2018 Community Health Needs Assessment **Report**

Aurora Medical Center®

Aurora Medical Center in Oshkosh
855 N. Westhaven Drive
Oshkosh, WI 54901

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Executive Summary | Aurora Medical Center in Oshkosh

During 2017 and 2018, the Fox Valley Community Health Improvement Coalition (Affinity Health System, Aurora Health Care, Children's Hospital of Wisconsin-Fox Valley, ThedaCare, and the Health Departments of Appleton, Calumet County, Menasha, Outagamie County, and Winnebago County), convened a series of meetings with the purpose of collecting community health data for the health department's Community Health Assessment (CHA) and the health systems' Community Health Needs Assessments (CHNA). A review of the data was vetted among the partners during the final data collection meeting. The data collection process comprised of three main components:

1) Behavioral Risk Factor Surveillance System (BRFSS) Survey – a comprehensive phone-based survey which gathered specific data on the behavioral and lifestyle habits of the adult population and selected information about child health
2) Secondary Data Report – prepared by the Center for Urban Population Health, a summary of the demographic and health-related information for Winnebago County using publicly available data sources
3) Community Member and Stakeholder Survey Report – a summary of the top five health issues, additional health issues, existing strategies to address the issue, barriers or challenges to addressing the issue, additional strategies needed to address the issue from the perspective of the key informants, individuals who represent the broad interests of the community served

In 2018, the Aurora Medical Center in Oshkosh's (AMCO) utilized the above data and other data sources to identify and prioritize significant health needs, and develop implementation strategies to address the prioritized health needs within the context of the hospital's existing programs, resources, strategic goals and partnerships. To determine the significant health needs identified through the CHNA, the following criteria was considered:

- Burden of the health issue on individuals, families, hospitals and/or health care systems (e.g., illness, complications, cost, death);
- Scope of the health issue within the community and the health implications;
- Health disparities linked with the health issue; and/or
- Health priorities identified in the municipal health department Community Health Improvement Plan (CHIP)

A Hanlon Ranking further confirmed the prioritization process.

In addition, AMCO evaluated the impact of the initiatives identified its *2015 Community Health Needs Assessment Report* / *2016-2018 Implementation Strategy* plan which was executed with some successes, including providing free medical services through our partnership with the Living Healthy Community Clinic, telepsychiatric services, behavioral health screening in the ED, protocol development on alcohol and drug use, sexual assault advocacy and medical services, chronic disease education and screenings and partnering with the Weight of the Fox Valley on overweight and obesity initiatives. For further description see Appendix F.

As a result, AMCO prioritized the following significant health needs to address in our 2019-2021 implementation strategy:

- Access and coverage
- Behavioral health
- Obesity
- Cancer
- Sexual assault

AMCO leadership presented the completed CHNA report to the Aurora Health Care Community Board of the Advocate Aurora Health Board of Directors, who approved the report on November 19, 2018.

Introduction | About Advocate Aurora Health

Advocate Aurora Health is the 10th largest not-for-profit, integrated health system in the United States and a leading employer in the Midwest with more than 70,000 team members, including more than 22,000 nurses and the region's largest employed medical staff and home health organization. A national leader in clinical innovation, health outcomes, consumer experience and value-based care, the system serves nearly 3 million patients annually in Illinois and Wisconsin across more than 500 sites of care. Advocate Aurora is engaged in hundreds of clinical trials and research studies, and is nationally recognized for its expertise in cardiology, neurosciences, oncology and pediatrics. The organization contributed $2 billion in charitable care and services to its communities in 2016. To learn more, visit aah.org.

Part I | Aurora Medical Center in Oshkosh (AMCO)

Who we are. What we do

The Aurora Medical Center in Oshkosh (AMCO) evolved from the merging of several independent primary care groups that came together in 1995. The physician group continued to grow and in 2003 the Aurora Medical Center in Oshkosh opened.

Who we serve

Aurora Medical Center is easily accessible to serve residents throughout the Winnebago County area and is located at Highways 41 and 21 at 855 N. Westhaven Drive in Oshkosh, Wisconsin.

Area facilities and service partners include:

- 13 community clinics
- Urgent Care clinics in Oshkosh, Neenah and Fon du lac
- Outpatient surgery center in Fond du Lac
- Four pharmacies and two vision centers
- Physical therapy on campus and at four community locations
- Aurora Quick Care within the Oshkosh Walgreens on Koeller Street

AMCO by the Numbers (2017)

- 75 staffed hospital beds
- 750 newborn deliveries
- 22,000 emergency department visits

Our distinctions include

- Ranked second for patient safety and respect by *Consumer Reports* in 2015[1]
- Accreditation by the American College of Surgeons' National Accreditation Program for Breast Centers, the first nationally accredited breast care center in the Fox Valley
- Certification by The Joint Commission for our stroke program, the first center in the Fox Valley to earn this accreditation
- One of the nation's "Most Connected Hospitals" according to the *U.S. News & World Report*[2]

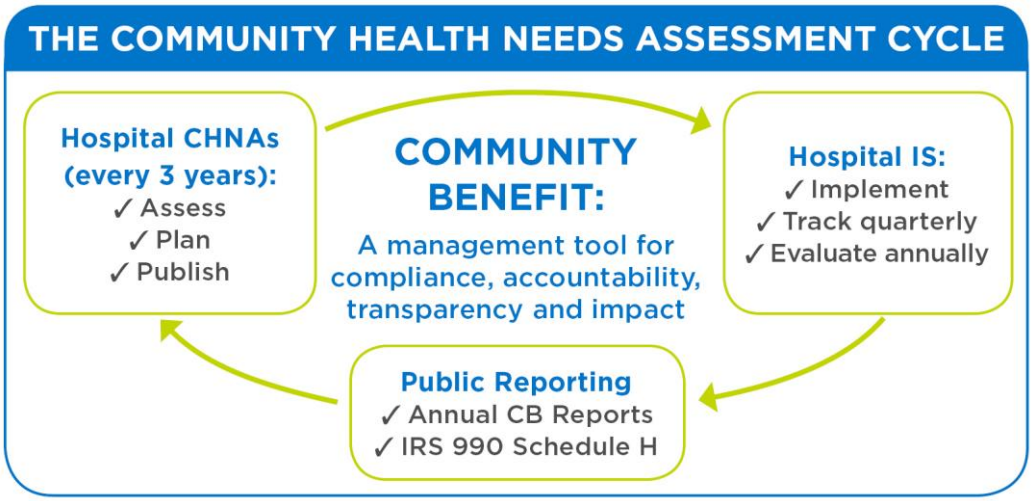
[1] Consumer Reports. Top- and bottom-scoring hospitals for safety and respect. Available at http://www.consumerreports.org/cro/magazine/2015/02/the-surprising-way-to-stay-safe-in-the-hospital/index.htm#hospitals. Accessed on November 19, 2018.

[2] U.S. News & World Report. Most Connected Hospitals 2015-2016 Report. Available at http://health.usnews.com/health-news/best-hospitals/articles/2015/10/15/most-connected-hospitals-2015-16-results. Accessed on November 19, 2018.

To learn more about our hospital, please visit https://ahc.aurorahealthcare.org/aboutus/community-benefits/hospitals/oshkosh.asp.

Assessing community health status – an ongoing commitment

Since 2003, Aurora Health Care has underwritten a community health survey of Winnebago County approximately every three years, conducted in partnership with the Winnebago County Health Department. This helps the health department focus its resources on community health issues and enables us to align our charitable resources and expertise to respond to identified community health priorities. To view the community health surveys dating back to 2003, visit http://www.aurora.org/commresearch.



Part II | Aurora Medical Center in Oshkosh (AMCO)
2018 Community Health Needs Assessment (CHNA) Report

Section 1 | Community served: Winnebago County

Although Aurora Medical Center in Oshkosh serves the county and beyond, for the purpose of the community health needs assessment the community served is defined as Winnebago County.

Winnebago County is located in eastern Wisconsin and is surrounded by several lakes including Buttes des Morts, Little Lake Butte des Morts, Poygan, Rush, Winneconne and the largest fresh water lake in Wisconsin, Lake Winnebago. The County is the home of several significant industries and leadership in paper production. The County is home to several academic centers including the University of Wisconsin-Oshkosh, University of Wisconsin - Fox Valley and the Fox Valley Technical College.[3]

Winnebago County includes urban, suburban and rural areas[4]

- Cities of Menasha, Neenah, Omro, Oshkosh, parts of Appleton
- Towns of Algoma, Black Wolf, Clayton, Neenah, Nekimi, Nepeuskun, Omro, Oshkosh, Poygan, Rushford, Utica, Vinland, Winchester, Winneconne, Wolf River
- Villages of Fox Crossing, Winneconne
- Unincorporated communities of Butte des Morts, Eureka, Larsen, Pickett, Metz (partial), Mikesville, Waukau, Winnebago

[3] Winnebago County Wisconsin. Available at https://www.co.winnebago.wi.us/, accessed March 26, 2018.
[4] Winnebago County Wisconsin. Available at https://www.co.winnebago.wi.us/about-us, accessed March 26, 2018.

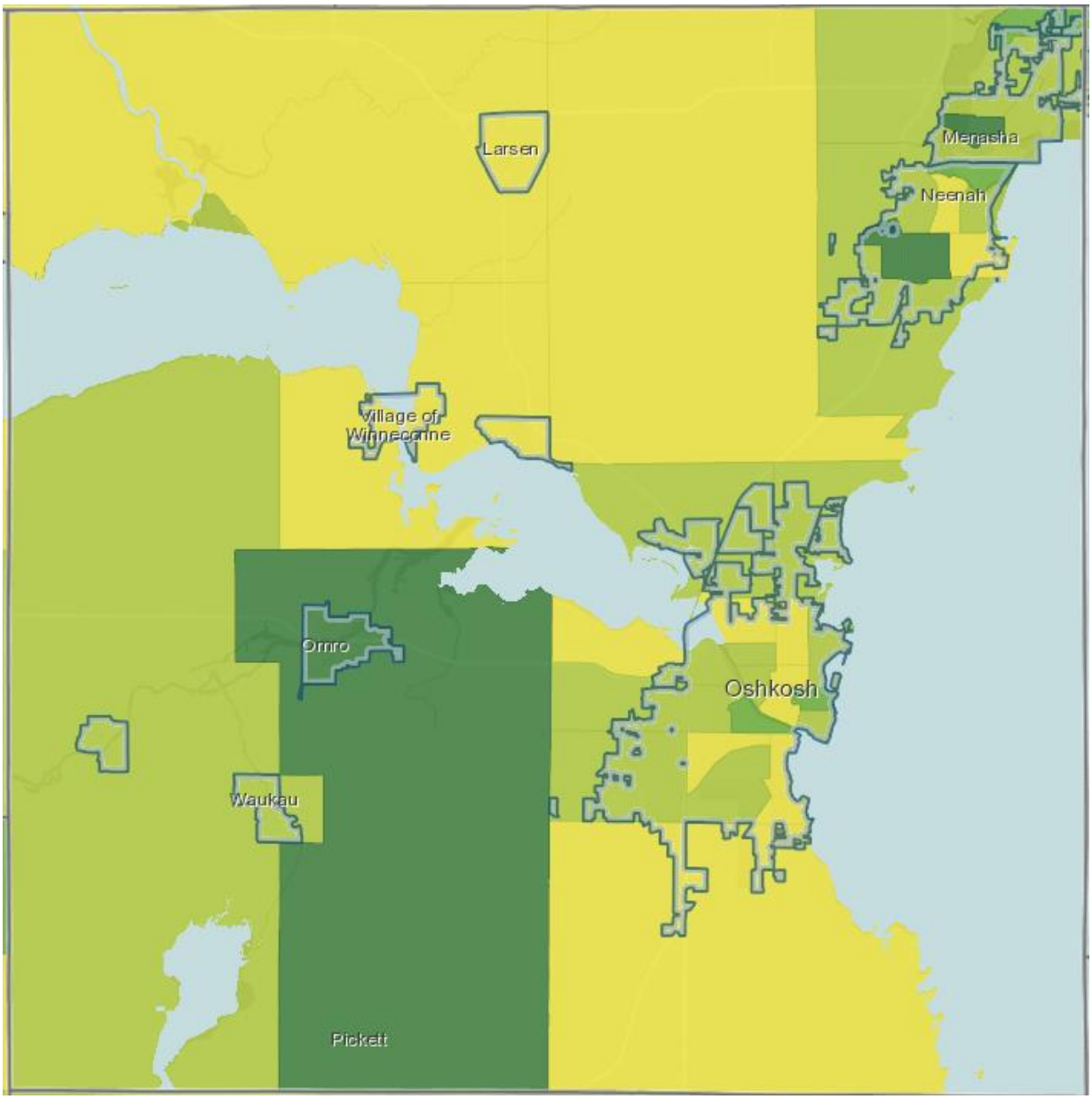
Demographic Characteristics of Winnebago County and Wisconsin, 2016

Characteristics	Winnebago County	Wisconsin
Total Population*	169,487	5,754,798
Median Age (years)*	37.9	39.1
Race*		
White	92.5%	86.2%
Black or African American	2.1%	6.3%
Asian	2.6%	2.6%
American Indian and Alaska Native	0.6%	0.9%
Native Hawaiian or Other Pacific Islander	0.0%	0.0%
Some other race	0.8%	1.8%
Two or more races	1.4%	2.2%
Hispanic or Latino (of any race)	3.8%	6.5%
Age*		
0-14 years	17.4%	18.6%
15-44 years	40.8%	38.4%
45-64 years	26.9%	27.8%
65 years and older	14.7%	15.2%
Education level of adults 25 years and older**		
Less than high school degree	7.9%	8.7%
High school degree	34.0%	31.7%
Some college/associates	31.2%	31.3%
Bachelor degree or higher	26.9%	28.3%
Unemployment Rate (estimate)**		
Percent of those ages 16 or older who are unemployed (estimate)	4.4%	5.5%
Median household income (estimate) (2016 inflation-adjusted dollars)	$53,501	$54,610
Percent below poverty in the last 12 months (estimate)	12.2%	12.7%

Note: Some totals may be more or less than 100% due to rounding or response category distribution

* American Community Survey. 2012-2016 5-year Estimates, accessed February 9, 2018.

