2016 COMMUNITY HEALTH NEEDS ASSESSMENT

Juneau

Central Wisconsin Health Partnership (CWHP)

TABLE OF CONTENTS

Letter from the Health Officers……..2

Acknowledgements- CWHP Community Health Partners & Steering Committee…….....3

CWHP Public Health Mission and Vision …….....4

Method Overview…….....4

Community Health Assessment…….....5
- a. Demographics.....5
  - I. Population, Gender, Age, Race, and Ethnicity.....5
  - II. Educational Attainment, Income, and Poverty.....6
  - III. Unemployment, Distressed Communities.....7
- b. County Health Rankings 8
  - I. Health Outcomes, Length of Life, Quality of Life.....8
- c. Overall Health 9
  - I. Cause of Death, Obesity Rate.....9
- d. Chronic Disease 9
  - I. Cancer.....9
  - II. Diabetes, Heart Disease.....10
- e. Communicable Disease.....10
- f. Environment.....11
  - I. Drinking Water.....11
  - II. Heat Vulnerability.....11
- g. Access to Healthcare.....12
  - I. Uninsured Rates.....12
  - II. Primary Care Physician Availability, Dentist Availability.....12
- h. Health Behaviors 13
  - I. Smoking, Physical Inactivity, Exercise Opportunities.....14

Health Focus Areas.....15
- a. Criteria Used to Identify Priorities.....15
  - I. Adverse Childhood Experiences.....15
- b. CWHP Priority 1. Alcohol and Other Drug Abuse.....17
  - I. Excessive Drinking, Tobacco Use, Alcohol and Drug Abuse Related Deaths.....17
  - II. CWHP Prescription Rates.....19
- c. CWHP Priority 2. Mental Health.....20
  - I. Mental Health Providers.....20
  - II. Suicide Rates, Attempted Suicide Rates.....20
- d. Juneau County Community Needs Assessment Forum and Overarching Priority of Health in All Policies.....22
- e. Juneau County Priority 3. Tobacco.....23
- f. Juneau County Priority 4. Physical Activity, Nutrition, and Obesity.....25

Appendix A 30
Appendix B.....31
Appendix C 38
References.....44

LETTER FROM THE HEALTH OFFICERS

The six health officers from the counties of Adams, Green Lake, Juneau, Marquette, Waupaca and Waushara which make up the Central WI Healthcare Partnership (CWHP) understand the overall health of a community is a shared responsibility. These health departments along with many other stakeholders including government agencies, healthcare providers, nongovernmental organizations and community members have provided thoughtful input to this Community Health Assessment (CHA). CWHP has a history of collaborating successfully on a number of projects in the past and decided a blended CHA would provide another opportunity to share, learn and explore best practices that would improve health outcomes in our rural communities.

This document is intended to be a resource that will not only help CWHP with planning and implementation of programs, but can also be used by community planners, practitioners and policy developers as they identify actions to improve health priorities. The CHA includes key drivers to community health needs such as: access to care, socioeconomic factors, limited preventative and screening services, chronic disease, mental health, drug abuse, and more. Information on demographics, health and societal risk factors for each of the six counties is included. Community input on the perceived health needs of the region was used to complement publicly available data. CWHP used all of this information to prioritize significant community health needs.

Each Central WI Healthcare Partnership member is deeply rooted in their respective communities with a variety of established programs and services to support the health of the community. Despite the continuous efforts of our CWHP Partners, all six counties identified gaps when it came to behavioral health and the treatment of substance use disorders. The CWHP hopes to leverage resources and synergies within the boundaries of our system to provide population-based services with comprehensive programs targeted at those most at risk for poor mental health and drug use disorders. Data collected will assist us in developing a roadmap to direct resources where services are needed most and the impact will be the greatest.

Although all six counties identified gaps in mental health and AODA services, each county also has unique concerns. For that reason, each of our partners has also identified individual health priorities. CWHP members will spearhead efforts to connect the community on regional and individual community goals. Resources and plans to improve the community's health and achieve measurable results will be developed and implemented.

The goal of CWHP is to work within our community and collaborate regionally to achieve a positive impact resulting in better health for each of our counties.

The CWHP Health Officers,

Sarah Grosshuesch	Kathy Munsey	Barbara Theis
Adams County	***Green Lake County***	***Juneau County***
Jayme Schenk	Jed Wohlt	Patti Wohlfeil
Marquette County	***Waupaca County***	***Waushara County***

ACKNOWLEDGEMENT

CWHP Community Health Assessment Partners

We would like to express our appreciation to the health care partners in our communities who participated in the 2017 CWHP CHA. They shared their concerns, ideas, and other invaluable information to help improve the health of our communities. Representatives from the organizations listed below helped develop this report by attending meetings, providing data, technical assistance, and completing surveys. We thank each one of you for the part you played, and we look forward to future partnerships.

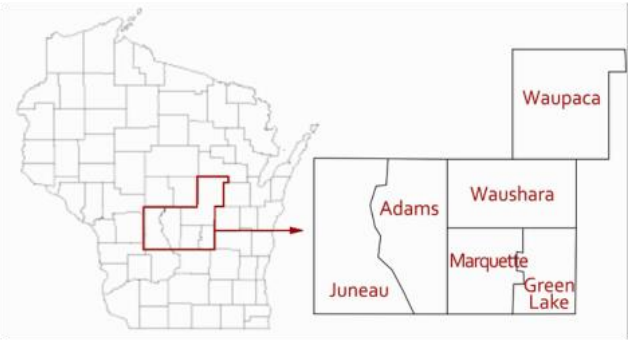
Steering Committee

Sarah Grosshuesch, Adams County Health Officer
Kathy Munsey, Green Lake County Health Officer
Makiko Thomas Omori, Green Lake County Intern
Barbara Theis, Juneau County Health Officer
Jayme Schenk, Marquette County Health Officer
Lauren Calnin, Marquette County Health Educator
Jed Wohlt, Waupaca County Health Officer
Patti Wohlfeil, Waushara County Health Officer
Trevor Cooper, Waushara County AmeriCorps Member

CWHP PUBLIC HEALTH MISSION AND VISION

Who we are:

The Central Wisconsin Health Partnership is a consortium among the Departments of Health and Human Services of Adams, Green Lake, Juneau, Marquette, Waupaca, and Waushara County. This Community Health Assessment (CHA) comes from the Health Departments in these counties.



Vision:

To be the healthiest counties in Wisconsin.

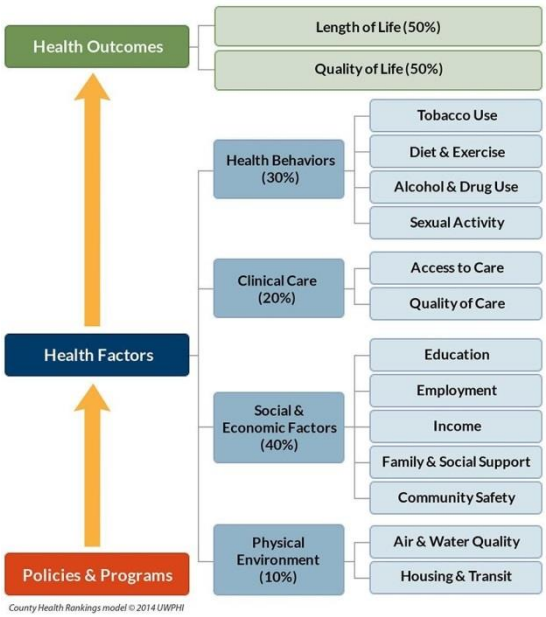
Mission:

To improve the health of the public and achieve equity in health status for the Central Wisconsin region.

METHOD OVERVIEW

The six counties began the blended CHA in 2015. The overall process followed the *Wisconsin Guidebook on Improving the Health of Local Communities*. This framework is built on the *Take Action Cycle* model used by the County Health Rankings and Roadmaps. The steps taken for the CHA were to assess the needs and resources along with focusing on what's important while emphasizing collaboration and open communication.

The CHA includes primary data from communicable disease reports, death records, local provider numbers, hospital admissions, and youth risk behavior surveys. The secondary data includes, but is not limited to, County Health Rankings, Wisconsin Department of Health and Human Services, and the U.S. Census Bureau.



This data, along with key informant interviews, surveys, focus groups, and/or community forums were used by the steering committee to determine the health focus areas in which health priorities were chosen.

This assessment will then be used to develop a Community Health Improvement Plan (CHIP).

COMMUNITY HEALTH ASSESSMENT

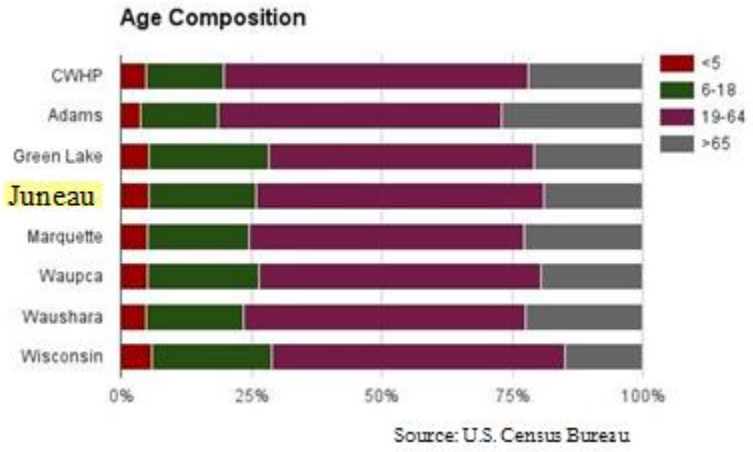
DEMOGRAPHICS

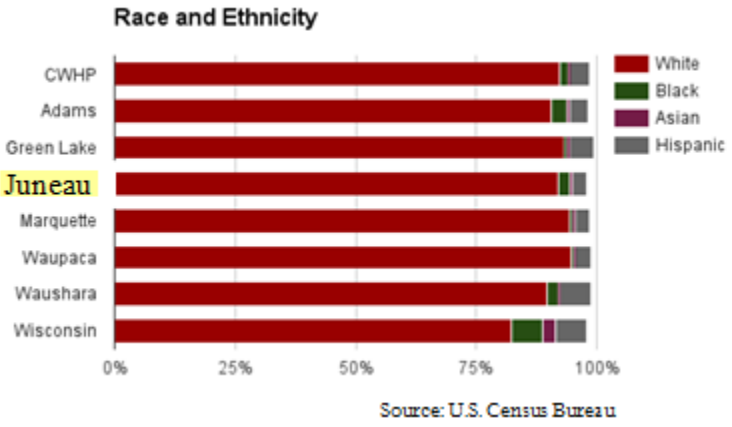
	Total Population	Female	Male	Urban	Rural
CWHP	156,281	48.22%	51.88%	19.14%	80.86%
Adams County	20,148	46.70%	53.30%	0%	100%
Green Lake County	18,856	49.60%	50.40%	25.67%	74.33%
Juneau County	**26,224**	**46.90%**	**53.10%**	**16.51%**	**83.49%**
Marquette County	15,075	49.20%	50.80%	0%	100%
Waupaca County	51,945	49.60%	50.40%	35.06%	64.94%
Waushara County	24,033	47.30%	52.70%	10.50%	89.50%
Wisconsin	5,724,692	50.30%	49.70%	70.15%	29.85%

Source: U.S. Census Bureau

Age Composition

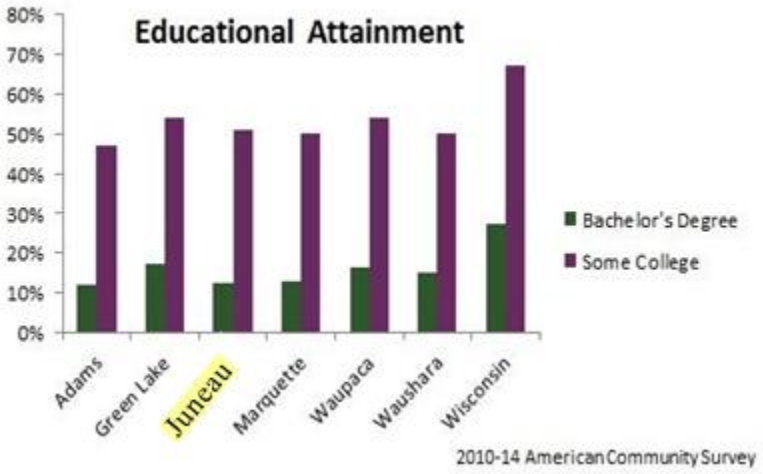
Overall, the elderly population is on the rise. By **2030** nearly 30% of CWHP residents will be 65 years and older (Wisconsin Department of Aging). The health needs of the community will shift as aging health concerns grow. This will require more focus on chronic disease prevention. Delaying the onset of chronic disease is essential to creating a healthier community.





Race and Ethnicity

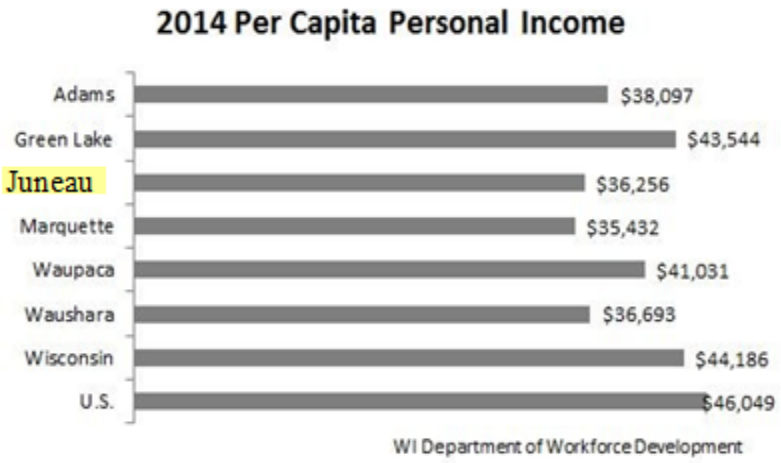
While the graph to the left shows minimal racial and ethnic diversity in CWHP counties, our Amish and Hispanic communities bring a unique variety of culture and customs. Racial and ethnic disparities in health factors, including access to care and income level, are some of the many factors that contribute to inequalities in health status. Eliminating disparities are challenging, yet vital to improving the health of our communities.



Educational Attainment

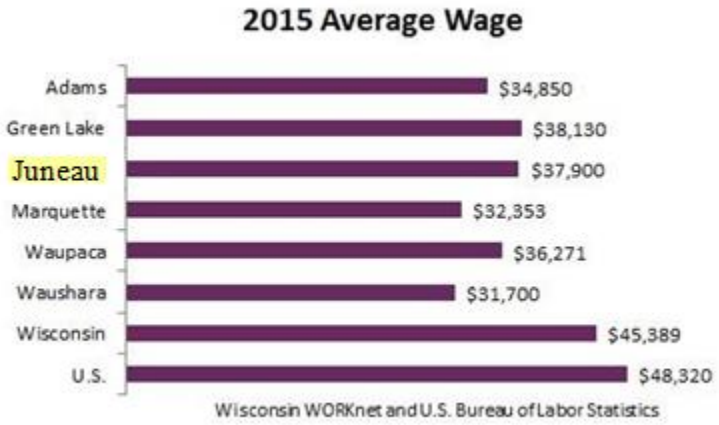
The relationship between higher education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, and reduced psychosocial stress (Egerter, Braveman, Sadegh-Nobari T, Grossman-Kahn, and Dekker 2011). CWHP has a lower number of adults with any form of formal education past high school. Those with 'some college' refer to those who have not completed their degree, whether it is vocational/technical, an associate's, and/or a bachelor's degree.

