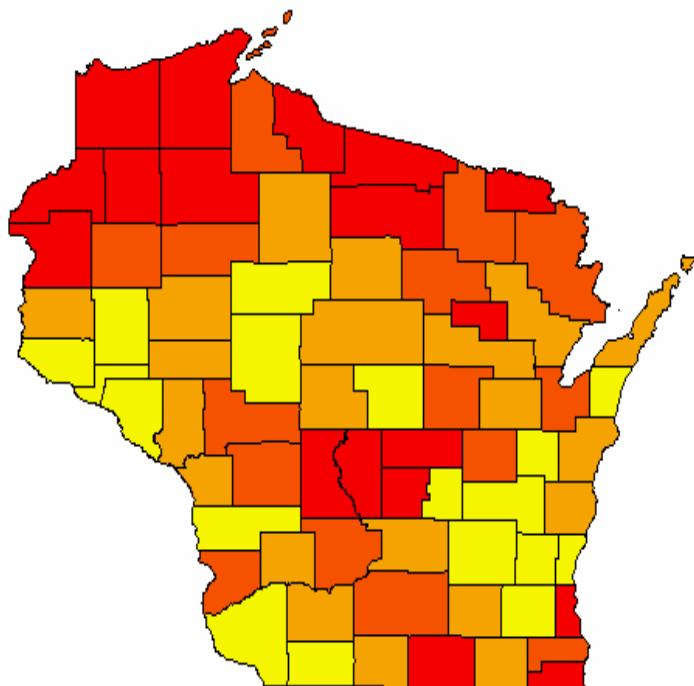


TABLE LEGEND →	
% Divorced	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$ where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having a lower percentage of people that have been divorced.

Place	% Divorced	95% CI	Z-Score	Rank (of 73)
Adams	10.9	9.8 - 11.9	1.61	66
Ashland	9.2	8.1 - 10.2	0.21	44
Barron	9.6	8.8 - 10.2	0.54	52
Bayfield	10.9	9.6 - 12.1	1.61	66
Brown	9.3	8.9 - 9.5	0.29	46
Buffalo	7.9	6.8 - 9.0	-0.86	16
Burnett	10.7	9.5 - 11.9	1.44	64
Calumet	7.1	6.4 - 7.6	-1.52	4
Chippewa	9.0	8.3 - 9.5	0.04	36
Clark	6.9	6.1 - 7.5	-1.69	3
Columbia	8.8	8.2 - 9.4	-0.12	30
Crawford	9.3	8.2 - 10.4	0.29	46
Dane	9.1	8.8 - 9.2	0.12	40
Dodge	7.8	7.3 - 8.2	-0.94	13
Door	8.8	7.9 - 9.6	-0.12	30
Douglas	11.2	10.5 - 11.9	1.85	71
Dunn	7.6	6.9 - 8.2	-1.11	10
Eau Claire	8.4	7.9 - 8.8	-0.45	24
Florence	11.2	9.0 - 13.3	1.85	71
Fond du Lac	7.8	7.4 - 8.2	-0.94	13
Forest	9.1	7.7 - 10.5	0.12	40
Grant	6.7	6.1 - 7.2	-1.85	1
Green	8.8	8.0 - 9.6	-0.12	30
Green Lake	7.9	6.9 - 8.8	-0.86	16
Iowa	8.9	7.9 - 9.7	-0.04	34
Iron	10.1	8.3 - 11.8	0.95	58
Jackson	9.2	8.2 - 10.2	0.21	44
Jefferson	8.8	8.3 - 9.3	-0.12	30
Juneau	10.9	9.9 - 11.9	1.61	66
Kenosha	10.4	10.0 - 10.7	1.19	61
Kewaunee	6.7	5.8 - 7.5	-1.85	1
La Crosse	8.5	8.0 - 8.8	-0.37	26
Lafayette	7.7	6.6 - 8.6	-1.03	12
Langlade	9.6	8.5 - 10.5	0.54	52
Lincoln	8.5	7.6 - 9.2	-0.37	26
Manitowoc	8.1	7.6 - 8.5	-0.70	21
Marathon	8.0	7.6 - 8.4	-0.78	19
Marinette	9.3	8.6 - 10.0	0.29	46
Marquette	9.9	8.8 - 11.0	0.78	56
Menominee	11.4	8.8 - 13.9	2.02	73
Milwaukee City	11.1	10.8 - 11.2	1.77	70
Milwaukee County	10.6	10.4 - 10.7	1.36	62
Monroe	9.4	8.7 - 10.1	0.37	49
Oconto	9.0	8.2 - 9.7	0.04	36
Oneida	10.6	9.7 - 11.3	1.36	62
Outagamie	8.1	7.7 - 8.4	-0.70	21
Ozaukee	7.2	6.7 - 7.6	-1.44	6
Pepin	7.2	5.7 - 8.6	-1.44	6
Pierce	7.1	6.4 - 7.7	-1.52	4
Polk	9.8	9.0 - 10.5	0.70	55
Portage	7.3	6.8 - 7.7	-1.36	8
Price	8.9	7.8 - 10.0	-0.04	34
Racine	9.7	9.3 - 10.0	0.62	54
Richland	9.0	7.9 - 10.0	0.04	36
Rock	10.9	10.5 - 11.2	1.61	66
Rusk	9.1	7.9 - 10.2	0.12	40
Sauk	9.5	8.9 - 10.1	0.45	50
Sawyer	10.7	9.4 - 11.8	1.44	64
Shawano	8.0	7.3 - 8.6	-0.78	19
Sheboygan	8.2	7.8 - 8.6	-0.62	23
St. Croix	8.4	7.8 - 8.9	-0.45	24
Taylor	7.8	6.8 - 8.6	-0.94	13
Trempealeau	9.0	8.1 - 9.8	0.04	36
Vernon	7.9	7.0 - 8.6	-0.86	16
Vilas	10.2	9.2 - 11.2	1.03	60
Walworth	8.6	8.1 - 8.0	-0.29	28
Washburn	9.9	8.7 - 11.0	0.78	56
Washington	7.6	7.2 - 7.9	-1.11	10
Waukesha	7.3	7.0 - 7.4	-1.36	8
Waupaca	9.5	8.9 - 10.1	0.45	50
Waushara	10.1	9.1 - 11.0	0.95	58
Winnebago	9.1	8.7 - 9.4	0.12	40
Wood	8.6	8.1 - 9.1	-0.29	28

SINGLE PARENT HOUSEHOLDS

ABOUT THE MEASURE

WHAT IT IS:	Single Parent Households is a measure of the number of households run by a single parent (male householder with no wife present or female householder with no husband present) with one or more of their own children under 18 years as a percentage of the total number of households
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census. Specifically, these data are obtained from Summary File 1 (SF1), Table P18: Household size, household type, and presence of own children.
REASONS FOR RANKING:	This measure is included as a proxy for social disruption in the community. Studies have shown that being raised in a single headed household can have negative effects on health in the future, such as increased anxiety symptoms. (See Kroes M, Kalf AC, Steyaert J, et al: A longitudinal community study: Do Psychosocial Risk Factors and Child Behavior Checklist Scores at 5 years of Age Predict Psychiatric Diagnoses at a Later Age? <i>J Am Acad Child Adolesc Psychiatry</i> 41: 955–963, 2002.)

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Socioeconomic Factors (Social Disruption)
Weight in Health Determinants:	6.67%
Years of data used:	2000
Changes from last year:	This is a new measure for 2006.

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	5.3-23.5%
Overall in Wisconsin:	8.2%
Comparable HP2010 Target:	None

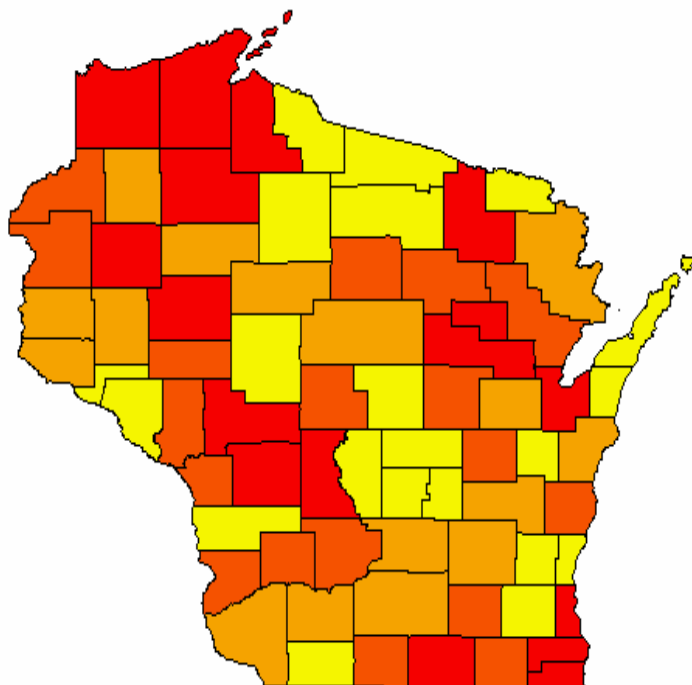


TABLE LEGEND →

% Single Parent Households	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$ where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having a lower percentage of single headed households.

Place	% Single Parent Households	95% CI	Z-Score	Rank (of 73)
Adams	6.5	5.2 - 7.6	-0.42	16
Ashland	9.4	7.8 - 10.9	0.84	65
Barron	7.8	6.9 - 8.6	0.14	57
Bayfield	8.6	6.9 - 10.1	0.49	62
Brown	8.4	7.9 - 8.7	0.40	61
Buffalo	5.4	4.0 - 6.7	-0.90	3
Burnett	7.4	6.0 - 8.8	-0.03	47
Calumet	6.3	5.4 - 7.1	-0.51	11
Chippewa	7.8	6.9 - 8.5	0.14	57
Clark	6.5	5.4 - 7.4	-0.42	16
Columbia	6.9	6.1 - 7.7	-0.25	33
Crawford	7.6	6.2 - 9.0	0.06	52
Dane	7.0	6.7 - 7.3	-0.20	35
Dodge	7.0	6.3 - 7.6	-0.20	35
Door	5.7	4.7 - 6.6	-0.77	6
Douglas	9.3	8.3 - 10.2	0.80	64
Dunn	6.8	5.8 - 7.6	-0.29	26
Eau Claire	7.4	6.8 - 8.0	-0.03	47
Florence	5.4	3.2 - 7.5	-0.90	3
Fond du Lac	6.9	6.3 - 7.4	-0.25	33
Forest	9.7	7.6 - 11.7	0.97	67
Grant	6.7	5.8 - 7.5	-0.33	22
Green	7.6	6.5 - 8.5	0.06	52
Green Lake	5.9	4.6 - 7.0	-0.68	8
Iowa	6.8	5.6 - 7.9	-0.29	26
Iron	5.3	3.5 - 7.0	-0.94	1
Jackson	8.0	6.6 - 9.4	0.23	59
Jefferson	7.3	6.6 - 7.9	-0.07	44
Juneau	8.3	7.0 - 9.5	0.36	60
Kenosha	9.8	9.2 - 10.3	1.01	68
Kewaunee	5.7	4.5 - 6.9	-0.77	6
La Crosse	7.3	6.7 - 7.9	-0.07	44
Lafayette	6.5	5.1 - 7.8	-0.42	16
Langlade	7.2	5.9 - 8.3	-0.12	40
Lincoln	7.5	6.4 - 8.5	0.01	51
Manitowoc	6.8	6.2 - 7.4	-0.29	26
Marathon	6.7	6.1 - 7.1	-0.33	22
Marinette	6.7	5.8 - 7.5	-0.33	22
Marquette	6.2	4.8 - 7.6	-0.55	10
Menominee	23.5	18.4 - 28.5	3.00	73
Milwaukee City	16.2	15.8 - 16.5	3.00	72
Milwaukee County	12.4	12.2 - 12.6	2.14	71
Monroe	8.6	7.5 - 9.5	0.49	62
Oconto	7.2	6.2 - 8.1	-0.12	40
Oneida	6.5	5.5 - 7.3	-0.42	16
Outagamie	6.8	6.3 - 7.2	-0.29	26
Ozaukee	5.3	4.7 - 5.8	-0.94	1
Pepin	6.1	4.0 - 8.0	-0.59	9
Pierce	7.0	6.0 - 8.0	-0.20	35
Polk	7.6	6.6 - 8.5	0.06	52
Portage	6.5	5.8 - 7.2	-0.42	16
Price	6.3	5.0 - 7.6	-0.51	11
Racine	10.3	9.7 - 10.7	1.23	70
Richland	7.3	5.9 - 8.6	-0.07	44
Rock	10.0	9.4 - 10.5	1.10	69
Rusk	6.8	5.3 - 8.1	-0.29	26
Sauk	7.2	6.4 - 7.9	-0.12	40
Sawyer	7.7	6.8 - 8.4	0.10	56
Shawano	9.6	8.0 - 11.2	0.93	66
Sheboygan	7.4	6.4 - 8.3	-0.03	47
St. Croix	6.7	6.1 - 7.2	-0.33	22
Taylor	6.8	5.5 - 8.1	-0.29	26
Trempealeau	7.6	6.4 - 8.7	0.06	52
Vernon	6.3	5.2 - 7.3	-0.51	11
Vilas	6.5	5.3 - 7.5	-0.42	16
Walworth	7.1	6.4 - 7.6	-0.16	38
Washburn	6.8	5.4 - 8.2	-0.29	26
Washington	6.3	5.7 - 6.7	-0.51	11
Waukesha	5.4	5.1 - 5.6	-0.90	3
Waupaca	7.1	6.2 - 7.8	-0.16	38
Waushara	6.3	5.1 - 7.3	-0.51	11
Winnebago	7.4	6.9 - 7.8	-0.03	47
Wood	7.2	6.5 - 7.8	-0.12	40