Winnebago County

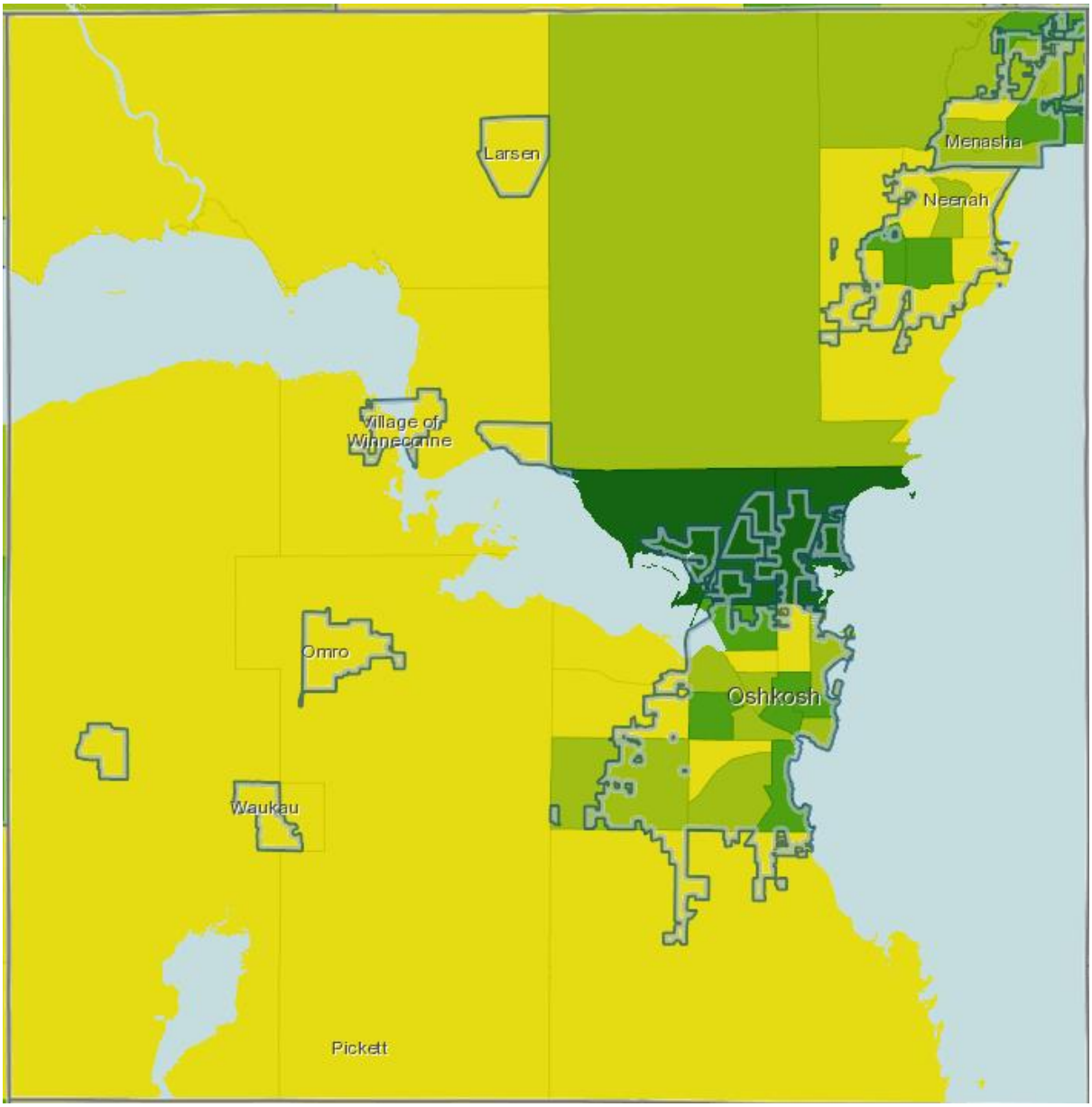


Data mapping from the Community Commons website, available at https://www.communitycommons.org/maps-data/, accessed February 14, 2018.

Population of Hispanic Origin: Percent by Census Tract
American Community Survey 2011-2015

- Over 10.0%
- 5.1 - 10.0%
- 2.1 - 5.0%
- Under 2.1%
- No Data or Data Suppressed

Winnebago County

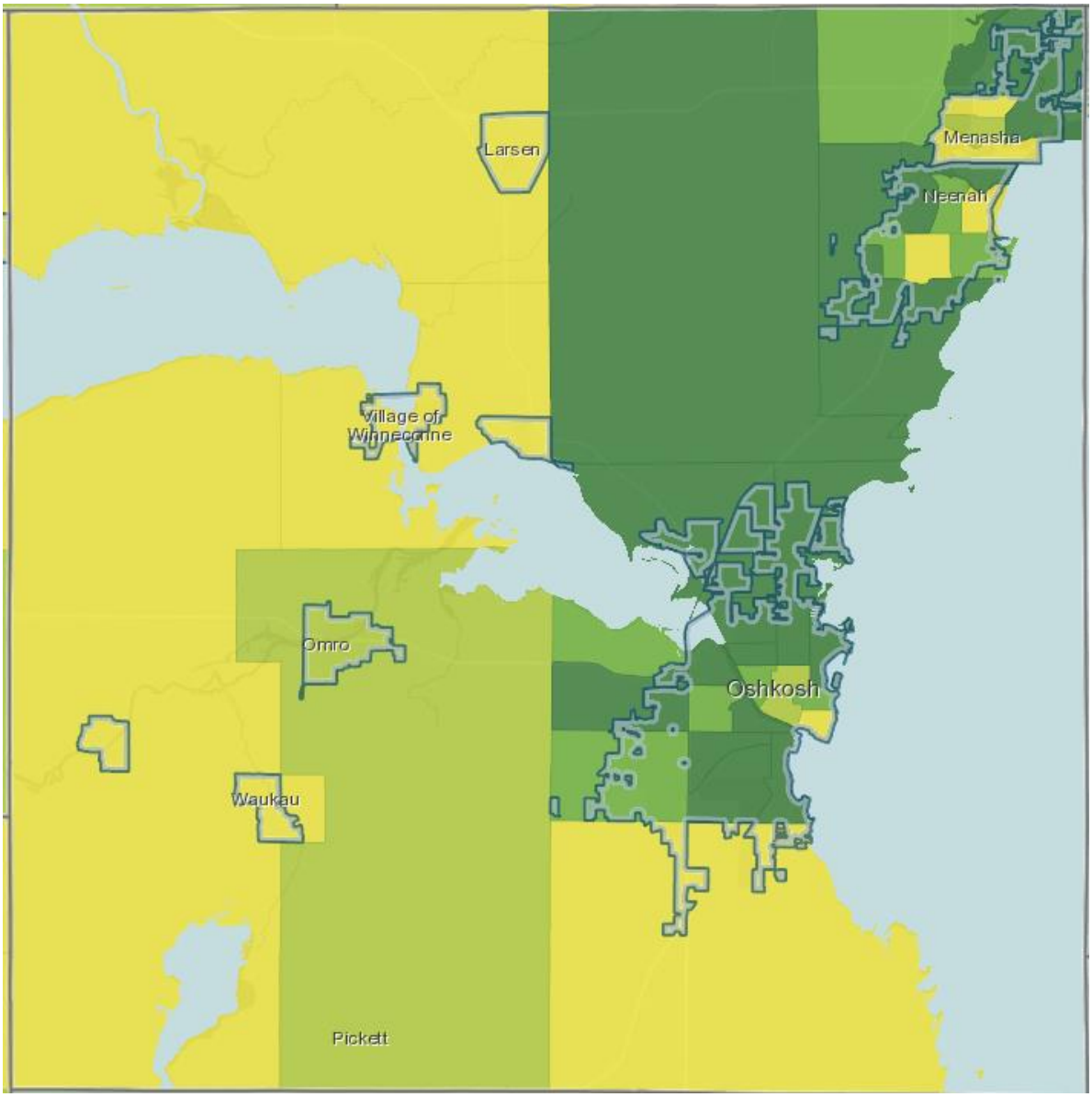


Data mapping from the Community Commons website, available at https://www.communitycommons.org/maps-data/, accessed February 14, 2018.

Non-Hispanic Population, Black: Percent by Census Tract
American Community Survey 2011-2015

- Over 10.0%
- 2.1 - 10.0%
- 0.6 - 2.0%
- Under 0.6%
- No Data or Data Suppressed

Winnebago County



Data mapping from the Community Commons website, available at https://www.communitycommons.org/maps-data/, accessed February 14, 2018.

Population of Asian:
Percent by Census Tract
American Community Survey 2011-2015

- Over 2.0%
- 1.1 - 2.0%
- 0.6 - 1.0%
- Under 0.6%
- No Asian Population Reported
- No Data or Data Suppressed

Section 2 | How the Community Health Needs Assessment (CHNA) was conducted

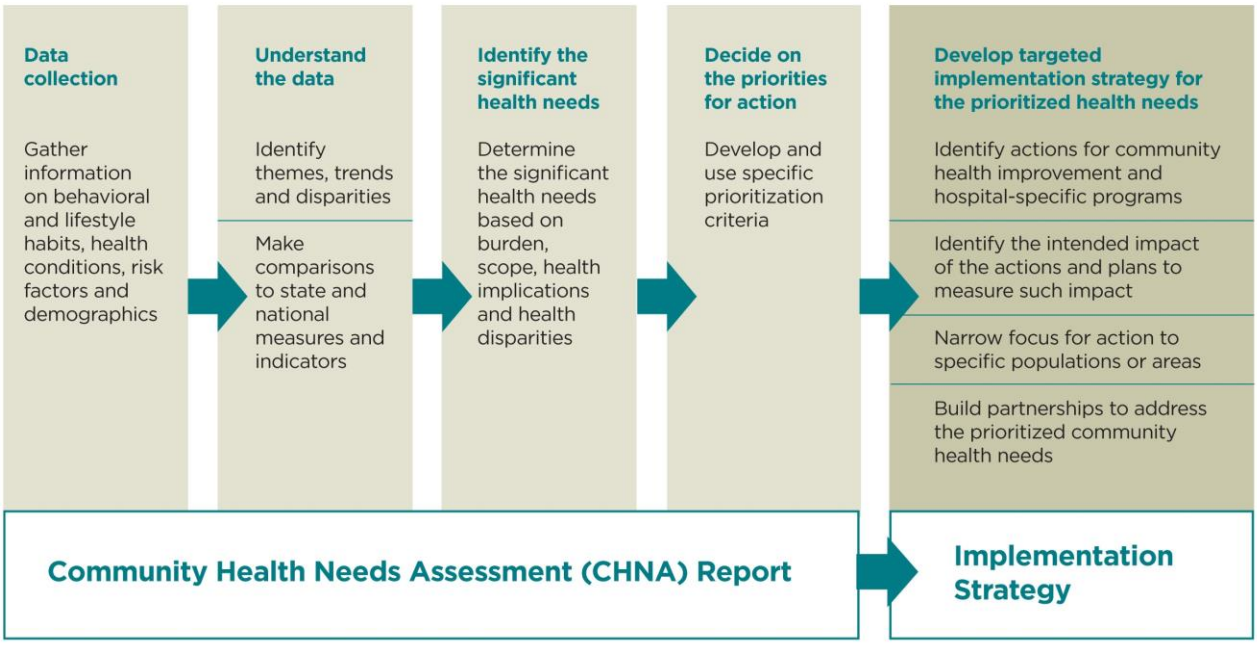
Purpose and process of the shared Community Health Needs Assessment

The inaugural community health needs assessment (CHNA) was conducted in 2013 and adopted by the Social Responsibility Committee of the Aurora Health Care (AHC) Board of Directors on December 19, 2013. In 2018, a CHNA was conducted to 1) determine current community health needs in Winnebago County, 2) gather input from persons who represent the broad interests of the community and to identify community assets, 3) identify and prioritize significant health needs, and 4) develop implementation strategies to address the prioritized health needs within the context of the hospital's existing programs, resources, strategic goals and partnerships. The process of conducting the CHNA is illustrated below and is described in this report.