INCOME AND POVERTY



Personal Income

Higher income is linked to better health (World Health Organization). It's not just the level of income that affects the health of our communities, but also the distribution of the income. The larger the income disparity, the larger the health inequalities will be. The average per capita personal income of CWHP is $38,509, which is $5,677 lower than Wisconsin's average. Compared to the national average, the gap is over $7,000.

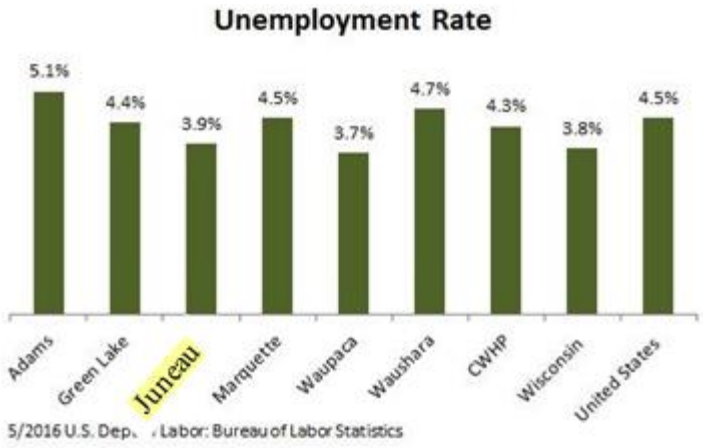


2015 Average Pay

CWHP's low average personal income can be partly attributed to two factors: wages paid by employers in the individual counties and the county's unemployment rates. The graph to the left illustrates the average wage paid by employers located in the county. Using these numbers the average wage for CWHP is $35,184. This is $10,205 lower than Wisconsin and $13,136 lower than the national average.

Unemployment Rate

Acknowledging the relationship between one's health and economic status, CWHP hosted the Central Wisconsin Health & Economic Summit in August 2015. This event helped develop strategies to improve the health and vitality of our communities, with a focus on workforce development. With the exception of Waupaca, all CWHP counties had higher unemployment rates than the state in May 2016. Recommended next steps from the CWHP summit can be found in Appendix C.

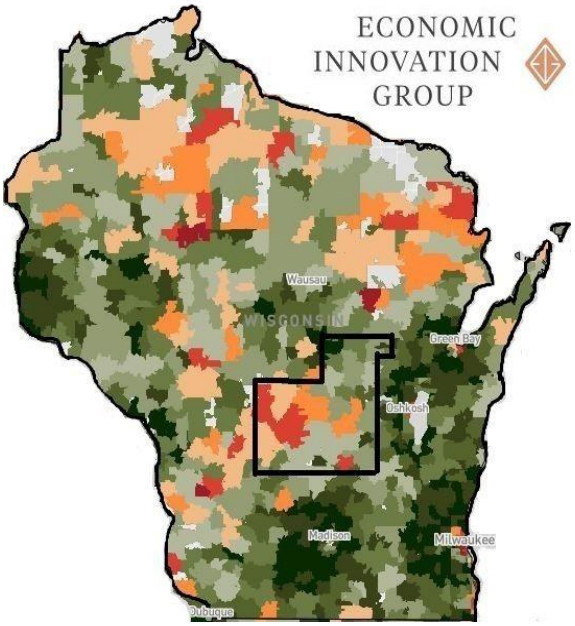


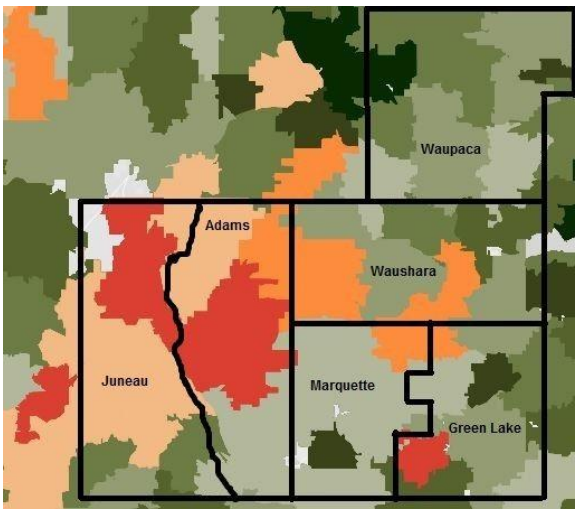
Distressed Communities Index

This index combines the seven measures listed below to present a complete and multidimensional picture of economic distress- or prosperity- in U.S. communities (Economic Innovation Group). Much of the data comes from the American Community Survey and County Business Pattern Data. The index further illustrates some of the economic challenges facing CWHP.

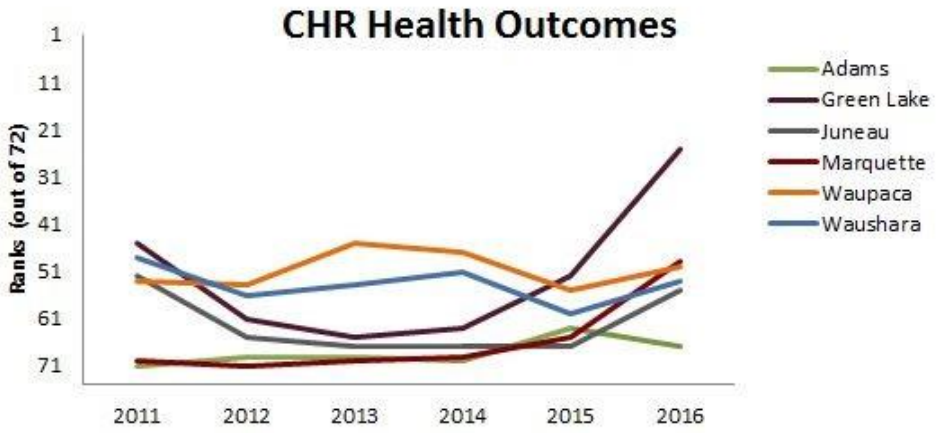
Index numbers are based upon the following measures:

- No High School Degree
- Housing Vacancy
- Adults Not Working
- Poverty Rate
- Median Income
- Change in Employment
- Change in Business Establishments





2016 WISCONSIN COUNTY HEALTH RANKINGS (CHR)



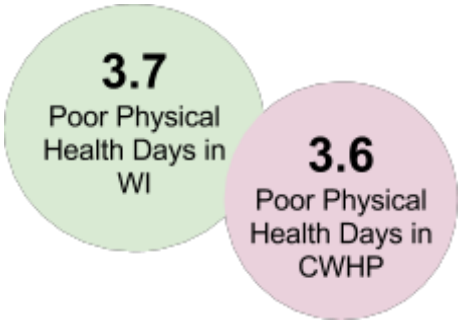
County Health Rankings & Roadmaps
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

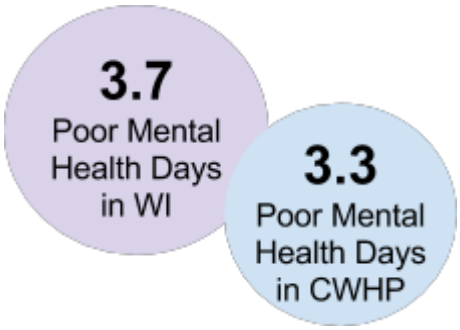
County Health Rankings

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute produce CHR each year which report the overall health of each county in Wisconsin. The report ranks all 72 counties based on measures of health outcomes and health factors, with the healthiest county being ranked #1. The counties of CWHP, in general, have been improving their ranks in overall health outcomes. While the CHR should not be compared year to year, creating a trend line can offer a picture of the health status for the past five years. We will continue to strive to improve our health factors and outcomes, and become the healthiest counties in Wisconsin.

Length of Life	
Green Lake	17th
Waupaca	47th
Marquette	55th
Waushara	58th
Juneau	59th
Adams	70th

Quality of Life	
Marquette	29th
Waushara	45th
Green Lake	46th
Juneau	47th
Waupaca	60th
Adams	64th

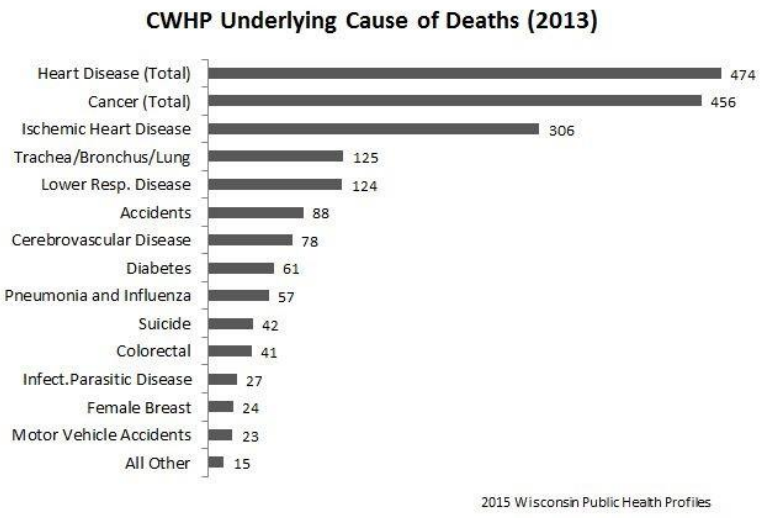


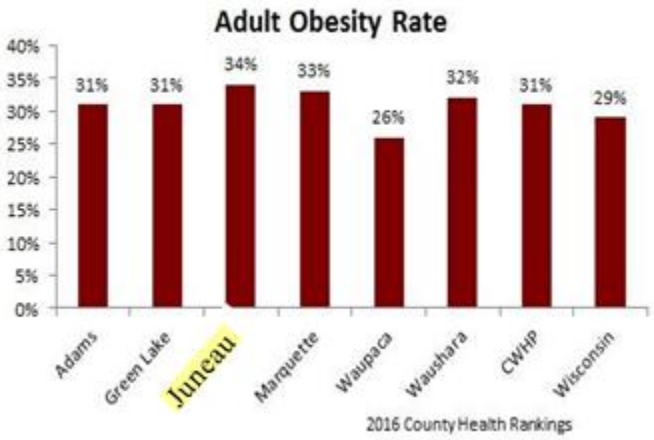


OVERALL HEALTH

Cause of Death

In 2013, there were a total of **1,941** deaths in CWHP. The vast majority of deaths in the six counties can be attributed to chronic disease and unhealthy behaviors. It is also important to note the high number of suicides in CWHP. Attributing suicide factors will be discussed in the CWHP Second Health Priority; Mental Health.





Obesity in CWHP

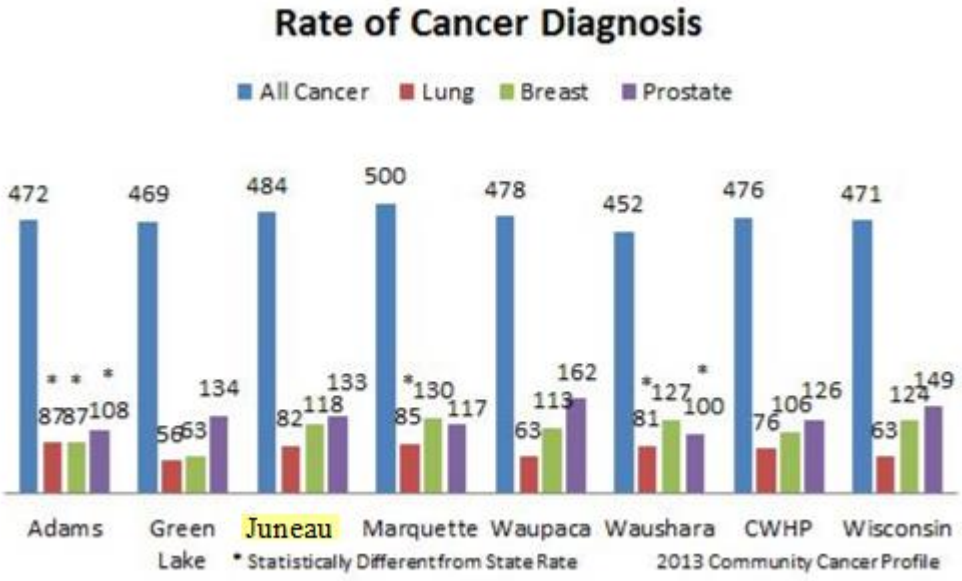
With the exception of Waupaca County, all counties in CWHP have rates of obesity higher than the state average. A combination of factors can be linked to higher obesity rates such as; individual and environmental socioeconomic status and the built environment. They may also be related to health attitudes and behaviors that contributed to obesity (McAlexander, Banda, McAlexander, Lee 2009). In order to combat this growing epidemic, positive change must come from all parts of society, especially from areas of policy and environmental change.

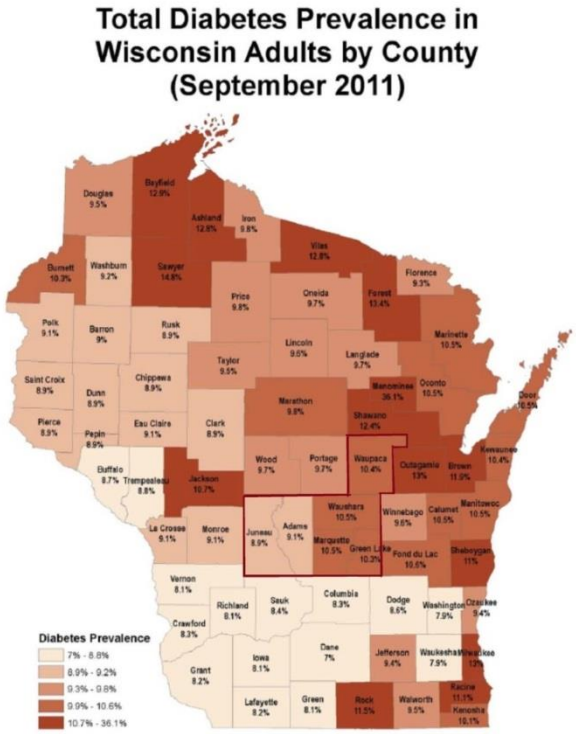
CHRONIC DISEASE

Prevention of chronic disease such as diabetes, heart disease, and cancer not only assures a strong quality of life, but also results in a decreased economic burden on our health care system.

Cancer

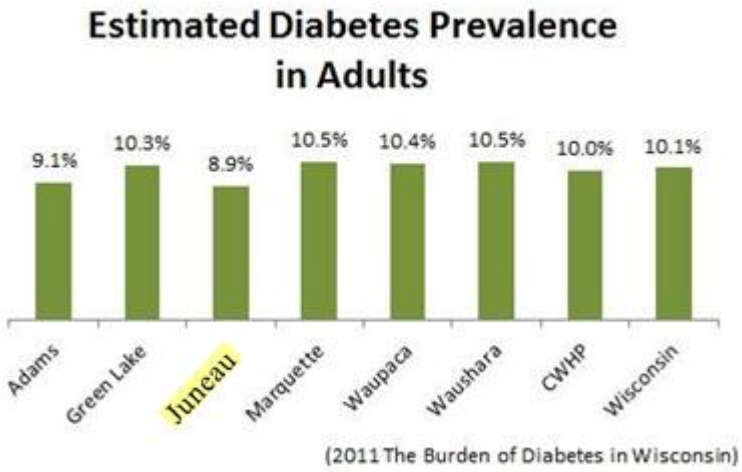
The rates of cancer for CWHP are slightly higher than the state average with the largest difference attributed to lung cancer. This can most likely be attributed to the high smoking rates in CWHP as seen on page 13.





Diabetes

Diabetes is a serious, complex condition which, when left unchecked, can lead to a lower quality of life. Nerve damage, heart disease, stroke, blindness, kidney disease, and sometimes amputations are all possible if diabetes is left uncontrolled. These complications can be minimized through a healthy diet, avoiding smoking and alcohol, and incorporating regular activity.