CANCER RISK

ABOUT THE MEASURE

WHAT IT IS: Cancer Risk is a measure of the lifetime cancer risk attributable to inhalation of air pollutants. This risk is based on EPA modeling of emissions converted to the median percentile distribution of risk across census tracts and reported as the incidence of cancer per 1,000,000 people.

WHERE IT COMES FROM: These data are obtained from the National Air Toxics Assessment (NATA), U.S. Environmental Protection Agency (EPA). Most of the data come from state and locally generated information where available. Where such data are not available, existing data from EPA's regulatory development databases are utilized. If neither of these data sources contains information for a known stationary source, EPA uses data from the Toxic Release Inventory (TRI) database, which contains information on toxic chemical releases reported annually by industry and some federal facilities. The EPA reports that it also gives preference to emissions data resulting from direct measurements over those generated from emissions factors and activity data.

REASONS FOR RANKING: Various pollutants measured by the NATA are known carcinogens, causing different types of cancer.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Physical Environment (Air Quality)
Weight in Health Determinants:	0.83%
Years of data used:	1999
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	9.4-52.7 cases per 1,000,000
Overall in Wisconsin:	28.4 cases per 1,000,000
Comparable HP2010 Target:	None

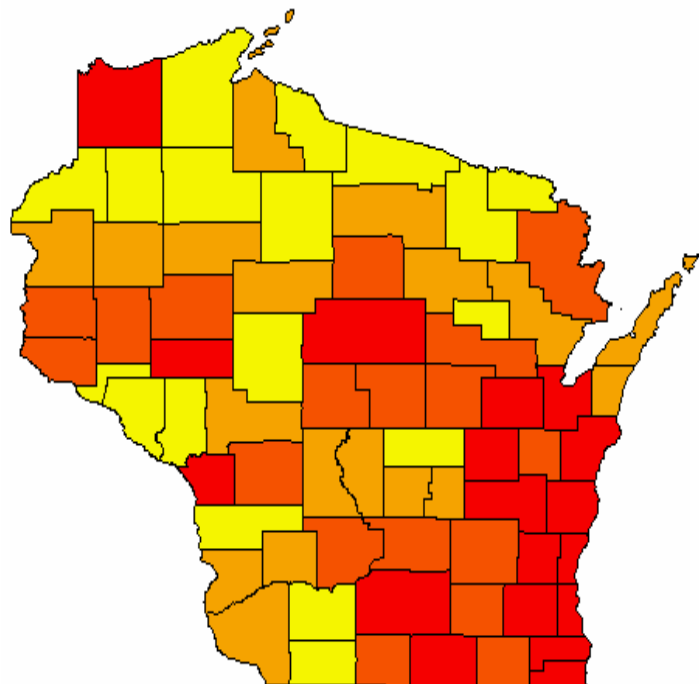


TABLE LEGEND →

Cases per 1,000,000 See above

Z-Score (Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having a lower risk of future cancers in the population due to the environment.

Place	Cancer Risk (per 1,000,000)	Z-Score	Rank (of 73)
Adams	11.7	-0.65	23
Ashland	13.3	-0.46	35
Barron	12.8	-0.52	33
Bayfield	9.4	-0.92	1
Brown	36.7	2.32	71
Buffalo	9.8	-0.87	6
Burnett	10.3	-0.81	10
Calumet	16.7	-0.05	45
Chippewa	16.9	-0.03	46
Clark	10.9	-0.74	16
Columbia	16.9	-0.03	46
Crawford	12.2	-0.59	27
Dane	35.3	2.15	70
Dodge	18.5	0.16	51
Door	11.9	-0.62	25
Douglas	22.6	0.65	55
Dunn	13.7	-0.41	38
Eau Claire	31.4	1.69	65
Florence	10	-0.85	8
Fond du Lac	24.7	0.90	61
Forest	9.5	-0.91	4
Grant	12.3	-0.58	29
Green	15	-0.25	43
Green Lake	12.2	-0.59	27
Iowa	10.5	-0.79	11
Iron	9.4	-0.92	1
Jackson	11.1	-0.72	19
Jefferson	20.1	0.35	52
Juneau	12.5	-0.55	30
Kenosha	32.1	1.77	67
Kewaunee	13.1	-0.48	34
La Crosse	23.7	0.78	58
Lafayette	9.4	-0.92	1
Langlade	12.5	-0.55	30
Lincoln	16.9	-0.03	46
Manitowoc	22.6	0.65	55
Marathon	24.3	0.85	60
Marinette	14.6	-0.30	40
Marquette	11.9	-0.62	25
Menominee	9.8	-0.87	6
Milwaukee City	52.7	3.00	73
Milwaukee County	51	3.00	72
Monroe	14.3	-0.34	39
Oconto	11.2	-0.71	20
Oneida	13.3	-0.46	35
Outagamie	32.4	1.81	68
Ozaukee	25.5	0.99	62
Pepin	10.5	-0.79	11
Pierce	15.8	-0.16	44
Polk	12.5	-0.55	30
Portage	20.1	0.35	52
Price	9.6	-0.90	5
Racine	28.3	1.32	63
Richland	11.8	-0.63	24
Rock	32.7	1.85	69
Rusk	11.4	-0.68	22
Sauk	14.8	-0.28	41
Sawyer	10.2	-0.82	9
Shawano	14.8	-0.28	41
Sheboygan	23.1	0.71	57
St. Croix	17.7	0.07	49
Taylor	11.3	-0.69	21
Trempealeau	11	-0.73	17
Vernon	11	-0.73	17
Vilas	10.8	-0.75	14
Walworth	18.4	0.15	50
Washburn	10.5	-0.79	11
Washington	24.1	0.82	59
Waukesha	31.4	1.69	65
Waupaca	13.6	-0.42	37
Waushara	10.8	-0.75	14
Winnebago	29.9	1.51	64
Wood	21.6	0.53	54

RESPIRATORY HAZARD INDEX

ABOUT THE MEASURE

WHAT IT IS:	Respiratory Hazard Index is a measure of the cumulative hazard of respiratory non-cancer adverse health effects due to inhalation of multiple pollutants based on EPA modeled estimates of emissions. This measure is reported as a ratio of the estimated potential level of exposure for a county to the level below which no adverse health effects are expected. If the Hazard Index is greater than 1, then it is possible that adverse effects may occur. If the Hazard Index is less than 1, then no adverse health effects are expected.
WHERE IT COMES FROM:	These data are obtained from the National Air Toxics Assessment, U.S. Environmental Protection Agency.
REASONS FOR RANKING:	The noncancer pollutants measured by the EPA were chosen because they are known to cause irritation to the lining of the respiratory system, which may lead to more serious problems in people with compromised respiratory systems such as cystic fibrosis patients or asthmatics.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Physical Environment (Air Quality)
Weight in Health Determinants:	0.83%
Years of data used:	1999
Changes from last year:	In 2005, this measure was reported as an overall hazard index, but is now subdivided into respiratory and neurological. We use the respiratory hazard index for 2006.

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	0.39-6.04 hazard index
Overall in Wisconsin:	2.69 hazard index
Comparable HP2010 Target:	None

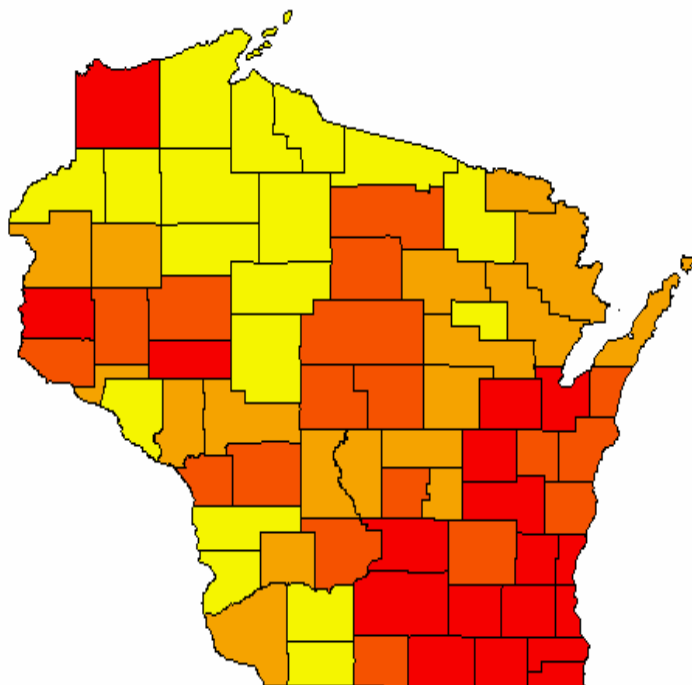


TABLE LEGEND →

Hazard Index	See above
Z-Score	$(\text{Measure} - \text{Average of 72 WI counties}) / (\text{Standard Deviation})$

← MAP

The counties are shaded by quartile, with lighter counties having less risk of adverse health effects due to air pollutants.

