



2016 COMMUNITY HEALTH ASSESSMENT



GREEN LAKE

Central Wisconsin Health Partnership (CWHP)

"For he who has health has hope; and he who has hope, has everything."- Owen Arthur





2016 CWHP Community Health Assessment

CENTRAL WISCONSIN HEALTH PARTNERSHIP

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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 that 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. CWHP has a history of collaborating successfully on a number of projects in the past and decided that a blended Community Health Assessment 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 Community Health Assessment (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

Adams County

Green Lake County

Juneau County

Jayme Schenk

Jed Wohlt

Patti Wohlfeil

Marquette County

Waupaca County

Waushara County

CWHP Community Health Assessment Partners

We would like to express our appreciation to the health care partners in our communities who participated in the 2016 CWHP Community Health Assessment. 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

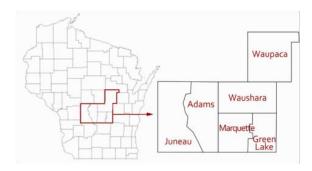
Sarah Grosshuesch, Adams County Health Officer Kathy Munsey, Green Lake County Health Officer Makiko Thomas Omori, Green Lake County Intern Barbara Theis, Juneau County Health Officer Jayme Schenk, Marquette County Health Officer Lauren Calnin, Marquette County Health Educator Jed Wohlt, Waupaca County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



CWHP 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 comes from the public health departments in these counties.



Vision:

To be the healthiest counties in Wisconsin

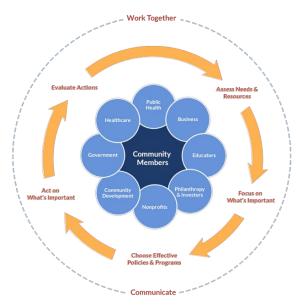
Mission:

Improve the health of the public and achieve equity in health status for the Central Wisconsin region

METHOD OVERVIEW

The six counties started the Community Health Assessment (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 needs assessment were to Assess Needs & Resources and to Focus on What's Important while emphasizing collaboration and open communication.

The assessment 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.



Length of Life (50%) **Health Outcomes** Quality of Life (50%) Tobacco Use Diet & Exercise **Health Behaviors** (30%) Alcohol & Drug Use Sexual Activity Access to Care Clinical Care (20%)Quality of Care **Health Factors** Education **Employment** Social & Income **Economic Factors** (40%)Family & Social Support Community Safety Physical Air & Water Quality **Environment Policies & Programs** (10%)Housing & Transit

County Health Rankings model © 2014 UWPHI

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

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

COMMUNITY HEALTH ASSESSMENT

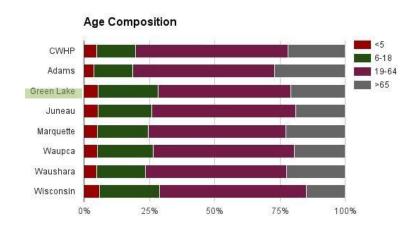
Demographics

	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 Source: U.S. Census Bureau	5,724,692	50.30%	49.70%	70.15%	29.85%

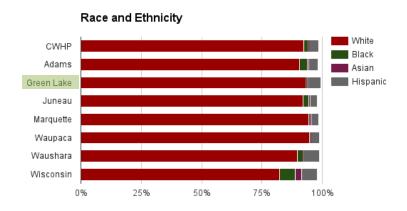
Source: U.S. Census Bureau

Age Composition

Overall, the elderly population is growing. By 2030 nearly 30% of CWHP residents will be 65 years and older (Wisconsin DOA). The health needs of the community will shift as the 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.



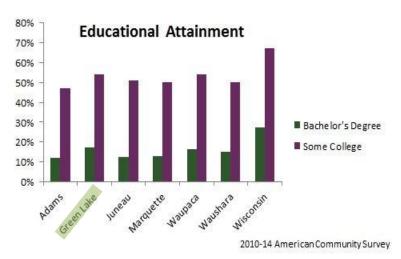
Source: U.S. Census Bureau



Source: U.S. Census Bureau

Race and Ethnicity

While the graph 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 one of many factors that contribute to inequalities in health status. Eliminating these disparities is challenging, yet vital to improving 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

Having a 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 nationwide average, the gap is over \$7,000.

2014 Per Capita Personal Income



2015 Average Wage



2015 Average Pay

The low average personal income can be partly attributed to two factors. The wage paid by employers in the individual counties, along with the counties' 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 those in CWHP is \$35,184. This is \$10,205 lower than Wisconsin and \$13,136 lower than the national average.

Unemployment Rate

With the exception of Waupaca, all of the CWHP counties had higher unemployment rates than the state in May 2016. Acknowledging the relationship between one's health and economical 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. A detailed description of the summit can be found in Appendix A.