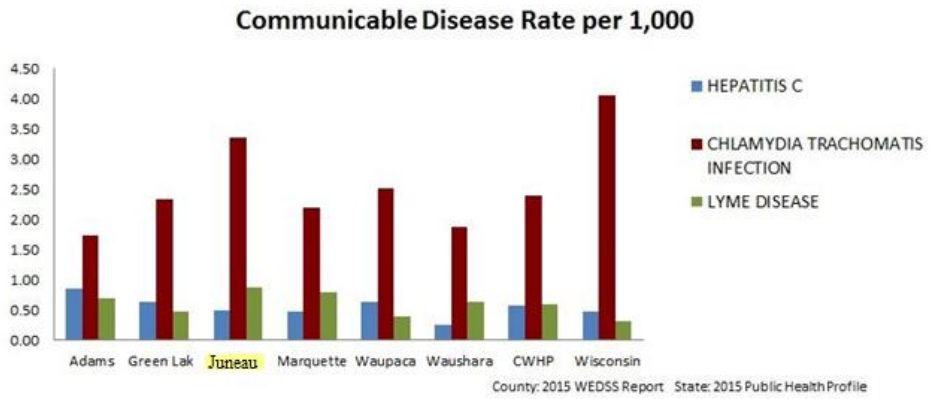
Heart Disease

Heart disease was the leading cause of death for CWHP in 2013. The burden heart disease has on CWHP counties can also be measured by looking at how often residents visit the emergency room for heart issues. Every hospital in CWHP has some form of heart related issue within their top ten types of ER visits.

Hospital	Berlin	Waupaca	Wild Rose	Mile Bluff	New London	Moundview	Ripon	Divine Savior
Rank	#2	#2	#8	#4	#7	#3	#2	#6
Reason for Visit	Chest Pain	Chest Pain	Heart Attack	Cardiac Related	Chest Pain	Chest Pain	Cardiac Related	Chest Pain

COMMUNICABLE DISEASE

Public Health plays an important role in preventing, monitoring, and controlling diseases that can spread from person to person in a variety of ways. These diseases can come from other humans through the air, skin-to-skin contact, blood and bodily fluids, or a variety of animal hosts like mosquitos or ticks. CWHP as a whole has higher rates of Hepatitis C and Lyme disease than Wisconsin.



ENVIRONMENT

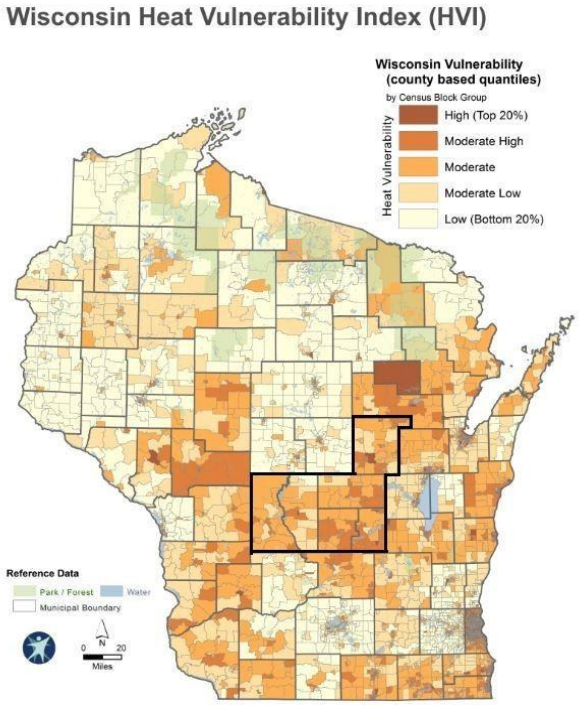
Drinking Water

Since CWHP economies are based on agriculture, manufacturing and tourism, it is important to monitor nitrate levels in water supplies. Sources of nitrate may include agricultural runoff; municipal and industrial waste water, animal feedlots, and septic tanks. CWHP's nitrate levels are higher than the state average with the average nitrate concentration shown by township in the map shown to the right.

Source: U.W. Stevens Point

	Adams	Green Lake	Juneau	Marquette	Waupaca	Waushara	Wisconsin
Nitrate mg/L	1.8	4.9	2.6	3.2	2.5	2.6	1.5

Source: Environmental Health Profiles



Heat Vulnerability

Extreme heat negatively affects human health in terms of causing heat exhaustion, stroke, and even death. It can also make pre-existing chronic conditions such as respiratory and heart diseases worse. As Wisconsin's climate changes, temperatures will rise and extreme heat events will increase in frequency (WHITEHOUSE). From 1950-2006, Wisconsin has seen an increase of average annual temperature by 1.5 degrees (Wisconsin Initiative on Climate Change Impacts). In addition to exposure to heat and climate conditions, many other factors such as infrastructure, physiology, culture, and demographics influence the risk of heat-related impacts. This is especially true for the elderly, socially isolated individuals, and those with pre-existing chronic conditions. Seen in the map to the left, CWHP residents have moderate to high vulnerability in the case of extreme heat. They also have higher rate of ER visits compared to Wisconsin.

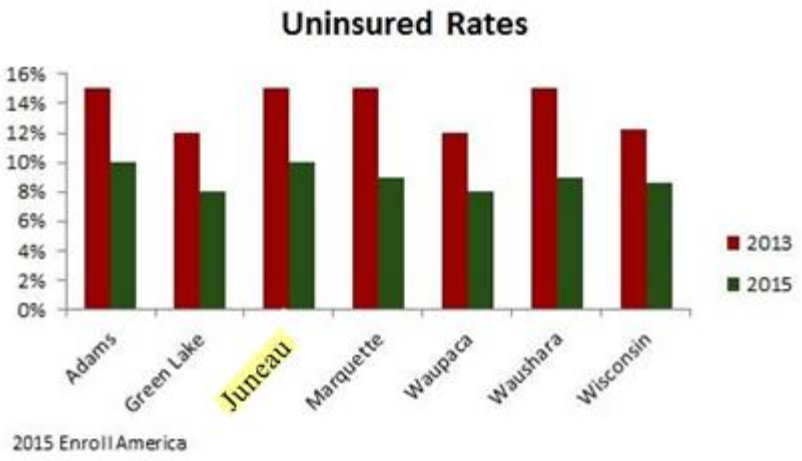
Heat Stress ER visits per 100,000 people	Adams	Green Lake	Juneau	Marquette	Waupaca	Waushara	Wisconsin
	46.8	19.2	48.6	28.8	21.6	23.6	16.5

Source: Environmental Health Profiles

ACCESS TO HEALTHCARE

Uninsured Rates

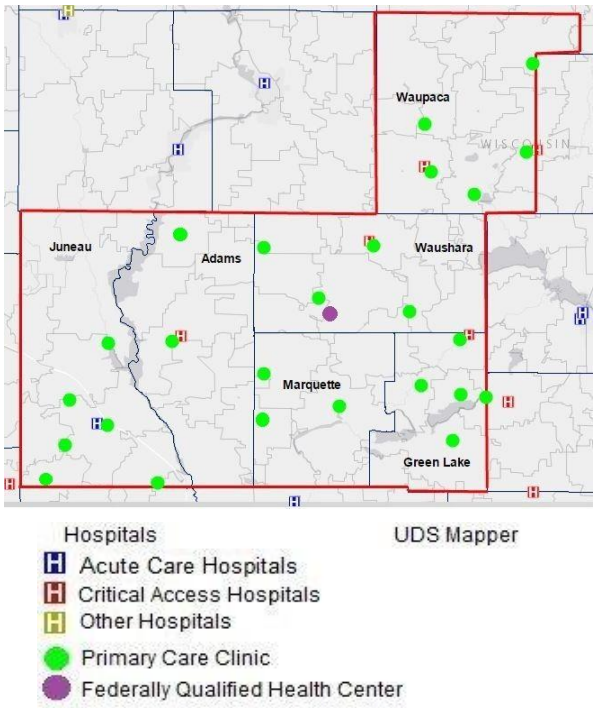
Access to healthcare encompasses many factors including health insurance, local care options, affordability, and social or cultural barriers. Not having health insurance is a significant barrier to utilizing the healthcare system. Since the Affordable Care Act's first open enrollment period, all CWHP counties have seen a modest decrease in their uninsured rates, similar to Wisconsin as a whole. *Those over 65 years old are not included in the uninsured rate shown in the graph to the right.

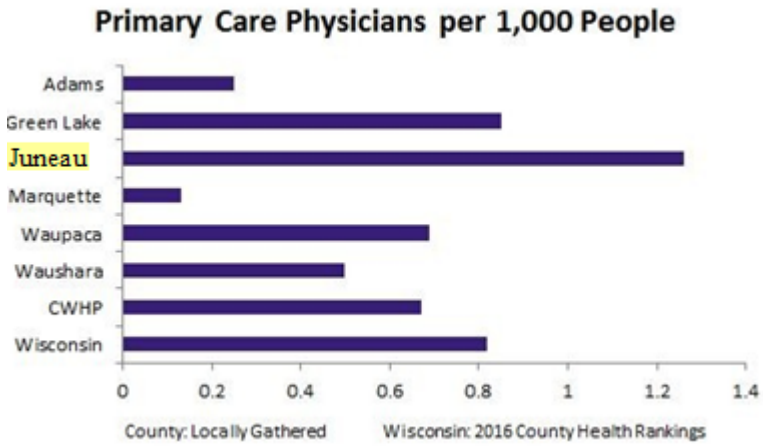


Primary Care Physicians

Not having enough local providers, along with their location, can act as a barrier to receiving the care necessary to gain access to satisfactory health outcomes. Compared to the state, the majority of CWHP has a lower ratio of primary care physicians to the population. These physicians are considered those specializing in general practice medicine, family medicine, pediatrics, and internal medicine (County Health Rankings and Roadmaps). The locations of their offices along with hospitals and a Federally Qualified Health Center can be seen below.

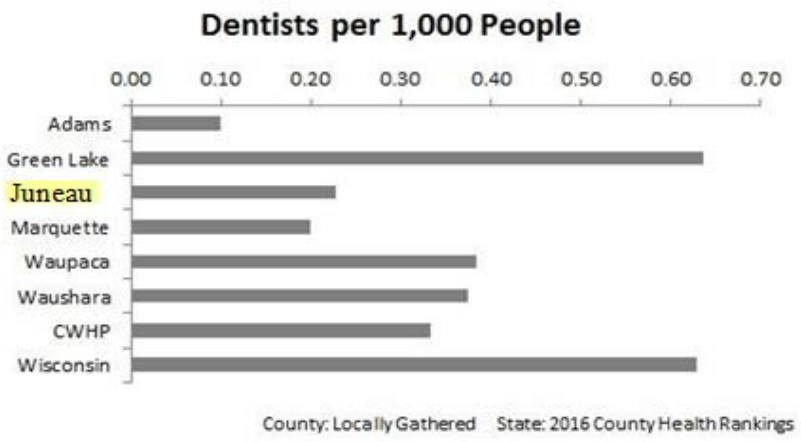
Federally Qualified Health Centers





Dental

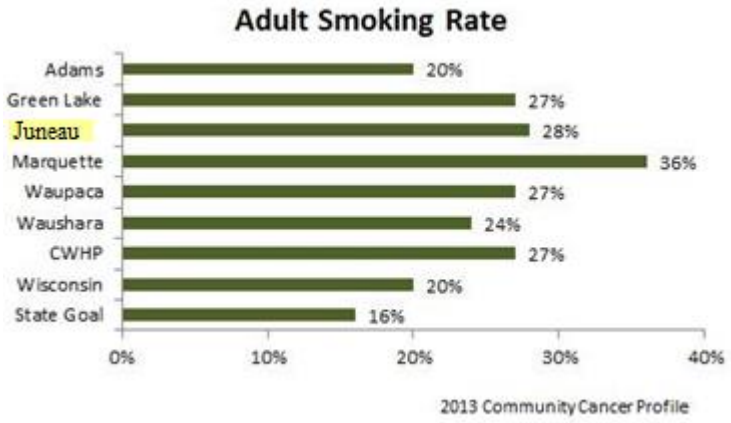
Oral Health is essential to general health and quality of life. Risk factors for oral disease typically include an unhealthy diet, tobacco use, poor oral hygiene, and social determinants. The poor and disadvantaged bear a disproportionate share of these diseases. Unmet dental care can increase the likelihood of oral disease, ranging from cavities to oral cancer, which can lead to pain and disability. The majority of CWHP has a lower number of dentists per 1,000 people, compared to the state average. All but Green Lake County are federally designated dental care shortage areas (Wisconsin Office of Rural Health). It is also important to note that a number of dentists in CWHP practice in multiple counties. Additionally, only Juneau and Waushara have free/low cost dental care access through a Federally Qualified Health Center.

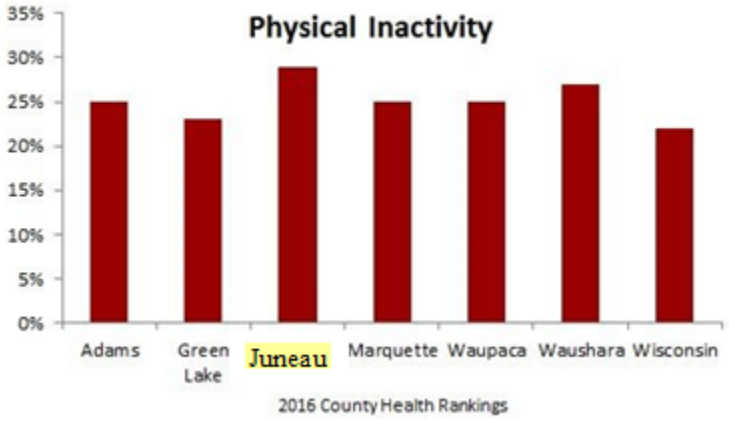


HEALTH BEHAVIORS

Smoking

It is well known smoking is bad for your health. It can lead to lung cancer, heart disease, and stroke. Unfortunately, smoking continues to be a problem for CWHP and the state as a whole. It is an issue for the general population and especially pregnant women. In Juneau County **one in four** pregnant mothers smoked during their pregnancy (County Health Rankings and Roadmaps).





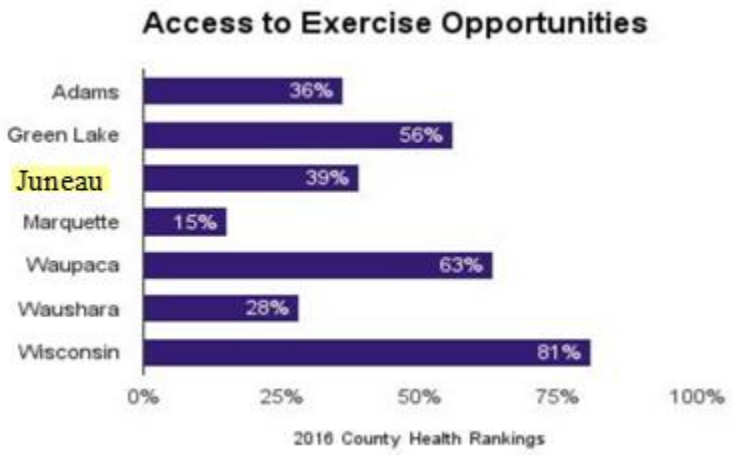
Physical Inactivity

The graph to the left depicts the percent of adults over age 20 reporting no leisure-time physical activity. It is known that lack of physical activity is related to health care expenditures for circulatory system diseases (Rosenberger, Sneh, Phipps, and Gurvitch 2005). A decrease in physical activity can also be related to diabetes, hypertension, and cancer.