Place	Respiratory Hazard Index	Z-Score	Rank (of 73)
Adams	0.81	-0.44	35
Ashland	0.47	-0.78	7
Barron	0.62	-0.63	24
Bayfield	0.46	-0.79	6
Brown	2.99	1.80	68
Buffalo	0.50	-0.76	9
Burnett	0.54	-0.71	14
Calumet	1.31	0.08	50
Chippewa	1.17	-0.07	46
Clark	0.53	-0.73	12
Columbia	1.58	0.35	55
Crawford	0.46	-0.80	4
Dane	3.10	1.92	70
Dodge	1.04	-0.21	43
Door	0.62	-0.63	25
Douglas	1.86	0.64	60
Dunn	0.89	-0.36	39
Eau Claire	2.54	1.34	63
Florence	0.63	-0.62	27
Fond du Lac	1.86	0.64	59
Forest	0.45	-0.81	3
Grant	0.60	-0.66	21
Green	1.18	-0.06	47
Green Lake	0.74	-0.51	31
Iowa	0.55	-0.70	15
Iron	0.42	-0.84	2
Jackson	0.66	-0.59	28
Jefferson	1.69	0.46	56
Juneau	0.80	-0.45	34
Kenosha	3.65	2.48	71
Kewaunee	0.95	-0.29	41
La Crosse	1.30	0.07	49
Lafayette	0.50	-0.76	10
Langlade	0.58	-0.67	19
Lincoln	0.93	-0.32	40
Manitowoc	1.48	0.25	53
Marathon	1.44	0.21	52
Marinette	0.60	-0.65	22
Marquette	0.86	-0.39	38
Menominee	0.54	-0.72	13
Milwaukee City	6.04	3.00	73
Milwaukee County	5.72	3.00	72
Monroe	0.99	-0.25	42
Oconto	0.58	-0.67	20
Oneida	0.83	-0.41	37
Outagamie	2.83	1.64	66
Ozaukee	3.01	1.82	69
Pepin	0.69	-0.56	29
Pierce	1.10	-0.14	44
Polk	0.82	-0.43	36
Portage	1.28	0.05	48
Price	0.39	-0.87	1
Racine	2.69	1.49	64
Richland	0.60	-0.65	23
Rock	2.94	1.75	67
Rusk	0.49	-0.76	8
Sauk	1.11	-0.13	45
Sawyer	0.50	-0.75	11
Shawano	0.77	-0.48	32
Sheboygan	1.51	0.28	54
St. Croix	1.79	0.56	58
Taylor	0.46	-0.80	5
Trempealeau	0.69	-0.56	30
Vernon	0.56	-0.70	16
Vilas	0.56	-0.70	17
Walworth	1.71	0.48	57
Washburn	0.57	-0.68	18
Washington	2.31	1.10	62
Waukesha	2.77	1.57	65
Waupaca	0.79	-0.46	33
Waushara	0.62	-0.63	26
Winnebago	2.12	0.90	61
Wood	1.33	0.10	51

FINE PARTICULATE MATTER IN AIR

ABOUT THE MEASURE

WHAT IT IS:	Fine Particulate Matter In Air is a measure of the amount of fine particulate matter, or matter less than 2.5 micrometers in diameter, in the air at monitoring sites throughout the state. Three years of data were available from Wisconsin FRM (Federal Reference Method) monitoring sites in 18 counties between 2003 and 2005. For counties having more than one monitoring site, a weighted average of the most recent county site values was used. Counties without measurements were assigned a value equal to the average of the counties within their region.
WHERE IT COMES FROM:	These data are obtained from the Bureau of Air Management, Division of Air and Waste, Wisconsin Department of Natural Resources (DNR).
REASONS FOR RANKING:	Fine particulate matter is a problem because particles are small enough to pass through the heart and lungs and can cause serious health effects, including difficulty breathing, irritation of the airways, decreased lung function, chronic bronchitis, irregular heartbeat, nonfatal heart attacks, and premature death in people with heart or lung disease.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Physical Environment (Air Quality)
Weight in Health Determinants:	0.83%
Years of data used:	2003-2005
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	6.0-13.6 $\mu\text{g}/\text{m}^3$
Overall in Wisconsin:	9.2 $\mu\text{g}/\text{m}^3$
Comparable HP2010 Target:	No comparable target

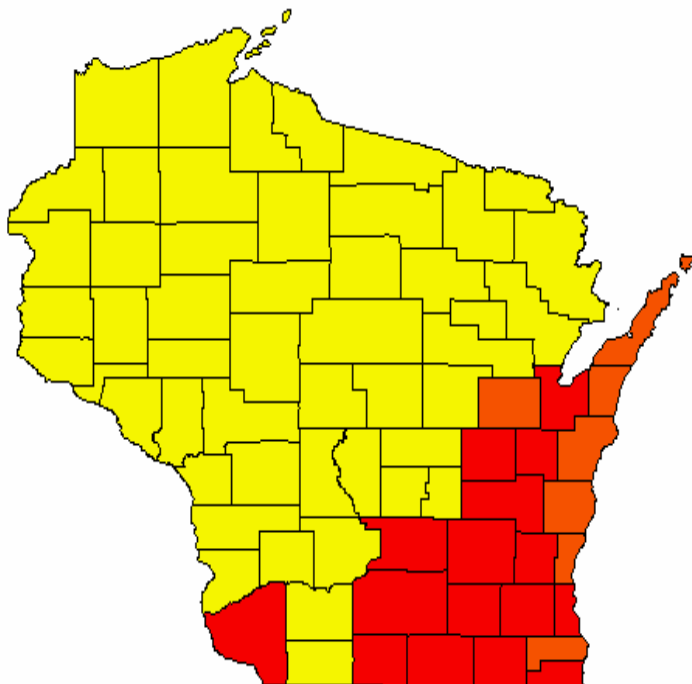


TABLE LEGEND →

PM_{2.5} See above

Z-Score (Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having less air pollution due to fine particulate matter.

Place	PM _{2.5}	Z-Score	Rank (of 73)
Adams	8.1	-0.60	3
Ashland	6.0	-1.90	1
Barron	8.1	-0.60	3
Bayfield	8.1	-0.60	3
Brown	10.8	1.08	58
Buffalo	8.1	-0.60	3
Burnett	8.1	-0.60	3
Calumet	11.5	1.51	60
Chippewa	8.1	-0.60	3
Clark	8.1	-0.60	3
Columbia	11.5	1.51	60
Crawford	8.1	-0.60	3
Dane	12.1	1.88	70
Dodge	10.7	1.02	57
Door	10.5	0.89	51
Douglas	8.1	-0.60	3
Dunn	8.1	-0.60	3
Eau Claire	8.1	-0.60	3
Florence	8.1	-0.60	3
Fond du Lac	11.5	1.51	60
Forest	8.1	-0.60	3
Grant	11.5	1.51	60
Green	11.5	1.51	60
Green Lake	8.1	-0.60	3
Iowa	8.1	-0.60	3
Iron	8.1	-0.60	3
Jackson	8.1	-0.60	3
Jefferson	11.5	1.51	60
Juneau	8.1	-0.60	3
Kenosha	11.3	1.39	59
Kewaunee	10.5	0.89	51
La Crosse	8.1	-0.60	3
Lafayette	8.1	-0.60	3
Langlade	8.1	-0.60	3
Lincoln	8.1	-0.60	3
Manitowoc	9.7	0.39	50
Marathon	8.1	-0.60	3
Marinette	8.1	-0.60	3
Marquette	8.1	-0.60	3
Menominee	8.1	-0.60	3
Milwaukee City	13	2.44	72
Milwaukee County	12.8	2.32	71
Monroe	8.1	-0.60	3
Oconto	8.1	-0.60	3
Oneida	8.1	-0.60	3
Outagamie	10.5	0.89	51
Ozaukee	10.5	0.89	51
Pepin	8.1	-0.60	3
Pierce	8.1	-0.60	3
Polk	8.1	-0.60	3
Portage	8.1	-0.60	3
Price	8.1	-0.60	3
Racine	10.5	0.89	51
Richland	8.1	-0.60	3
Rock	11.5	1.51	60
Rusk	8.1	-0.60	3
Sauk	8.1	-0.60	3
Sawyer	8.1	-0.60	3
Shawano	8.1	-0.60	3
Sheboygan	10.5	0.89	51
St. Croix	8.1	-0.60	3
Taylor	8.1	-0.60	3
Trempealeau	8.1	-0.60	3
Vernon	8.1	-0.60	3
Vilas	6.9	-1.34	2
Walworth	11.5	1.51	60
Washburn	8.1	-0.60	3
Washington	11.5	1.51	60
Waukesha	13.6	2.82	73
Waupaca	8.1	-0.60	3
Waushara	8.1	-0.60	3
Winnebago	11.5	1.51	60
Wood	8.1	-0.60	3

OZONE LEVEL

ABOUT THE MEASURE	
WHAT IT IS:	Ozone Level is a measure of the amount of ozone present at air monitoring sites throughout the state. The 2003-2005 annual average 4 th highest peak daily running 8-hour ozone values were available from Wisconsin DNR ozone monitoring sites in 29 counties. The average daily 4 th highest peak of 8-hour ozone values, averaged throughout an entire year, is what is reported here. Counties without measurements were assigned a value equal to the average of the counties within their assigned region.
WHERE IT COMES FROM:	These data are obtained from the Bureau of Air Management, Division of Air and Waste, Wisconsin Department of Natural Resources (DNR).
REASONS FOR RANKING:	Ozone has been linked to a variety of human health problems, including chest pain, coughing, wheezing, and difficulty breathing.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Physical Environment (Air Quality)
Weight in Health Determinants:	0.83%
Years of data used:	2003-2005
Changes from last year:	None

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	66-90 ppb
Overall in Wisconsin:	73 ppb
Comparable HP2010 Target:	No comparable target

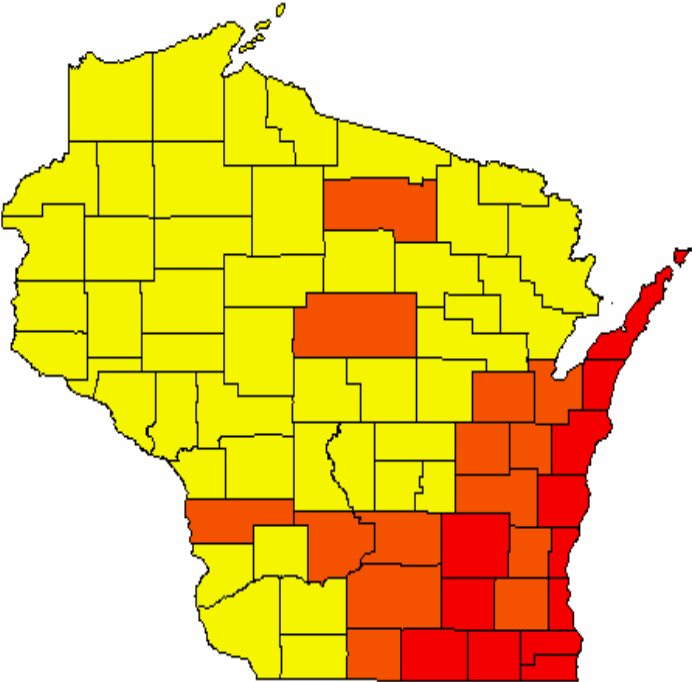


TABLE LEGEND	
→	
Ozone	See above
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having lower ozone levels.