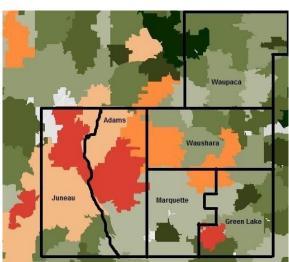
5.1% 4.4% 4.5% 4.7% 4.3% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8% 4.5% 3.8%

Unemployment Rate

Distressed Communities Index

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



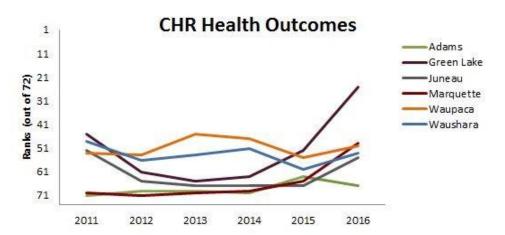


Index numbers are based upon the following measures.

- 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

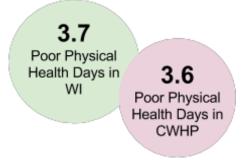
A Robert Wood Johnson Foundation program

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute produce County Health Rankings each year. These 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 CHWP, in general, have been improving ranks in overall health outcomes. While the rankings should not be compared year to year, creating a trend line can offer a picture of the health status for the past 5 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	17 th				
Waupaca	47 th				
Marquette	55 th				
Waushara	58 th				
Juneau	59 th				
Adams	70 th				

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

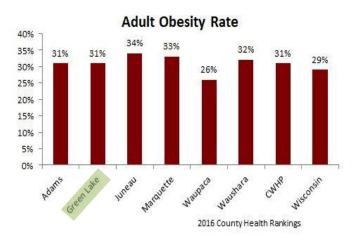




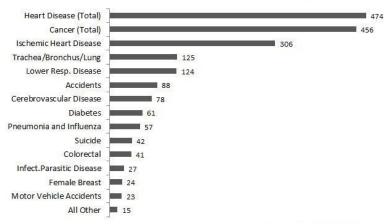
Overall Health

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 factors will be discussed in the Second Health Priority.



CWHP Underlying Cause of Deaths (2013)



2015 Wisconsin Public Health Profiles

Obesity in CWHP

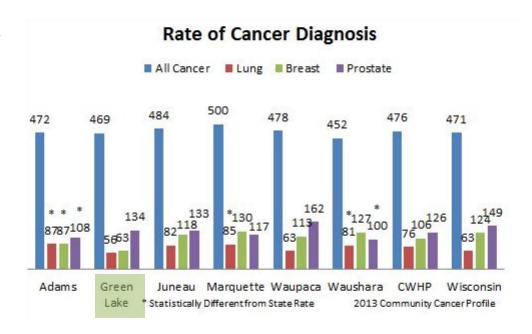
With the exception of Waupaca County, all counties in CWHP have rates of obesity higher than the state average. High rates can be attributed to lower individual and environmental socioeconomic status and the built environment, which may then be related to health attitudes and behaviors contributing to obesity (McAlexander, Banda, McAlexander, Lee 2009). In order to combat this growing epidemic, positive change must come to all parts of society, especially to areas of policy and environmental change.

Chronic Disease

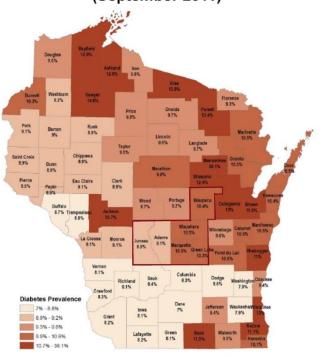
Prevention of chronic disease such as diabetes, heart disease, and cancer not only assures a strong quality of life, but also results in a decreased economic burden on our health care system.

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 seen on page 15.



Total Diabetes Prevalence in Wisconsin Adults by County (September 2011)



Diabetes

Diabetes, as a chronic disease, 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 it is left uncontrolled. These complications can be managed through a healthy diet, avoiding smoking and alcohol, and incorporating regular activity.

Estimated Diabetes Prevalence in Adults



(2011 The Burden of Diabetes in Wisconsin)

Heart Disease

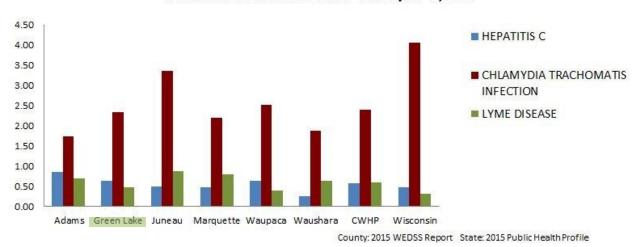
Heart disease was the leading cause of death for CWHP in 2013. Another way to measure the burden heart disease has on our counties is by looking at how often residents visit the emergency room for heart issues. Every hospital in CWHP has some form of heart related issue in their top ten types of ER visits.

