2016 COMMUNITY HEALTH ASSESSMENT

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

Waushara County
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

## TABLE OF CONTENTS

Letter from the Health Officers .................................................................................................................................................. 2

Partners and Steering Committee .................................................................................................................................................. 3

Mission, Vision and Method Overview ....................................................................................................................................... 4

Community Health Assessment ....................................................................................................................................................... 5
  - Demographics – Population, Gender, Age, Race and Ethnicity, Income, Unemployment, Education .................................................. 5
  - County Health Rankings - Health Outcomes, Length of Life, Quality of Life .................................................................................. 8
  - Overall Health .............................................................................................................................................................................. 9
  - Chronic Disease - Cancer, Diabetes, Heart Disease ..................................................................................................................... 9
  - Communicable Disease .................................................................................................................................................................. 11
  - Environment .................................................................................................................................................................................. 11
  - Access to Healthcare ..................................................................................................................................................................... 12
  - Health Behaviors - Smoking, Physical Activity ........................................................................................................................... 14

Health Focus Areas
  a. Criteria Used ............................................................................................................................................................................... 15
  b. Priority 1. Alcohol and Other Drug Abuse ............................................................................................................................. 16
  c. Priority 2. Mental Health ............................................................................................................................................................. 18
  d. Priority 3. Chronic Disease .......................................................................................................................................................... 19

Appendix A - Assessment and Planning Process ......................................................................................................................... 20

Appendix B – Additional Waushara County Data ........................................................................................................................ 22

Appendix C – Community Feedback ............................................................................................................................................... 25

Appendix D – Acknowledgements, Limitations, and References .................................................................................................. 29
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  Kathy Munsey  Barb Theis
Adams County  Green Lake County  Juneau County

Jayme Schenk  Jed Wohlt  Patti Wohlfeil
Marquette County  Waupaca County  Waushara County
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
MISSION & 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 both primary and secondary data. Secondary data sources include communicable disease reports, death records, data from local healthcare providers, hospital admission data, and youth risk behavior surveys. Also included are numbers from the County Health Rankings, Wisconsin Department of Health and Human Services, and U.S. Census Bureau.

The primary data consists of key informant interviews, community surveys, focus groups, and public forums. All information was used by the steering committee to determine the health focus areas.

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

DEMOGRAPHICS

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Female</th>
<th>Male</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWHP</td>
<td>156,281</td>
<td>48.12%</td>
<td>51.88%</td>
<td>19.14%</td>
<td>80.86%</td>
</tr>
<tr>
<td>Adams County</td>
<td>20,148</td>
<td>46.70%</td>
<td>53.30%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Green Lake County</td>
<td>18,856</td>
<td>49.60%</td>
<td>50.40%</td>
<td>25.67%</td>
<td>74.33%</td>
</tr>
<tr>
<td>Juneau County</td>
<td>26,224</td>
<td>46.90%</td>
<td>53.10%</td>
<td>16.51%</td>
<td>83.49%</td>
</tr>
<tr>
<td>Marquette County</td>
<td>15,075</td>
<td>49.20%</td>
<td>50.80%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Waupaca County</td>
<td>51,945</td>
<td>49.60%</td>
<td>50.40%</td>
<td>35.06%</td>
<td>64.94%</td>
</tr>
<tr>
<td>Waushara County</td>
<td>24,033</td>
<td>47.30%</td>
<td>52.70%</td>
<td>10.50%</td>
<td>89.50%</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>5,724,692</td>
<td>50.30%</td>
<td>49.70%</td>
<td>70.15%</td>
<td>29.85%</td>
</tr>
</tbody>
</table>

U.S. Census Bureau

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 health concerns regarding aging grow. This will require more focus on chronic disease prevention. Delaying the onset of chronic disease will enhance the health of the aging community.

While the graph shows minimal racial and ethnic diversity in CWHP counties, the Amish and Hispanic communities bring unique culture and diversity. Health disparities that exist for these groups and for those with low incomes exist for unique reasons. For the Amish, discrepancies in health equity and utilization of the healthcare system are commonly attributable social causes. Many in the Amish community reject certain aspects or all of modern healthcare for religious reasons. This certainly creates a barrier for those within the Amish community who may wish to utilize available healthcare resources. For the Hispanic population, barriers exist primarily due to language as many speak little or no English. Those with low incomes may have difficulties affording the costs of healthcare or accessing the care that is available.