Place	Ozone (ppb)	Z-Score	Rank (of 73)
Adams	69	-0.55	3
Ashland	69	-0.55	3
Barron	69	-0.55	3
Bayfield	69	-0.55	3
Brown	75	0.52	54
Buffalo	69	-0.55	3
Burnett	69	-0.55	3
Calumet	75	0.52	54
Chippewa	69	-0.55	3
Clark	69	-0.55	3
Columbia	74	0.34	52
Crawford	69	-0.55	3
Dane	73	0.16	51
Dodge	77	0.88	63
Door	90	3.00	73
Douglas	69	-0.55	3
Dunn	69	-0.55	3
Eau Claire	69	-0.55	3
Florence	66	-1.09	1
Fond du Lac	75	0.52	54
Forest	69	-0.55	3
Grant	69	-0.55	3
Green	75	0.52	54
Green Lake	69	-0.55	3
Iowa	69	-0.55	3
Iron	69	-0.55	3
Jackson	69	-0.55	3
Jefferson	76	0.70	61
Juneau	69	-0.55	3
Kenosha	86	2.49	68
Kewaunee	86	2.49	68
La Crosse	69	-0.55	3
Lafayette	69	-0.55	3
Langlade	69	-0.55	3
Lincoln	69	-0.55	3
Manitowoc	87	2.67	70
Marathon	71	-0.19	49
Marinette	69	-0.55	3
Marquette	69	-0.55	3
Menominee	69	-0.55	3
Milwaukee City	80	1.42	66
Milwaukee County	79	1.24	65
Monroe	69	-0.55	3
Oconto	69	-0.55	3
Oneida	70	-0.37	47
Outagamie	75	0.52	54
Ozaukee	87	2.67	70
Pepin	69	-0.55	3
Pierce	69	-0.55	3
Polk	69	-0.55	3
Portage	69	-0.55	3
Price	69	-0.55	3
Racine	82	1.78	67
Richland	69	-0.55	3
Rock	76	0.70	61
Rusk	69	-0.55	3
Sauk	71	-0.19	49
Sawyer	69	-0.55	3
Shawano	69	-0.55	3
Sheboygan	89	3.00	72
St. Croix	69	-0.55	3
Taylor	69	-0.55	3
Trempealeau	69	-0.55	3
Vernon	70	-0.37	47
Vilas	68	-0.73	2
Walworth	77	0.88	63
Washburn	69	-0.55	3
Washington	75	0.52	54
Waukesha	74	0.34	52
Waupaca	69	-0.55	3
Waushara	69	-0.55	3
Winnebago	75	0.52	54
Wood	69	-0.55	3

NITRATE LEVELS IN WATER

ABOUT THE MEASURE	
WHAT IT IS:	Nitrate Levels in Water measures the presence of nitrates in the private and municipal water supply above the Preventative Action Level of 2 mg/L. The percentage reported here is the percentage of the population that is exposed to nitrate levels in the water above 2mg/L, as measured in the municipal and well water supply.
WHERE IT COMES FROM:	These data are obtained from the Bureau of Drinking Water and Groundwater, Division of Water, Wisconsin Department of Natural Resources (DNR).
REASONS FOR RANKING:	Among other negative health effects, nitrates in drinking water are responsible for blue baby syndrome and can cause birth defects. (See Landis M, Kempf A, Remington P, Peppard P, McElroy J. Using Air, Water, and Lead Exposure as Measures of the Physical Environment: The Wisconsin County Health Ranking. <i>University of Wisconsin Population Health Institute Issue Brief</i> . 2004;5(6).)

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Physical Environment (Water Quality)
Weight in Health Determinants:	3.33%
Years of data used:	2005
Changes from last year:	In 2005, both the nitrate levels > 10 and > 2 were used for the determinants rank. In 2006, only the > 2 measure is used to rank.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	0.0-6.8%
Overall in Wisconsin:	0.02%
Comparable HP2010 Target:	No comparable target

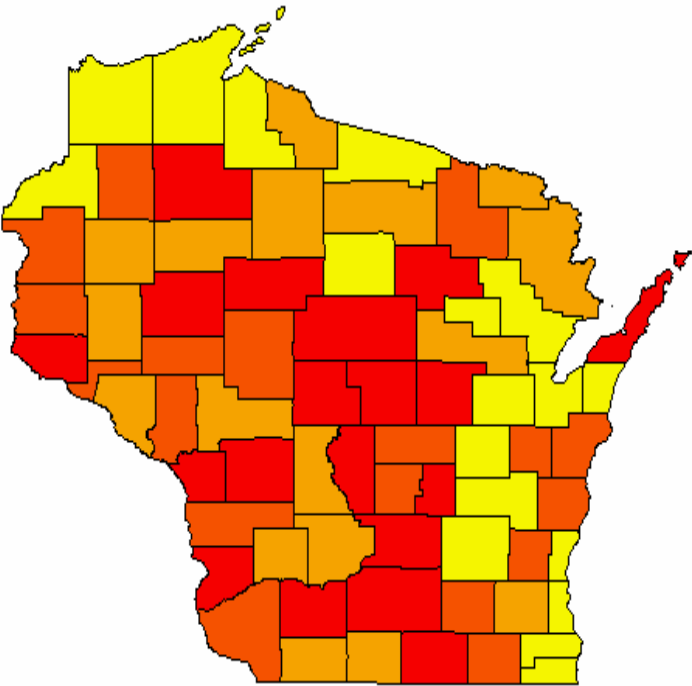


TABLE LEGEND →	
% Above 2 mg/L	See above
% Above 10 mg/L	10 mg/L is the enforcement standard in the private and municipal water supply
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having fewer people exposed to nitrate levels exceeding the preventative action level.

Place	% Above 2 mg/L	% Above 10 mg/L	Z-Score	Rank (of 73)
Adams	26.4	3.2	0.78	61
Ashland	1.0	1.0	-0.77	18
Barron	6.3	2.8	-0.44	34
Bayfield	0.0	0.0	-0.83	1
Brown	0.2	0.2	-0.82	11
Buffalo	4.8	2.1	-0.54	30
Burnett	0.5	0.5	-0.80	14
Calumet	17.7	0.0	0.25	53
Chippewa	41.6	3.5	1.70	68
Clark	13.6	1.8	0.00	48
Columbia	28.8	4.1	0.92	64
Crawford	36.8	0.7	1.41	67
Dane	26.5	2.4	0.78	62
Dodge	0.9	0.9	-0.77	17
Door	33.2	0.4	1.19	66
Douglas	0.0	0.0	-0.83	1
Dunn	3.9	3.9	-0.59	28
Eau Claire	9.2	0.9	-0.27	41
Florence	1.4	1.4	-0.74	21
Fond du Lac	1.0	1.0	-0.77	18
Forest	19.5	0.0	0.36	54
Grant	10.8	1.5	-0.17	43
Green	4.2	4.2	-0.58	29
Green Lake	19.9	5.1	0.38	55
Iowa	25.6	1.3	0.73	60
Iron	1.2	1.2	-0.76	20
Jackson	5.3	2.6	-0.51	31
Jefferson	7.7	0.8	-0.36	39
Juneau	5.8	1.5	-0.48	32
Kenosha	0.0	0.0	-0.83	1
Kewaunee	0.7	0.7	-0.79	16
La Crosse	71.8	1.2	3.00	73
Lafayette	6.4	1.0	-0.44	35
Langlade	41.9	0.4	1.72	69
Lincoln	0.0	0.0	-0.83	1
Manitowoc	7.0	1.7	-0.40	38
Marathon	27.0	1.4	0.82	63
Marinette	3.3	1.8	-0.63	25
Marquette	10.7	2.3	-0.18	42
Menominee	0.0	0.0	-0.83	1
Milwaukee City	0.0	0.0	-0.83	1
Milwaukee County	0.0	0.0	-0.83	1
Monroe	49.7	4.2	2.20	70
Oconto	0.0	0.0	-0.83	1
Oneida	2.6	0.9	-0.67	24
Outagamie	0.0	0.0	-0.83	1
Ozaukee	0.0	0.0	-0.83	1
Pepin	16.2	3.3	0.16	50
Pierce	22.4	3.2	0.53	57
Polk	9.2	1.0	-0.27	40
Portage	63.1	6.1	3.00	71
Price	1.9	0.0	-0.71	22
Racine	0.4	0.4	-0.81	12
Richland	3.7	2.2	-0.61	27
Rock	67.7	3.4	3.00	72
Rusk	2.4	0.7	-0.68	23
Sauk	6.8	6.8	-0.42	36
Sawyer	25.0	1.2	0.69	59
Shawano	5.9	2.5	-0.47	33
Sheboygan	11.9	0.0	-0.10	45
St. Croix	11.9	0.0	-0.10	45
Taylor	20.4	0.0	0.41	56
Trempealeau	12.0	2.8	-0.10	47
Vernon	16.9	1.5	0.20	52
Vilas	0.4	0.4	-0.81	13
Walworth	6.9	2.4	-0.41	37
Washburn	16.2	0.4	0.15	49
Washington	11.8	2.1	-0.11	44
Waukesha	3.6	0.9	-0.61	26
Waupaca	24.0	1.4	0.63	58
Waushara	16.4	2.9	0.17	51
Winnebago	0.5	0.5	-0.80	15
Wood	28.9	0.8	0.93	65

HOUSING WITH INCREASED LEAD RISK

ABOUT THE MEASURE	
WHAT IT IS:	Housing with Increased Lead Risk is the percentage of housing units that were built before 1950. These units have a higher possibility of providing exposure to lead paint.
WHERE IT COMES FROM:	These data are obtained from the United States Decennial Census.
REASONS FOR RANKING:	Housing that was built before 1950 has a higher risk of lead poisoning for its inhabitants. In children, lead poisoning can cause learning disabilities, ADD, and stunted growth, among other problems. In adults, lead poisoning can cause fertility, neurological, and memory problems, among many others.

RANKING METHODOLOGY	
Summary Measure:	Health Determinants – Physical Environment (Lead Risk)
Weight in Health Determinants:	1.67%
Years of data used:	2000
Changes from last year:	In 2005, this measure was called Pre-1950 Housing.

SUMMARY INFORMATION	
Range in Wisconsin (Min-Max):	8-53%
Overall in Wisconsin:	31%
Comparable HP2010 Target:	No comparable target

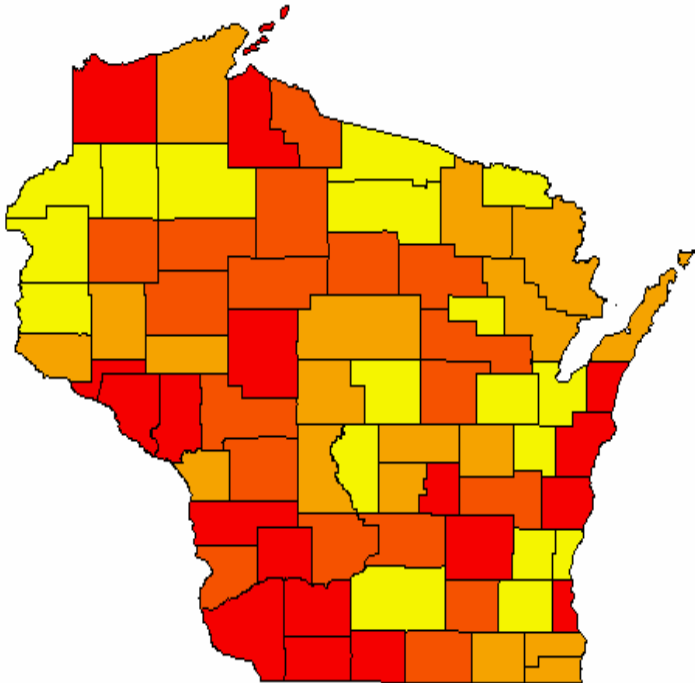


TABLE LEGEND →	
% Housing with Increased Risk	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{5x * (1 - \frac{x}{n})}$ where x is the number of events and n is the total population
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)
← MAP	The counties are shaded by quartile, with lighter counties having a lower percentage of housing units at risk for having lead paint.