Access to Exercise Opportunities

The ability to be physically active is dependent on access. CWHP has limited access, in part, because rural residents must travel longer distances to reach exercise facilities and safe places to walk or bike. Another barrier can be the cost of memberships to the gyms present in the counties.

It is important to note the percentages to the right do not include access to schools, which most CWHP residents can use during the winter to walk in. They also have ample access to nature based play and recreation.



HEALTH FOCUS AREAS

CRITERIA USED TO IDENTIFY HEALTH PRIORITIES

1. The magnitude of the problem

- What is the percentage of the population impacted?
- Is it associated with the leading cause of death in four of the six counties?

2. The severity of the problem

- Is it worse than the Wisconsin average?
- Is the trend worsening in four of the six counties?

3. A high need among vulnerable populations (health equity)

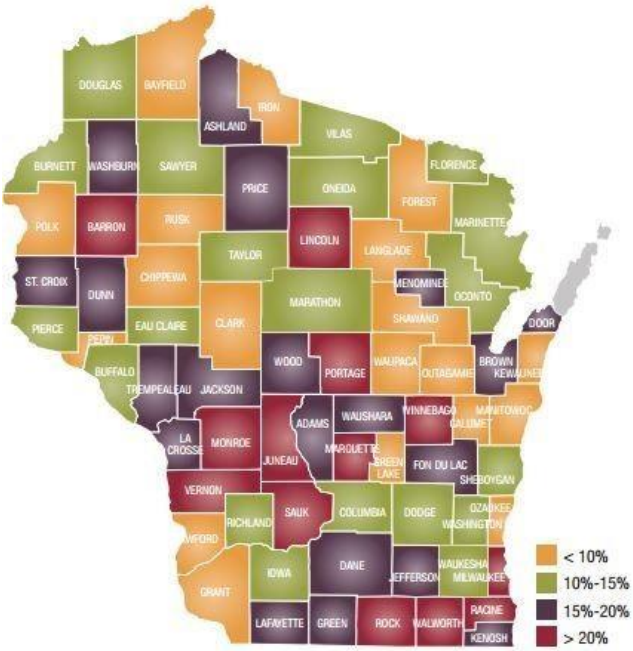
- Is the problem equally distributed across the population?
- If no, what groups are more likely to be at risk or currently impacted?

4. The community's capacity and/or willingness to act on the issue

- Was it identified by community stakeholders in four of the six counties?
- Was it identified by primary community input in four of the six counties?
- Was it identified by Wisconsin Health Improvement Planning Process?

Adverse Childhood Experiences (ACEs)

Before we discuss the priorities chosen, it is important to keep in mind the strong association between poor social, mental, and physical health outcomes in adulthood, and ACEs. An ACE is a traumatic experience, occurring prior to the age of 18. Physical, emotional or sexual abuse, having an incarcerated household member, exposure to domestic violence or parental divorce are all examples of ACEs (Children's Hospital of Wisconsin). ACEs can disrupt healthy brain development required for emotional control, learning capacity, and the ability to form healthy relationships. Research has demonstrated a strong dose-response relationship between ACEs and a variety of substance-related behaviors (Substance Abuse and Mental Health Services Administration). This means the more ACEs an individual has the more likely it is they will have substance abuse behaviors. The map demonstrates Juneau County having greater than 20% of its adult population who have experienced four or more ACEs.



Prevalence of 4 or more ACEs in Wisconsin Counties

The steering committee identified health priorities using specific criteria below, with the understanding that community feedback was the driving component to determine the most appropriate health focus areas/health priorities. The input gathered from key informant interviews, surveys, focus groups, and/or forums helped identify health focus areas/priorities with a summary of results provided below. Additional information can be found in Appendix C.

Order of Priority	**Community Feedback**					
	Adams	Green Lake	Juneau	Marquette	Waupaca	Waushara
1st	Access to Care	Mental Health	AODA	AODA	AODA	AODA
2nd	Employment	AODA	Obesity	Mental Health	Mental Health	Chronic Disease
3rd	AODA	Nutrition	Mental Health	Nutrition & Physical Activity	Poverty	Mental Health
4th	Mental Health	Physical Activity	Chronic Disease	Tobacco	Chronic Disease	Nutrition & Physical Activity
5th	Physical Activity	Chronic Disease	Nutrition & Physical Activity	Access to Care	Access to Care	Aging Problems

PRIORITY 1. ALCOHOL AND OTHER DRUG ABUSE (AODA)

Drug and alcohol dependence often go hand in hand. They can also lead to other chronic diseases such as diabetes and heart disease. Preventing substance abuse disorders and related problems is essential to CWHP residents' behavioral and physical health.

Relevant Strengths:

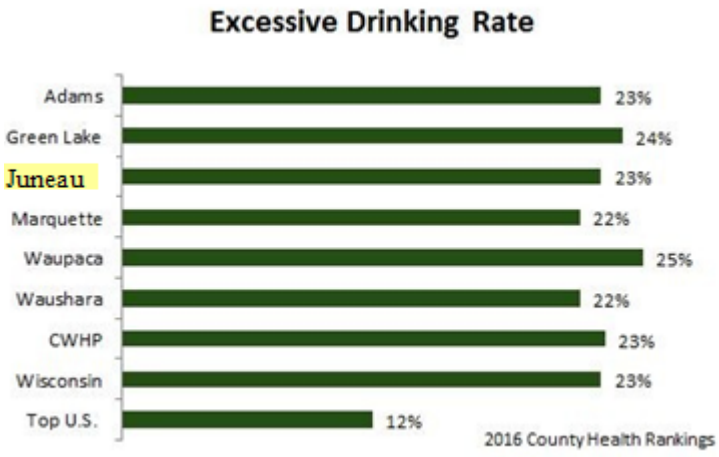
- Wisconsin State Drug Database
- Statewide "Dose of Reality" Campaign
- Regional Comprehensive Community Services
- Treatment and Alternatives Diversion (TAD) Court
- Social Host Ordinance
- Opiate Pain Management Groups
- AODA local coalitions (Substance Abuse Free Environment (SAFE) in Juneau County)

Relevant Challenges:

- Availability, affordability, attractiveness, and acceptability of alcohol in Wisconsin
- Lack of professional assistance in overcoming substance abuse (detox, long term care, etc.)
- High number of ACEs
- Medication and drug seekers
- Limited locations to send patients for AODA treatment
- Lack of Youth Risk Behavior Survey (YRBS) Data

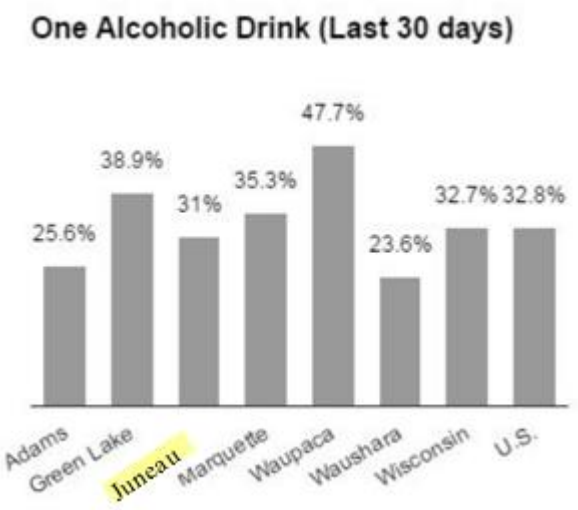
Excessive Drinking

Excessive drinking is defined as both binge and heavy drinking. Binge drinking is five or more drinks in about two hours, which brings blood alcohol concentration levels to 0.08 g/dL. Heavy drinking is when someone consumes five or more drinks at one time for five or more days in the past 30 days (National Institute on Alcohol Abuse). Adverse health outcomes associated with excessive drinking include violence, suicide, vehicle crashes, sexually transmitted infections, and heart problems among others. CWHP is not alone in high rates of drinking. Similar to the state average, CWHP has a rate double that of top U.S. performers. An equal concern among CWHP is the early initiation of drinking among our youth.



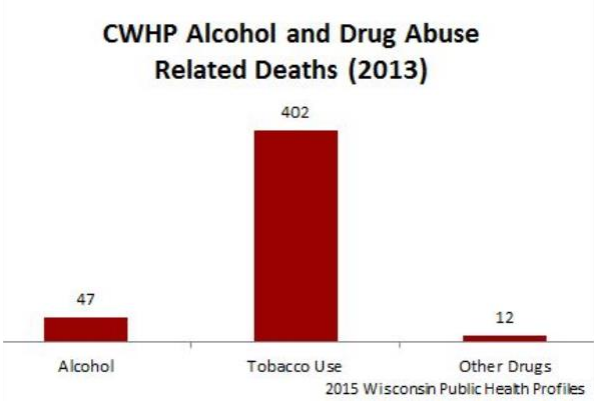
One Alcoholic Drink

The YRBS is taken by middle and high school children to monitor six types of health-risk behaviors that contribute to the leading causes of death and disability. The YRBS and other youth surveys demonstrate risky behaviors of high school students. Example; high school students reported having one alcoholic drink in the last 30 days.



Tobacco Use

Tobacco use remains the single most preventable cause of death and disease in the United States and Wisconsin. In 2013, there were a total of 1,941deaths in CWHP, **402** of which were attributed to tobacco. Including alcohol and other drugs, as the underlying cause of death, CWHP experienced **23.75%** deaths which is higher than Wisconsin at **20.68**%(Public Health Profiles).

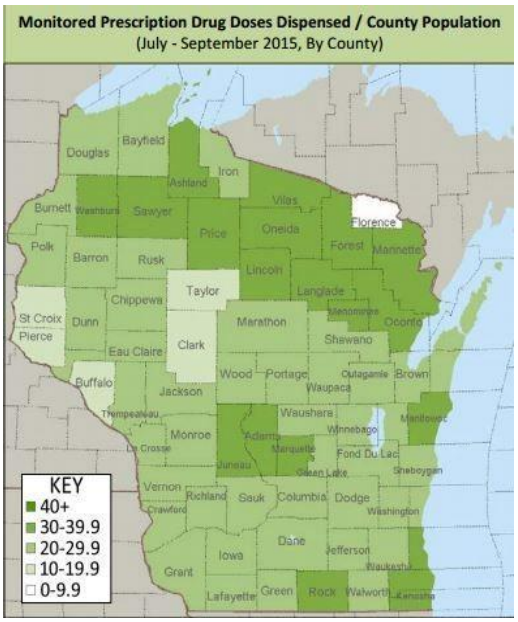


Wisconsin Prescription Drug Monitoring Program

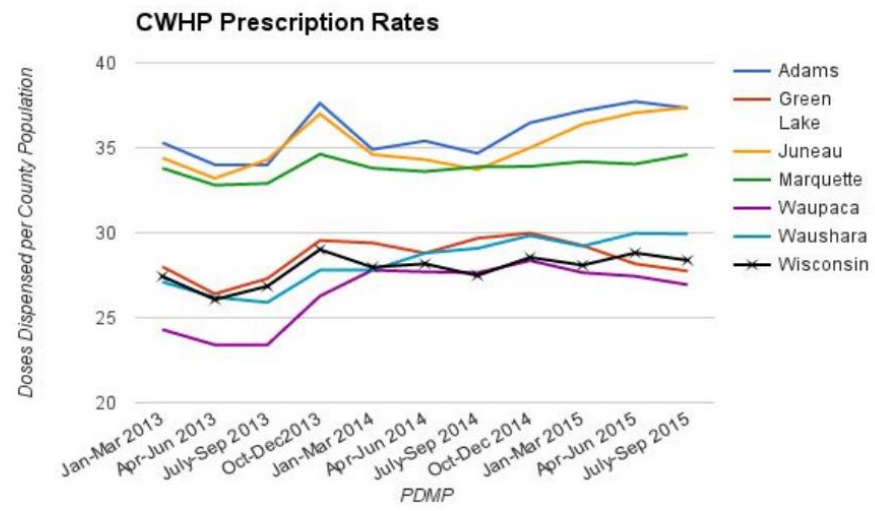
The Wisconsin Prescription Drug Monitoring Program (PDMP) is a tool to improve patient care and safety and to reduce the abuse and diversion of prescription drugs. The monitored drugs are state and federally controlled substances in schedule II, III, IV, or V that requires a prescription to be legally dispensed. Examples include opioids, stimulants, and antipsychotics.

The map of Wisconsin offers a snapshot of the recent rates and illustrates three counties in CWHP higher than the majority of the state.

NOTE: According to the WI PDMP, Juneau County has largest number of prescription drug doses dispensed for July-September 2015.



Source: Wisconsin Prescription Drug Monitoring Program (PDMP)



AODA Summary/Key Findings Pertaining to Juneau County

- Excessive drinking is a leading cause of death in the U.S. and a risk factor for i.e. alcohol poisoning, hypertension, interpersonal violence, and motor vehicle crashes.
- Juneau County, CWHP, and WI's excessive drinking is almost twice the rate as the U.S. top performers. See data chart on pg. 17.
- Juneau County has the highest number of prescription drug doses dispensed/per population from 7-9/2015. See data chart on pg. 18.
- Drug overdoses in Juneau County have been on the increase for the past five years. See data chart on pg. 33.
- Juneau County is within the top 16 Wisconsin counties with the highest rate of Neonatal Abstinence Syndrome. See data chart in Appendix B.
- 2013 CWHP deaths attributed from alcohol, tobacco and drugs were higher at 23.75% versus that of the State at 20%.

PRIORITY 2. MENTAL HEALTH

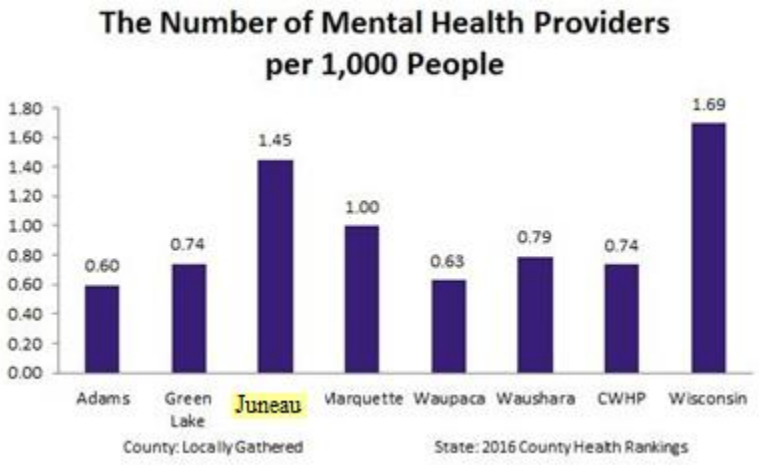
Many factors can contribute to one's mental health. Risk factors can include biology, a family history of mental health problems, or ACEs. In Wisconsin, a higher number of ACEs has been linked to higher rates of depression (Child Abuse and Neglect). With a high prevalence of ACEs in CWHP there is great need for mental health services. Those seeking these services in CWHP will most likely have trouble due to the low number of service providers in the area.