Steps are being to address these issues. Immunizations are offered to the Amish by the Health Department for those that are willing. For the low income and Hispanic populations, Family Health/La Clinica, a federally qualified health center, offers care for those earning less than 200 percent of the federal poverty level per year with providers speaking both English and Spanish. Increasing access to care is an ongoing issue that the health department is seeking to address.
Compared to Wisconsin, CWHP has a lower number of adults with any formal education past high school.

The relationship between higher education and improved health outcomes is well known. Years of formal education correlates strongly with improved work and economic opportunities, and reduced psychosocial stress (Egerter, Braveman, Sadegh-Noban, Grossman-Kahn, and Dekker, 2011).

Income and Poverty:

Having a higher income is linked to better health (World Health Organization). It is not only the level of income that affects the health of our communities, but also the distribution of income. The larger the income disparity, the greater the health inequalities will be. The average per capita personal income of CWHP is $38,509, which is $5,677 lower than the Wisconsin average. When compared to the nationwide average, the gap is over $7,000.

The low average personal income can be partly attributed to two factors: the wage paid by employers in the individual counties as well as the county unemployment rate. The graph at left illustrates the average annual wage paid by employers located in each county. Using these numbers, the average wage for residents of CWHP is $35,201. This is $10,188 lower than Wisconsin’s average and $13,119 less than the national average.
With the exception of Waupaca County, all CWHP counties had higher unemployment rates than the state average in May, 2016. 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. A detailed description of the summit can be found in Appendix A.

Distressed Communities Index:

The index combines seven measures 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. This index further illustrates some of the economic challenges facing CWHP.

Index numbers are based on the following population measures:

- Percent Without a High School Diploma
- Number of Housing Vacancies
- Adult Unemployment Rate
- Poverty Rate
- Median Income
- Change in Employment Rates
- Change in Number of Business Establishments
2016 COUNTY HEALTH RANKINGS

The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute produce County Health Rankings each year.

County Health Rankings report the overall health of each county in Wisconsin. It 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.

Length of Life and Quality of Life are two health outcomes measured for the County Health Rankings. The tables below show how CWHP counties rank compared to the rest of the state.

<table>
<thead>
<tr>
<th>Length of Life</th>
<th>Quality of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Lake</td>
<td>Marquette</td>
</tr>
<tr>
<td>17th</td>
<td>29th</td>
</tr>
<tr>
<td>Waupaca</td>
<td>Waushara</td>
</tr>
<tr>
<td>47th</td>
<td>45th</td>
</tr>
<tr>
<td>Marquette</td>
<td>Green Lake</td>
</tr>
<tr>
<td>55th</td>
<td>46th</td>
</tr>
<tr>
<td>Waushara</td>
<td>Juneau</td>
</tr>
<tr>
<td>58th</td>
<td>47th</td>
</tr>
<tr>
<td>Juneau</td>
<td>Waupaca</td>
</tr>
<tr>
<td>59th</td>
<td>60th</td>
</tr>
<tr>
<td>Adams</td>
<td>Adams</td>
</tr>
<tr>
<td>70th</td>
<td>64th</td>
</tr>
</tbody>
</table>

In addition, a number of other health factors are used in the County Health Rankings. These include:

- **Health Behaviors:** Adult smoking, Teen births, Adult obesity, Excessive drinking
- **Clinical Care:** Uninsured, Number of primary care and mental health providers, Mammography screening
- **Social & Economic Factors:** Injury deaths, Violent crime, High school graduation, Children in poverty
- **Physical Environment:** Drinking water violations, Driving alone to work, Air pollution, Severe housing problems
OVERALL HEALTH

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 health Priority #2. Additionally, an in-depth look at the deaths for Waushara County can be seen in Appendix B.

Obesity:

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. These factors have the potential to impact 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 in areas of policy and environmental change.