Place	% Housing with Increased Risk	95% CI	Z-Score	Rank (of 73)
Adams	11.9	10.6 - 13.0	-2.32	2
Ashland	42.6	40.2 - 44.8	1.13	65
Barron	34.5	33.0 - 35.9	0.22	41
Bayfield	31.4	29.4 - 33.2	-0.13	33
Brown	19.8	19.1 - 20.3	-1.43	8
Buffalo	45.5	42.7 - 48.3	1.46	69
Burnett	19.3	17.7 - 20.8	-1.49	5
Calumet	25.8	24.2 - 27.2	-0.76	14
Chippewa	35.3	33.9 - 36.7	0.31	42
Clark	46.7	44.7 - 48.5	1.60	71
Columbia	37.5	36.1 - 38.9	0.56	51
Crawford	33.5	31.2 - 35.7	0.11	39
Dane	20.7	20.2 - 21.1	-1.33	9
Dodge	41.0	39.8 - 42.1	0.95	59
Door	30.7	29.2 - 32.1	-0.21	30
Douglas	44.1	42.6 - 45.6	1.30	66
Dunn	33.0	31.3 - 34.6	0.05	36
Eau Claire	28.7	27.6 - 29.7	-0.43	22
Florence	25.8	22.8 - 28.7	-0.76	14
Fond du Lac	37.3	36.2 - 38.3	0.54	47
Forest	27.7	25.5 - 29.8	-0.54	20
Grant	40.9	39.3 - 42.3	0.94	57
Green	42.0	40.1 - 43.8	1.07	62
Green Lake	39.5	37.3 - 41.6	0.78	55
Iowa	44.3	42.0 - 46.4	1.33	68
Iron	38.7	35.8 - 41.5	0.69	54
Jackson	37.4	35.0 - 39.7	0.55	49
Jefferson	37.0	35.7 - 38.2	0.50	46
Juneau	29.0	27.1 - 30.7	-0.40	24
Kenosha	30.0	29.1 - 30.8	-0.29	28
Kewaunee	41.6	39.1 - 43.9	1.02	61
La Crosse	29.2	28.2 - 30.1	-0.38	25
Lafayette	52.6	49.8 - 55.2	2.26	73
Langlade	37.7	35.7 - 39.7	0.58	52
Lincoln	35.5	33.7 - 37.1	0.33	43
Manitowoc	42.3	41.1 - 43.4	1.10	63
Marathon	31.0	30.1 - 31.9	-0.17	32
Marinette	29.3	28.0 - 30.5	-0.36	27
Marquette	27.3	25.1 - 29.3	-0.59	19
Menominee	8.2	5.5 - 10.8	-2.74	1
Milwaukee City	46.7	46.2 - 47.1	1.60	71
Milwaukee County	40.9	40.5 - 41.2	0.94	57
Monroe	34.0	32.4 - 35.6	0.17	40
Oconto	28.8	27.3 - 30.1	-0.42	23
Oneida	22.4	21.2 - 23.4	-1.14	11
Outagamie	26.5	25.7 - 27.2	-0.68	16
Ozaukee	18.4	17.4 - 19.3	-1.59	4
Pepin	44.1	40.1 - 48.0	1.30	66
Pierce	31.6	29.8 - 33.3	-0.10	34
Polk	27.1	25.7 - 28.4	-0.61	17
Portage	25.2	24.0 - 26.3	-0.83	13
Price	35.5	33.3 - 37.6	0.33	43
Racine	32.6	31.8 - 33.3	0.01	35
Richland	45.6	43.1 - 48.0	1.47	70
Rock	33.4	32.5 - 34.2	0.10	38
Rusk	36.9	34.4 - 39.2	0.49	45
Sauk	33.3	31.9 - 34.5	0.09	37
Sawyer	21.0	19.4 - 22.5	-1.30	10
Shawano	37.3	35.7 - 38.8	0.54	47
Sheboygan	41.4	40.3 - 42.3	1.00	60
St. Croix	22.8	21.6 - 23.9	-1.10	12
Taylor	37.4	35.1 - 39.6	0.55	49
Trempealeau	40.1	38.1 - 42.1	0.85	56
Vernon	42.5	40.5 - 44.4	1.12	64
Vilas	19.6	18.4 - 20.7	-1.46	7
Walworth	30.4	29.4 - 31.3	-0.24	29
Washburn	27.2	25.3 - 29.0	-0.60	18
Washington	19.5	18.7 - 20.3	-1.47	6
Waukesha	14.3	13.9 - 14.7	-2.05	3
Waupaca	38.0	36.5 - 39.4	0.62	53
Waushara	28.1	26.4 - 29.7	-0.50	21
Winnebago	30.9	30.1 - 31.7	-0.18	31
Wood	29.2	28.0 - 30.3	-0.38	25

LEAD POISONED CHILDREN

ABOUT THE MEASURE

WHAT IT IS:	Lead Poisoned Children is a measure of the percentage of lead tests on children under age six that tested positive for lead poisoning. This measure is not based on a complete or random sample and should be <u>interpreted with caution</u> . Children in the cities of Milwaukee and Racine are tested more thoroughly than those in other parts of the state. Outside of Milwaukee and Racine, children are selected to be tested based on a series of questions asked at well-child clinics to determine if they are at high risk of exposure to lead poisoning, and are then given blood tests. More details on how testing occurs can be found at http://dhfs.wisconsin.gov/lead/doc/Chap7Screen.pdf .
WHERE IT COMES FROM:	These data are obtained from the Wisconsin Department of Health and Family Services (DHFS).
REASONS FOR RANKING:	Lead poisoning has been shown to cause many health problems. In children, lead poisoning can cause learning disabilities, ADD, and stunted growth, among other problems, and in adults, lead poisoning can cause fertility, neurological, and memory problems, among many others.

RANKING METHODOLOGY

Summary Measure:	Health Determinants – Physical Environment (Lead Risk)
Weight in Health Determinants:	1.67%
Years of data used:	2004
Changes from last year:	None

SUMMARY INFORMATION

Range in Wisconsin (Min-Max):	0.0-8.5%
Overall in Wisconsin:	3.7%
Comparable HP2010 Target:	0%

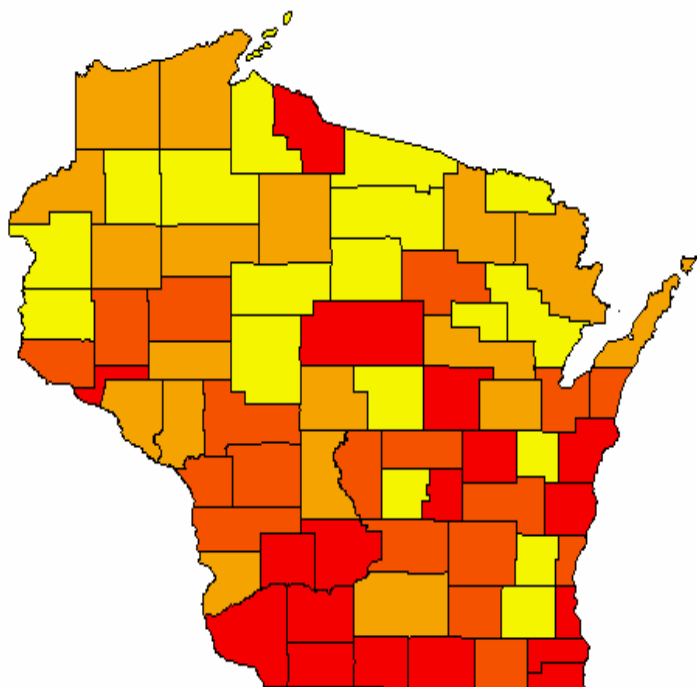


TABLE LEGEND →

% Tested Positive	See above
95% CI	95% confidence interval, calculated as $1.96 * \sqrt{\frac{p(1-p)}{n}}$ where p is the prevalence and n is the sample size.
Z-Score	(Measure – Average of 72 WI counties)/(Standard Deviation)

← MAP

The counties are shaded by quartile, with lighter counties having a lower number of children testing positive for lead poisoning.

Place	% Tested Positive	95% CI	Z-Score	Rank (of 73)
Adams	1.5	0.0 - 3.0	-0.07	45
Ashland	0.7	0.0 - 1.4	-0.75	11
Barron	1.0	0.2 - 1.7	-0.51	28
Bayfield	1.0	0.0 - 2.1	-0.48	29
Brown	1.2	0.9 - 1.4	-0.34	37
Buffalo	1.2	0.0 - 2.4	-0.36	36
Burnett	1.0	0.0 - 2.1	-0.46	32
Calumet	0.6	0.0 - 1.5	-0.81	9
Chippewa	1.3	0.6 - 2.0	-0.21	41
Clark	0.4	0.0 - 0.9	-0.95	4
Columbia	1.8	0.9 - 2.6	0.15	50
Crawford	0.9	0.0 - 1.8	-0.57	23
Dane	0.8	0.5 - 1.0	-0.62	21
Dodge	2.0	1.2 - 2.7	0.29	52
Door	0.9	0.0 - 1.7	-0.57	23
Douglas	1.1	0.4 - 1.6	-0.43	33
Dunn	1.4	0.5 - 2.3	-0.13	43
Eau Claire	1.0	0.5 - 1.3	-0.52	26
Florence	0.0	-	-1.27	1
Fond du Lac	1.7	1.1 - 2.3	0.09	49
Forest	0.8	0.0 - 1.8	-0.62	19
Grant	3.1	2.0 - 4.2	1.21	65
Green	3.9	2.2 - 5.5	1.82	68
Green Lake	2.2	0.9 - 3.5	0.47	58
Iowa	2.0	0.4 - 3.5	0.32	55
Iron	4.5	0.7 - 8.1	2.28	69
Jackson	1.2	0.2 - 2.1	-0.33	38
Jefferson	2.0	1.2 - 2.5	0.27	51
Juneau	1.0	0.2 - 1.6	-0.51	27
Kenosha	2.5	1.9 - 3.1	0.73	60
Kewaunee	1.7	0.2 - 3.1	0.06	48
La Crosse	1.2	0.7 - 1.6	-0.32	40
Lafayette	4.7	2.2 - 7.2	2.46	71
Langlade	1.2	0.1 - 2.2	-0.33	38
Lincoln	0.5	0.0 - 1.1	-0.85	6
Manitowoc	3.0	2.2 - 3.8	1.12	63
Marathon	2.0	1.4 - 2.5	0.32	55
Marinette	1.1	0.4 - 1.7	-0.43	33
Marquette	0.7	0.0 - 1.5	-0.74	12
Menominee	0.6	0.0 - 1.4	-0.84	8
Milwaukee City	8.5	8.2 - 8.8	3.00	73
Milwaukee County	7.3	7.0 - 7.5	3.00	72
Monroe	2.0	1.1 - 2.8	0.31	54
Oconto	0.7	0.0 - 1.5	-0.69	14
Oneida	0.8	0.0 - 1.5	-0.67	15
Outagamie	0.9	0.5 - 1.2	-0.53	25
Ozaukee	1.3	0.5 - 2.1	-0.21	41
Pepin	2.2	0.0 - 4.7	0.49	59
Pierce	1.7	0.5 - 2.7	0.05	47
Polk	0.7	0.0 - 1.3	-0.71	13
Portage	0.5	0.1 - 0.9	-0.85	6
Price	0.8	0.0 - 1.8	-0.62	19
Racine	3.8	3.3 - 4.2	1.72	67
Richland	3.4	1.4 - 5.4	1.45	66
Rock	3.1	2.5 - 3.6	1.15	64
Rusk	0.9	0.0 - 1.7	-0.60	22
Sauk	2.8	1.7 - 3.7	0.90	61
Sawyer	0.2	0.0 - 0.4	-1.15	2
Shawano	1.1	0.3 - 1.9	-0.37	35
Sheboygan	4.6	3.7 - 5.4	2.36	70
St. Croix	0.8	0.1 - 1.4	-0.64	18
Taylor	0.6	0.0 - 1.4	-0.78	10
Trempealeau	1.0	0.3 - 1.7	-0.47	30
Vernon	1.6	0.4 - 2.7	-0.01	46
Vilas	0.4	0.0 - 1.0	-0.95	4
Walworth	1.5	0.9 - 2.0	-0.09	44
Washburn	0.4	0.0 - 0.9	-0.97	3
Washington	0.8	0.2 - 1.2	-0.66	17
Waukesha	0.8	0.5 - 0.9	-0.66	16
Waupaca	2.2	1.2 - 3.1	0.45	57
Waushara	2.0	0.8 - 3.0	0.29	52
Winnebago	2.8	2.0 - 3.4	0.90	61
Wood	1.0	0.5 - 1.5	-0.47	30

SPECIAL FEATURES

Examining Non-Smoking Ordinances as Public Health Policies

In order to begin to capture programs and policies that affect population health, we present an example of non-smoking policies in the table to the right. Following the model proposed by Kindig and Stoddart (see Introduction), one can affect health outcomes by implementing policies and interventions to directly affect the health determinants in the population or to affect how the determinants transfer into health outcomes. Adopting non-smoking ordinances is an example of a policy in a community to actively affect one important determinant of health—cigarette smoking and environmental tobacco smoke (ETS) exposure.