Partnership

The community health survey was sponsored by the Fox Valley Community Health Improvement Coalition, a broad group of health departments, healthcare systems and related organizations in Calumet, Outagamie and Winnebago Counties. The data collection process is aligned to coordinate with varied fiscal year cycles among the partners. The community health survey is supplemented by additional data collection and analysis from the Center for Urban Population Health, www.cuph.org.

The 2018 community health needs assessment is based on prior efforts undertaken by Aurora Health Care to assess community health needs. Since 2003, Aurora Health Care has underwritten a community health survey of Winnebago County approximately every three years, conducted in partnership with the Winnebago County Health Department.



Data collection and analysis

Quantitative data was collected through primary and secondary sources and was supplemented with qualitative data gathered through key informant interviews. Different data sources were collected, analyzed and published at different intervals, and therefore the prior data years (e.g., 2012, 2014, 2015) will vary in this report. The most current data available was used for the CHNA.

The core data sources for the CHNA include:

Quantitative data sources

Source #1 | Winnebago County Behavioral Risk Factor Surveillance System (BRFSS) Survey Report

The Behavioral Risk Factor Surveillance System Survey is a source of primary community health data. The latest telephone survey was completed between December 8, 2017 and January 30, 2018, and analyzed and posted in 2018. This comprehensive phone-based survey gathers specific data on behavioral and lifestyle habits of the adult population and select information about child health. In addition, this report collects data on the prevalence of risk factors and disease conditions existing within the adult population and compares, where appropriate and available, health data of residents to state and national measures. Conducted approximately every three years, the survey can be used to identify community trends and changes over time. New questions have been added at different points in time. JKV Research, LLC analyzed the data and prepared the final report. For further description see Appendix A.

Source #2 | Secondary Data Report

This report summarizes the demographic and health-related information for Winnebago County. Data used in the report came from publicly available data sources. Data for each indicator is presented by race, ethnicity and gender when the data is available. When applicable, *Healthy People 2020* objectives are presented for each indicator. The report was prepared in 2018 by the Center for Urban Population Health (CUPH). For further description see Appendix B.

Qualitative data source

Source #3 | Community Member and Stakeholder Survey

A total of 53 community member surveys were conducted in June 2018, and a total of 50 community stakeholder surveys were completed in June 2018. Community members who receive services from non-profit organizations as well as government entities were included in community member surveys. Community stakeholder interviews included input from persons who represent the broad interests of the community served. Each key informant was asked to identify community strengths, community areas for improvement, top community health conditions concern, and how to better community health in the next few years. Among the community stakeholders were leaders from public health, education and community organizations. These key informants represent the broad interest of the community served, including medically underserved, low income and minority populations.

The *Community Member and Stakeholder Survey Report* presents the results, including cross-cutting themes and summaries of the top health issues and additional health issues. The report was prepared by JKV. For further description see Appendix C.

Quantitative youth data source

Source #4 | Winnebago County Youth Risk Behavior Survey: 2017-2018 School Year

The Youth Risk Behavior Survey (YRBS) system gathers middle school and high school students' self-reported data on health behaviors, attitudes and perceptions, and protective factors. The survey is administered throughout Winnebago County. For further description see Appendix D.

Source #5 | Written Comments on the Current CHNA Report and Implementation Strategy
Aurora Health Care invites the community to provide written comments on its current CHNA Reports and Implementation Strategies via a one-click portal on its website at http://www.aurora.org/commbenefits. *Through October 2018, AMCO did not receive any comments on the current CHNA Report or Implementation Strategy.*

Additional sources of data and information used to prepare the AMCO CHNA Report were considered when identifying significant community health needs and are cited within the report.

Section 3 | Significant health needs identified through the Community Health Needs Assessment (CHNA) for Winnebago County

The significant health needs identified through the CHNA are also identified as key health issues for the state as outlined in the state health plan, *Healthy Wisconsin*, as well as the nation as outlined in *Healthy People 2020*, and are among major focus areas of the Centers for Disease Control and Prevention (CDC). From a local perspective, the significant health needs identified through the CHNA have an impact on community health, both for the community at-large and in particular specific areas within the community (such as neighborhoods or populations experiencing health disparities).

To determine the significant health needs identified through the CHNA, the following criteria was considered:

- Burden of the health issue on individuals, families, hospitals and/or health care systems (e.g., illness, complications, cost, death);
- Scope of the health issue within the community and the health implications;
- Health disparities linked with the health issue; and/or
- Health priorities identified in the municipal health department Community Health Improvement Plan (CHIP)
- Hanlon Rankings (see page 50)

The *Healthy People 2020* definition of a health disparity:

> If a health outcome is seen in greater or lesser extent between populations, there is disparity. Race or ethnicity, sex, sexual identity, age, disability, socioeconomic status and geographic location all contribute to an individual's ability to achieve good health.

Summary of municipal health department community health improvement plan (CHIP), *Healthy Wisconsin* and *Healthy People 2020*

Local Health Department *Community Health Improvement Plan (CHIP)*	"Since 1993, Wisconsin State Statutes have required communities throughout Wisconsin to develop and implement local health plans to address health conditions impacting their residents." This process has been referred to as the Community Health Improvement Plan (CHIP). http://www.dhs.wisconsin.gov/chip/
Healthy Wisconsin	*"Healthiest Wisconsin 2020 (HW2020)* identifies priority objectives for improving health and quality of life in Wisconsin. These priorities were chosen based on which accomplishments would offer the greatest improvements in lifelong health, and to eliminate health disparities and achieve more equal access to conditions in which people can be healthy. Priorities were influenced by more than 1,500 planning participants statewide, and shaped by knowledgeable teams based on trends affecting health and information about effective policies and practices in each focus area." The 23 focus area profiles of *HW2020* were grouped into three categories: crosscutting, health and infrastructure. http://www.dhs.wisconsin.gov/hw2020/pdf/exesummary.pdf Updated in 2017, *HW2020* was rebranded to *Healthy Wisconsin* to prioritize and narrow the focus areas to alcohol, nutrition & physical activity, opioids, suicide and tobacco along with addressing ACEs or adverse childhood experiences. https://healthy.wisconsin.gov/
Healthy People 2020	"*Healthy People* provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, *Healthy People* has established benchmarks and monitored progress over time in order to: • Encourage collaborations across communities and sectors • Empower individuals toward making informed health decisions • Measure the impact of prevention activities"

	http://www.healthypeople.gov/2020/about/default.aspx

Summary of the significant health needs identified through the CHNA for Winnebago County

This report focuses on the following data collection years: 2011, 2015 and 2018. The Behavioral Risk Factor Surveillance System, (Source #1), the secondary data (Source #2) and the key informant interview reports (Source #3) provide an overview of the community health issues in Winnebago County. When available and applicable, *Healthy People 2020* objectives are listed for the health topics.

Access

Unmet medical care | In 2018, 6% of the respondents had an unmet medical need. The percentage of adults who have a Primary Care Physician increased from 84% in 2011 to 89% in 2018. Of the households with a child, 0% reported that a child did not receive the needed specialty care in the past 12 months. However, 92% of the children have a medical home with a personal health care clinician who knows the child well, lower than 99% in 2015 (Source #1).

Top Health Issue

- The *Healthy People 2020* targets are to reduce the proportion of persons who are without health care coverage to 0% and who are unable to obtain or delay in receiving necessary medical care to 4.2%.

Why is this significant? Unmet medical care can lead to further health complications and increase future costs. Access to medical care can detect and treat disease at an earlier stage, improve overall health, prevent disease and disability, and reduce preventable deaths.[5]

Dental services and unmet dental care | In 2018, 8% percent of respondents reported that they did not get the dental care they needed sometime in the last 12 months; those who were in the bottom 40 percent household income bracket were more likely to report this (Source #1).

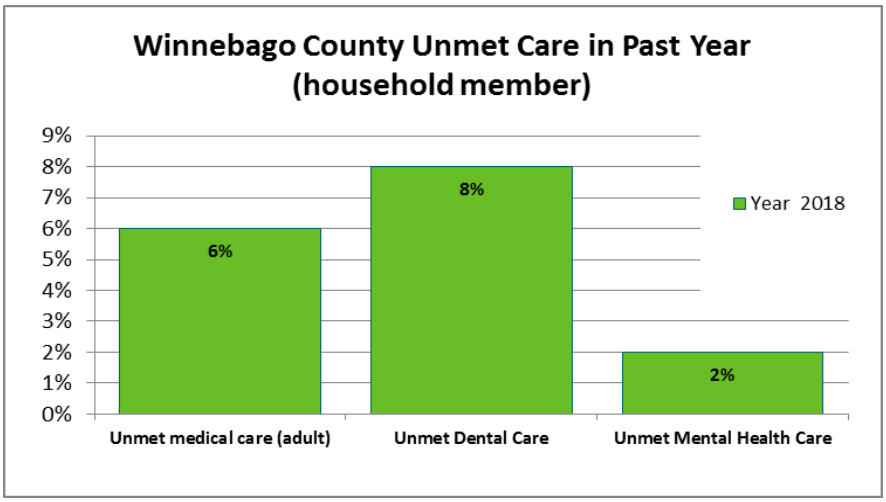
- The *Healthy People 2020* target is to reduce the proportion of persons who are unable to obtain or who encounter substantial delay in receiving necessary dental care to 5.0%.

Why is this significant? Unmet dental care can increase the likelihood for oral disease, ranging from cavities to oral cancer, which can lead to pain and disability. Access to oral health services can prevent cavities, gum disease and tooth loss, improve the detection of oral cancers and reduce dental care costs.[6]

Unmet mental health services | In 2018, 2% of respondents reported that they did not get the mental health care they needed sometime in the last 12 months (Source #1).

Why is this significant? Mental health and physical health are interconnected. An unmet mental health need can lead to further complications and increase future costs; the burden of mental illness and unwellness is among the highest of all diseases. Screening, early detection and access to services can improve outcomes and over time can provide savings to the health care system.[7]

[5] Healthy People 2020 – Access to Health Services. U.S. Department of Health and Human Service. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services Accessed February 5, 2018.
[6] Healthy People 2020 – Oral Health. U.S. Department of Health and Human Service. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/oral-health. Accessed February 5, 2018.
[7] Healthy People 2020 – Mental Health and Mental Disorders. U.S. Department of Health and Human Service. Available at https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders. Accessed February 5, 2018.



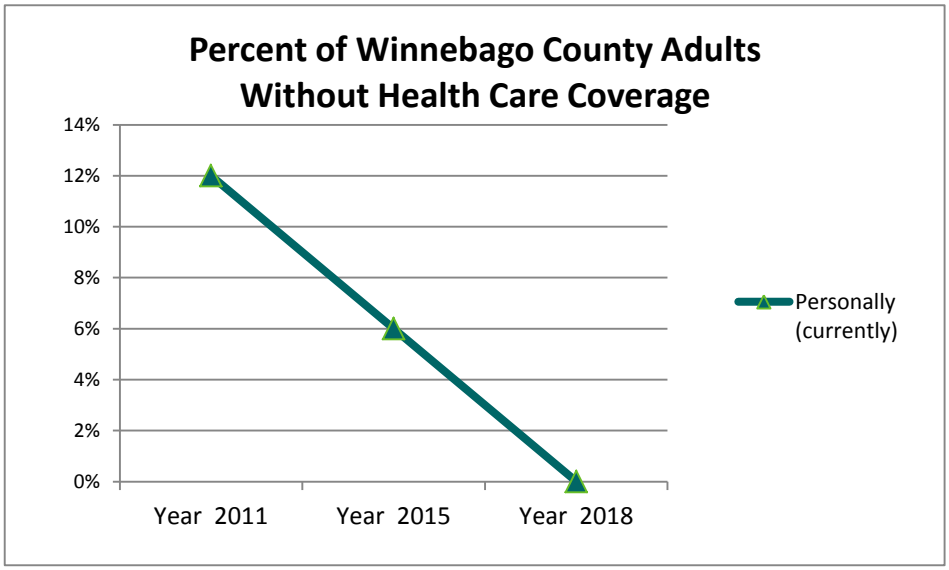
Coverage

Health care coverage | In 2018, <1% of adults reported they personally were not currently covered with health care insurance, a decrease from 12% in 2011. (Source #1).

Top Health Issue

- The *Healthy People 2020* target for health care coverage is 100%.