CHRONIC DISEASE

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

Cancer:

The rates of cancer, per 100,000 people, for CWHP are slightly higher than the state average. The largest difference can be seen in regards to lung cancer. High rates of lung cancer could be attributed to the high smoking rates in CWHP as seen on page 14.
Diabetes:
Diabetes as a chronic disease is a serious and complex condition. When left unchecked, it can lead to a lower quality of life. Nerve damage, heart disease, stroke, blindness, kidney disease, and amputations are all possible if left uncontrolled. These complications can be managed with a healthy diet, avoidance of smoking and alcohol, and incorporation of regular physical activity.

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.

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Berlin</th>
<th>Waupaca</th>
<th>Wild Rose</th>
<th>Mile Bluff</th>
<th>New London</th>
<th>Moundview</th>
<th>Ripon</th>
<th>Divine Savior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank</td>
<td>#2</td>
<td>#2</td>
<td>#8</td>
<td>#4</td>
<td>#7</td>
<td>#3</td>
<td>#2</td>
<td>#6</td>
</tr>
<tr>
<td>Reason for Visit</td>
<td>Chest Pain</td>
<td>Chest Pain</td>
<td>Heart Attack</td>
<td>Cardiac Related</td>
<td>Chest Pain</td>
<td>Chest Pain</td>
<td>Cardiac Related</td>
<td>Chest Pain</td>
</tr>
</tbody>
</table>
COMMUNICABLE DISEASE

Public health plays an important role in preventing, monitoring, and controlling diseases that can spread from person-to-person. 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. Chlamydia is the most common communicable disease in Waushara County. As a whole, CWHP has a higher rate of hepatitis C and Lyme disease compared to the state. Lyme disease is of no surprise, as it is more common in the central to northern most counties in Wisconsin. A state map of Lyme disease incidences, along with an individual trend line for Waushara 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. There are many sources of nitrate: agricultural runoff, municipal and industrial waste water, animal feedlots, and septic tanks. CWHP’s nitrate levels are higher than the state average. The average nitrate concentration is shown, by township, in the map to the right.

(Map Source: U.W. Stevens Point  Table 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 worse, such as respiratory and heart diseases. 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°F (WICCI). The HVI is calculated using a combination of climate and environmental data, population density, measures of community health, and socioeconomic and demographic factors. In the case of extreme heat, CWHP residents have moderate to high vulnerability, especially the elderly, socially isolated and those with pre-existing chronic conditions. This can be seen on the map to the left.

Compared to the state, CWHP also has higher rates of heat-related ER visits.

<table>
<thead>
<tr>
<th>Heat Stress ER visits per 100,000 people</th>
<th>Adams</th>
<th>Green Lake</th>
<th>Juneau</th>
<th>Marquette</th>
<th>Waupaca</th>
<th>Waushara</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>46.8</td>
<td>19.2</td>
<td>48.6</td>
<td>28.8</td>
<td>21.6</td>
<td>23.6</td>
<td>16.5</td>
</tr>
</tbody>
</table>

Source: Environmental Health Profiles

ACCESS TO HEALTHCARE

Medical:
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 ACA’s first open enrollment period, all CWHP counties have seen a modest decrease in their uninsured rates. This is similar to Wisconsin, as a whole.

*Those over 65 years old are not included in the uninsured rate.
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 needs can increase the likelihood of oral disease, which ranges from cavities to oral cancer. Oral disease 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 with Waushara County currently having eight practicing dentists (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 facilities which are operated by Family Health/ La Clinica.

**HEALTH BEHAVIORS**

**Smoking:**
It is well known that smoking is detrimental to one's 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 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.

The ability to be physically active is dependent on access. CWHP has limited access to exercise opportunities, in part, because of how rural location. Residents travel long distances to reach exercise facilities and safe places to walk/bike. Another barrier can be the cost of memberships. It is important to note the percentages to the right do not include access to schools, which most CWHP residents can utilize during the winter. They also have ample access to nature. This allows the possibility for higher levels of outdoor physical activity and nature-based play and recreation.
HEALTH FOCUS AREAS

CRITERIA USED TO IDENTIFY PRIORITIES

Criterion 1. The magnitude of the problem
➢ What percentage of the population is 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 the Wisconsin Health Improvement Planning Process?

The steering committee identified priorities using the above criteria to determine the most appropriate health focus areas with the understanding that community feedback was the driving component. 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.