Relevant strengths:

- Community support systems
- Crisis Units
- Comprehensive Community Services

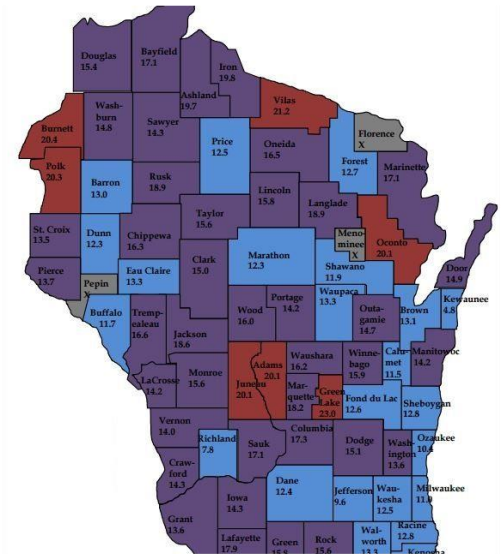
Relevant challenges:

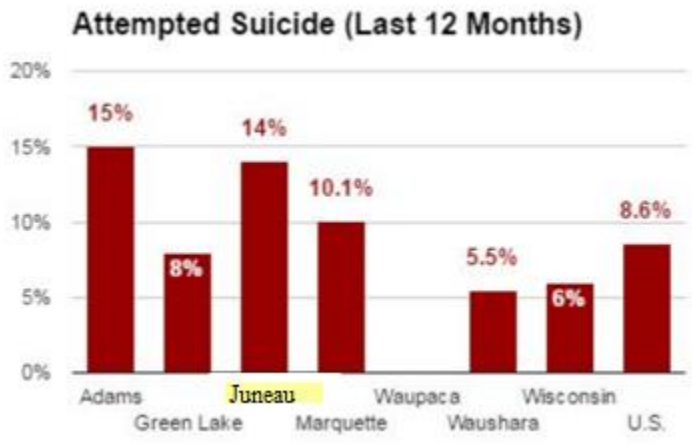
- Mental health stigma
- Mental health provider shortage
- High number of ACEs
- Social isolation & Physical isolation
- Limited social associations
- Limited natural supports



Suicide Rates

Suicide impacts families, communities, and society in terms of economic and human costs. Suicide rates in the U.S. have been on the rise since 1999(Center for Disease Control). All of CWHP, except for Waupaca County, have suicide rates higher than the statewide average of 13.5 per 100,000 people. Preventing suicidal behavior before it occurs, while addressing risk and protective factors, is essential to improve the mental health of CWHP. Juneau County has one of the highest rates of suicide with 20.1 suicides per 100,000 people.





Attempted Suicide

The chart to the left illustrates the percentage of high school students in each county who reported attempting suicide within the last 12 months of taking the YRBS. This measure can be a gauge for the mental health of our students.

*Waupaca County does not have data for this measure.

Mental Health Summary/Key Findings pertaining to Juneau County

- More than 20% of Juneau County's adult population has four or more ACEs putting this population at greater risk for depression. See data on page 15.
- Juneau County is one of seven Wisconsin counties with the highest rate of suicide in 2015. See data on page 20.
- Both suicide and accidental overdoses are increasing within Juneau County. See data in Appendix B.
- Mental health was one of the top 10 reasons for emergency room visits at Mile Bluff Medical Center in 2015. See data in Appendix B.
- Mental health was a concern demonstrated in Juneau County's 2016 Key Informant Interviews and in the 2016 Community Health Needs Assessment Survey. See data in Appendix C.
- Juneau County has chosen mental health as a health priority since 2009 –and this priority continues to present significant challenges.

JUNEAU COUNTY COMMUNITY NEEDS ASSESSMENT FORUM AND OVERARCHING PRIORITY OF HEALTH IN ALL POLICIES

On September 19, 2016 the Juneau County Economic Development Corporation, Mile Bluff Medical Center, University of Wisconsin-Extension and the Juneau County Health Department held a community forum. It was attended by 57 individuals representing a broad group of county stakeholders including: schools; faith-based; community organizations; employers and business; medical, dental and mental health providers; citizens; government; and media. The purpose of this forum was to showcase:

- The health of Juneau County's population over the past decade using the County Health Rankings data
- 2016 Key Informant Interviews
- 2016 Community Health Needs Assessment Survey Results
- Outcomes of the Central WI Health and Economic Development Summit
- Results of the CWHP regional health priorities and
- To select additional health priorities unique to Juneau County

Based on the secondary data provided, presentations from local stakeholders, key informant summaries, and the community health needs assessment survey results, people attending the forum identified two additional health priorities and one overarching priority through a nominal group process. The health priorities were endorsed by the Juneau County Board of Health and will be addressed in the Community Health Improvement Plan. They are:

- Health in All Policies (overarching health priority)
- Tobacco Use and Exposure
- Physical Activity, Nutrition and Obesity

Overarching Priority: Health in All Policies (HiAP)

At the Community Forum, Juneau County stakeholders expressed a desired assurance that consideration be given to the impact current and future policies, programs, or projects have on the quality of life for our population. To help guide this consideration, Health in All Policies(HiAP) was chosen.

"Health in All Policies is a collaborative approach to improve health by incorporating health considerations into decision-making across sectors and policy areas. A Health in All Policies approach identifies the ways in which decisions in multiple sectors affect health and how better health can support the goals of these multiple sectors. It engages diverse partners and stakeholders to work together to promote health, equity, and sustainability, and simultaneously advance other goals such as promoting job creation and economic stability, transportation access and mobility, a strong agricultural system, and improved educational attainment."

Source: "Health in All Policies: A Guide for State and Local Governments," American Public Health Association and Public Health Institute, 2013, https://www.apha.org/topics-and-issues/healthy-communities/health-in-all-policies

Implementing policies, projects, or programs using the HiAP approach will allow all Juneau County residents an opportunity to reach their full potential. It will require a collaboration of many different sectors to collectively address the various social and environmental determinants of health, and promote health equity and sustainability.

JUNEAU COUNTY PRIORITY 3. TOBACCO USE AND EXPOSURE

Healthiest Wisconsin 2020, Everyone Living Better, Longer states: "Tobacco use and exposure represent the leading overall cause of death in the U.S. and Wisconsin and a major economic burden." According to the 2015 edition of *The Burden of Tobacco*, each year in Wisconsin 6,678 people die of tobacco-related illness: 3 billion is paid in direct health care costs, and 1.6 billion is attributed to lost productivity.

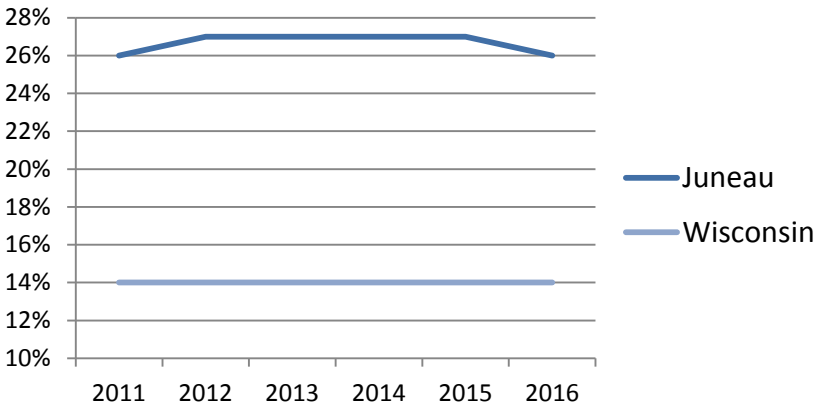
Relevant Strengths:

- Tobacco Compliance Checks
- Retail training on Tobacco compliance checks
- Active FACT group within Juneau County
- Juneau County Smoke-free Ordinance
- Substance Abuse-Free Environment (SAFE) coalition Juneau County

Relevant Challenges:

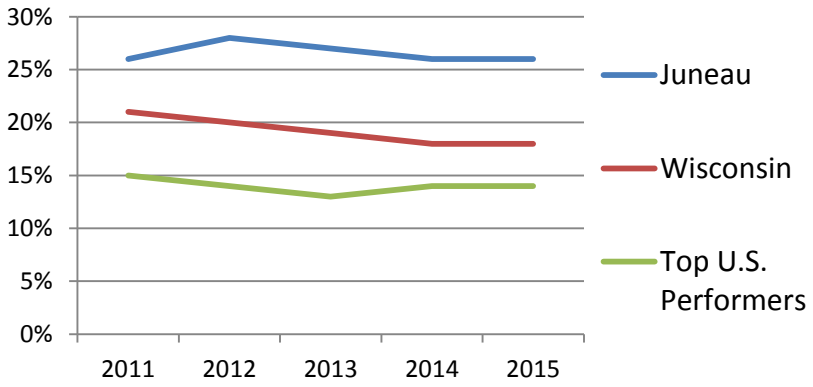
- High number of ACEs
- High rate of adult smoking rates
- High percentage of pregnant women who smoke
- Marketing of tobacco products
- Lack of consistent YRBS data

Smoking during Pregnancy



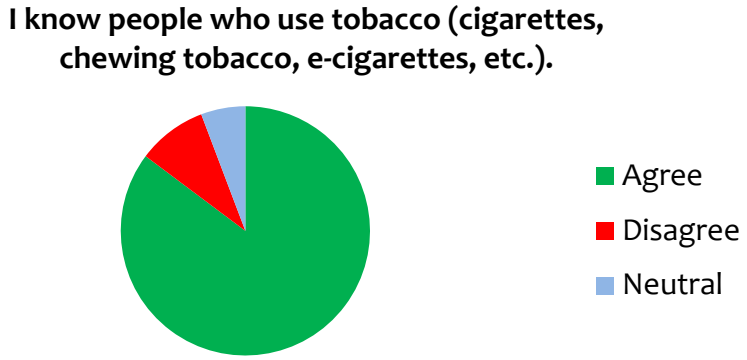
Juneau County's population of smoking mothers is 12% higher than the state average.

Adult Smoking



According to the 2015 *The Burden of Tobacco*, the health and economic effects of cigarette smoking are well documented and include excessive rates of chronic diseases, substantial health care costs, reduced productivity, and premature death. Although cigarette smoking has decreased from 28% in 2012 to 26% in 2015, there has been a significant increase in the use of E-Cigarettes and Other Tobacco Products (OTP) especially among youth.

Community Health Needs Assessment Survey Results (687 Participants)



Survey Comments:

"Alcoholics and smokers are everywhere!"

"Too many sources for tobacco."

"Too many bars and locations that sell alcohol/tobacco products."

Tobacco Use and Exposure Summary/Key Findings pertaining to Juneau County

- Juneau County adult smoking rate is above both Wisconsin and Top U.S. performing states. See data on pg. 23.
- Smoking among Juneau County pregnant women is almost double that of the state and puts the health of the mother and her unborn child at risk. See data on pg. 23.
- Tobacco use remains the single most preventable cause of death and disease in the U.S. In the CWHP area, tobacco has an even greater impact. See CWHP alcohol and drug abuse related deaths on pg. 18.
- Juneau County has the second highest rate of adult smoking in the CWHP at 28%.

JUNEAU COUNTY PRIORITY 4. PHYSICAL ACTIVITY, NUTRITION & OBESITY

Healthiest Wisconsin 2020, Everyone Living Better, Longer states: " Physical activity is a preventative factor for many adverse health conditions, such as heart disease, stroke, high blood cholesterol, depression, and bone and joint disease." Both children and adults need regular physical activity to maintain their weight and well-being. *Healthiest Wisconsin 2020, Everyone Living Better, Longer* also states: "Adequate and appropriate nutrition is a cornerstone for preventing chronic disease and promoting vibrant health. One key area is food security, or assured access to enough food to lead an active health life."

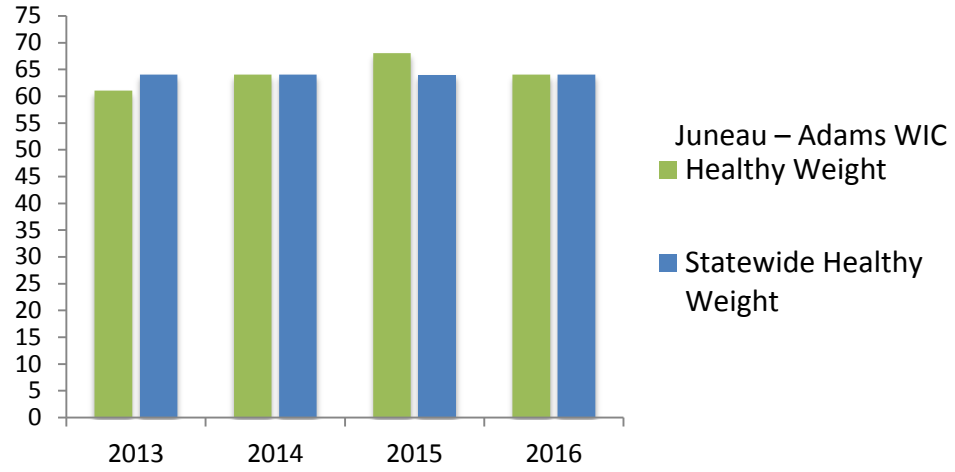
Relevant Strengths:

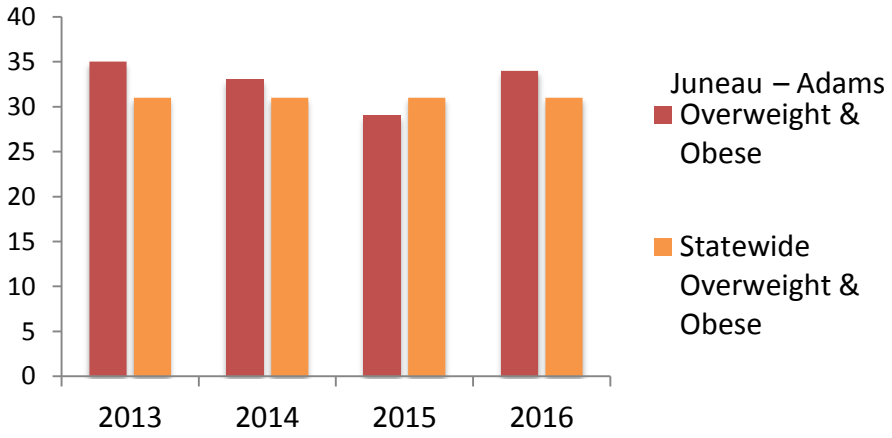
- Women, Infant, and Children (WIC) Clinics
- Farm to School Program
- Strong Women Strong Bones
- Community gardens

Relevant Challenges:

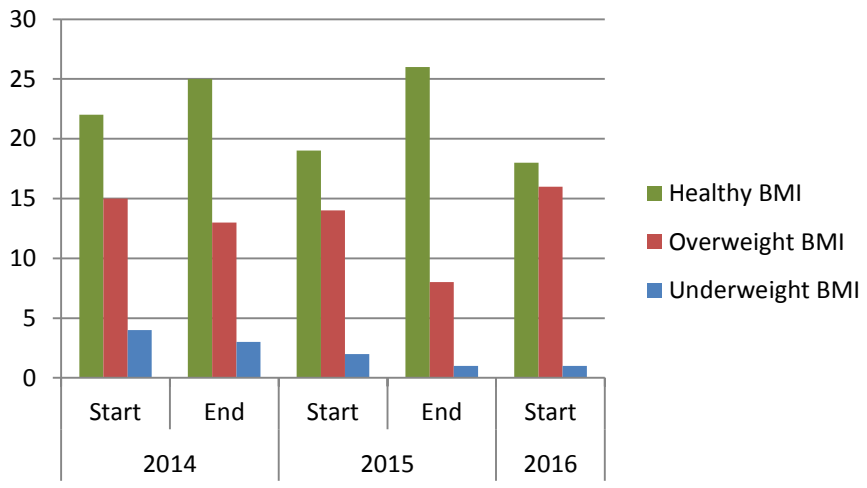
- High number of ACEs
- High cost of healthy food choices
- High accessibility of fast food restaurants

BMI Trend Report for Children 2-5 in Juneau and Adams Counties on WIC



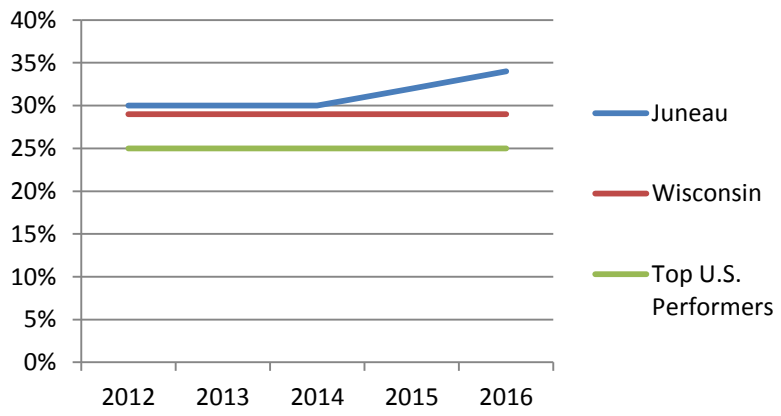


WIC Fit Families Data



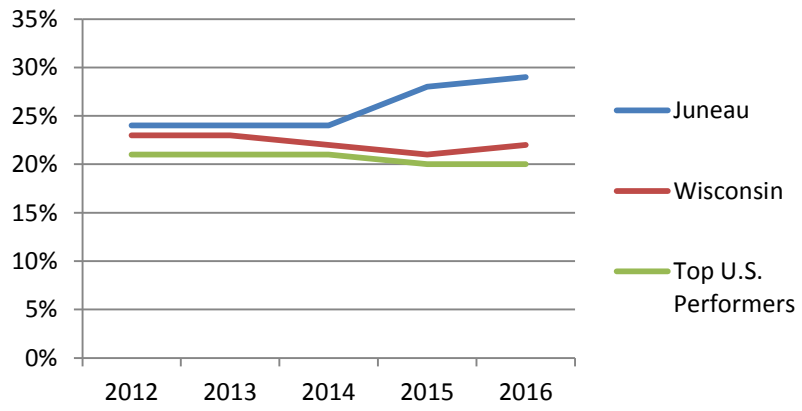
Juneau County Fit Families is a program designed to help families set goals to either consume more fruits and vegetables, drink more water and less sugary beverages, and/or increase physical activity. Overall, Fit Families' purpose is to decrease childhood obesity.