Why is this significant? Adults without consistent health care coverage are more likely to skip medical care because of cost concerns, which can lead to poorer health, higher long-term health care costs and early death.[8, 9]



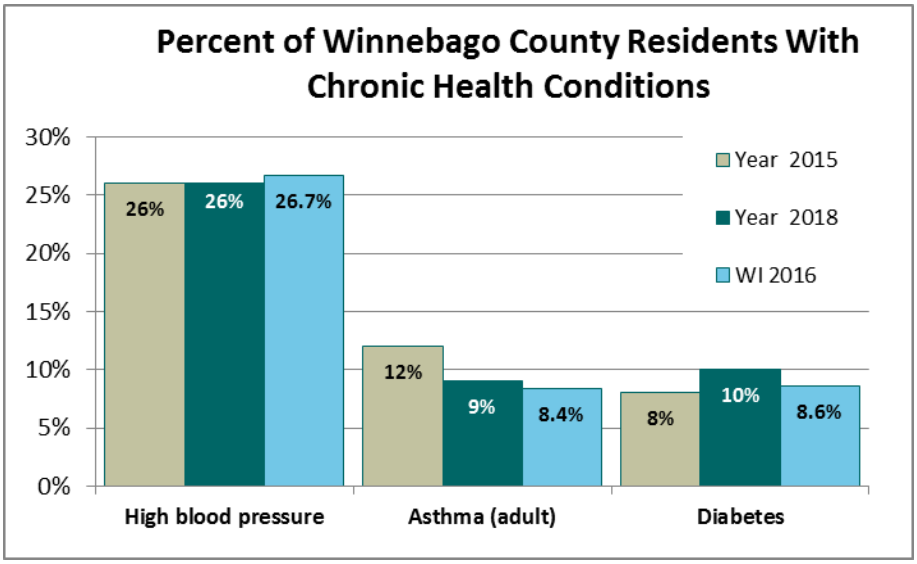
[8] Healthy People 2020 – Access to Health Services. U.S. Department of Health and Human Service. Available at http://www.healthypeople.gov/2020/topics-objectives/topic/Access-to-Health-Services. Accessed February 5, 2018.
[9] Key Facts about the Uninsured Population. Kaiser Family Foundation. Available at https://www.kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population/. Accessed February 5, 2018.

Chronic disease: asthma, diabetes, heart disease, overweight/obesity and cancer

Chronic conditions such as asthma, diabetes, heart disease and cancer can result in health complications, compromised quality of life and burgeoning health care costs. As the most common and preventable of all health issues, chronic diseases account for 86% of health care costs nationwide.[10] Chronic diseases were identified as one of the top five health issues in the community by the residents (Source #1) and key informants (Source #3).

Asthma | In 2018, 9% of adults reported asthma (current), down from 12% in 2015. This is lower compared to the 8.4% for the state. Residents who were female or in the bottom 40 percent household bracket were more likely to report having asthma. In 2018, 10% of the children of the surveyed households currently had asthma, which is above the national level of 8.3% (Source #1).

> **Why is this significant?** Without proper management, asthma can lead to increased health care usage and decreased quality of life.[11] Management of the disease with medical care and prevention of attacks by avoiding triggers is essential.



Diabetes | In 2018, 10% of adults reported diabetes in the past three years, an increase from 8% in 2015 and higher than the state (8.6%) and national (9.5%) rates. Respondents who were male or in the bottom 40 percent household income bracket were more likely to report having diabetes (Source #1).

> **Why is this significant?** Diabetes may lead to serious health complications including heart disease, blindness, kidney failure and lower-extremity amputations; it is the seventh leading cause of death in the US.[12] The average medical expenditures among people with diagnosed diabetes were about 2.3 times higher than expenditures for people without diabetes. [13]

[10] Centers for Disease Control and Prevention - Chronic Disease Prevention and Health Promotion. Available at http://www.cdc.gov/chronicdisease/index.htm. Accessed February 5, 2018.
[11] Centers for Disease Control and Prevention – Uncontrolled Asthma among Persons with Current Asthma. Available at https://www.cdc.gov/asthma/asthma_stats/uncontrolled_asthma.htm. Accessed February 5, 2018.
[12] Centers for Disease Control and Prevention. - Diabetes Public Health Resources. Available at http://www.cdc.gov/basics/diabetes.html. Accessed February 5, 2018.
[13] CDC National Diabetes Statistics Report, 2017: Estimates of Diabetes and Its Burden in the United States. Available at https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf. Accessed February 5, 2018.

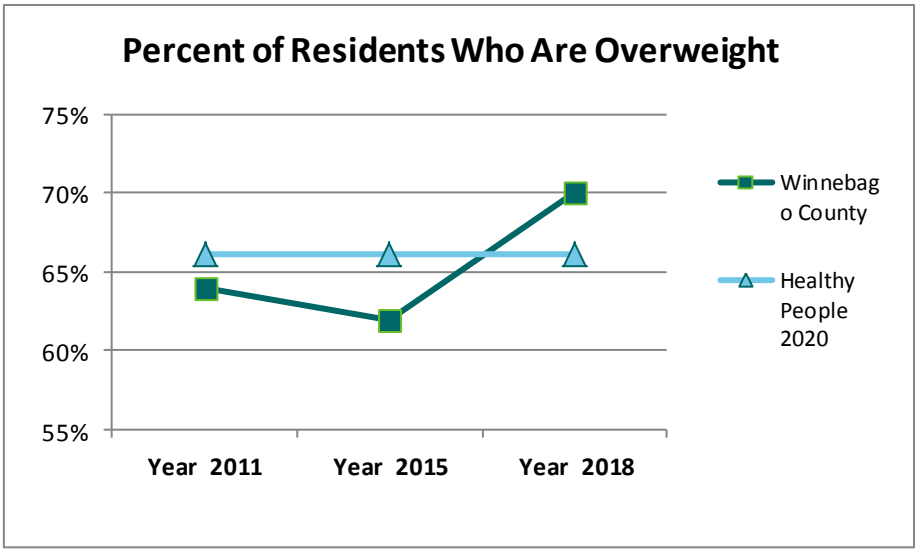
Heart disease or heart condition| In 2018, 8% of adults reported heart disease or heart condition in the past three years, lower than the U.S. rate of 11.6%.[14] Respondents who were 65 and older or in the bottom 40 percent household income bracket were more likely to report heart disease or heart condition (Source #1).

Why is this significant? The term "heart disease" refers to several types of heart conditions, such as coronary artery disease, angina, heart failure and arrhythmias. High blood pressure, high cholesterol and smoking are key risks for heart disease. Heart disease is the leading cause of death among both males and females in the United States.[15]

Overweight/Obesity |In 2018, 70% of adults in Winnebago County were classified as being overweight, an increase from 64% in 2011. Since 70% of adults in Winnebago County in 2016 were classified as overweight, this means 30% of adults were classified as a healthy weight. Male residents were more likely to report being overweight or obese (Source #1).

Top Health Issue

In the Winnebago County BRFSS, the category "overweight" includes overweight and obese respondents. One nationally used definition of overweight status developed by the CDC is when a person's body mass index (BMI) is greater or equal to 25.0. A BMI of 30.0 or more is considered obese. Body Mass Index is calculated by using weight in kilograms/height in meters^2 (Source #1).



– The *Healthy People 2020* goal for healthy weight is 33.9%.

Why is this significant? Overweight and obesity can increase the risk for high blood pressure, high cholesterol levels, coronary heart disease, type 2 diabetes, stroke, some cancers, low quality of life and other health conditions. People who have obesity have annual medical costs which average $1,429 higher than those of normal weight.[16]

14 CDC Health, United States, 2016, https://www.cdc.gov/nchs/data/hus/hus16.pdf. Accessed February 5, 2018.
15 Centers for Disease Control and Prevention - Heart Disease. Available at https://www.cdc.gov/heartdisease/facts.htm. Accessed February 5, 2018.
16 Centers for Disease Control and Prevention – Overweight & Obesity: Adult Obesity Facts. Available at https://www.cdc.gov/obesity/data/adult.html. Accessed February 5, 2018.

Cancer | The 2010-2014 cancer age-adjusted incidence rate in Winnebago County was 471.7 per 100,000 population, higher compared to the state at 459.0 per 100,000. The table below compares Winnebago County's age-adjusted cancer incidence and mortality rates per 100,000 population with the rates for Wisconsin (WI), national (US), and *Healthy People 2020* objectives *(HP2020)* (Source #2).

Top Health Issue

Why is this significant? A person's cancer risk can be reduced in a number of ways including, but not limited to, receiving regular medical care and screenings, getting vaccinated, avoiding tobacco, limiting alcohol use, avoiding excessive exposure to ultraviolet rays from the sun and tanning beds, eating a diet rich in fruits and vegetables, maintaining a healthy weight and being physically active.[17]

Cancer	Winnebago	WI	US	*HP2020*	Status
Female Breast Cancer Incidence Rate	132.9	66.1	123.6		
Cervical Cancer Incidence Rate	5.9	6.7			
Male Colorectal Cancer Incidence Rate	38.1	42.2	45.8		
Female Colorectal Cancer Incidence Rate	30.1	31.9	34.8		
Male Lung/Bronchus Cancer Incidence Rate	62.9	64.8	72.7		
Female Lung/Bronchus Cancer Incidence Rate	55.3	52.9	52.6		
Prostate Cancer Incidence Rate	106.1	99.8	114.9		
Female Breast Cancer Mortality Rate	17.9	18.6	21.2	20.7	●
Cervical Cancer Mortality Rate		2.1		2.2	
Male Colorectal Cancer Mortality Rate	17.1	15.6	17.7	14.5	■
Female Colorectal Cancer Mortality Rate	10.3	10.1	12.4	14.5	●
Male Lung/Bronchus Cancer Mortality Rate	49.4	48.8	55.9	45.5	■
Female Lung/Bronchus Cancer Mortality Rate	39.4	33.3	36.3	45.5	●
Prostate Cancer Mortality Rate: Age-Adjusted	23.3	20.7	20.1	21.8	■

*If Winnebago County's rate meets or exceeds the HP2020 benchmark, then a green circle (●) is shown under "Status". Conversely, if the community falls below the 2020 goal, then a red square (■) is shown. If the CDC did not set a HP2020 goal in a specific health indicator, then the community's health information is compared with the U.S. goal. If no information is available under HP2020 or national data, or community data, then "na" is displayed for "not available".

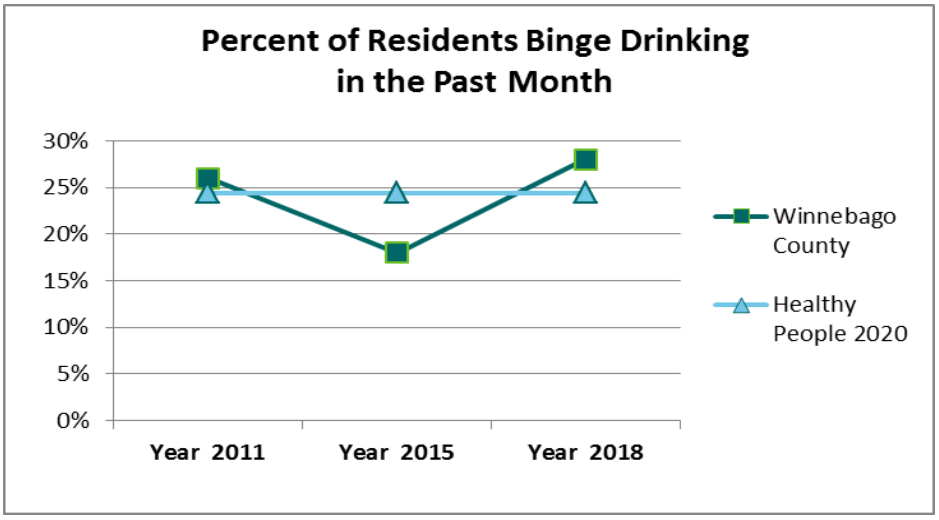
Health risk behaviors: alcohol use, substance use, tobacco use, nutrition and physical activity

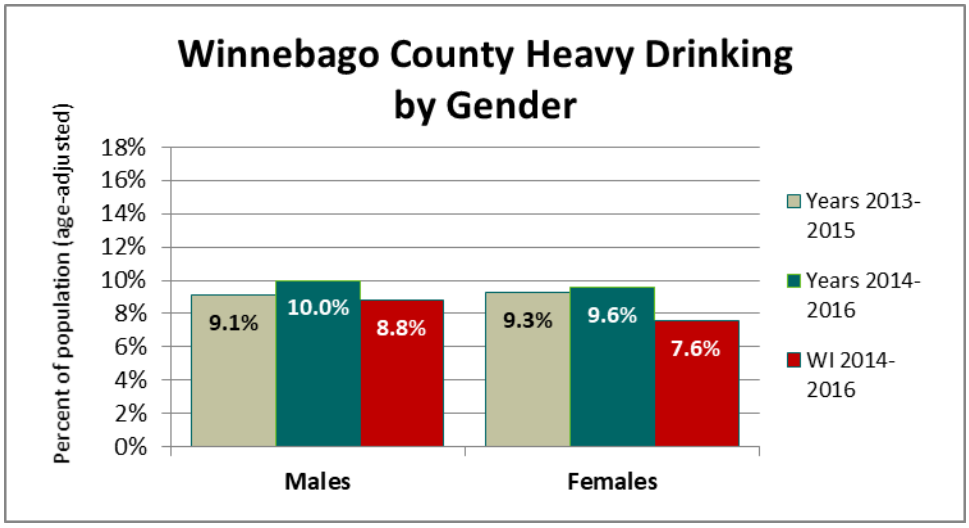
Four modifiable health risk behaviors are responsible for the main share of premature death and illness related to chronic diseases: excessive alcohol consumption, tobacco use and exposure, poor nutrition and lack of physical activity.[18]

Alcohol use | In 2018, 28% of adults in Winnebago County reported binge drinking in past month, an increase from 2015 (18%), and higher compared to the state (22.1%) and the United States (16.0%). Respondents who are male were more likely to report binge drinking in the past month (Source #1). However, female residents of Winnebago County reported heavy drinking at a higher rate (9.6%) than the state rate (7.6%) but lower than Winnebago County males (10.0%) (Source #2). In addition, 2.0% of the population stated that they drove or rode in a vehicle when the driver had too much to drink (Source #1). According to the *Winnebago County YRBS*, 12.0% of the high school students binge drank in the past month, which is above the *Healthy People 2020* target of 8.6% (Source #4).