Hospital	Berlin	Waupaca	Wild	Mile	New	Moundview	Ripon	Divine
			Rose	Bluff	London			Savior
Rank	#2	#2	#8	#4	#7	#3	#2	#6
Reason	Chest	Chest	Heart	Cardiac	Chest	Chest Pain	Cardiac	Chest
for Visit	Pain	Pain	Attack	Related	Pain		Related	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 contact, blood and bodily fluids, or from a variety of animal hosts like mosquitos or ticks. CWHP as a whole has higher rates of Hepatitis C and Lyme disease. Lyme disease is of no surprise as it is more common in the central to northern most counties in Wisconsin.

Communicable Disease Rate per 1,000



A state map of Lyme disease incidences, along with an individual trend line for Green Lake County's rate of Chlamydia, can be seen in Appendix B.

Environment

Drinking Water

With economies based on agriculture, manufacturing, and tourism it is important to monitor nitrate levels in the 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

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

Source: Environmental Health Profiles

Wisconsin Heat Vulnerability Index (HVI)

Wisconsin Vulnerability (county based quantiles) by Centus Block Group High (Top 20%) Moderate High Moderate Low Low (Bottom 20%)

Heat Vulnerability

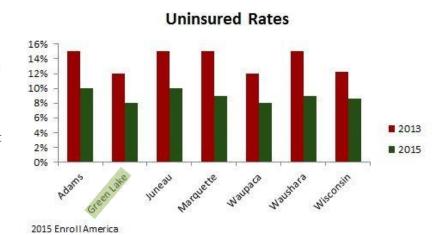
Extreme heat negatively affects human health in terms of causing heat exhaustion, stroke, and even death. It can also make pre-existing chronic conditions, such as respiratory and heart diseases, worse. Heat exposure, climate conditions and many other factors, such as infrastructure, physiology, culture, 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. Assessing heat vulnerability can identify areas that are of greatest risk for negative health outcomes due to extreme heat. 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 the state.

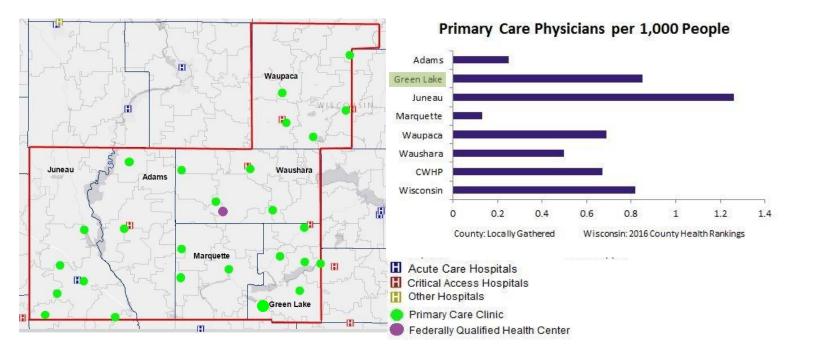
Heat Stress ER visits per	Adams	Green Lake	Juneau	Marquette	Waupaca	Waushara	Wisconsin
100,000	46.8	19.2	48.6	28.8	21.6	23.6	16.5
people	Source: Environme	ental Health Pro	files				

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.



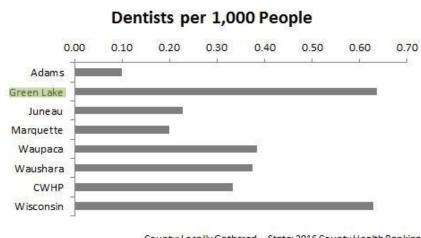


Primary Care Physicians

Not having enough local providers, along with their location, can act as barriers 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. 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 above.

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. Poor and disadvantaged groups 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



County: Locally Gathered State: 2016 County Health Rankings

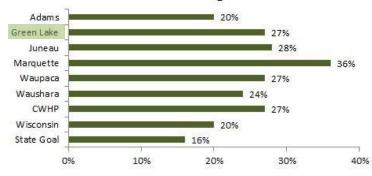
areas (Wisconsin Office of Rural Health). It is also important to note a number of dentists in CWHP practice in multiple counties. Additionally, only Juneau and Waushara have free/low cost dental care access through facilities operated by Family Health/ La Clinica.