Adult Obesity



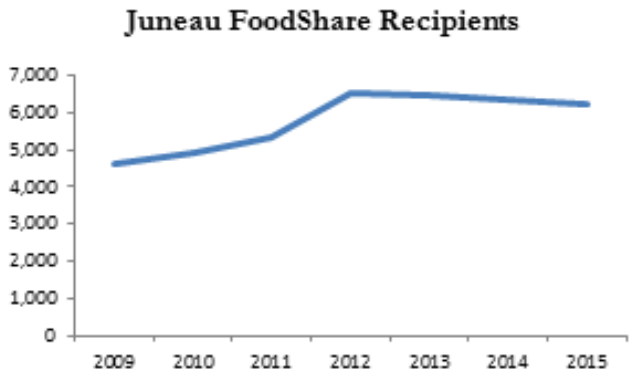
Obesity rates among Juneau County adults are higher than previously reported. According to the graph, 34.5 percent of Juneau County adults are obese. Juneau County's obesity rate is 4.5 percent higher than the Wisconsin rate and almost 10 percent higher than the Top U.S. Performers. Obesity rates are higher in persons who are older, poor, less educated, minorities, or live in a community with high economic hardship. Juneau County residents are increasingly at risk for Type 2 diabetes, hypertension, and other obesity-related illnesses and the county is at greater risk for higher health care costs and lost productivity due to these illnesses.

Physical Inactivity



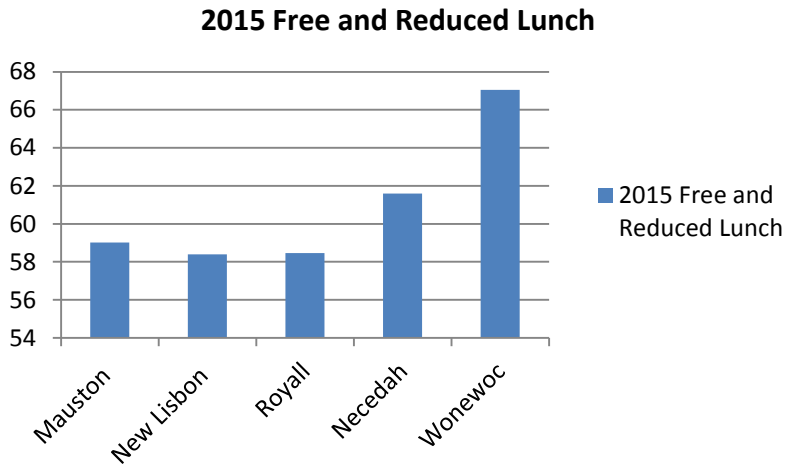
Physical inactivity is a multi-facetted issue with several possible causes. For some, the cost of gym memberships, low access to physical fitness facilities and lack of walking/running/biking trails are all possible contributions to the high percentage of physical inactivity.

FoodShare



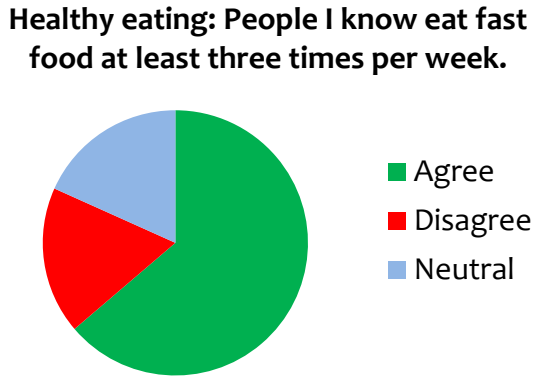
Following the national economic recession that occurred from December 2007 to June 2009, Juneau County saw an increased need for FoodShare assistance. After peaking in 2012, the number of FoodShare recipients still has not made any significant decline. Following the trend of this measure allows the health department to see how many of its residents are living in poverty.

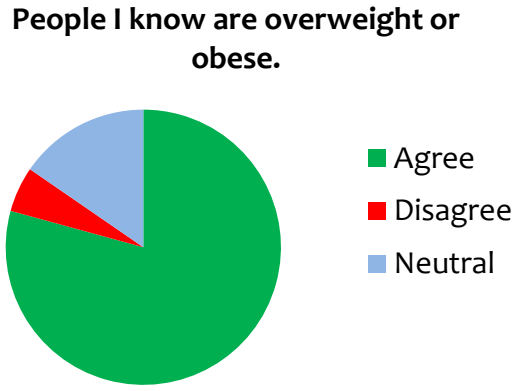
Free and Reduced Lunch



Free and reduced school lunch percentages can provide information about relative poverty. It is termed "relative" because of the varying federal poverty thresholds. The actual number of children in poverty in Juneau is **21%**(County Health Rankings 2016). This has been consistent for the last five years.

Community Health Needs Assessment Survey Results





Survey Comments:

"Grocery store is expensive. It would be nice to have some competing grocery stores in the local area to hopefully bring the cost of healthy food down."

"While we have access to local fitness centers, they tend to be on the expensive side. Would be great to encourage free or low cost fit clubs in our area."

"Poor economic social status, lack of community involvement/programs for youth, teens, adults, kids. Provide more support and community sponsored events, organizations...local YMCA? Boys and Girls Clubs? Give people local incentives for gym memberships, make it easier and more affordable for people, community gym? Splash pad, community outdoor pool, etc."

"Fast food everywhere!!"

Physical Activity, Nutrition, and Obesity Summary/Key Findings pertaining to Juneau County

- Juneau County is experiencing an increasing trend in adult obesity and demonstrates almost a 10% higher rate than Top U.S. Performers. See data chart on pg. 26.

- Juneau County reports the highest level of inactivity in the CWHP area.

- Obesity/Nutrition was identified by survey respondents as an opportunity for improvement in the Juneau County Community Needs Assessment Survey. See page 40.

- Juneau County WIC Fit Families is demonstrating effective ways to decrease childhood obesity. See data chart on pg. 26.

- The Juneau County Community Needs Assessment Survey identified a large percent of people eating fast foods at least three times per week thus compromising a healthy diet. See pie chart on pg. 27.

TABLE OF CONTENTS

Appendix A 30
a. Assessment and Planning Process (Method, Rationale, Timeline)

Appendix B.....31
a. Additional Data Related to AODA Priority.....31
b. Juneau County Department of Human Services Data.....33
c. Community Health Assessment Additional Data.....35
d. Population.....35
e. Housing.....35
f. County Health Rankings.....36
g. Community Cancer Profile.....37

Appendix C 38
a. Summary of Key Informant Interviews.....38
b. Top Five Strengths and Weaknesses.....39
c. CWHP Summit Description.....42

APPENDIX A

ASSESSMENT AND PLANNING PROCESS

METHOD OF ASSESSMENT

CWHP generally followed the *WisconsinGuidebook on Improving the Health of Local Communities*. This framework is built on the *Action Cycle* model used by the County Health Rankings and Roadmaps. Adjustments were made in order to meet the local and regional context.

RATIONALE OF ASSESSMENT

The purpose of the regional community health assessment is to collaborate with partners, to assess the region's resources and needs, and to align our counties under two regional priorities.

Questions we had:

- What collaboration can and cannot be done with a needs assessment between the hospitals and public health departments?
- Will a regional health assessment fit in the Public Health Accreditation Board's (PHAB) guidelines?
- How many regional priorities will we focus on and what will they be?
- What will the state's new assessment look like? How will it guide our priorities?

ASSESSING AND PRIORITIZING (MARCH 2016-SEPTEMBER 2016)

Identifying county themes and strengths, county health status, and data needed were the beginning goals of the assessment. Processes used to gather this information included steering committee brainstorming, key informant input, and the development of a data subcommittee to gather the individual county data needed.

Individual county data was gathered, with the help of partner agencies and stakeholders, through surveys, town hall forums, focus groups, and key informant interviews. This community feedback was used to narrow our regional priorities to two health topics. Each county then chose their own third or fourth health topic.

FINALIZING AND ENGAGING (AUGUST 2016 AND BEYOND)

Once the health assessment is complete, each health department will inform their communities of the findings and ask for input and help developing improvement plan objectives. The regional and local steering committees will then begin the Community Health Improvement Plan (CHIP) process. Once completed, community health partners from a variety of sectors will utilize the CHIP to set priorities, coordinate activities, and collaborate to improve the health status of CWHP's counties.

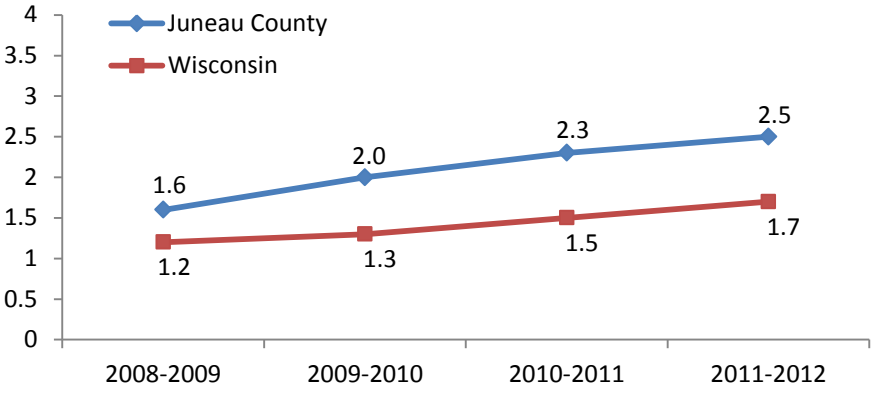
APPENDIX B

ADDITIONAL DATA RELATED TO AODA PRIORITY

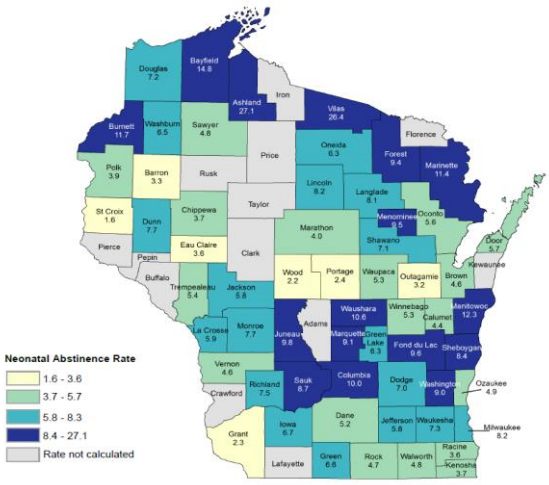
Opiate Treatment and Physical Health rates per 10,000 population, Juneau Co. and WI, 2010-2012, WI Department of Health Services

	Juneau Co.	WI
Opiate and Cocaine Arrests	12.4	18.4
Medicaid Opiate Admissions	36.0	32.1
PPS Opiate Admissions	15.4	15.1
Opiate Deaths	3.4	1.4
Opiate Hospital Admissions	36.4	36.3
Opiate Emergency Room Visits	23.6	19.6

Opioid-related hospitalizations per 1,000 population, ages 12-25, Wisconsin by county, 2008-2012 (moving two-year rates)



Neonatal Abstinence Syndrome Rate by County of Residence, WI, 2009-2014

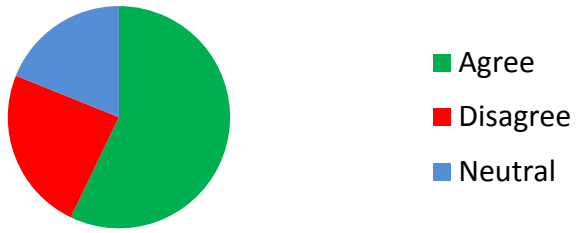


Neonatal Abstinence Syndrome is a postnatal drug withdrawal syndrome caused by maternal drug use, primarily prescription opioid abuse.

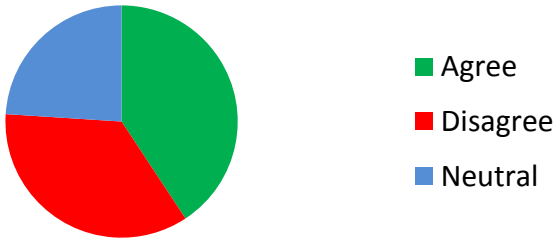
Community Health Needs Assessment Survey Results

I know people who take part in heavy drinking (8 drinks or more per week for women, and 15 drinks or more per week for men).

I know people who take part in unhealthy use of alcohol and behaviors like drunk driving, drinking while pregnant, alcoholism and underage drinking.



I know people who use things like mood-altering substances (including marijuana, cocaine, meth, heroine and illegal use of prescription drugs.



Survey Comments:

"I think there are still a lot of people in Juneau County that spend half their life in bars, drinking/driving, doing drugs, etc. It would be nice to see more preventive and reactive care for these problems."

"Alcohol/Drug abuse in family. Lack of wages to keep up with inflation."

"Attitude that alcohol isn't a problem causing product."