[17] Centers for Disease Control and Prevention – Cancer. Available at https://www.cdc.gov/cancer/dcpc/prevention/index.htm. Accessed February 5, 2018.
[18] Centers for Disease Control and Prevention-Chronic Disease Overview. Available at https://www.cdc.gov/chronicdisease/resources/infographic/nccdphp.htm. Accessed February 5, 2018.

Excessive drinking reflects the percent of adults who report either binge drinking or heavy drinking. According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA), binge drinking is defined as alcohol consumption that brings the blood alcohol concentration to 0.08% or more; this is generally achieved through consuming four or more alcoholic beverages for women or five or more for men within approximately two hours. In addition, the NIAAA defines heavy drinking as drinking more than one drink for women or two drinks for men per day on average.[19] Alcohol (and other drugs) was identified as one of the top three health issues in the county by key stakeholders (Source #3).





– The *Healthy People 2020* goal for binge drinking among adults is 24.4%.

Why is this significant? Binge drinking is associated with an array of health problems including, but not limited to, unintentional injuries (e.g. car crashes, falls, burns, drownings), intentional injuries (e.g., firearm injuries, sexual assault, domestic violence), alcohol poisoning, sexually transmitted infections, unintended pregnancy, high blood pressure, stroke and other cardiovascular diseases, poor diabetes

[19] National Institute on Alcohol Abuse and Alcoholism – Alcohol & Your Health: Drinking Levels Defined. Available at https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/moderate-binge-drinking. Accessed February 6, 2018.

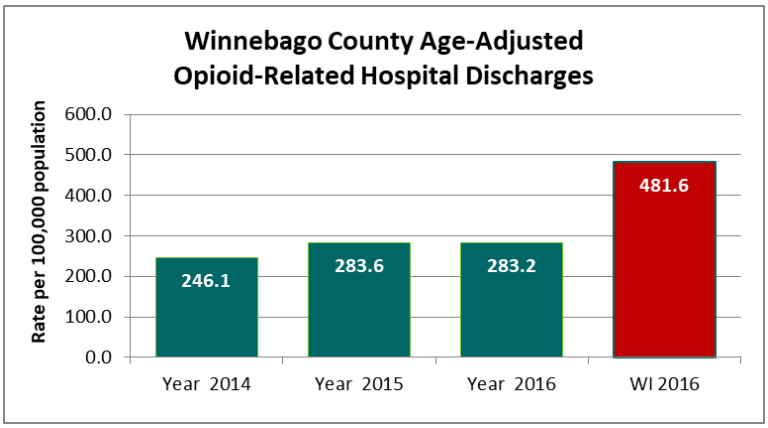
control, cancer, mental health problems and learning and memory issues. Binge drinking is extremely costly to society from losses in productivity, employment, health care, crime and other expenses.[20]

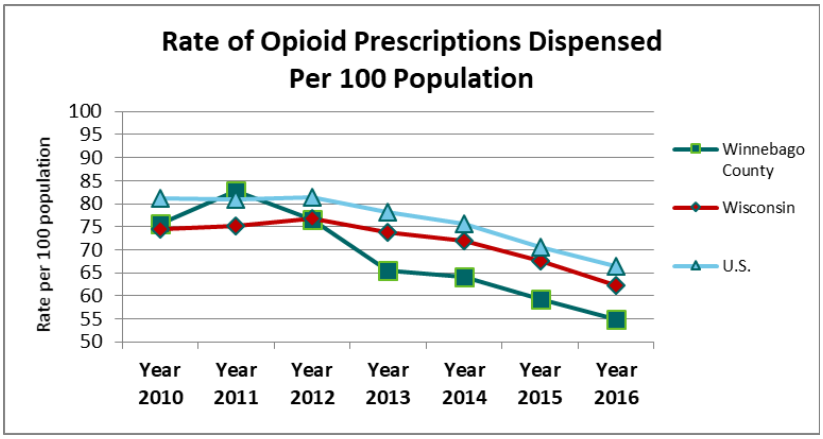
Substance use | Drug misuse, specifically opioids, is escalating statewide. In Winnebago County, the rate of opioid-related hospital encounters was 283.2 per 100,000 population in 2016, lower than Wisconsin rate of 481.6 per 100,000 population. Winnebago County residents who identified as Black, non-Hispanic had higher opioid-related hospital encounter rates than other races or ethnicities (Source #2). According to the CDC, the rate of dispensed opioid prescriptions peaked in 2012 and has since decreased steadily. In addition, the rate of opioid prescriptions dispensed was lower in Winnebago County at 54.9 prescriptions per 100 population than the state or U.S. rate (62.2/100 population and 66.5/100 population respectively).[21] Residents and key informants identified drug misuse as one of the top health issues challenging the community (Sources #1, #4).

Top Health Issue

– The *Healthy People 2020* goal for drug-induced deaths is 12.6 deaths per 100,000 population.

Why is this significant? Nationally, the amount of pain medicines prescribed and sold have increased since 1999. Every day in the U.S., 115 people die due to an overdose of prescription opioids. The overprescribing of opiates and other pain medicines leads to medicinal abuse and overdose deaths.[22]





[20] Centers for Disease Control and Prevention – Alcohol & Public Health. Available at https://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm. Accessed February 6, 2018.
[21] Centers for Disease Control and Prevention – Opioid Overdose: U.S. County Prescribing Rates. Available at https://www.cdc.gov/drugoverdose/maps/rxcounty2016.html. Accessed February 16, 2018.
[22] Centers for Disease Control and Prevention – Opioid Overdose. Available at https://www.cdc.gov/drugoverdose/index.html. Accessed February 8, 2018.

Tobacco Use and Exposure | In 2018, 17% of adults in Winnebago County reported cigarette smoking in the past 30 days (current smoker), an increase from 16% in 2016. Respondents who were male or in the bottom 60 percent household income bracket were more likely to report being a current smoker (Source #1). According to the *2018 YRBS*, 9.0% of the high school students reported being a current smoker, a decrease from 18% in 2012. However, 29% of high school students surveyed reported using electronic vapor products in the past month (Source #4).

- The *Healthy People 2020* target is to reduce cigarette smoking by adults to 12.0% and adolescents to 16.0% and increase the percentage of current smokers to quit smoking in the past year to 80.0%. Also, it aims to increase the prohibition of smoking within the homes to 87.0% and to reduce the percentage of non-smokers exposed to secondhand smoke in the past seven days to 33.8%.

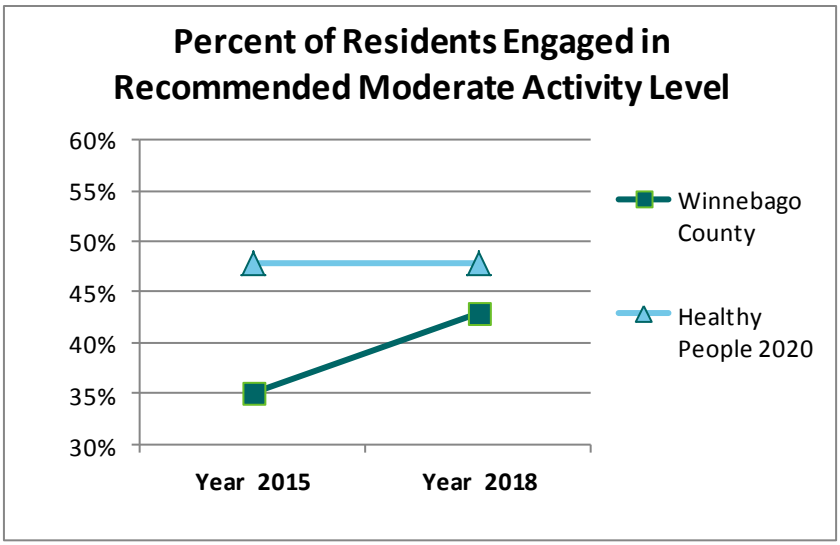
Additionally, in 2016, 13.6% of Winnebago County mothers indicated smoking during pregnancy, higher than the state rate of 11.3% (Source #2).

- The *Healthy People 2020* target is no greater than 1.4%.

  Why is this significant? In the United States, cigarette smoking is the leading cause of preventable death. Smoking harms nearly every organ in the body, leading to disease and disability, including increasing the risk of coronary heart disease, stroke and several types of cancer. In addition, research has shown that smoking during pregnancy can cause health problems for both mother and baby, such as pregnancy complications, premature birth, low birth weight infants and stillbirth. [23]

Nutrition and physical activity | In 2018, 43% of adults in Winnebago County reported engaging in recommended moderate or vigorous activity, an increase from 2015 (34%). In 2018, 64% of the children in Winnebago County engaged in physical activity for 60 minutes at least five days out of the week. In 2018, 44% of adults in Winnebago County reported eating the recommended fruit servings while 31% of adults reported eating the recommended vegetable servings (Source #1). Based on the *2017 County Health Rankings* for Winnebago County, 8% of the population had limited access to healthy foods.[24] This was higher than the state (5.0%), and higher than the national benchmark (0% of the population had limited access to healthy foods) (Source #2).

Top Health Issue



[23] Centers for Disease Control and Prevention – Smoking & Tobacco Use. Available at https://www.cdc.gov/tobacco/data_statistics/fact_sheets/index.htm. Accessed February 8, 2018.
[24] Note: Limited access to healthy foods captures the percentage of the population who are low income and do not live close to a grocery store. In rural areas, living close to a grocery store means living less than 10 miles from a grocery store whereas in non-rural areas it is less than 1 mile. Low income is defined as having an annual family income of less than or equal to 200% of the federal poverty threshold for the family size. Available at http://www.countyhealthrankings.org/app/wisconsin/2017/measure/factors/133/description. Accessed February 8, 2018.

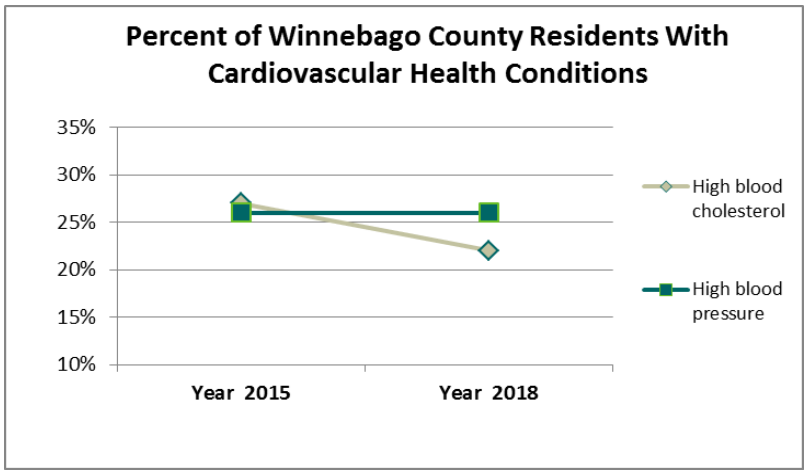
According to the 2018 *YRBS,* 24% of high school students had seven days of 60 minutes of physical activity in the past week. 63% of middle school students surveyed reported 60 or more minutes of physical activity in the day before the survey was taken. Additionally, 53% of the high school students surveyed had breakfast 5 or more times in the past week, and 69% of the middle school students surveyed reported having breakfast the day before the survey was taken (Source #4).