Health Behaviors

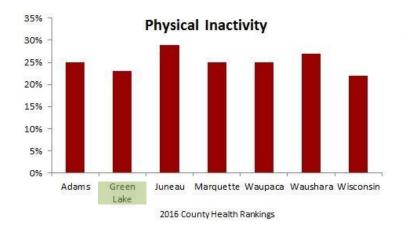
Smoking

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 mothers who are pregnant. In Waushara County 1 in 5 pregnant mothers smoked during their pregnancy (County Health Rankings and Roadmaps).

Adult Smoking Rate



2013 Community Cancer Profile



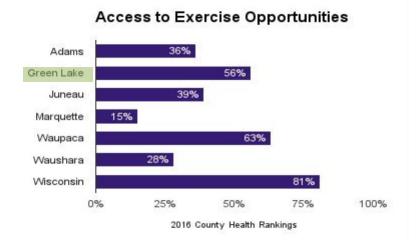
Physical Inactivity

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 is limited in access, in part, because of how rural the counties are. 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. This allows the possibility for higher levels of



outdoor physical activity and nature- based play and recreation.

^{*}Green Lake County's additional measures for the community health assessment can be found in Appendix B

CHOOSING HEALTH PRIORITIES

Criteria Used to Identify Priorities

Criterion 1. The magnitude of the problem

- ➤ What is the percentage of the population impacted?
- ➤ Is it associated with the leading cause of death in 4 of the 6 counties?

Criterion 2. The severity of the problem

- ➤ Is it worse than the Wisconsin average?
- ➤ Is the trend worsening in 4 of the 6 counties?

Criterion 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?

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

- ➤ Was it identified by community stakeholders in 4 of the 6 counties?
- ➤ Was it identified by primary community input in 4 of the 6 counties?
- ➤ Was it identified by Wisconsin Health Improvement Planning Process?

The steering committee identified priorities utilizing the above criteria, with the understanding that community feedback was the driving component to determine the most appropriate health focus areas. The input gathered allowed for the ranking of all the identified health focus areas, with a summary of results provided below. Additional information can be found in Appendix C.

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

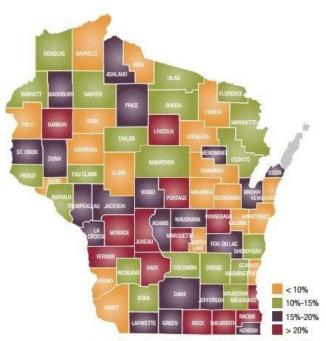
^{*}Before we discuss the priorities chosen, it is important to keep in mind a strong association between poor social, mental, and physical health outcomes in adulthood, and Adverse Childhood Experiences (ACEs).

Adverse Childhood Experiences (ACEs)

An Adverse Childhood Experience (ACE) is a traumatic experience, which occurs prior to the age of 18, such as child physical or sexual abuse, having an incarcerated household member, exposure to domestic violence or parental divorce (Children's Hospital of Wisconsin). These ACEs can disrupt healthy brain development required for emotional control, learning capacity, and the ability to form healthy relationships. Research has also demonstrated a strong dose-response relationship between ACEs and a variety of substance-related behaviors (SAMHSA). This means the more ACEs an individual has; the more likely it is they will have substance abuse behaviors.

Priority 1. Alcohol and Other Drug Abuse (AODA)

Drug and alcohol dependence often go hand in hand. It 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.



Prevalence of 4 or more ACEs in Wisconsin Counties

Relevant Strengths:

- Wisconsin State Drug Database
- Statewide "Dose of Reality" Campaign
- Regional Comprehensive Community Services
- Treatment and Alternatives Diversion (TAD) Court
- Social Host Ordinance

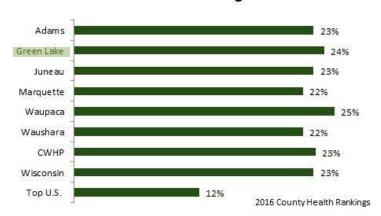
Relevant Challenges:

- 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

Excessive Drinking

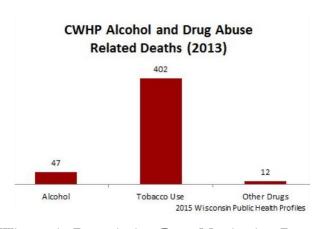
Excessive drinking is defined as both binge and heavy drinking. Binge drinking is 5 or more drinks in about 2 hours, which brings blood alcohol concentration levels to 0.08 g/dL. Heavy drinking is when someone consumes 5 or more drinks at one time for 5 or more days in the past 30 days (National Institute on Alcohol Abuse). Adverse health outcomes associated with excessive drinking include violence, suicide, vehicle crashes, STIs, 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.

Excessive Drinking Rate



One Alcoholic Drink

The Youth Risk Behavior Survey (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. From the YRBS and other youth surveys we were able to find out how many high school students reported having one alcoholic drink in the last 30 days.