<table>
<thead>
<tr>
<th>Order of Priority</th>
<th>Community Feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adams</td>
</tr>
<tr>
<td>1st</td>
<td>Access to Care</td>
</tr>
<tr>
<td>2nd</td>
<td>Employment</td>
</tr>
<tr>
<td>3rd</td>
<td>AODA</td>
</tr>
<tr>
<td>4th</td>
<td>Mental Health</td>
</tr>
<tr>
<td>5th</td>
<td>Physical Activity</td>
</tr>
</tbody>
</table>
Before discussing the priorities chosen, it is important to keep in mind the strong association between poor social, mental, and physical health outcomes in adulthood and Adverse Childhood Experiences (ACEs). An Adverse Childhood Experience is a traumatic experience which occurs prior to the age of 18. Experiences include physical or sexual abuse, having an incarcerated household member, exposure to domestic violence, or parental divorce (Children’s Hospital of Wisconsin). ACEs can disrupt healthy brain development required for emotional control, learning capacity, and formation of healthy relationships. Research has also demonstrated a strong positive correlation between ACEs and a variety of substance-related behaviors (SAMHSA). This means that the more ACEs an individual has, the more likely they are to have substance abuse behaviors. (Map Source: Children’s Hospital of Wisconsin)

**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 other 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

Excessive drinking is defined as both binge and heavy drinking. Binge drinking is 5 or more drinks in about 3 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. 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.

**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 Rate](chart.png)
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. They require a prescription to be legally dispensed. Examples include opioids, stimulants, and antipsychotics.

An equal concern among CWHP is the early initiation of drinking among our youth. The Youth Risk Behavior Survey (YRBS) is taken by middle and high school students 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, percentages are available of how many high school students reported having one alcoholic drink in the last 30 days.

Tobacco use remains the single most preventable cause of death and disease in the United States. In 2013 there were a total of 1,941 deaths in CWHP, 402 of which were attributed to tobacco use. When combining tobacco, alcohol, and other drugs as the underlying or contributing cause of death, these factors were responsible for 23.13% of the deaths in CWHP which 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. They require a prescription to be legally dispensed. Examples include opioids, stimulants, and antipsychotics.

This map of Wisconsin offers a snapshot of the most recent prescription rates, and shows three counties in CWHP higher than the majority of the state.

Source: Wisconsin Prescription Drug Monitoring Program (PDMP)
**PRIORITIZE #2 – Mental Health**

Many factors can contribute to one’s mental health. Risk factors can include genetics, 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 a 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.

**Relevant strengths:**
- Community support systems
- Crisis units
- Comprehensive Community Services

**Relevant challenges:**
- Mental health stigma
- Shortage of mental health providers
- High number of ACEs
- Social & physical isolation
- Limited social associations
- Limited natural supports

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 (Last 12 Months)**

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 CWHP youth.

*Waupaca County does not have data for this measure.*
Priorities #3 – Chronic Disease

ACEs have also been linked to poor chronic health conditions including asthma, COPD, cancer, arthritis, diabetes, and others. Chronic disease prevention programs come in many forms. Examples include education on healthy food choices, physical activity programs, child maltreatment prevention, and more broadly, anything with the aim to reduce risky behaviors. These behaviors may include smoking, excessive drinking, risky sexual practices, poor nutrition, and a lack of physical activity.

Relevant strengths:
- “Stepping On” (Aging and Disability Resource Center)
- “Living Well with Chronic Disease” (Aging and Disability Resource Center)
- “Healthy Living with Diabetes” (ADRC & Family Health/ La Clinica)
- “Cancer Clear & Simple” (UW Extension)
- Pulmonary Rehabilitation Program at Wild Rose Hospital
- Blood pressure clinics at senior meal sites (Public Health)
- Fresh fruits and veggies from local farm stands, families, or friends
- SNAP-Ed education interventions in schools and with vulnerable or at-risk populations (UW Extension)

Relevant challenges:
- Access to affordable exercise opportunities
- High concentration of fast food restaurants in Wautoma
- Potential food desert in Coloma, with its only grocery store now closed
- High smoking rates
- Excessive drinking rates
- High number of ACEs
- Poverty

3 of the top 10 visits at Family Health/La Clinica, in 2015, can be attributed to chronic disease.