ADDITIONAL DATA RELATED TO MENTAL HEALTH PRIORITY

2015 Mile Bluff Medical Center ER Visits				
Gastrointestinal	Musculoskeletal/ Fractures/ Dislocation	Neuro Symptoms/Deficits	Cardiac	Respiratory/Pulmonary
Genitourinary	ENT/Dental	Skin/Rash/ Abscess	Mental Health	General Illness

Suicide Deaths in Juneau County

January- July 2016	5
2015	6
2014	8
2013	10
2012	1
2011	4

Accidental Overdose

January- July 2016	4
2015	3
2014	0
2013	1
2012	2
2011	2

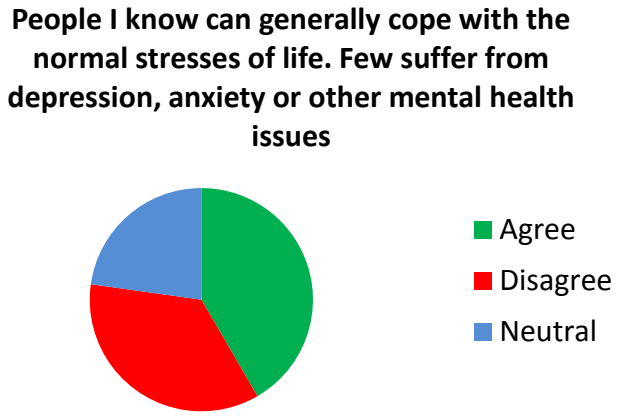
The Juneau County Department of Human Services (JCDHS) has had an increase in AODA treatment requests and services from 2015 to 2016. Looking specifically at individuals requesting to go to treatment/inpatient AODA there has been an increase in individuals who have come to JCDHS stating they are ready to get clean and sober and may not have had this level of treatment in the past. Subsequently, we have seen an increase in detoxifications. This is partly due to the individuals seeking treatment must first go through the detoxification process prior to being admitted to a 30-90 day treatment program. JCDHS has also expanded who we contract with to provide treatment services, so we can match our clients to the programs that fit their needs and gives us more opportunity to get clients into treatment before they change their mind

Juneau County Department of Human Services	Cost 2015	Cost Jan-July 2016
Detox	$14,012	$10,772
Drug Screens	$897.21	$981.55
Inpatient	$559.40	$5,600
Treatment	$20,935	$63,687
Total	**36,403.61**	**$81,040.55**

Juneau County Department of Human Services	2015	Jan-July 2016
Voluntary Hospitalization	11	17
Detox	17	19

JCDHS has also had an increase in voluntary hospitalizations to psychiatric facilities. JCDHS firmly believes individuals should be treated in the least restrictive environments and works hard to help clients find the least restrictive most effective treatments for them. Another change that may be impacting our voluntary hospitalizations is due to having a dedicated daytime crisis worker who is able to assist in voluntary admissions for individuals feeling suicidal rather than having to enact an emergency detention which is the most restrictive form of treatment.

Community Needs Assessment Survey Results



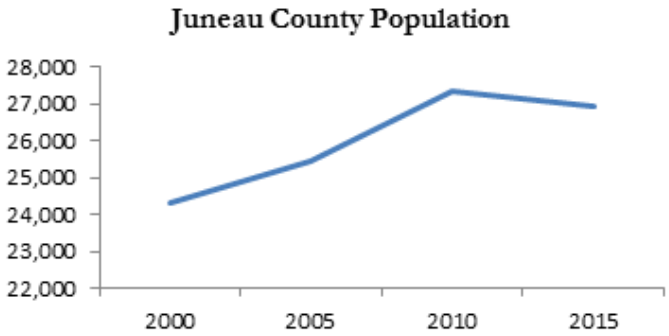
Survey Comments:

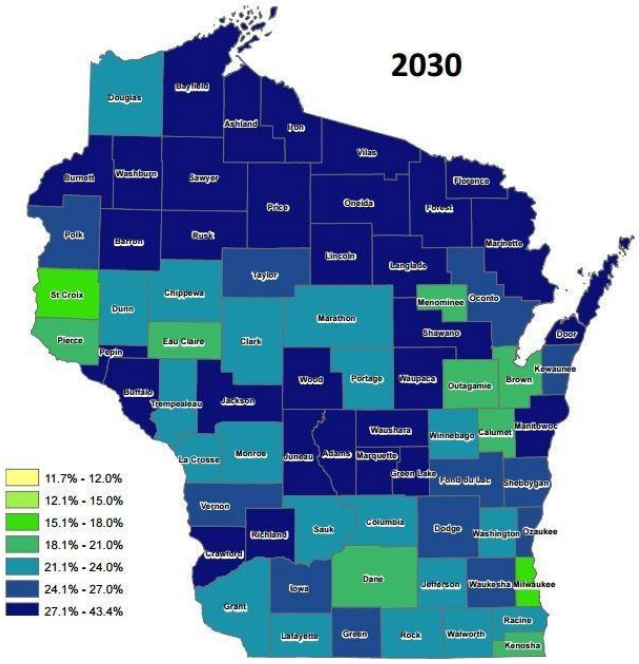
"Dysfunctional families involved in alcohol, drugs, or the "disability" mentality to get by. Depression for those that cannot realistically make enough income to take care of themselves or family. No family counseling or financial safety net. Growing crime in the area related to drugs."

"Lack of mental health providers locally."

COMMUNITY HEALTH ASSESSMENT ADDITIONAL DATA FOR JUNEAU COUNTY

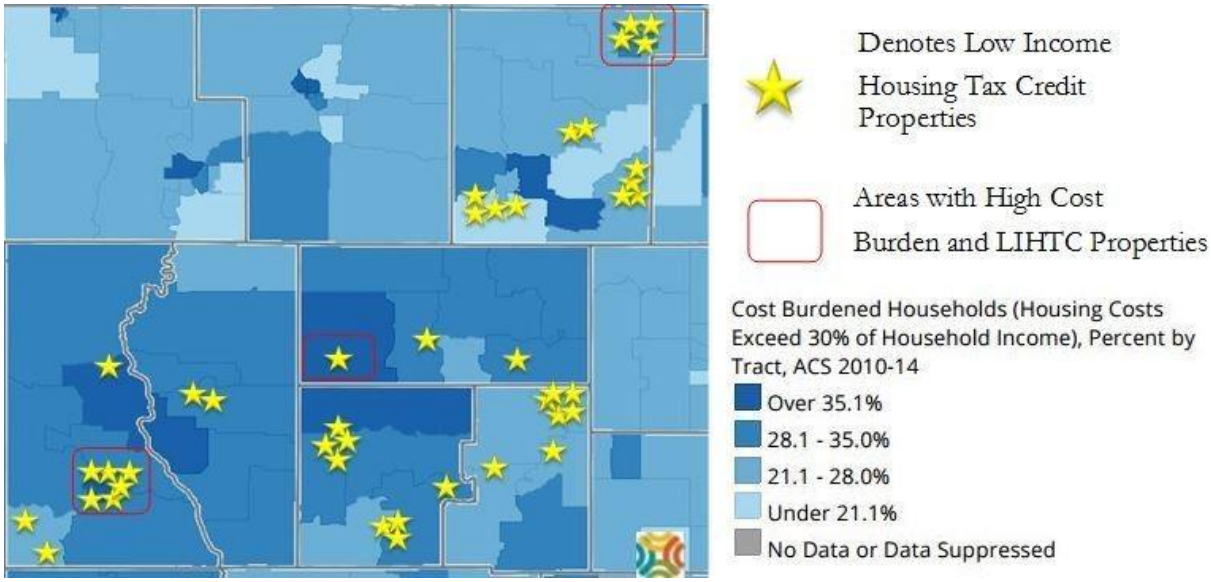
Population





In Juneau County, there has been general population loss since 2010. The Wisconsin map to the right shows the 65 and older population projections for the year 2030

Housing



County Health Rankings & Roadmaps
A Healthier Nation, County by County

Juneau County - 2016

* 90th percentile, i.e., only 10% are better. Note: Blank values reflect unreliable or missing data	Juneau County	Error Margin	Top U.S. Performers*	Wisconsin	Rank (of 72)
Health Outcomes					55
Length of Life					59
Premature death	7,500	6,200-8,800	5,200	6,000	
Quality of Life					47
Poor or fair health	15%	14-15%	12%	13%	
Poor physical health days	3.6	3.5-3.8	2.9	3.4	
Poor mental health days	3.4	3.3-3.6	2.8	3.4	
Low birthweight	6%	5-7%	6%	7%	
Health Factors					65
Health Behaviors					69
Adult smoking	18%	18-19%	14%	16%	
Adult obesity	34%	28-40%	25%	29%	
Food environment index	7.7		8.3	7.9	
Physical inactivity	29%	24-36%	20%	22%	
Access to exercise opportunities	39%		91%	81%	
Excessive drinking	23%	22-24%	12%	24%	
Alcohol-impaired driving deaths	42%	33-51%	14%	38%	
Sexually transmitted infections	184		134.1	411.6	
Teen births	36	31-41	19	26	
Clinical Care					56
Uninsured	13%	12-14%	11%	11%	
Primary care physicians	1,210:1		1,040:1	1,220:1	
Dentists	2,930:1		1,340:1	1,590:1	
Mental health providers	1,890:1		370:1	590:1	
Preventable hospital stays	60	52-68	38	48	
Diabetic monitoring	91%	82-100%	90%	90%	
Mammography screening	64%	56-73%	71%	71%	
Social & Economic Factors					59
High school graduation	92%		93%	88%	
Some college	51%	47-54%	72%	67%	
Unemployment	6.7%		3.5%	5.5%	
Children in poverty	21%	15-27%	13%	18%	
Income inequality	4.0	3.8-4.3	3.7	4.3	
Social Associations	14.7		22.1	11.8	
Children in single-parent households	32%	27-38%	21%	31%	
Violent crime	208		59	255	
Injury deaths	100	83-117	51	65	
Physical Environment					41
Air pollution - particulate matter	11.8		9.5	11.5	
Drinking water violations	No		No		
Severe housing problems	15%	13-17%	9%	15%	
Driving alone to work	81%	79-83%	71%	80%	
Long commute - driving alone	30%	27-32%	15%	26%	

Community Cancer Profile

JUNEAU COUNTY

Cancer is a leading cause of death in Juneau County

Rate of New Cancer Diagnoses†

	Juneau County	State of WI
All Cancers	499	501
Colorectal	43	41
Lung	67	61
Breast	74	84
Prostate	108	122

Rate of Cancer Deaths†

	Juneau County	State of WI
All Cancers	174	170
Colorectal	14	14
Lung	55	45
Breast	11	12
Prostate	28	22

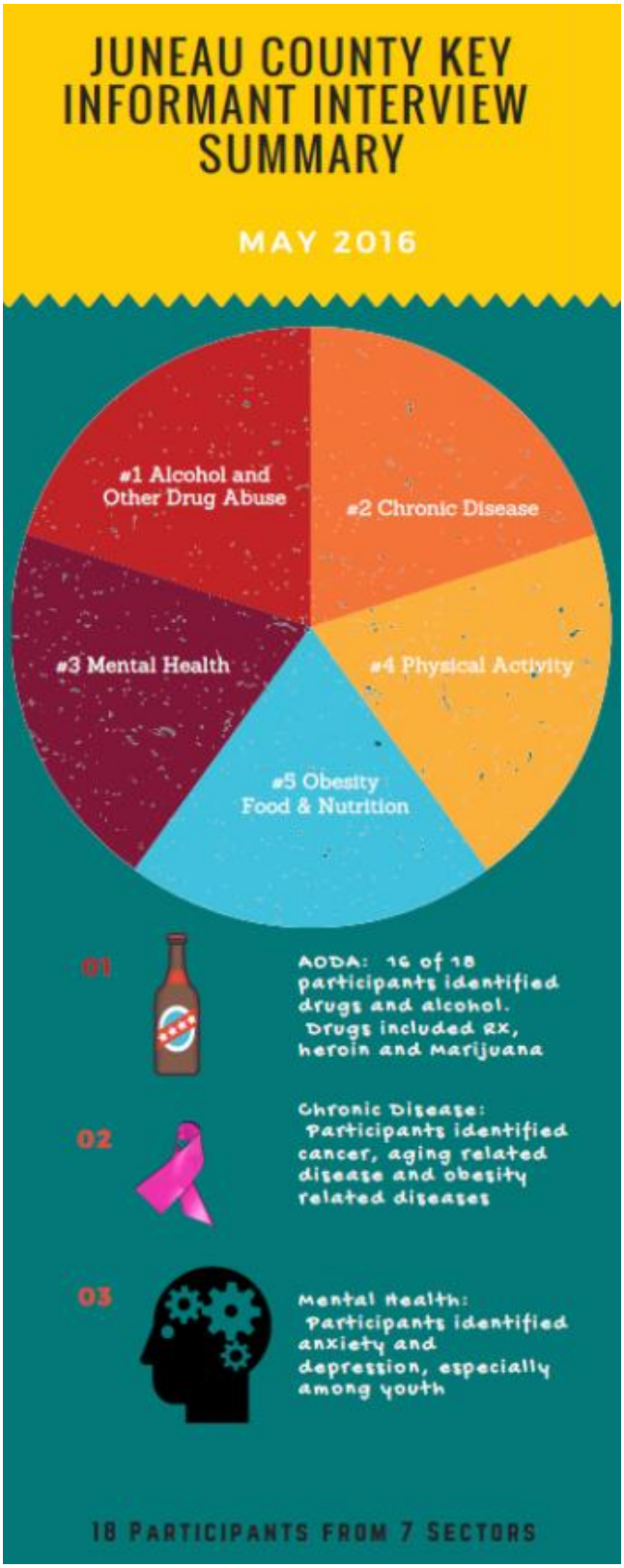
†Per 100,000 persons

Many factors shape cancer's impact on the community, including social and economic characteristics and access to care

Here is how Juneau County compares:

	Juneau County	State of WI
Population	26,224	5,771,337
Population Over 65	19%	15%
Racial Minorities	6%	19%
Hispanic	3%	7%
Rural	83%	30%
Median Income	$45,135	$52,738
Living in Poverty	13%	13%
Unemployment	5%	5%
High School Graduation	85%	91%
College Degree	12%	27%
Uninsured Adults	13%	9%
Ratio of Population to Primary Care Providers	1,207:1	1,220:1
County Health Outcomes Ranking	55 of 72	N/A

APPENDIX C



* For the full Key Information Interview Report, please go to http://www.co.juneau.wi.gov/health1.html

TOP FIVE STRENGTHS AND WEAKNESSES FOUND FROM THE JUNEAU COUNTY COMMUNITY NEEDS ASSESSMENT SURVEY

The Juneau County Health Department and Mile Bluff Medical Center are required to develop and implement local health plans to address health conditions impacting their communities. Community input is viewed as integral for prioritizing county health needs and creating a healthier Juneau County. The *Juneau County Community Health Survey* was designed to elicit feedback from the community to guide the next three years' planning efforts. Twenty-six survey questions were categorized into five overarching constructs consisting of: 1) access to services, 2) health and wellness, 3) substance abuse/mental health, 4) safety, and 5) social determinants of health.

While analysis of the Juneau County *Community Health Needs Assessment Survey* showed many positive aspects of Juneau County which support heath, wellness, and safety, there were also some clear areas of opportunity which can improve community members' health status.

Strengths:

Overall, survey respondents identified five factors within Juneau County which are supportive of health and wellness. The majority of these relate to access to programs and services. These strengths are supported by both responses to individual survey items as well as responses to open-ended, write-in responses. These include:

a. Knowledge of the importance of vaccination. Over 90% of respondents agreed/strongly agreed with the statement, "I know the importance of vaccines and keep my family up to date on them." While this question is not directly related to access to health services, the fact that respondents show strong knowledge and use of vaccinations supports the fact that respondents also positively identify "access to health insurance" and "timely access to health care" as supportive factors within Juneau County.

b. Access to health insurance. Over 83% of respondents agreed/strongly agreed with the statement, "people I know have some kind of health care coverage."

c. Timely access to health care. Seventy-eight percent of respondents agreed /strongly agreed with the statement, "doctors are available, and I can make an appointment to get the care and services I need."

d. Education level. Over 77% of respondents agreed/strongly agreed with the statement, "people I know graduate from high school and attend college or plan to." Education level is considered a social determinate of health. Those with lower educational achievement often experience more barriers to accessing health services. The fact that the majority of survey respondents feel that community members have a high school education or above, supports the understanding that health care is accessible in the community.

e. Access to health improvement opportunities. Over 74% of respondents agreed/strongly agreed with the statement, "people I know have access to opportunities that can improve health and fitness such as; bike trails, fitness classes, etc." This is further supported by the fact that 40% of respondents agreed/strongly agreed with the statement "people I know exercise for 30 minutes at least four times per week and 30%

of responses to the write-in question "What are the factors in Juneau County that help you to be healthy" categorized access to walking/biking paths and gyms as supportive factors for being healthy.