One Alcoholic Drink (Last 30 days)



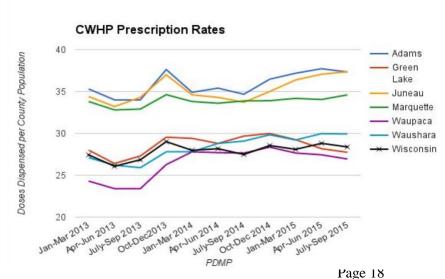
Tobacco Use

Tobacco use remains the single most preventable cause of death and disease in the United States. In 2013 there were a total of 1,941deaths in CWHP, of which 402 were attributed to tobacco. Including alcohol and other drugs, as the underlying or contributing cause of death, we see 23.75% of the deaths in CWHP. This is higher than the state's 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 most recent rates and illustrates three counties in CWHP higher than the majority of the state.





Source: Wisconsin Prescription Drug Monitoring Program (PDMP)

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 Adverse Childhood Experiences (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 care in CWHP will most likely have trouble due to the low number of providers in the area.

The Number of Mental Health Providers

Relevant strengths:

- Community support systems
- Crisis Units
- Comprehensive Community Services

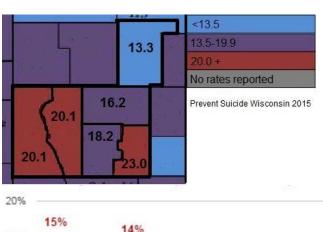
Relevant challenges:

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

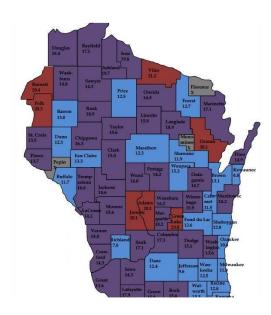
per 1,000 People 1 69 1.80 1.60 1 45 1.40 1.20 1.00 1.00 0.74 0.74 0.80 0.63 0.60 0.60 0.40 0.20 0.00 Marquette Waupaca Waushara County: Locally Gathered State: 2016 County Health Rankings

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(CDC). 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 ever occurs, while addressing risk and protective factors, is essential to improve the mental health of CWHP.







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.

Priority 3. Chronic Disease

Adverse Childhood Experiences (ACE's) have also been linked to poor chronic health conditions, encompassing asthma, COPD, cancer, arthritis, and diabetes among others. Chronic disease prevention programs come in many forms. Examples include making healthy food choices, physical activity programs, child maltreatment prevention, and more broadly, anything with the aim to reduce risky behaviors. These behaviors include smoking, excessive drinking, risky sexual practices, poor nutrition, and a lack of physical activity.

Relevant strengths:

- "Stepping On" (ADRC)
- "Living Well with Chronic Disease" (ADRC)
- "Healthy Living with Diabetes" (ADRC & Family Health/ La Clinica)
- "Cancer Clear & Simple" (UW Extension)
- WI Women's Health Foundation Grapevine program for many chronic illnesses including: diabetes, mental health, healthy brain aging, heart health, oral health and more
- Town Square/Green Lake Renewal classes for Core Strengthening, Pilates, Yoga, Zumba, Steps and Reps, cooking classes, art classes and more
- Senior Nutrition classes twice a year
- Fresh fruits and veggies from local farm stands, families, or friends

Relevant challenges:

- Access to affordable exercise opportunities
- High smoking rates
- Excessive drinking rates
- High number of ACEs
- Poverty

3 of the top 10 visits at Family Health/La Clinica in Wautoma can be attributed to chronic disease.

2015 Family Health/ La Clinica Top Visits							
Rank	1	2	3	4	5		
Type of Visit	Dental Exam	Dental Exam	Medical Exam	Diabetes	Long-Term		
		and Cleaning			Medications		
Rank	6	7	8	9	10		
Type of Visit	Hypertension	Infant or Child	Exercise	Long-Term	Immunizations		
		Check	Counseling	Opiate Use			

Note: Family Health La Clinica is a Federally Qualified Healthcare Center that serves all six counties of CWHP.

APPENDIX A

CENTRAL WISCONSIN HEALTH PARTNERSHIP'S TIMELINE

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.

The Start---- Central Wisconsin Health and Economic Development Summit

155 stakeholders registered to attend the August 2015 Summit, with representatives from all six counties and a breadth of public, private, and community sectors. Across all sessions, the most common regional theme was workforce development, with a focus on linkages from education and skill building to jobs, regional economic development, and attention to early childhood support and lifelong learning. While collaboration was identified as an asset for the region, there was a recognized need for better engagement, communication, aligned vision, and regional partnership (Forward Community Investments).