<table>
<thead>
<tr>
<th>Rank</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Visit</td>
<td>Dental Exam</td>
<td>Dental Exam and Cleaning</td>
<td>Medical Exam</td>
<td>Diabetes</td>
<td>Long-Term Medications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rank</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Visit</td>
<td>Hypertension</td>
<td>Infant or Child Check</td>
<td>Exercise Counseling</td>
<td>Long-Term Opiate Use</td>
<td>Immunization</td>
</tr>
</tbody>
</table>
APPENDIX A – Assessment and Planning Process

CWHP generally followed the *Wisconsin Guidebook 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

**Planning (October 2015-February 2016)**

The purpose of the regional health assessment was to assemble with partners and assess the region’s resources and needs 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-July 2016)**

Identifying county themes and strengths, county health statuses, and necessary data 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. Specifically, Waushara County Health Department shared preliminary findings with community members and stakeholders. Feedback was requested through town hall meetings, an article published in the local newspaper, and during a Wellness Coalition meeting.
Community feedback from each CWHP county was used to narrow the regional priorities to two health topics: Mental Health and AODA.

Each county chose a third health priority based on county-specific data and the responses of their residents. The Wellness Coalition in Waushara County reviewed the information and voted for Chronic Disease as the third priority. As a coalition, and a county, it was decided that efforts will be focused on AODA, Mental Health and Chronic Disease.

**Finalizing and Engaging (September 2016 and Beyond)**

Next, the health departments will ask for help and input 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.

**Thoughts and Considerations**
- Social Determinants
- Physical Determinants
- Vulnerable Populations
- Data Visualization
APPENDIX B – Additional Waushara County Data

Population:
In Waushara County, there has been a slight population loss since 2005. The Wisconsin map, to the right, shows the 65 and older population projections for the year 2030. (Map Source: Wisconsin DOA, Prepared by Eric Grosso) Waushara County also has a high number of migrant and seasonal crop production farm workers reside here during harvest season. Assessment findings showed that around \( \frac{1}{4} \) of the respondents said they had never had a physical checkup. About 1 in 8 workers reported no history of dental visits. (Needs of Wisconsin’s Migrant and Seasonal Agricultural Workers Wisconsin Farmworker Coalition Report, March 2017)
The Waushara County Health Department has ongoing partner relationships with Family Health/La Clinica, a Federally Qualified Health Center located in Wautoma, and United Migrant Opportunity Services (UMOS) of Waushara County to address the needs of our county’s migrant and seasonal farm worker population.

FoodShare:
FoodShare helps people with limited money buy the food they need for good health. The graph at left illustrates the percentage of Waushara County residents receiving FoodShare. Following the national economic recession that occurred from December 2007 to June 2009, Waushara County saw an increased need for assistance from its residents. Tracking the trend of this measure allows the health department to see how many of its residents are living in poverty.

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 Waushara is...
22% (County Health Rankings 2016). This number has been increasing since 2002.

**Housing:**

The majority of Waushara County households are considered “cost burdened”. This means they are spending more than 30% of their income on housing costs.

As the map illustrates, there are only three Low Income Housing properties in the county to address the existing need for affordable housing.

**ER Visits:**

The table below shows the most common types of Emergency Room visits at Wild Rose Hospital in 2015.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Type of Visit</th>
<th>Rank</th>
<th>Type of Visit</th>
<th>Rank</th>
<th>Type of Visit</th>
<th>Rank</th>
<th>Type of Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pain</td>
<td>2</td>
<td>Dental Issues</td>
<td>3</td>
<td>UTI's</td>
<td>4</td>
<td>Burns</td>
</tr>
<tr>
<td>6</td>
<td>Lacerations</td>
<td>7</td>
<td>Medication Seeking</td>
<td>8</td>
<td>Heart Attack</td>
<td>9</td>
<td>Detoxification</td>
</tr>
</tbody>
</table>

**Chlamydia:**

Over the last 10 years chlamydia rates have been, on average, increasing in Waushara County. In 2014 rates were 133.15 per 100,000 people and 174.76 per 100,000 in 2015.

In order to prevent the spread of STD/STIs we must have equal access to reproductive care and proper sexual health education. Avoiding alcohol and recreational drug use can also reduce the risk of contracting an STD/STI.