– The *Healthy People 2020* target is to increase the percentage of adults engaged in the recommended moderate or vigorous physical activity to 47.9% and to reduce the percentage of students playing video games or using the computer for non-school work three or more hours on an average school day to 17.4%.

  Why is this significant? Inactive adults have a higher risk for obesity, coronary heart disease, type 2 diabetes, stroke, some cancers, depression and other health conditions.[25] A healthy and balanced diet, including eating fruits and vegetables, is associated with reduced risk for many diseases, including several of the leading causes of death: heart disease, cancer, stroke and diabetes. An energy imbalance, or eating more calories than one expends through physical activity, can increase one's risk for overweight and obesity. [26]

Health risk factors: high blood pressure and high blood cholesterol

High blood pressure and high blood cholesterol | In 2018, 26% of adults reported high blood pressure – the same rate as 2015. Respondents who were aged 65 and over, or in the bottom 40 percent household income bracket, were more likely to report high blood pressure. Also, 22% of adults in 2018 reported high cholesterol in the past three years, a decrease from 2015 (27%). Respondents who were 65 and older or overweight were more likely to report high blood pressure and high blood cholesterol (Source #1).



– The *Healthy People 2020* goal of adults with high blood pressure is 26.9% and adults with high total blood cholesterol is 13.5%.

  Why is this significant? High blood pressure, the "silent killer" because it often lacks symptoms or warnings signs, increases the risk for heart disease and stroke.[27] Likewise, high cholesterol is also a risk

[25] Centers for Disease Control and Prevention – Division of Nutrition, Physical Activity, and Obesity. Available at https://www.cdc.gov/nccdphp/dnpao/division-information/media-tools/dpk/vs-disability-activity/index.html. Accessed February 8, 2018.
[26] Centers for Disease Control and Prevention – Physical Activity and Health. Available at https://www.cdc.gov/physicalactivity/basics/pa-health/index.htm. Accessed February 8, 2018.
[27] Centers for Disease Control and Prevention – High Blood Pressure. Available at https://www.cdc.gov/bloodpressure/. Accessed February 8, 2018.

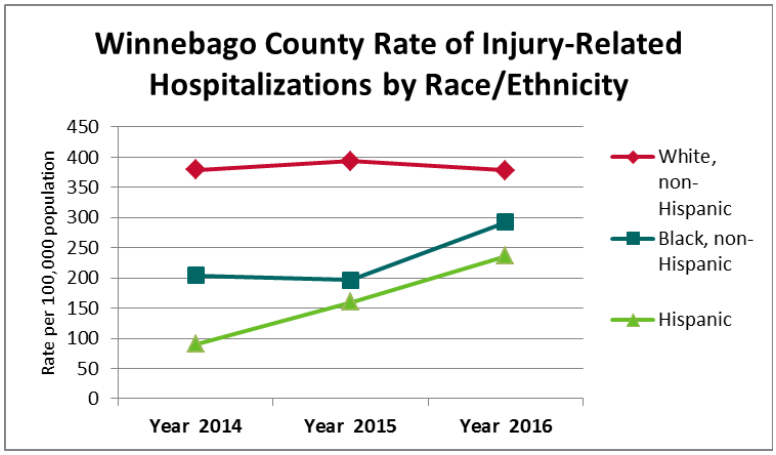
factor for heart disease and stroke.[28] Once identified and diagnosed, high blood pressure and cholesterol can be treated and controlled.[29]

Injury and Violence

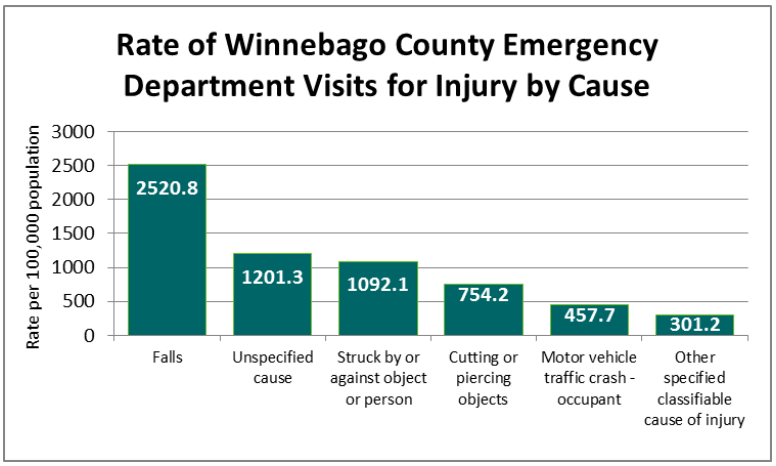
Injury hospitalization | The 2016 Winnebago County injury-related hospitalizations rate was 372.1 per 100,000, which is lower compared to the state (500.0 per 100,000) and the *Healthy People 2020* target. Winnebago County residents who are White had higher rates of injury-related hospitalizations compared to Blacks and Hispanics. The injury-related emergency department (ED) visit rate for Winnebago County was 7,455.5 per 100,000, which is slightly higher than the Wisconsin rate (7,392.4 per 100,000).[30] The injury-related death rate in Winnebago County was 70.9 per 100,000 population, lower than the Wisconsin rate of 81.2 per 100,000 population, but higher than the Healthy People 2020 goal of 53.3 per 100,000 population. The top ranked cause of injury-related ED visits was falls, over two times higher than the second ranked cause (Source #2).

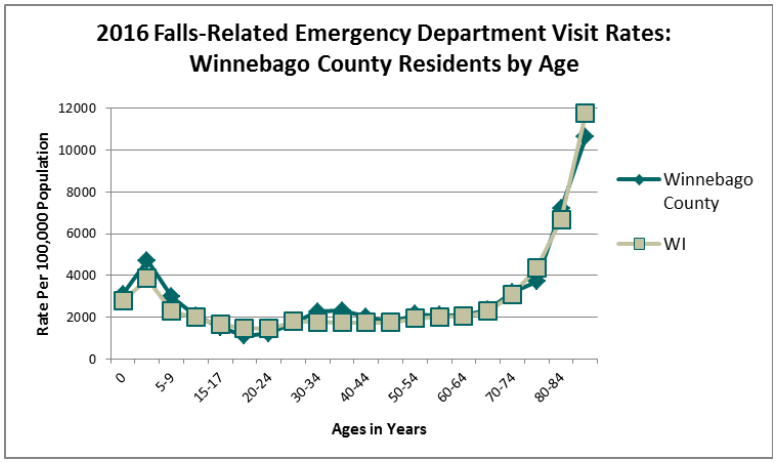
- The *Healthy People 2020* target for injury-related hospitalization rate is 555.8 per 100,000; the target for injury emergency department visit is 7,533.4 per 100,000. The target for injury related death rate is 53.3 per 100,000.

  Why is this significant? Injuries are a leading cause of death for people ages 1-44 in the United States. In 2013 alone, injuries cost the nation 671 billion dollars in lost productivity and medical care. Injuries can be prevented and their consequences reduced for infants, children and adults.[31]

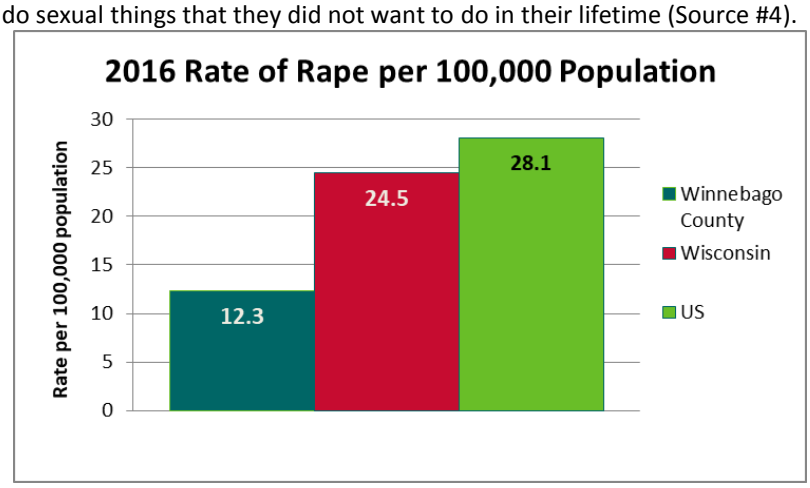


[28] Centers for Disease Control and Prevention – Cholesterol. Available at https://www.cdc.gov/cholesterol/. Accessed February 8, 2018.
[29] Centers for Disease Control and Prevention – Heart Disease. Available at https://www.cdc.gov/heartdisease/medical_conditions.htm. Accessed February 8, 2018.
[30] Wisconsin Interactive Statistics on Health (WISH), Available at https://www.dhs.wisconsin.gov/wish/index.htm. Accessed June 13, 2018
[31] Centers for Disease Control and Prevention – Injury Prevention and Control. Available at https://www.cdc.gov/injury/wisqars/overview/key_data.html. Accessed February 8, 2018.





Sexual violence | Sexual violence is defined as sexual activity when consent is not obtained or not given freely.[32] The rate of rape for Winnebago County was 12.3 reports per 100,000 persons, lower than Wisconsin's overall rate of 24.5 per 100,000 in 2016.[33] However, sexual assault and rape are underreported and the definition of sexual assault varies across different agencies; therefore, the number and rate may vary depending on the source. According to the *Winnebago County YRBS*, 11% of the high school students reported that they had been verbally or physically forced to do sexual things that they did not want to do in their lifetime (Source #4).



[32] Centers for Disease Control and Prevention – Violence Prevention: Sexual Violence. Available at https://www.cdc.gov/violenceprevention/sexualviolence/index.html. Accessed February 8, 2018.
[33] Wisconsin Department of Justice, Crime in Wisconsin 2012, September 2013. Available at https://wilenet.org/html/justice-programs/programs/justice-stats/library/crime-and-arrest/2012-crime-in-wi.pdf. Accessed February 22, 2016

Why is this significant? Sexual violence can have harmful and lasting consequences for victims, families, and communities including, but not limited to, unintended pregnancy, sexually transmitted infections, long term physical consequences, immediate and chronic psychological consequences, health behavior risks and financial cost to victims, families and communities.[34]

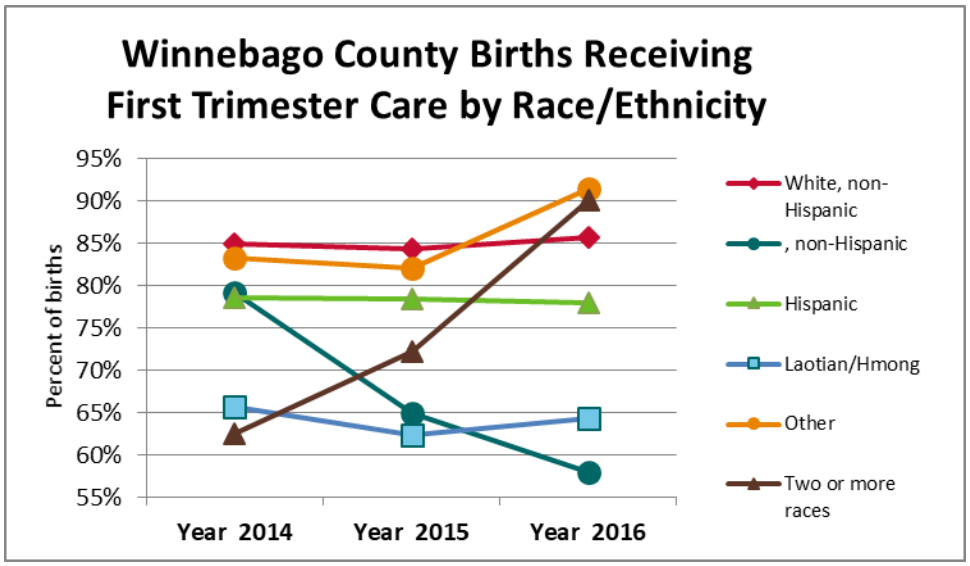
Other violence | The rate of aggravated assault for Winnebago County in 2016 was 127.6 reports per 100,000 persons, lower than Wisconsin's overall rate of 186.3 per 100,000.[35] In Wisconsin, the rate of Child Protective Services (CPS) reports was 32.8 per 1,000 children in 2015; Winnebago County's rate was higher at 38.8 reports per 1,000 children (Source #2). According to the *Winnebago County YRBS*, 6% of the high school students reported being in a physical fight in the past 12 months, lower than the *Healthy People 2020* target of 28.4% (Source #4).

Why is this significant? Violence has a lasting effect throughout one's life. Survivors of violence may suffer from physical, emotional, social and other health problems.[36]

Reproductive Health

Births receiving first trimester care | From 2014 to 2016, the percent of births receiving first trimester care in Winnebago County was statistically the same at 83.3%, but was higher compared to the state (76.4%). Women who were White experienced consistently higher rates than other races while women who were Black/African American had the lowest rates in 2016 (Source #2).