The key themes that emerged from summit conversations across all six counties were:

- 1. Workforce Development
- 2. Family and Community Development
- 3. Transportation and Communication Connectivity
- 4. Collaboration

For more in depth information on the summit, visit: www.cwhpartnership.org

Planning (October 2015-February 2016)

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

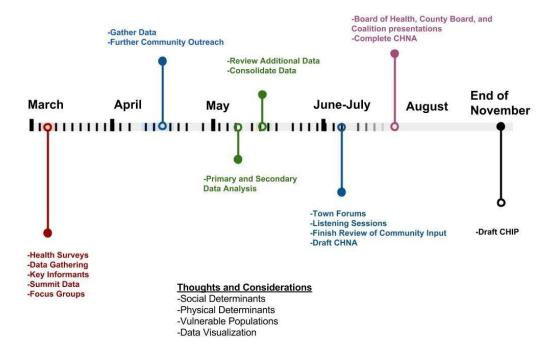
Questions we had were:

- 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-July 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 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.



What resources are needed to improve health?

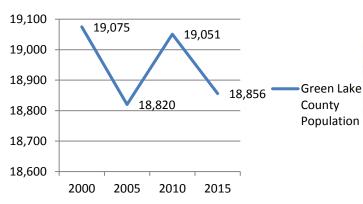
APPENDIX B

Community Health Assessment Additional Data

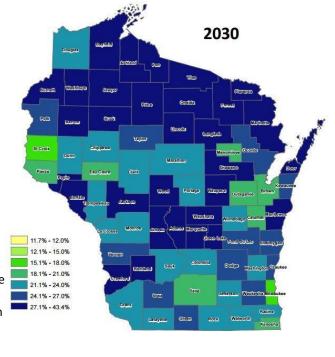
Population

In Green Lake County, there has been a slight population loss since 2000. The Wisconsin map to the right shows the 65 and older population projections for the year 2030.

Green Lake County Population



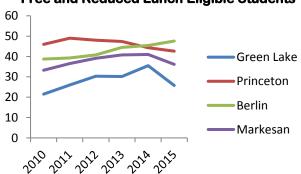
Source: Wisconsin DOA, Prepared by Eric Grosso



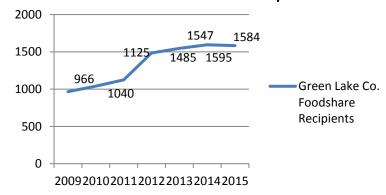
FoodShare

Following the national economic recession that occurred from December 2007 to June 2009, Green Lake Co. saw an increased need for assistance from its residents. After peaking in 2014, the number of FoodShare recipients seems to have leveled off. 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 Eligible Students



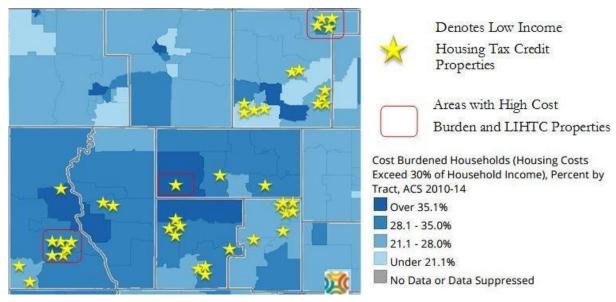
Green Lake Co. Foodshare Recipients



Free and Reduced Lunch

Free and reduced school lunch percentages can provide information about relative poverty. The percentage is the combined average of all the public schools in the district. It is termed relative because of the varying federal poverty thresholds. The actual number of children in poverty in Green Lake is 20%, up from 2002 (County Health Rankings 2016).

Housing



Source: U.S. Census Bureau, American Community Survey, Prepared by Community Commons

ER Visits

	2015 Theda	Care Berli	in Hospital	Emergency Roo	om Visits
Rank	1	2	3	4	5
Type of Visit	UTI's	Chest Pain Unspecified	Other Chest Pain	Dizzi-ness & Giddi-ness	Pneumonia Unspecified Organism
Rank	6	7	8	9	10
Type of Visit	Open Wound Finger	Syncope/ Collapse	Pneumonia Organism Specified	Nausea and Vomiting	Bronchitis

Fluoridation by Public System

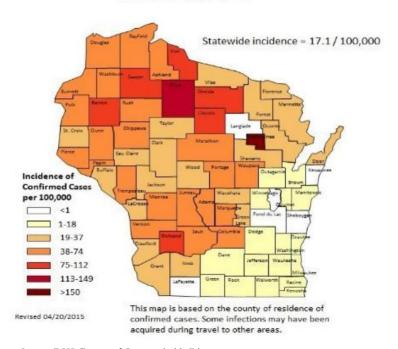
Public Supply	Population Served	Fluoride Status
Berlin	5371	Adjusted
Coachlite Mobile Home Park	70	Non-Adjusted
Dalton Waterworks	115	Non-Adjusted
Green Lake Waterworks	1100	Non-Adjusted
Lamplighter Mobile Home Park	125	Non-Adjusted
Markesan Waterworks	1496	Non-Adjusted
Princeton Waterworks	1458	Non-Adjusted

Source: Wisconsin Public Water Supply Fluoridation Census

Adjusted refers to levels of fluoride at the recommended level. Those non-adjusted are below the recommended level.