(Source: County Health Rankings, 2016)
Fluoridation by Public System:

Aside from a low number of providers, another oral health disparity is the lack of access to water with fluoride in it. Among residents in Waushara County who rely on a public water supply, 25.4% have access to optimally fluoridated water. Still, to this day, there is public disbelief of the medical and scientific consensus that fluoride is safe. This natural mineral hardens tooth enamel and prevents tooth decay.

<table>
<thead>
<tr>
<th>Public Supply</th>
<th>Population Served</th>
<th>Fluoride Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coloma</td>
<td>367</td>
<td>Adjusted</td>
</tr>
<tr>
<td>Dakota Capitol Park</td>
<td>102</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Hancock Waterworks</td>
<td>462</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Pineland Mobile Park</td>
<td>60</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Plainfield Waterworks</td>
<td>899</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Redgranite Waterworks</td>
<td>2019</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Rosemore Village</td>
<td>32</td>
<td>Non-Adjusted</td>
</tr>
<tr>
<td>Wautoma Water Department</td>
<td>2110</td>
<td>Adjusted</td>
</tr>
<tr>
<td>Wild Rose Manor</td>
<td>50</td>
<td>Non-Adjusted</td>
</tr>
</tbody>
</table>

Source: Wisconsin Public Water Supply Fluoridation Census

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

Lyme Disease:

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 parts of Wisconsin.

(Map Source: DHS, Bureau of Communicable Disease)
Key Findings from the 2016 Waushara County Youth Risk Behavior Survey

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of students who carried a weapon at least one day during the last 30 days</td>
<td>21.7%</td>
<td>▲</td>
<td>14.5%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Percentage of students who were bullied on school property during the last 12 months</td>
<td>30.3%</td>
<td>▲</td>
<td>27.3%</td>
<td>22.7%</td>
</tr>
<tr>
<td>Percentage of students who felt so sad or hopeless almost every day for two or more weeks in a row that they stopped doing some usual activities during the last 12 months</td>
<td>29.5%</td>
<td>▲</td>
<td>24.4%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Percentage of students who have ever tried cigarette smoking, even one or two puffs</td>
<td>28.3%</td>
<td>▼</td>
<td>33.1%</td>
<td>33.2%</td>
</tr>
<tr>
<td>Percentage of students who had at least one drink of alcohol in the last 30 days</td>
<td>23.6%</td>
<td>▼</td>
<td>24.7%</td>
<td>32.7%</td>
</tr>
<tr>
<td>Percentage of students who used marijuana one or more times during their life</td>
<td>23.2%</td>
<td>▼</td>
<td>26.2%</td>
<td>31.2%</td>
</tr>
<tr>
<td>Among students who were currently sexually active, the percentage who reported that either they or their partner had used a condom during last sexual intercourse</td>
<td>24.0%</td>
<td>▼</td>
<td>29.8%</td>
<td>62.5%</td>
</tr>
<tr>
<td>Percentage of students who ate fruit one or more times during the last seven days</td>
<td>37.8%</td>
<td>-</td>
<td>92.4%</td>
<td></td>
</tr>
<tr>
<td>Percentage of students who played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day</td>
<td>44.1%</td>
<td>▼</td>
<td>32.9%</td>
<td>34.2%</td>
</tr>
</tbody>
</table>

APPENDIX C – Community Feedback

Key Informant Interviews:
Several individuals were interviewed by ThedaCare staff to obtain the community’s perspective on the health needs of Waushara County. The key informants serve and interact with large populations in Waushara County communities. Examples of key informants include school district representatives, hospital staff, and Family Health / La Clinica staff. Their discussion findings are incorporated into this document. The informants provided the following thoughts on areas where they felt there were gaps and offered suggestions for improvements.