- The *Healthy People 2020* target for births receiving first trimester care is 77.9%.



Premature births | From 2014 to 2016, the percent of premature births (before 37 weeks) in Winnebago County improved from 10.6% to 9.2%, and was lower than the state's 9.6% (Source #2).

- The *Healthy People 2020* target for premature births is 11.4%.

[34] Centers for Disease Control and Prevention – Violence Prevention/Sexual Violence: Consequences. Available at https://www.cdc.gov/violenceprevention/sexualviolence/consequences.html. Accessed February 8, 2018.
[35] Wisconsin Department of Justice, UCR Offense Data, 2016. Available at https://www.doj.state.wi.us/dles/bjia/ucr-offense-data. Accessed June 29, 2017.
[36] Centers for Disease Control and Prevention – Violence Prevention. Available at https://www.cdc.gov/violenceprevention/. Accessed February 8, 2018.

Low birth weight | From 2014 to 2016, the percent of low birth weight births (less than 2,500 grams or approximately 5.5 pounds) in Winnebago County decreased from 7.7% to 6.7% and was lower compared to the state (7.4%) (Source #2).

- The *Healthy People 2020* target for low birth-weight births is 7.8%.

  Why is this significant? Preconception and early prenatal care improves mother and infant outcomes. Babies born prematurely (three weeks or earlier than their due date) or with a low birth weight (less than 2,500 grams or about 5.5 pounds) experience a greater risk for an adverse outcome including a serious disability or death. In 2015, preterm birth and low birth weight accounted for about 17% of infant deaths.[37]

Birth rate to teens| In 2016, births among Winnebago County females aged 15-17 years was 4.9 per 1,000 females, lower than the state rate of 6.2 births per 1,000 females. For Winnebago County females aged 15-19 years, the birth rate was 15.6 per 1,000 females, higher than the state rate of 15.2 births per 1,000 females (Source #2).

Why is this significant? Teen pregnancy and childbearing bring substantial social and economic costs through immediate and long-term impacts on teen parents and their children. The children of teenage mothers are more likely to have lower school achievement and to drop out of high school, have more health problems, be incarcerated at some time during adolescence, give birth as a teenager, and face unemployment as a young adult. [38]

Infant Mortality | From 2014 to 2016, the rate of infants dying before their first birthday in Winnebago County decreased from 7.7 deaths per 1,000 live births to 4.2 deaths per 1,000 live births, lower than the statewide rate of 6.2 deaths per 1,000 live births (Source #2).

- The *Healthy People 2020* target for rate of infant deaths (within one year) is 6.0 per 1,000 live births.

Mental health

Mental health conditions| According to the *2017 County Health Rankings*, Winnebago County adults reported an average of 3.4 mentally unhealthy days in the past 30 days, less than the state average of 3.5 days (Source #2). Mental health was identified as one of the top health issues in the county by residents and key stakeholders (Source #3).

Top Health Issue

Mental health is defined as including "our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make healthy choices."[39] Indicators of mental health include emotional, social and psychological well-being. This definition differs from mental illness, which is classified as "conditions that affect a person's thinking, feeling, mood or behavior," which "may be occasional or long-lasting (chronic) and affect someone's ability to relate to others and function each day."[40] Anxiety, depression, and bipolar disorder are examples of mental illness.

[37] Centers for Disease Control and Prevention – Reproductive Health: Preterm Birth. Available at https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm. Accessed February 8, 2018.
[38] Centers for Disease Control and Prevention – Reproductive Health: About Teen Pregnancy. Available at https://www.cdc.gov/teenpregnancy/about/index.htm. Accessed February 8, 2018.
[39] Centers for Disease Control and Prevention – Learn About Mental Health. Available at https://www.cdc.gov/mentalhealth/learn/index.htm. Accessed February 8, 2018.
[40] Centers for Disease Control and Prevention – Learn About Mental Health. Available at https://www.cdc.gov/mentalhealth/learn/index.htm. Accessed February 8, 2018.

Why is this significant? Mental health conditions are related to risk behaviors for chronic disease, such as physical inactivity, smoking, excessive drinking and insufficient sleep, and associated with chronic diseases such as cardiovascular disease, diabetes and obesity.[41]

Suicide | In 2018, 10% of adults in Winnebago County reported feeling so overwhelmed in the past year that they considered suicide. Note: The survey did not ask how seriously, how often or how recently suicide was considered. Nine percent of the households reported having a child who was always or nearly always sad, unhappy or depressed in the past six months (Source #1). Additionally, in 2016, there were 30 suicides in Winnebago County at a rate of 17.7 per 100,000, higher than the Wisconsin rate of 14.9 per 100,000 population (Source #2).

- The *Healthy People 2020* target is 10.2 suicides per 100,000.

Why is this significant? A serious public health problem, suicide can have lasting harmful effects on individuals, their families and the communities. While its causes are complex and multifaceted, the aim of suicide prevention is to reduce factors that decrease risk factors and promote resilience.[42]

Youth mental health | The *YRBS* included all Winnebago County school districts. Results are based on student self-report and were taken during the 2017-2018 school year (grades 9-12 included) (Source #4). Some of the key findings include:

- 68% reported having had one or more days in the past 30 days when their mental health was not good
- 16% seriously considered attempting suicide in the past 12 months, higher than the state or national average of 13.2% and 17.0%, respectively
- 2% reported making a suicide attempt in the past year that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse

- The *Healthy People 2020* target is 1.7 adolescent suicide attempts per 100 people (1.7%).

[41] Centers for Disease Control and Prevention – Learn About Mental Health. Available at https://www.cdc.gov/mentalhealth/learn/index.htm. Accessed February 8, 2018.
[42] Centers for Disease Control and Prevention – Suicide Prevention. Available at https://www.cdc.gov/violenceprevention/suicide/. February 8, 2018.

Section 4 | Prioritized significant health needs

Criteria for prioritizing significant health need
During 2012, an ad hoc committee of the Aurora Health Care Board of Directors' Social Responsibility Committee undertook a five-month process to identify a common need in all Aurora Health Care service areas. The ad hoc committee presented its final recommendation to the Social Responsibility Committee in October of 2012 and, for the purpose of developing community benefit implementation strategies, a "signature community benefit focus" for all Aurora Health Care hospital facilities was determined:

- A demonstrable increase in "health home" capacity and utilization by underserved populations across Aurora's footprint (Medicaid-eligible and uninsured)

During 2018, Aurora hospital facility leaders prioritized significant needs based on the following criteria:

- Meets a defined community need (i.e., access for underserved populations)
- Aligns community benefit to organizational purpose and clinical service commitment to coordinate care across the continuum
- Aligns with hospital resources and expertise and the estimated feasibility for the hospital to effectively implement actions to address health issues and potential impact
- Reduces avoidable hospital costs by redirecting people to less costly forms of care and expands the care continuum
- Has evidence-basis in cross-section of the literature for management of chronic diseases in defined populations
- Leverages existing partnerships with free and community clinics and Federally Qualified Health Centers (FQHCs)
- Resonates with key stakeholders as a meaningful priority for the Aurora hospital to address
- Potential exists to leverage additional resources to extend impact
- Increases collaborative partnerships with others in the community by expanding the care continuum
- Improves the health of people in the community by providing high-quality preventive and primary care
- Aligns hospital resources and expertise to support strategies identified in municipal health department Community Health Improvement Plan (CHIP)
- Quantifying health issues based on the *Hanlon Method for Prioritizing Health Problems*[43] (see Appendix E for details)

Using this criteria, Aurora Medical Center in Oshkosh has prioritized the significant health needs to address in our 2019-2021 implementation strategy:

- Access and coverage
- Behavioral health
- Obesity
- Cancer
- Sexual assault

Significant health needs not being addressed in the implementation strategy and the reason:
The implementation strategy does not include specific strategies and goals for asthma, high blood pressure and high blood cholesterol as these are part of the standard continuum of clinical care at AMCO and Aurora clinics. Additionally, one of the aims of increasing access to health care, specifically primary care, is to address the health risk factors and behaviors that put people at greater risk for health complications and disease.

[43] National Association of County & City Health Officials (NACCHO) – First Things First: Prioritizing Health Problems. Available at http://archived.naccho.org/topics/infrastructure/accreditation/upload/Prioritization-Summaries-and-Examples.pdf, accessed August 23, 2017.

Section 5 | Community resources and assets

The assessment identified a multitude of community resources and assets from AMCO plus the other hospital and their community benefit programs, primary and specialty health care providers and dentists, municipal governments and their departments, public and private schools and many religious organizations. The *Community Member and Stakeholder Report* describes available community health resources and assets under each health issue as noted by the interviewed community members. The organizations listed as providing key informants for interviews are assets and resources for the community as well. Specific resources leveraged by AMCO are identified in the Implementation Strategy. For details, see Appendix C.

Section 6 | Evaluation of impact: AMCO's 2015 CHNA Report / 2016-2018 Implementation Strategy

The impact of the initiatives identified in AMCO's *2015 Community Health Needs Assessment Report / 2016-2018 Implementation Strategy* plan was executed with some successes. Successes at AMCO included providing free medical services through our partnership with the Living Healthy Community Clinic, telepsychiatric services, behavioral health screening in the ED, protocol development on alcohol and drug use, sexual assault advocacy and medical services, chronic disease education and screenings and partnering with the Weight of the Fox Valley on overweight and obesity initiatives. For detailed evaluation of impact, see Appendix F.

This Community Health Needs Assessment (CHNA) Report was adopted by the Aurora Health Care Community Board of the Advocate Aurora Health Board of Directors on November 19, 2018.

To submit written comments about the Community Health Needs Assessment (CHNA) report or request a paper version of the report, go to www.aurora.org/commbenefits.

Appendix A | Winnebago County Behavioral Risk Factor Surveillance System Survey: 2018 Report (Source #1)

The report is available at www.aurora.org/commbenefits

Data collection and analysis: The Winnebago County Behavioral Risk Factor Surveillance System (BFRSS) survey, a comprehensive phone-based community health survey, gathers specific data on behavioral and lifestyle habits of the adult population and select information about the respondent's household. In addition, this report collects data on the prevalence of risk factors and disease conditions existing within the adult population, and compares, where appropriate and available, health data of residents to state and national measurements. Conducted approximately every three years, the survey can be used to identify community trends and changes over time. The health topics covered by the community health survey are provided in the Winnebago County Behavioral Risk Factor Surveillance System Survey Summary (Appendix A).

Respondents were scientifically selected so that the survey would be representative of all adults 18 years old and older. Data collection consisted of 500 interviews in Winnebago County, with target of 45% being cell-only households. Interviews were completed between December 8, 2017 and January 30, 2018. With a sample size of 500, we can be 95% sure that the sample percentage reported would not vary by more than ±5 percent from what would have been obtained by interviewing all persons 18 years old and older who lived in Winnebago County. When applicable, the data was compared with measures from the *Behavioral Risk Factor Surveillance System* (BRFSS) and indicators established by *Healthy People 2020*.

When using percentages from this study, it is important to keep in mind what each percentage point, within the margin of error, actually represents in terms of the total adult population. One percentage point equals approximately 1,700 adults or 850 households.

The margin of error for smaller subgroups will be larger. For the landline sample, weighting was based on the number of adults in the household and the number of residential phone numbers, excluding fax and computer lines, to take into account the probability of selection. For the cell-phone only sample, it was assumed the respondent was the primary cell phone user. Combined, post-stratification was conducted by sex and age to reflect the 2010 census proportion of these characteristics in the area. Throughout the report, some totals may be more or less than 100% due to rounding and response category distribution. Percentages occasionally may differ by one or two percentage points from previous reports or the Appendix as a result of rounding, recoding variables or response category distribution.

Partners & Contracts: This report was sponsored by the Fox Valley Community Health Improvement Coalition. The data was analyzed and prepared by JKV Research, LLC. Data collection was conducted by Management Decisions Incorporated.

Winnebago County Adult Community Health Survey Trend Data Report

This research provides valuable behavioral data, lifestyle habits, and the prevalence of risk factors and disease conditions of Winnebago County residents. The following data are highlights of the comprehensive study. Please see the full report for more details.