Besides a low number of providers, another oral health disparity is a lack of access to water with fluoride in it. Among residents in Green Lake County, who rely on a public water supply, **55.8**% have access to optimally fluoridated water. Still to this day there is disbelief with the medical and scientific consensus that fluoride is safe. This natural mineral hardens tooth enamel and prevents tooth decay.

Lyme Disease Annual Incidence Wisconsin, 2014



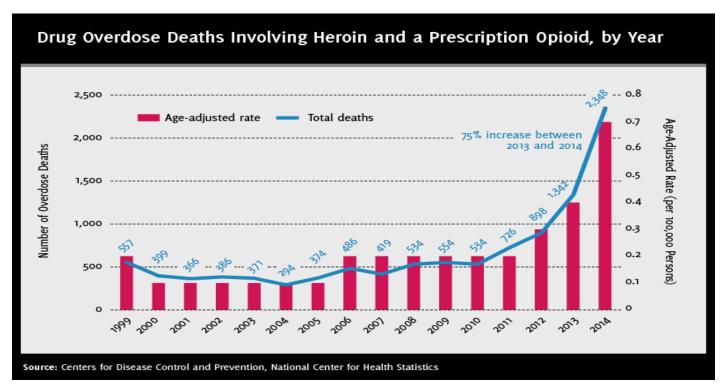
Lyme Disease Incidence

The Wisconsin map illustrates the locations of confirmed Lyme disease cases in 2014. It is more likely to be seen in the central and northern Wisconsin.

Source: DHS, Bureau of Communicable Disease

Substance Use Disorders

In 1999, only 557 people who died from a drug overdose had both heroin and an opioid analgesic in their systems. This figure dropped for the next few years and then climbed significantly in the late 2000s. The most dramatic spike occurred between 2013 and 2014, when there was a 75% increase in deaths involving both heroin and opioid analgesics. This figure is potentially the clearest reminder of the increasingly deadly relationship between illegal opiates like heroin and legal opioids prescribed by doctors. While their origin and official purpose may differ, the potentially deadly outcomes of abuse are identical. Although this is national data, Green Lake County has seen a significant increase in heroin, opioid and methamphetamine use also.

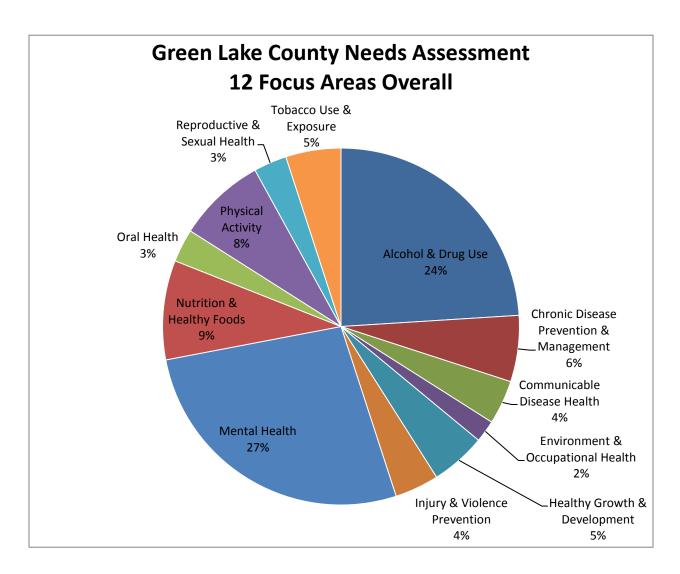


Community Feedback

Survey Results---Over 200 individuals were surveyed and asked to identify the top health priorities in Green Lake County. Below are the results of the survey.

Top 5 Focus Areas Identified

- 1. Mental Health
- 2. Alcohol and Other Drug Abuse
- 3. Nutrition & Healthy Foods
- 4. Physical Activity
- 5. Chronic Disease Prevention and Management



Key Informant Interviews—several individuals were interviewed by Theda Care Community Health Coordination staff to get the community's perspective on the health of Green Lake County. Many of the key issues have been incorporated into this document. Additionally, the informants provided the following thoughts on key areas where they felt there were gaps and offered suggestions for improvements.