Top health concerns identified by key informants:

1) Mental Health
2) Poverty
   a. Food insecurity
   b. Lack of employment
3) AODA (including heroin)
4) AODA (including alcohol and other drugs)
5) Access to Care
   a. Cost of healthcare
   b. No insurance
   c. Transportation
   d. Lack of services for elderly
   e. Dental
   f. Continuity of care (especially for migrants)
### 4) Chronic Disease  
#### a. Inactivity

#### Barriers and challenges identified:
- Lack of collaboration with the hospital
- Lack of urgent care facility
- Shortage of mental health providers
- Lack of staff to address addictions & mental health
- Stigma regarding mental health
- Lack of education and awareness regarding preventative care and screenings
- Many uninsured residents
- Drug seekers at healthcare facilities
- Lack of service coordination between family services and private care
- Shortage of ADRC staff
- Younger families with limited cooking skills
- Lack of social connection
- Unemployment
- Lack of big industry jobs and skilled workers
- Lack of housing, especially for low income families
- Increased anxiety and anger in school-aged children
- Insufficient transportation
- Language barriers
- Low levels of health literacy in general population
- Poverty cycle
- Blended families
- Families living with grandparents
- Families with absent parents
- Failure of families to report to social services

#### Existing strategies:
- Prenatal Care Coordination (PNCC)
- Parents as Teachers Program
- Wautoma Food Pantry
- Backpack Nutrition Program
- SANE Nursing
- Wisconsin State Drug Database
- Youth and Family
- Drug Court
- ThedaCare – Berlin and Wild Rose
- Community Response Program
- Crisis Mental Health & Substance Abuse Services
- CAP Services
- Head Start Program
- Mental health assessments
- Wild Rose Schools
  - Mission Backpack
  - School Psychologist
  - Family Math/Reading Nights
  - Mental Health Counselors from DHHS every other week
- Family Health/La Clinica
  - Suboxone Program
  - Prescription Voucher Program
  - Mobile health unit – labs, physicals, etc.
- Aging and Disability Resource Center (ADRC)
  - Meals on Wheels
  - Support groups
  - ADRC bus
  - Classes – Fall prevention, healthy living, chronic disease, etc.

#### Needed strategies:
- Anything regarding mental health
- Additional mental health providers
- Additional Suboxone prescribers
- Reduction of healthcare costs
- Affordable insurance options
- More dentists
- Certified Substance Abuse Counselors
- A recovery center
- Universal home visitation program
- More employment opportunities
- More skilled workers
- Low income housing
- More Transportation
- Family/parenting education
- Retirement education
- More school funding
- Funding for services other than Family Care
- Better community collaboration, especially among agencies that serve the Hispanic population
Waushara County Community Survey Results:
349 individuals were surveyed and asked to identify the top health priorities in Waushara County.

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Caucasian</th>
<th>African American</th>
<th>American Indian</th>
<th>Asian</th>
<th>Hispanic</th>
<th>Other</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response Percentage</td>
<td>76.19</td>
<td>1.68</td>
<td>1.12</td>
<td>.56</td>
<td>12.89</td>
<td>.84</td>
<td>6.72</td>
</tr>
</tbody>
</table>

Top Focus Areas Identified by Survey Respondents:

“What is needed to improve these health areas?”
- Free education sessions
- More free and affordable exercise options, especially indoor options
- Education and awareness of existing services and opportunities
- Affordable child care, dental care, health care, and mental health services
- More information in newspapers and in public places including ad campaigns in schools
- More physical education classes

“What is available to address these health areas?”
- Recreational opportunities and services
- Roads, parks, clean lakes, and streams
- Arts, entertainment, and libraries
- Schools - Classes, speakers, and counseling
Town Hall Meetings:

47 Participants

Preliminary findings of the community health surveys were presented at 4 town hall meetings and to the Board of Health. Results from the Waushara County Community Survey were shared, along with a variety of secondary health data.

After this information was shared, participants were asked how they would allocate $10,000 between the various health issues on the survey. A sample of this activity is shown below.

The graph represents a total breakdown of what the communities recommended for spending and where they believe efforts should be focused.
APPENDIX D – Acknowledgements, Limitations & References

Acknowledgements

Waushara County Board of Health  Wild Rose School District  Wautoma School District  Tri-County School District

Waushara County Department of Human Services  ThedaCare  Waushara County Department of Aging  Waushara County ADRC

University of Wisconsin Extension  Family Health/ La Clinica  Waushara Faith Community  Wisconsin Health Services- Green Bay Regional Office

Village of Coloma  Village of Plainfield  City of Wautoma  Town of Leon

Limitations

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

- For teen data used, not every county conducted the same youth survey and some were done in different years. Additionally, not all 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 a result of the way year to year changes are measured

References


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


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