In this analysis, we report the proportion of the locality covered by a written non-smoking ordinance in municipal or county buildings. Also included in the table is a measure obtained from asking people about their work environments: whether or not there is an official non-smoking policy in work areas and common areas at work. Having a non-smoking policy at work has been shown to dramatically reduce ETS exposure in the workplace,^{5,6} even in non-smokers.⁷

The local population covered by a smoking ban in municipal or county buildings ranged from 8.8% to 100%, with a median of 58.7%.⁸ The proportion of the population covered by a smoking ban across the State was 79.7%. The proportion of the population who reported that they work in a place that has a non-smoking policy ranged from 12.8% to 39.9%, with a median of 24.6%. The proportion of the population reporting a non-smoking policy at work throughout Wisconsin was 24.2%. Because of the low proportion of people covered by a non-smoking policy in their place of employment, a useful public health policy action might be to enact non-smoking policies in businesses and places of employment throughout the community.

It is important to note that these two data sources may not reflect all the smoking policies in effect at the local level. For example, county officials in Menominee report that all Menominee County and Tribal worksites and vehicles, as well as many other places in the county currently have non-smoking policies in place.

For a guide to evidence-based programs and policies that have been evaluated by the CDC's Preventive Services Task Force, please see the Community Guide website at www.thecommunityguide.org.

Place	Population Covered by Smoking Ban in Municipal Buildings		Official Non-Smoking Policy at the Workplace	
	Value	Rank (of 73)	Value	Rank (of 47)
Adams	45.6%	52	NR	NR
Ashland	84.4%	8	NR	NR
Barron	30.6%	64	23.4%	26
Bayfield	49.5%	49	NR	NR
Brown	31.7%	63	22.3%	29
Buffalo	57.9%	38	NR	NR
Burnett	72.5%	18	NR	NR
Calumet	19.7%	71	21.6%	34
Chippewa	59.5%	35	18.7%	40
Clark	27.8%	67	22.1%	32
Columbia	80.2%	10	18.1%	41
Crawford	51.8%	48	NR	NR
Dane	86.0%	6	14.6%	46
Dodge	52.4%	47	24.7%	22
Door	64.6%	30	25.5%	19
Douglas	87.4%	5	12.8%	47
Dunn	59.4%	36	22.1%	31
Eau Claire	84.8%	7	20.2%	38
Florence	69.0%	25	NR	NR
Fond du Lac	63.7%	31	27.7%	14
Forest	64.8%	29	NR	NR
Grant	26.7%	68	31.1%	8
Green	39.1%	61	22.8%	28
Green Lake	43.3%	56	NR	NR
Iowa	45.6%	53	NR	NR
Iron	57.3%	40	NR	NR
Jackson	54.1%	45	NR	NR
Jefferson	76.1%	11	16.6%	43
Juneau	57.5%	39	39.9%	1
Kenosha	29.6%	65	29.8%	10
Kewaunee	57.2%	42	NR	NR
La Crosse	40.0%	60	14.9%	45
Lafayette	42.7%	57	NR	NR
Langlade	72.3%	20	NR	NR
Lincoln	58.7%	37	39.0%	3
Manitowoc	80.5%	9	29.4%	12
Marathon	70.2%	23	22.1%	33
Marinette	72.6%	17	35.1%	5
Marquette	43.5%	55	NR	NR
Menominee	100.0%	1	NR	NR
Milwaukee City	100.0%	1	27.1%	16
Milwaukee County	92.7%	4	26.8%	17
Monroe	55.8%	44	24.6%	23
Oconto	57.3%	41	39.7%	2
Oneida	44.7%	54	17.4%	42
Outagamie	74.7%	13	22.2%	30
Ozaukee	61.8%	34	25.3%	21
Pepin	18.6%	72	NR	NR
Pierce	76.0%	12	27.2%	15
Polk	47.4%	51	20.7%	37
Portage	73.8%	16	26.4%	18
Price	23.5%	70	NR	NR
Racine	74.2%	15	31.9%	6
Richland	53.1%	46	NR	NR
Rock	25.7%	69	29.6%	11
Rusk	48.8%	50	NR	NR
Sauk	68.9%	26	24.2%	25
Sawyer	8.8%	73	NR	NR
Shawano	67.2%	28	38.7%	4
Sheboygan	72.4%	19	28.1%	13
St. Croix	70.0%	24	15.3%	44
Taylor	28.1%	66	NR	NR
Trempealeau	42.5%	58	21.2%	35
Vernon	37.0%	62	NR	NR
Vilas	61.9%	33	NR	NR
Walworth	62.4%	32	24.4%	24
Washburn	72.1%	22	NR	NR
Washington	72.1%	21	30.0%	9
Waukesha	68.8%	27	19.6%	39
Waupaca	56.6%	43	31.2%	7
Waushara	40.5%	59	21.0%	36
Winnebago	95.6%	3	23.3%	27
Wood	74.4%	14	25.4%	20

* NR = Not reported. Places with less than 50 respondents are censored in this analysis.

The Burden of Excess Deaths in Wisconsin

Place	Annual Number of Excess Deaths	Annual Number of Total Deaths	Percent of Deaths which are In Excess
Adams	30	102	30%
Ashland	26	68	38%
Barron	45	165	27%
Bayfield	19	65	29%
Brown	122	614	20%
Buffalo	10	49	20%
Burnett	29	84	35%
Calumet	3	94	3%
Chippewa	42	185	23%
Clark	19	104	19%
Columbia	46	181	26%
Crawford	15	63	25%
Dane	164	1026	16%
Dodge	81	291	28%
Door	21	105	20%
Douglas	66	176	37%
Dunn	17	101	17%
Eau Claire	26	230	12%
Florence	6	22	28%
Fond du Lac	69	310	22%
Forest	16	46	34%
Grant	39	166	24%
Green	22	106	20%
Green Lake	18	75	24%
Iowa	17	73	23%
Iron	12	35	34%
Jackson	24	74	32%
Jefferson	58	238	24%
Juneau	47	117	40%
Kenosha	178	511	35%
Kewaunee	13	65	21%
La Crosse	79	320	25%
Lafayette	13	57	22%
Langlade	21	84	26%
Lincoln	30	112	27%
Manitowoc	58	279	21%
Marathon	40	343	12%
Marinette	62	185	33%
Marquette	26	76	34%
Menominee	18	28	63%
Milwaukee City	1330	2615	51%
Milwaukee County	1650	3822	43%
Monroe	59	160	37%
Oconto	32	129	24%
Oneida	38	158	24%
Outagamie	69	420	16%
Ozaukee	17	227	7%
Pepin	3	23	15%
Pierce	18	92	19%
Polk	36	143	25%
Portage	29	175	17%
Price	17	66	26%
Racine	210	664	32%
Richland	12	61	19%
Rock	183	559	33%
Rusk	20	64	31%
Sauk	48	187	26%
Sawyer	29	85	35%
Shawano	40	151	26%
Sheboygan	71	345	21%
St. Croix	31	166	18%
Taylor	12	61	20%
Trempealeau	26	97	27%
Vernon	25	101	25%
Vilas	24	104	23%
Walworth	68	285	24%
Washburn	19	68	28%
Washington	35	305	12%
Waukesha	70	941	7%
Waupaca	79	213	37%
Waushara	34	110	31%
Winnebago	96	463	21%
Wood	35	230	15%

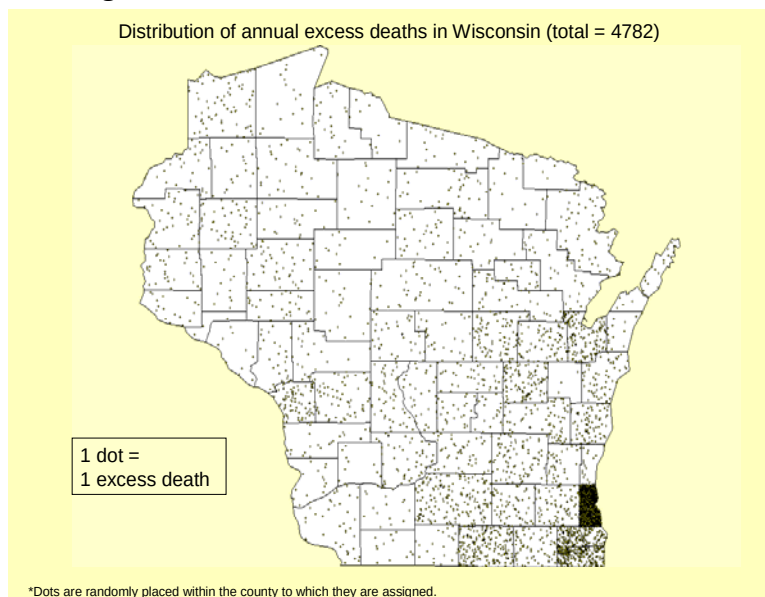
Examining only the rate of death in each county does not provide a complete picture regarding the magnitude of the burden of mortality across Wisconsin. An alternative approach for measuring burden is to use a measure of *excess deaths* which incorporates both elements of the death rate and the population size. Excess deaths are calculated by counting how many more deaths occur in a county above the number that would be expected if that county instead had the age-specific death rates of the healthiest counties in the state. These death rates in the healthiest counties are referred to as the target death rates.

There are on average about 17,700 total deaths each year among Wisconsin residents under 75 years of age. Of these deaths, 4,782 (27%) are in excess of what would be expected if every county was able to achieve the target rates.⁹

The distribution of total excess deaths across Wisconsin counties is displayed in the table and map on this page. Three counties have excess deaths which account for less than 10% of their total annual deaths; in contrast the majority of the total deaths occurring in Menominee County (63%) and the City of Milwaukee (51%) could be avoided with significant improvements in mortality rates.

Milwaukee County contains approximately 18% of the state's population but accounts for 35% of the state's excess deaths. Within Milwaukee County, the City of Milwaukee has 1,330 excess deaths compared to only 320 in the remaining areas of the county, demonstrating that the City has a larger burden of excess deaths than would be expected by population distribution alone.

Including the distribution of excess deaths across Wisconsin in examinations of the mortality burden can assist in program planning, allocation of resources, and targeting approaches for reaching state and local health goals such as those included in *Healthiest Wisconsin 2010*.