- 1) AODA issues including heroin, alcohol and opiates
 - a. Lack of treatment options
 - b. Lack of counseling options
- 2) Mental Health Issues
 - a. Increased life stress coupled with inadequate coping skills and lack of support
 - b. Lack of healthy family relationships
- 3) Access/Poverty
 - a. Lack of affordable insurance/often prohibitive
 - b. Medicaid and uninsured seeking treatment at walk-in clinics and ER's
 - c. Transportation
- 4) Obesity as it related to nutrition and physical activity

Existing Strategies/Strengths:

Collaboration/Support

- Community support, Berlin is a tight-knit community
- Local support groups
- Berlin Schools has a family/community coordinator
- Green Lake County Interagency
- Wild Rose Hospital now understanding the role of the ADRC
- Besides Green Lake County Police Department there are police Departments in Markesan,
 Princeton, Green Lake and Berlin

Mental Health/Medical /AODA

- EMS
- Mobil Crisis Units
- Berlin Schools have a Schools Liaison Officer
- Green Lake County Wellness Coalition
- Strong Women Campaign
- A wellness program in the jail
- La Clinica
- Dr. Wilika

- ADRC
- Meals on Wheels
- DHHS
- Green lake County has held two heroin Summits
- Cancer Clear and Simple Program
- Green Lake County has a grant to study high cancer rates
- The Amish Kingston Care for you Clinic
- AODA committee at the Berlin Schools
- Jail recidivism reduction program
- Therapeutic Community Counselor

Obesity/Physical Activity/Nutrition

- Safe Routes to School in Green Lake Schools\
- Berlin Schools have a food pantry for weekend support

Access/Cost

- Green Lake County Economic Support is assisting with the enrollment of people into the insurance exchange
- Caring Hearts Program

Barriers and Challenges

Access/Cost

- No place to send mental health patients who need treatment
- No place to send patients for AODA treatment
- There are no psychologists and no psychiatrists
- Lack of insurance knowledge
- Green Lake County has no enrollment specialists
- For private pay patients, lack of availability on in-home care providers
- Poor service in the outlying clinics
- Marketplace offers only Dean Care
- There is only one detoxification facility that accepts Dean Care
- When treatment is needed for mental health issues patients are sent to Agnesian in Ripon or Mercy in Oshkosh.

Obesity/Physical Activity/Nutrition

- Obesity issues with ambulances larger cots needed. Larger beds needs, larger BP cuffs and wheelchairs needed
- Concern for ER safety

Mental Health/AODA

- Police 911 calls, welfare checks, domestic violence AODA and mental health calls are all rising
- Doctors want to treat everything with pills
- Law enforcement is sensing increasing danger

- Increasing issues with elementary students acting out
- Tobacco use
- Teacher stress, shortage of teaching subs, kids with deeper issues
- Significant issues with Hispanic migrants fighting, drugs, alcohol leading to illegal status problems

Collaboration

- Lacking a sense of partnership between law, schools and hospital systems
- Lack of communication with our medical community

Education

- Lack of basic life skills
- Large awareness events are not enough

Transportation

- Only one cab service in Green Lake area
- No transportation

Poverty

- FoodShare use has increased 25% over the last 4.5 years and now serves 21 families a month
- Financial struggles
- High free and reduced lunch usage
- High poverty Farms are consolidating. One, two and three smaller farms are merging into larger corporations.

Changing Demographics

- Asian population is rising
- Hispanic population is staying

Needed strategies

Mental Health/AODA

- Mental health treatment options
- AODA treatment options
- Drug Court is in the developmental stage

Collaboration/Action

- Respect for families, law and each other
- Education
- Continued work on the Green Lake County Community Health Action Plan

Transportation

Obesity

- Increased resources for obese patients
- Cultural shift to wellness
- Patient responsibility

Acknowledgements

Green Lake County	Berlin School	Green Lake School	Princeton School
Board of Health	District	District	District
Green Lake County Department of Health & Human Services	ThedaCare	Green Lake County Department of Aging	Green Lake County ADRC
University of Wisconsin Extension	Family Health/ La Clinica	Green Lake County Board	Wisconsin Health Services- Green Bay Regional Office
Green Lake County	Markesan School District	Ripon Medical Center	Care 4U Clinic
Wellness Coalition		Agnesian Hospitals	Dalton

LIMITATIONS

Although this assessment reflects the most recent and best available health information for CWHP and Green Lake County, there are important limitations to note.

- For teen data used, not every county conducted the same youth survey and a few of them were done in different years. Additionally, not all of the surveys asked every grade in high school.
- Input from vulnerable populations, like the Amish, can be hard to obtain
- Not all of the data gathered is from the same year
- Much of the data is hard to put into a trend as the way they are measured changes year to year

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