Opportunities for Improvement:

Survey respondents identified five areas for health improvement within Juneau County. These opportunities are supported by both responses to individual survey items as well as responses to open-ended, write-in responses. These include:

a. Obesity/Nutrition. The lowest desirable response to any item on the survey was to the statement, "people I know are overweight or obese." Seventy-eight percent of respondents agreed/strongly agreed with this statement, whereas only 5.3% of respondents disagreed/strongly disagreed with the statement. While not directly addressing obesity, write-in responses indicated that fast food is too available in the community, that there is a perceived lack of healthy restaurant options, and that there is a lack of affordable fresh foods at local grocery stores.

b. Tobacco use. Reponses to the question "I know people who use tobacco" had the second lowest average desirable responses of any survey item. Eighty-four percent of respondents agreed/strongly agreed with this statement compared to 8.9% who disagreed/strongly disagreed.

c. Alcohol use. Overall, the "substance abuse/mental health" construct of six questions had the lowest average score relative to other constructs. Within this construct there were three survey questions which directly asked about misuse/abuse of alcohol. On average, respondents agreed that people they know take part in unhealthy drinking behaviors (drunk driving, drinking while pregnant, etc.), heavy drinking, and binge drinking. In addition, comments to write-in questions mentioned alcohol, drinking, or the number of bars within the community as problematic.

d. Cost of programs, services and healthy foods. While there were only a few questions on the survey which solely focused on the affordability of programs or services, a large majority of write-in responses mentioned "cost" as a barrier to accessing programs and services. In particular, respondents mentioned the cost of fresh food and the cost of gyms or exercise classes as barriers to living healthier. To improve health, respondents recommended adding more free or reduced cost options for physical fitness, such as reduced price gym memberships, and increased availability of low cost healthy foods (i.e. healthy restaurants, low cost grocery stores with fresh produce, and less unhealthy fast food).

e. Access to dental care. Responses to the survey item, "dental care is available and affordable" had one of the ten lowest average scores overall. However, within the "access to services" category of questions it ranked the lowest of nine questions within the construct - only 33.2% of respondents agreed/strongly agreed with the statement. In addition, 9% of write-in responses identifying "access to services" and 4.7% of respondents identifying "cost of services" as barriers to good health mentioned access to dental care within their responses.

Finally, respondents mentioned they would benefit from more communication about events taking place within the community. Currently, 30% of respondents reported they receive information about community events via the internet, 26% received information from the radio, and 26% received information from the newspaper. Suggestions for improved communication came from write-in responses and included providing information to residents through Facebook, texts, a community newsletter, and website(s).

*For the full report on 2016 Juneau County Community Needs Assessment Survey, please go to http://www.co.juneau.wi.gov/health1.html

CENTRAL WISCONSIN HEALTH & ECONOMIC DEVELOPMENT SUMMIT SUMMARY REPORT RECOMMENDED NEXT STEPS

The Summit served as a catalyst to bring diverse agencies and community members together across the six counties: Adams, Green Lake, Juneau, Marquette, Waupaca, and Waushara. CWHP partnered with Forward Community Investments (FCI), a Community Development Financial Institution serving Wisconsin, to support the facilitation of the Summit, with a focus on using collective impact as a model for collaborative partnerships across the six counties and core issues. As emphasized by Summit participants, regional collaboration and system coordination are a necessity to further this work. The following initiatives would build on the momentum from this Summit and maximize the collective impact of participants' efforts across the Central Wisconsin region.

Identify backbone support

CWHP and the Summit Planning Committee members will lead efforts to identify and develop a backbone organization. The aim will be to establish independent, dedicated staff that can mobilize and support ongoing regional strategy efforts.

Convene post Summit workgroups

In consultation with FCI, the CWHP and the Summit Planning Committee will review Summit evaluation materials (pre- and post- survey responses), as well as the highlights and regional themes from the Summit to identify one or two issue areas where there is strong stakeholder interest to address as a region. Stakeholders will convene as workgroups around these initial focus areas and develop a plan for coordinated action.

Encourage further participation across sectors and consider collaboration strategies

The most common regional theme from this Summit, workforce development, is particularly relevant across industry sectors. Data in this report show the need to further outreach to sectors such as agriculture and trade, among many others. Alongside this outreach, it is recommended to consider the collaboration strategies identified by Summit attendees, as noted in this report.

Create opportunities for continuous communication

To facilitate ongoing collaboration, CWHP and the Summit Planning Committee will connect with Summit participants who indicated interest in further involvement, identify avenues for ongoing communication, and create opportunities for participation of diverse stakeholders. Further development and management of a communication system may be a role for the future backbone organization.

Begin identifying data that can be used to track progress

Establishing common goals and developing a system of shared measurement to assess progress towards those goals is a possible long-term endeavor for the region. Initial steps can be taken to help monitor and assess progress of collaborative efforts thus far. These steps may include identifying relevant data and existing data sources.

Incorporate a broad approach to sustainability

Sustainability is a necessary post-Summit consideration. For example, it may be helpful for stakeholders to inventory, maximize, and leverage funding and resources. Not only are resources important, but shared purpose and community buy-in, as identified by Summit participants, are key for the sustainability of collaborative efforts.

Once these initiatives are established, a collective impact framework may provide a foundation for creating a common or shared agenda, supporting mutually reinforcing activities across the region, and developing meaningful outcomes and data. Applying this framework, regional stakeholders can work together to define and achieve shared success.

*For the full Summit Summary Report, please visit; http://www.co.juneau.wi.gov/health1.html

References

Agnesian HealthCare. *Logo Picture*. Retrieved from http://www.agnesian.com/

Centers for Disease Control and Prevention, National Center for Health Statistics. *Increase in Suicide in the United States, 1999-2014*. April 2016. Retrieved from http://www.cdc.gov/nchs/products/databriefs/db241.htm

Children's Hospital of Wisconsin. *Wisconsin ACE Brief 2011-12: Wisconsin ACE Map*. Retrieved from https://preventionboard.wi.gov/Documents/WisconsinACEsBrief%202011-2012.pdf

County Health Rankings and Roadmaps 2016. *Outcomes and Measures County Comparison*. Retrieved from http://www.countyhealthrankings.org/app/wisconsin/2016/compare/snapshot?counties=55_001%2B55_047%2B55_057%2B55_077%2B55_135%2B55_137

County Health Rankings and Roadmaps 2016. *Smoking during pregnancy*. Retrieved from http://www.countyhealthrankings.org/app/wisconsin/2016/measure/factors/10/data

County Health Rankings and Roadmaps. *Action Center* .Retrieved from http://www.countyhealthrankings.org/roadmaps/action-center

County Health Rankings and Roadmaps. *Rankings Model*. Retrieved from http://www.countyhealthrankings.org/our-approach

Divine Savior HealthCare. *Logo Picture*. Retrieved from http://www.dshealthcare.com/Main/Home.aspx

Economic Innovation Group. *The 2016 Distressed Communities Index: An Analysis of Community Well-Being Across the United States*. 2016. Retrieved from http://eig.org/dci/interactive-maps/u-s-zip-codes

Egerter S, Braveman P, Sadegh-Nobari T, Grossman-Kahn R, Dekker M. Education Matters for Health. Princeton, NJ: RWJF Exploring the Social Determinats. May 2011. Retrieved from http://www.rwjf.org/en/library/research/2011/05/education-matters-for-health.html

Enroll America. *All Counties in Wisconsin: Uninsured Rates by major demographic groups*. Retrieved from https://s3.amazonaws.com/assets.enrollamerica.org/wp-content/uploads/2015/11/WI-State-Snapshot-County-table.pdf

Family Health La Clinica. *Logo Picture*. Retrieved from http://www.famhealth.com/

Forward Community Investments. *Central Wisconsin Health & Economic Development Summit Summary Report*. October 2015. Retrieved from http://www.cwhpartnership.org/uploads/2/1/4/8/21489738/cwhealth_and_ed_summit_report.pdf

Georgia Public Health District Accreditation Program *Public Health Word Cloud* Retrieved from http://www.healthcaregeorgia.org/focus-areas/public-health.cfm

McAlexander KM, Banda JA, McAlexander JW, Lee RE. *Physical activity resource attributes and obesity in low-income African Americans*. J Urban Health. 2009 Sep;86(5):696-707. doi: 10.1007/s11524-009-9385-0. Epub 2009 Jul 8 Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19585244

Mile Bluff. *Logo Picture*. Retrieved from http://www.milebluff.com/about-mile-bluff.html

Moundview. *Logo Picture*. Retrieved from http://www.moundview.org/

National Institute on Alcohol Abuse and Alcoholism. *Drinking Levels Defined*. Retrieved from https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-dri nking

Prevent Suicide Wisconsin. *Map of Suicide Rates by County*.17 Dec 2015.Retrieved from http://www.preventsuicidewi.org/Data/Sites/16/media/suicide-facts/suicide-rates-by-county_2009-to-2013.pdf

Rosenberger RS, Sneh Y, Phipps TT, Gurvitch R. *A spatial analysis of linkages between health care expenditures, physical inactivity, obesity and recreation supply*. Journal of Leisure Research. 2005; 37.2:216-235 Retrieved from http://js.sagamorepub.com/jlr/article/view/545

SAMHSA's Center for the Application of Prevention Technologies. *The Role of Adverse Childhood Experiences in Substance Abuse and Related Behavioral Health Problems*. Retrieved from http://www.samhsa.gov/capt/sites/default/files/resources/aces-behavioral-health-problems.pdf

ThedaCare. *Logo Picture*. Retrieved from https://www.thedacare.org/

Child Abuse and Neglect Prevention Board .*The Influence of Adverse Childhood Experiences on the Health of Wisconsin Citizens in Adulthood*. 2015. Retrieved from https://preventionboard.wi.gov/Documents/WisconsinACEs2011-13-WEB_FINAL_3.16.pdf

The WHITE HOUSE, Office of the Press Secretary. *Fact Sheet: What Climate Change Means for Wisconsin and the Midwest*. 6 May 2014. Retrieved from https://www.whitehouse.gov/sites/default/files/microsites/ostp/WISCONSIN_NCA_2014.pdf

UDS Mapper. *CWHP outline and hospital location*. Retrieved from http://www.udsmapper.org/mapESA.cfm

United States Census Bureau, American Community Survey. *Cost Burdened Households (Housing Costs Exceed 30% of Household Income, Percent by Tract, American Community Survey 2010-14*.Report prepared by Community Commons. Retrieved from http://assessment.communitycommons.org/temp/CC38023RPT.pdf

United States Census Bureau, American Community Survey(ACS). *Data on Educational Attainment*. 2014. Retrieved from https://www.census.gov/hhes/socdemo/education/data/acs/

United States Census Bureau. *QuickFacts*. Retrieved from https://www.census.gov/quickfacts/table/PST045215/00

United States Department of Labor: Bureau of Labor Statistics. *Labor Force Statistics from the Current Population* Retrieved from http://data.bls.gov/pdq/SurveyOutputServlet?request_action=wh&graph_name=LN_cpsbref3

United States Department of Labor: Bureau of Labor Statistics. *May 2015 National Occupational Employment and Wage Estimates* Retrieved from http://www.bls.gov/oes/current/oes_nat.htm#00-0000

University of Wisconsin School of Medicine and Public Health, Carbon Cancer Center. *Community Cancer Profile Waushara County*. March 2013. Retrieved from http://chdi.wisc.edu/sites/chdi.wisc.edu/files/attachments/Waushara%20County%20Cancer%20Profile%202013.pdf

University of Wisconsin Stevens Point, Center for Watershed Science and Education. *Groundwater Quality Viewer: Nitrates*. Retrieved from http://gissrv2.uwsp.edu/cnr/gwc/pw_web/

Wisconsin CHIPP Infrastructure Improvement Project, Wisconsin Association of Local Health Departments and Boards, University of Wisconsin Population Health Institute. *Wisconsin Guidebook on Improving the health of Local Communities*. February 2015. Retrieved from http://c.ymcdn.com/sites/www.walhdab.org/resource/resmgr/Custom_Site/Wisconsin_Guidebook_v2.0_Fin.pdf

Wisconsin Diabetes Prevention and Control Program. Division of Public Health, Department of Health Services. *The 2011 Burden of Diabetes in Wisconsin Adult Obesity Rate*. September 2011 Retrieved from https://www.dhs.wisconsin.gov/publications/p0/p00284.pdf

Wisconsin Department of Health Services, Bureau of Environmental and Occupational Health. *Wisconsin Heat Vulnerability Index* Retrieved from https://www.dhs.wisconsin.gov/images/map-hvi-wi.jpg

Wisconsin Department of Health Services, Division of Public Health, Bureau of Communicable Diseases. *Lyme Disease Annual Incidence Wisconsin, 2014*. 20 April 2015. Retrieved from https://www.dhs.wisconsin.gov/tickborne/lyme/2014data.htm

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics, Health Analytics Section. Public Health Profiles, Wisconsin 2015 (P-45358-15). September 2015.

Wisconsin Department of Health Services, Division of Public Health, Oral Health Program. *Wisconsin Public Water Supply Fluoridation Census*. 2013. Retrieved from https://www.dhs.wisconsin.gov/publications/p0/p00103.pdf

Wisconsin Department of Health Services, FoodShare Wisconsin Data. *FoodShare Caseload Recipients by Calendar Year*. Retrieved from https://www.dhs.wisconsin.gov/foodshare/rsdata.htm

Wisconsin Department of Public Instruction. *Enrollment and Participation Reports*. Retrieved from http://dpi.wi.gov/school-nutrition/program-statistics

Wisconsin DOA Demographic Services, Population Projections, Vintage 2013 Prepared by Eric Grosso, WI Department of Health Services Bureau of Aging and Disability Resources. *2030 Wisconsin Map*. Retrieved from https://www.dhs.wisconsin.gov/publications/p0/p00138.pdf

Wisconsin Department of Workforce Development. 2015 *WORFKORCE & ECONOMIC PROFILE*. 2015. Retrieved from http://worknet.wisconsin.gov/worknet_info/Downloads/CP/waushara_profile.pdf

Wisconsin Environmental Public Health Tracking Program. *Waushara County Environmental Health Profile*. 2015. Retrieved from https://www.dhs.wisconsin.gov/publications/p0/p00719-waushara.pdf

Wisconsin Initiative on Climate Change Impacts (WICCI). Wisconsin's changing climate: impacts and adaptation. Nelson Institute for Environmental Studies, University of Wisconsin and Wisconsin Department of Natural Resources. 2011. Retrieved from http://www.wicci.wisc.edu/report/2011_WICCI-Report.pdf.

Wisconsin Office of Rural Health (WIORH). *Health Professional Shortage Areas Dental Care Map*. December 2015. Retrieved from http://worh.org/sites/default/files/HPSA-Dental%20Care-2014.pdf

Wisconsin Prescription Drug Monitoring Program. *July1-September 30, 2015 Statistics Sheet #11*.12 No. 2015. Retrieved from http://dsps.wi.gov/Documents/PDMP/Stats/Stats_1503.pdf

Wisconsin Prescription Drug Monitoring Program. *Statistics Sheets 2013-2015*. Retrieved from http://dsps.wi.gov/pdmp/stats

Wisconsin's Worknet *2015*. *Average Wage*. Retrieved from http://worknet.wisconsin.gov/worknet/daindustry.aspx?menuselection=da

World Health Organization(WHO). *Health Impact Assessment (HIA)*. Retrieved from http://www.who.int/hia/evidence/doh/en/

*Where one county is listed, it can be assumed the same source was used to gather every county's data