STATEWIDE FINDINGS

Table 2: Overall Results

RANK	HEALTH OUTCOMES	Z-Score	HEALTH DETERMINANTS	Z-Score
1	Florence	-1.68	Ozaukee	-0.41
2	Waukesha	-1.64	Waukesha	-0.40
3	Ozaukee	-1.63	Washington	-0.26
4	Eau Claire	-1.24	Lafayette	-0.24
5	Portage	-1.17	Calumet	-0.22
6	Dane	-1.06	Dane	-0.19
7	Washington	-0.98	Kewaunee	-0.19
8	Outagamie	-0.98	Buffalo	-0.19
9	St. Croix	-0.93	Pierce	-0.17
10	Calumet	-0.86	St. Croix	-0.16
11	Marathon	-0.85	Iowa	-0.13
12	Kewaunee	-0.75	Door	-0.12
13	Iowa	-0.65	Outagamie	-0.12
14	Jefferson	-0.63	Portage	-0.11
15	Bayfield	-0.62	Wood	-0.11
16	La Crosse	-0.59	Marathon	-0.11
17	Wood	-0.59	Columbia	-0.11
18	Walworth	-0.59	Sheboygan	-0.09
19	Door	-0.55	Walworth	-0.09
20	Sauk	-0.43	Eau Claire	-0.09
21	Brown	-0.41	Florence	-0.08
22	Vernon	-0.40	Fond du Lac	-0.08
23	Manitowoc	-0.39	Dodge	-0.08
24	Grant	-0.39	Green	-0.08
25	Taylor	-0.39	La Crosse	-0.08
26	Richland	-0.38	Winnebago	-0.06
27	Fond du Lac	-0.37	Polk	-0.05
28	Dodge	-0.37	Oneida	-0.05
29	Green	-0.36	Rusk	-0.04
30	Winnebago	-0.33	Brown	-0.04
31	Oconto	-0.33	Clark	-0.03
32	Lafayette	-0.31	Price	-0.03
33	Dunn	-0.25	Manitowoc	-0.02
34	Pierce	-0.21	Sauk	-0.01
35	Sheboygan	-0.18	Grant	-0.01
36	Crawford	-0.17	Chippewa	0.00
37	Clark	-0.06	Vilas	0.00
38	Shawano	-0.04	Iron	0.01
39	Chippewa	-0.03	Sawyer	0.01
40	Lincoln	0.02	Pepin	0.02
41	Pepin	0.08	Richland	0.02
42	Rusk	0.10	Barron	0.03
43	Polk	0.10	Green Lake	0.03
44	Trempealeau	0.20	Washburn	0.03
45	Rock	0.27	Oconto	0.03
46	Iron	0.30	Vernon	0.03
47	Racine	0.32	Dunn	0.03
48	Columbia	0.37	Jefferson	0.04
49	Oneida	0.38	Shawano	0.04
50	Buffalo	0.39	Bayfield	0.06
51	Jackson	0.47	Waupaca	0.07
52	Burnett	0.48	Wausara	0.07
53	Barron	0.48	Jackson	0.08
54	Washburn	0.49	Ashland	0.08
55	Sawyer	0.54	Crawford	0.08
56	Langlade	0.56	Burnett	0.09
57	Ashland	0.56	Marinette	0.10
58	Monroe	0.60	Trempealeau	0.12
59	Green Lake	0.70	Rock	0.12
60	Kenosha	0.71	Kenosha	0.13
61	Wausara	0.75	Langlade	0.14
62	Waupaca	0.90	Lincoln	0.14
63	Douglas	0.96	Marquette	0.14
64	Marinette	1.02	Racine	0.15
65	Marquette	1.11	Taylor	0.15
66	Price	1.24	Monroe	0.16
67	Vilas	1.26	Douglas	0.18
68	Forest	1.30	Juneau	0.18
69	Adams	1.40	Forest	0.19
70	Milwaukee County	1.43	Milwaukee County	0.25
71	Menominee	1.53	Adams	0.26
72	Juneau	1.81	Milwaukee City	0.53
73	Milwaukee City	2.52	Menominee	0.68

Table 3: Health Outcomes Ranks

MORTALITY: YEARS OF POTENTIAL LIFE LOST			Z-Score	GENERAL HEALTH STATUS: % FAIR/POOR HEALTH			Z-Score
RANK				RANK			
1	Waukesha	3886	-1.66	1	Florence	5.6%	-2.55
2	Calumet	4006	-1.56	2	Ozaukee	7.6%	-1.81
3	Ozaukee	4140	-1.45	3	Waukesha	8.2%	-1.61
4	Portage	4199	-1.40	4	Bayfield	8.2%	-1.60
5	Taylor	4504	-1.15	5	Iowa	8.7%	-1.42
6	Eau Claire	4529	-1.13	6	Eau Claire	8.9%	-1.36
7	Washington	4615	-1.05	7	Dane	9.5%	-1.15
8	Dane	4708	-0.98	8	Marathon	9.7%	-1.06
9	Manitowoc	4739	-0.95	9	Outagamie	9.9%	-1.01
10	Outagamie	4740	-0.95	10	Grant	9.9%	-1.00
11	Walworth	4759	-0.93	11	St. Croix	10.0%	-0.94
12	Wood	4760	-0.93	12	Portage	10.1%	-0.93
13	St. Croix	4767	-0.93	13	Washington	10.1%	-0.91
14	Florence	4905	-0.81	14	Clark	10.2%	-0.88
15	Crawford	4972	-0.76	15	Kewaunee	10.3%	-0.86
16	Door	5072	-0.67	16	Iron	10.4%	-0.82
17	Marathon	5109	-0.64	17	Jefferson	10.4%	-0.81
18	Kewaunee	5115	-0.64	18	Sauk	10.5%	-0.77
19	Brown	5124	-0.63	19	La Crosse	10.8%	-0.67
20	Fond du Lac	5138	-0.62	20	Oconto	10.8%	-0.65
21	Chippewa	5183	-0.58	21	Sawyer	10.9%	-0.62
22	Winnebago	5268	-0.51	22	Burnett	11.0%	-0.59
23	La Crosse	5270	-0.51	23	Vernon	11.4%	-0.46
24	Pepin	5274	-0.51	24	Dodge	11.4%	-0.44
25	Pierce	5332	-0.46	25	Door	11.5%	-0.43
26	Green	5347	-0.45	26	Richland	11.5%	-0.42
27	Jefferson	5351	-0.44	27	Sheboygan	11.7%	-0.36
28	Dunn	5378	-0.42	28	Jackson	11.7%	-0.36
29	Vernon	5474	-0.34	29	Lafayette	11.8%	-0.30
30	Richland	5482	-0.33	30	Green	11.9%	-0.28
31	Lafayette	5494	-0.32	31	Wood	12.0%	-0.24
32	Lincoln	5523	-0.30	32	Walworth	12.0%	-0.24
33	Dodge	5534	-0.29	33	Brown	12.1%	-0.19
34	Oneida	5568	-0.26	34	Calumet	12.2%	-0.16
35	Buffalo	5659	-0.19	35	Winnebago	12.2%	-0.15
36	Shawano	5766	-0.10	36	Fond du Lac	12.3%	-0.13
37	Sauk	5783	-0.08	37	Dunn	12.4%	-0.08
38	Polk	5802	-0.07	38	Rusk	12.7%	0.02
39	Trempealeau	5827	-0.05	39	Shawano	12.7%	0.03
40	Sheboygan	5882	0.00	40	Pierce	12.8%	0.04
41	Oconto	5885	0.00	41	Menominee	12.8%	0.06
42	Iowa	6016	0.11	42	Racine	12.8%	0.07
43	Columbia	6069	0.15	43	Manitowoc	13.1%	0.16
44	Rusk	6102	0.18	44	Polk	13.4%	0.28
45	Rock	6117	0.19	45	Washburn	13.5%	0.31
46	Langlade	6155	0.22	46	Lincoln	13.6%	0.34
47	Grant	6156	0.22	47	Rock	13.6%	0.35
48	Price	6202	0.26	48	Taylor	13.7%	0.37
49	Barron	6255	0.31	49	Marquette	13.8%	0.41
50	Forest	6266	0.32	50	Crawford	13.8%	0.42
51	Bayfield	6308	0.35	51	Trempealeau	13.9%	0.45
52	Green Lake	6372	0.40	52	Chippewa	14.1%	0.53
53	Waupaca	6388	0.42	53	Monroe	14.2%	0.56
54	Ashland	6395	0.42	54	Columbia	14.3%	0.59
55	Kenosha	6409	0.43	55	Barron	14.5%	0.65
56	Racine	6587	0.58	56	Pepin	14.5%	0.68
57	Waushara	6612	0.60	57	Ashland	14.6%	0.71
58	Vilas	6624	0.61	58	Langlade	15.1%	0.89
59	Adams	6657	0.64	59	Waushara	15.2%	0.90
60	Monroe	6668	0.65	60	Douglas	15.2%	0.93
61	Washburn	6685	0.66	61	Buffalo	15.3%	0.97
62	Clark	6795	0.75	62	Milwaukee County	15.3%	0.97
63	Marinette	7033	0.95	63	Kenosha	15.4%	0.98
64	Douglas	7087	1.00	64	Green Lake	15.4%	1.00
65	Juneau	7203	1.09	65	Oneida	15.5%	1.02
66	Jackson	7451	1.30	66	Marinette	15.7%	1.09
67	Iron	7596	1.42	67	Waupaca	16.5%	1.38
68	Burnett	7746	1.54	68	Vilas	18.0%	1.92
69	Sawyer	7931	1.70	69	Milwaukee City	18.3%	2.05
70	Marquette	8065	1.81	70	Adams	18.6%	2.15
71	Milwaukee County	8153	1.88	71	Price	18.8%	2.22
72	Milwaukee City	10577	3.00	72	Forest	19.0%	2.29
73	Menominee	11760	3.00	73	Juneau	19.6%	2.52

**Table 4: Health
Determinants
Ranks**

RANK	HEALTH CARE	Z-Score	HEALTH BEHAVIORS	Z-Score	SOCIOECONOMIC FACTORS	Z-Score	PHYSICAL ENVIRONMENT	Z-Score
1	Wood	-0.12	Waukesha	-0.44	Ozaukee	-0.57	Menominee	-0.11
2	Outagamie	-0.10	Ozaukee	-0.44	Waukesha	-0.53	Vilas	-0.10
3	Marathon	-0.10	Lafayette	-0.37	Calumet	-0.45	Florence	-0.08
4	Portage	-0.09	Iron	-0.36	St. Croix	-0.43	Burnett	-0.08
5	Ozaukee	-0.08	Florence	-0.30	Kewaunee	-0.39	Oneida	-0.07
6	Eau Claire	-0.08	Rusk	-0.28	Washington	-0.38	Oconto	-0.07
7	Waukesha	-0.08	Washington	-0.25	Pierce	-0.37	Bayfield	-0.06
8	Washington	-0.07	Iowa	-0.24	Outagamie	-0.29	Price	-0.05
9	Door	-0.06	Dane	-0.23	Lafayette	-0.27	Marinette	-0.05
10	Winnebago	-0.06	Buffalo	-0.23	Portage	-0.26	Ashland	-0.05
11	Sauk	-0.06	Washburn	-0.21	Dane	-0.25	Juneau	-0.05
12	Trempealeau	-0.06	Price	-0.18	Buffalo	-0.23	Polk	-0.05
13	Manitowoc	-0.06	Sawyer	-0.16	Sheboygan	-0.22	Lincoln	-0.05
14	Dane	-0.05	Clark	-0.15	Dodge	-0.22	Marquette	-0.05
15	Fond du Lac	-0.05	Polk	-0.14	Grant	-0.21	Rusk	-0.05
16	Jefferson	-0.05	Door	-0.13	Columbia	-0.21	Washburn	-0.04
17	Sheboygan	-0.05	Wood	-0.12	Manitowoc	-0.20	Sawyer	-0.04
18	La Crosse	-0.05	Bayfield	-0.11	Eau Claire	-0.19	Barron	-0.04
19	Price	-0.05	Vernon	-0.11	Marathon	-0.19	Dunn	-0.04
20	Vilas	-0.05	Walworth	-0.10	La Crosse	-0.19	St. Croix	-0.04
21	Oneida	-0.05	Calumet	-0.10	Door	-0.18	Jackson	-0.03
22	Calumet	-0.04	Richland	-0.10	Winnebago	-0.16	Adams	-0.03
23	Lincoln	-0.03	Oneida	-0.09	Fond du Lac	-0.16	Forest	-0.03
24	St. Croix	-0.03	Kewaunee	-0.09	Green Lake	-0.15	Shawano	-0.03
25	Florence	-0.03	Columbia	-0.08	Pepin	-0.15	Buffalo	-0.02
26	Brown	-0.02	Green	-0.07	Green	-0.14	Waushara	-0.02
27	Dodge	-0.02	Marathon	-0.06	Wood	-0.13	Trempealeau	-0.02
28	Rock	-0.02	Pierce	-0.06	Iowa	-0.13	Waukesha	-0.01
29	Buffalo	-0.02	Chippewa	-0.04	Walworth	-0.12	Taylor	-0.01
30	Chippewa	-0.01	Fond du Lac	-0.03	Brown	-0.11	Douglas	-0.01
31	Columbia	-0.01	La Crosse	-0.01	Jefferson	-0.09	Clark	-0.01
32	Kewaunee	-0.01	Sheboygan	-0.01	Oconto	-0.05	Brown	-0.01
33	Clark	0.00	Portage	-0.01	Sauk	-0.04	Eau Claire	-0.01
34	Grant	0.00	Eau Claire	0.00	Dunn	-0.03	Outagamie	-0.01
35	Washburn	0.00	Barron	0.01	Waupaca	-0.01	Sauk	-0.01
36	Walworth	0.00	Brown	0.01	Shawano	-0.01	Washington	-0.01
37	Langlade	0.00	Winnebago	0.01	Oneida	0.01	Ozaukee	0.00
38	Monroe	0.01	Outagamie	0.01	Vilas	0.02	Calumet	0.00
39	Green	0.01	Vilas	0.02	Chippewa	0.03	Iron	0.00
40	Douglas	0.02	Dodge	0.03	Polk	0.03	Pierce	0.00
41	Green Lake	0.02	Sauk	0.03	Marquette	0.05	Vernon	0.01
42	Rusk	0.02	Milwaukee County	0.05	Marinette	0.06	Walworth	0.01
43	Racine	0.02	Jackson	0.05	Barron	0.07	Richland	0.01
44	Barron	0.02	St. Croix	0.05	Clark	0.07	Dodge	0.01
45	Bayfield	0.02	Kenosha	0.06	Crawford	0.08	Wood	0.01
46	Polk	0.03	Forest	0.06	Ashland	0.09	Kewaunee	0.01
47	Forest	0.03	Waushara	0.06	Waushara	0.12	Pepin	0.01
48	Dunn	0.03	Rock	0.07	Monroe	0.12	Fond du Lac	0.01
49	Adams	0.04	Racine	0.08	Langlade	0.12	Green Lake	0.01
50	Pierce	0.04	Ashland	0.09	Price	0.12	Crawford	0.02
51	Waupaca	0.04	Burnett	0.09	Richland	0.13	Waupaca	0.02
52	Oconto	0.04	Trempealeau	0.09	Florence	0.13	Winnebago	0.02
53	Taylor	0.04	Shawano	0.10	Jackson	0.14	Jefferson	0.03
54	Kenosha	0.04	Juneau	0.11	Burnett	0.14	Grant	0.03
55	Waushara	0.04	Crawford	0.11	Vernon	0.17	Iowa	0.03
56	Marinette	0.04	Dunn	0.12	Sawyer	0.18	Marathon	0.03
57	Jackson	0.04	Oconto	0.14	Rusk	0.18	Lafayette	0.04
58	Shawano	0.05	Manitowoc	0.15	Rock	0.20	Langlade	0.04
59	Milwaukee County	0.06	Waupaca	0.16	Lincoln	0.20	Green	0.04
60	Marquette	0.06	Lincoln	0.17	Taylor	0.21	Dane	0.04
61	Lafayette	0.07	Taylor	0.17	Trempealeau	0.23	Kenosha	0.05
62	Vernon	0.07	Pepin	0.17	Kenosha	0.26	Racine	0.05
63	Burnett	0.08	Douglas	0.18	Racine	0.26	Chippewa	0.05
64	Sawyer	0.08	Jefferson	0.18	Douglas	0.27	Door	0.05
65	Pepin	0.08	Grant	0.19	Bayfield	0.27	Manitowoc	0.06
66	Richland	0.09	Marinette	0.21	Washburn	0.30	Columbia	0.06
67	Crawford	0.09	Langlade	0.21	Iron	0.33	Portage	0.07
68	Milwaukee City	0.09	Green Lake	0.21	Juneau	0.33	Monroe	0.07
69	Menominee	0.10	Monroe	0.26	Adams	0.39	La Crosse	0.09
70	Ashland	0.10	Adams	0.27	Forest	0.43	Sheboygan	0.09
71	Iowa	0.11	Marquette	0.30	Milwaukee County	0.53	Milwaukee County	0.12
72	Juneau	0.12	Milwaukee City	0.33	Milwaukee City	0.95	Milwaukee City	0.13
73	Iron	0.17	Menominee	0.68	Menominee	1.03	Rock	0.17

SUMMARY OF CHANGES FROM PAST RANKINGS

While we present the rankings as a look at current county health outcomes and determinants of future health, we recognize that counties may want to use the rankings to track their change over time relative to other counties. It is important to recognize that while the Institute strives to make estimates of county health as accurate as possible, the estimates are not perfect and minor differences in rankings among counties or slight changes from year to year should be interpreted with caution.

In order to keep with our mission to accurately report the health of Wisconsin communities, we are continuously implementing new measures and methods of measuring health as a way of improving the *Wisconsin County Health Rankings*; as a byproduct, there is some fluctuation from year to year due to the revisions in methods. However, having an understanding of the methods and types of data sources used can help in interpreting county ranks and changes. For example, one method, such as using multiple years of data to calculate prevalence estimates, is incorporated to improve the reliability and stability of county estimates. Three primary reasons for changes in rankings are discussed below.

I. Real Changes

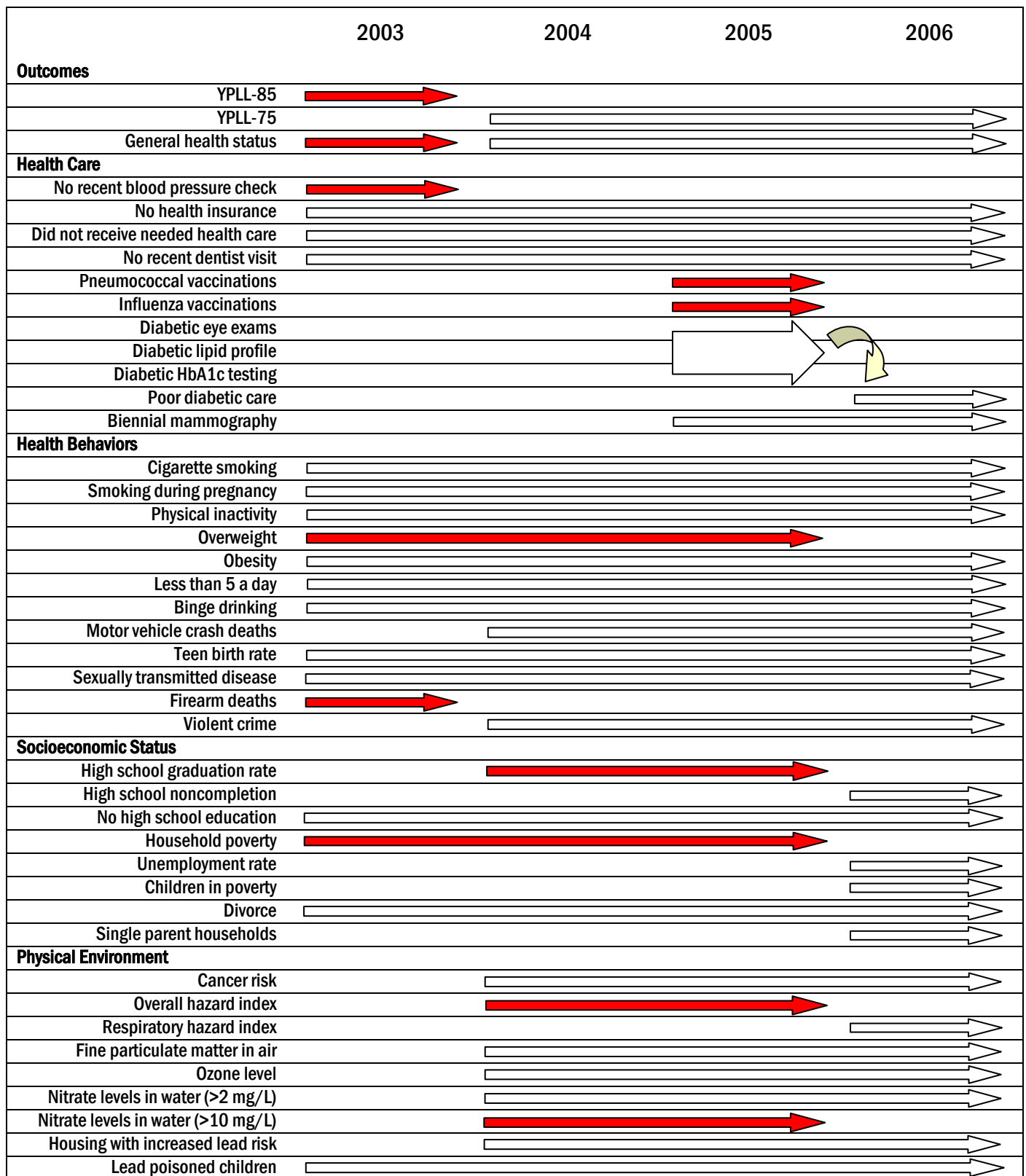
It is possible that changes made in the county health system, or declining health outcomes, are reflected in the change in rank from year to year. While the purpose of the *Rankings* is to monitor these changes in outcomes and determinants, the time required for a change in policy to reflect a change in the rankings is generally longer than only one year. An actual change in health status is not likely to cause major variation in the rankings. A minor steady increase or decrease from year to year is probably indicative of real changes in health status, but large variations in rank are most likely due to other factors, including those outlined below.

II. Sampling Variance

If a relatively small number of individuals in a population are sampled for their survey responses, there can be significant random variation from year to year. This potentially large variation can have a noticeable effect on the estimated measure, impacting the aggregate ranking. While measures like mortality and socioeconomic status are not likely to be affected by sampling variance, measures derived from survey data including self-reported health, health care access, and health behaviors are subject to random sampling variance due to the nature of the survey methods used.

III. Revision in Methods

The following table shows yearly revisions in methods. The light arrows indicate measures still in use, and the dark arrows indicate measures no longer in use. A curved arrow indicates that several measures have been condensed into one.



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