General Health	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Overall Health								
Excellent/Very Good[A,B,C,D]	57%	52%	42%	56%	53%	42%		
Good	31%	31%	43%	31%	32%	43%		
Fair or Poor	13%	17%	15%	13%	14%	16%	*16%*	*16%*
At Least One Physically Unhealthy Day in Past Month[A]	36%	42%	42%	38%	37%	40%		
At Least One Mentally Unhealthy Day in Past Month[A,D]	37%	42%	45%	40%	37%	44%		
At Least One Physically/Mentally Unhealthy Day Prevented Usual Activities in Past Month	24%	31%	29%	23%	26%	26%		

Health Care Coverage	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Currently No Health Care Coverage								
18 Years Old and Older [HP2020 Goal: 0%][A,B,C,D]	12%	6%	<1%	9%	4%	<1%	*9%*	*10%*
18 to 64 Years Old [HP2020 Goal: 0%][A,B,C,D]	14%	7%	<1%	10%	5%	1%	*10%*	*12%*
Unmet Care in Past Year (Household Member)								
Medical Care [HP2020 Goal: 4%]	--	--	6%	--	--	6%		
Dental Care [HP2020 Goal: 5%]	--	--	8%	--	--	8%		
Mental Health Care	--	--	2%	--	--	3%		
Have a Primary Care Physician [HP2020 Goal: 84%][A,C]	84%	--	89%	88%	--	91%		
Advance Care Document or Conversation	--	--	67%	--	--	67%		
Advance Directive Document for Health Care	--	--	44%	--	--	45%		
Conversation with Trusted Person about Health Care Wishes if Unable to Speak for Self	--	--	49%	--	--	50%		

Routine Procedures	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Routine Checkup (2 Year Ago or Less)[A,C,D]	83%	91%	92%	84%	88%	91%	*84%*	*84%*
Respondents with a Routine Checkup in Past 2 Years								
HCP Inquired about Alcohol Consumption[B,D]	--	66%	81%	--	65%	83%		
Advised to Quit or Reduce Alcohol Consumption (of HCP Inquiries)	--	10%	6%	--	7%	5%		
Dental Checkup (Past Year) [HP2020 Goal: 49%][A,B]	80%	79%	74%	79%	78%	77%	*73%*	*66%*

Health Conditions in Past 3 Years	Winnebago County 2011[1]	2015[1]	2018	Tri-County 2011[1]	2015[1]	2018	*WI 2016*	*US 2016*
High Blood Pressure	30%	26%	26%	26%	26%	25%		
High Blood Cholesterol[D]	19%	27%	22%	26%	30%	24%		
Mental Health Condition	--	24%	21%	--	24%	21%		
Diabetes	7%	8%	10%	8%	8%	10%		
Heart Disease/Condition	--	--	8%	--	--	8%		
Asthma (Current)[D]	--	12%	9%	--	15%	9%	*9%*	*9%*

[1]In 2011 and 2015, time frame was "ever".
[A]Winnebago County statistical change from 2011 to 2018. [B]Winnebago County statistical change from 2015 to 2018.
[C]Tri-County statistical change from 2011 to 2018. [D]Tri-County statistical change from 2015 to 2018.

Financial Factors Affecting Health in Past Year	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Worried/Stressed About Having Enough Money for Rent, Mortgage or Utilities (always/usually)	--	17%	14%	--	14%	14%		
Food Didn't Last and Unable to Purchase More (Often True/Sometimes True)	--	17%	15%	--	11%	13%		

Mental Health Status	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Get Social/Emotional Support Needed (Rarely/Never)[A]	7%	11%	10%	6%	8%	6%		
Stress Because Mind is Troubled in Past Month (All the Time/Most of the Time)	--	--	13%	--	--	15%		
Considered Suicide in Past Year	--	--	10%	--	--	8%		

Physical Health	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Overweight Status								
Overweight (BMI 25.0+) [HP2020: 66%][A,B]	64%	62%	70%	66%	65%	67%	*67%*	*65%*
Obese (BMI 30.0+) [HP2020: 31%][A,B,C]	30%	31%	39%	30%	32%	35%	*31%*	*30%*
Physical Activity/Week								
Moderate Activity (5 Times/30 Min)[B,D]	--	20%	32%	--	22%	33%	*42%[1]*	*33%[1]*
Vigorous Activity (3 Times/20 Min)	--	24%	25%	--	28%	25%	*31%[3]*	*29%[3]*
Recommended Moderate or Vigorous[B]	--	35%	43%	--	40%	44%	*53%[3]*	*51%[3]*
Major Reasons Not Participate in Physical Activity More (Of Respondents Who Did Not Meet Recommendation)								
Not Enough Time to Exercise	--	--	30%	--	--	24%		
Difficult to Motivate Self	--	--	28%	--	--	24%		
Boring	--	--	15%	--	--	11%		

Nutrition	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Fruit Intake (2+ Servings/Day)[B,C,D]	49%	54%	44%	54%	60%	48%		
Vegetable Intake (3+ Servings/Day)[C]	29%	27%	31%	26%	33%	31%		
At Least 5 Fruit/Vegetables/Day[D]	28%	33%	28%	30%	39%	29%	*23%[3]*	*23%[3]*
Sugar Drink (1+ Drinks/Day)	--	--	34%	--	--	30%		
Non-Work Screen Time (4+ Hours/Day)[B]	--	44%	32%	--	36%	30%		
Sleep in Past 24 Hours (7+ Hours) [HP2020 Goal: 71%]	--	63%	64%	--	67%	65%		
Family Meals (Households with More than 1 Person; 5+ Meals/Week)[B,D]	--	65%	56%	--				

Alcohol Use in Past Month	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Heavy Drinker (Female 31+ Drinks; Male 61+ Drinks)	--	--	9%	--	--	10%	*7%[2]*	*5%[2]*
Binge Drinker (Female 4+ Drinks; Male 5+ Drinks on an Occasion)[B,D]	26%[4]	18%[4]	28%	23%[4]	20%[4]	25%	*25%*	*17%*
Excessive Drinker (Either Heavy or Binge Drinker) [HP2020 Goal: 25%][B,D]	26%[5]	18%[5]	29%	23%[5]	20%[5]	26%		
Driven When Perhaps Had Too Much to Drink[B,C,D]	2%	4%	2%	3%	5%	1%		

[1]2005 WI and US Data; [2]2007 WI and US Data; [3]2009 WI and US Data.
[4]In 2011 and 2015, binge drinking was defined as 5 or more drinks on an occasion, regardless of gender.
[5]In 2011 and 2015, heavy drinking was not asked. As a result, 2011 and 2015 percentages include binge drinking only.
[A]Winnebago County statistical change from 2011 to 2018. [B]Winnebago County statistical change from 2015 to 2018.
[C]Tri-County statistical change from 2011 to 2018. [D]Tri-County statistical change from 2015 to 2018.

Tobacco Use	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Past Month Use								
Tobacco Cigarette Smoker [HP2020 Goal:12%][C,D]	17%	16%	17%	18%	16%	12%	*17%*	*17%*
Smokeless Tobacco [HP2020 Goal: 0.2%][A]	5%	4%	2%	3%	3%	4%	*4%*	*4%*
Electronic Cigarettes/Vaping	--	5%	6%	--	5%	5%	*5%*	*5%*
Of Current Tobacco Cigarette Smokers…								
Quit Smoking 1 Day or More in Past Year Because Trying to Quit [HP2020 Goal: 80%]	43%	41%	45%	59%	51%	48%	*49%[1]*	*56%[1]*
Someone Smokes in Household or Vehicle [HP2020 Goal: 13%][A,C]	14%	--	9%	15%	--	7%		

Household Problems Associated With…	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Alcohol (Past Year)[C]	4%	--	4%	4%	--	2%		
Misuse of Prescription or Over-the-Counter Medication (Past Year)	--	--	2%	--	--	2%		

Firearms in Household	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2002*	*US 2002*
Firearm in House/Garage	--	--	43%	--	--	43%		
Firearm Loaded (All Households)	--	--	14%	--	--	9%		
Loaded Firearm Also Unlocked (All Households)	--	--	7%	--	--	3%	*2%*	*4%*
Of Households with a Firearm								
Loaded Firearm Also Unlocked	--	--	16%	--	--	7%	*5%*	*13%*

Personal Safety in Past Year	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
At Least One Personal Safety Issue	--	--	13%	--	--	10%		
Afraid for Safety	--	--	9%	--	--	8%		
Pushed, Kicked, Slapped, or Hit	--	--	5%	--	--	4%		
Felt Extremely Unsafe/Unsafe from Crime in Neighborhood	--	--	4%	--	--	2%		

Top Community Health Issues	Winnebago County 2011	2015	2018	Tri-County 2011	2015	2018	*WI 2016*	*US 2016*
Overweight or Obesity	--	--	26%	--	--	22%		
Chronic Diseases	--	--	22%	--	--	21%		
Illegal Drug Use	--	--	18%	--	--	18%		
Mental Health or Depression	--	--	16%	--	--	15%		
Infectious Diseases	--	--	15%	--	--	13%		
Cancer	--	--	14%	--	--	17%		
Alcohol Use or Abuse	--	--	14%	--	--	14%		
Access to Health Care	--	--	14%	--	--	17%		
Prescription or Over-the-Counter Drug Abuse	--	--	10%	--	--	9%		
Violence or Crime	--	--	6%	--	--	4%		
Affordable Health Care	--	--	6%	--	--	8%		
Lack of Physical Activity	--	--	6%	--	--	5%		
Access to Affordable Healthy Food	--	--	6%	--	--	6%		

[1]2005 WI and US Data.
[A]Winnebago County statistical change from 2011 to 2018. [B]Winnebago County statistical change from 2015 to 2018.
[C]Tri-County statistical change from 2011 to 2018. [D]Tri-County statistical change from 2015 to 2018.

Children in Household	Winnebago County 2015[1]	Winnebago County 2018[1]	Tri-County 2015[1]	Tri-County 2018[1]	*WI 2016*	*US 2016*
Personal Doctor/Nurse Who Knows Child Well and Familiar with History[A]	99%	92%	96%	95%		
Visited Personal Doctor/Nurse for Preventive Care in Past Year (Children who have a Personal Doctor/Nurse)	97%	97%	96%	97%		
Did Not Receive Specialist Care Needed (Past Year)[A,B]	4%	0%	3%	0%		
Used New Parent Programs for Child[B]	15%	12%	23%	12%		
Health Conditions						
Asthma	9%	10%	10%	6%		
Diabetes	0%	0%	2%	<1%		
Extremely Unsafe/Unsafe in Community/Neighborhood	--	1%	--	<1%		
Fruit Intake (2+ Servings/Day)[A,B]	86%	73%	82%	73%		
Vegetable Intake (3+ Servings/Day)[B]	32%	23%	31%	23%		
5+ Fruit/Vegetables per Day[A,B]	52%	36%	50%	40%		
Sugar Drink in Past Month						
Less Than One/Day, but More Than One/Week	--	44%	--	38%		
At Least One per Day	--	19%	--	15%		
Screen Time						
2 or 3 Hours/Day	--	38%	--	38%		
4 or More Hours/Day	--	23%	--	18%		
Sleeping Location when an Infant						
Crib or Bassinette	93%	92%	89%	94%		
In Bed with Adult	3%	1%	2%	3%		
Children 4 to 17 Years Old						
Physical Activity (60 Min./5 or More Days/Week)[A,B]	39%	64%	50%	63%		
Unhappy, Sad or Depressed in Past 6 Months (Always/Nearly Always)	4%	9%	5%	6%		
Experienced Bullying in Past Year	16%	25%	18%	24%		
Verbally Bullied[B]	13%	23%	13%	21%		
Physically Bullied[A]	1%	7%	4%	7%		
Cyber Bullied	0%	3%	<1%	3%		

[1]In 2015, survey included children 12 years old or younger. In 2018, survey included children 17 or younger.
[A]Winnebago County statistical change from 2015 to 2018. [B]Tri-County statistical change from 2015 to 2018.

Appendix B| Winnebago County Health Data Report: A summary of secondary data sources (2018) (Source #2)
The report is available at www.aurora.org/commresearch

Data Collection & Analysis: In 2018, the Center for Urban Population Health was enlisted to compile secondary data to supplement the community health survey and community member and stakeholder interviews. This report summarizes the demographic and health-related information for Winnebago County.

Publicly available data sources used for the Secondary Data Report

Source	Description
American Community Survey	*American Community Survey* provides access to data about the United States. The data comes from several censuses and surveys. The American Community Survey (ACS) is a nationwide survey designed to provide information of how communities are changing. ACS collects and produces population and housing information every year, and provides single and multi-year estimates. *Source: United States Department of Commerce, US Census Bureau*
County Health Rankings	Each year the overall health of almost every county in all 50 states is assessed and ranked using the latest publically available data. Ranking includes health outcomes (mortality and morbidity) and health factors (health behaviors, clinical care, social and economic factors and physical environment). *Source: Collaboration of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute*
Wisconsin Department of Health Services – Data & Statistics	All reportable communicable disease case counts, including sexually transmitted diseases (STD) and HIV incidences, are based on case reports for 2015 or later. Reports are available for Wisconsin statewide, the five DPH regions, and the 72 Wisconsin counties. *Source: Wisconsin Department of Health Services*
Wisconsin Interactive Statistics on Health (WISH)	WISH uses protected databases containing Wisconsin data from a variety of sources and provides information about health indicators (measure of health). Select topics include Behavioral Risk Factor Survey, birth counts, fertility, infant mortality, low birth weight, prenatal care, teen births, cancer, injury emergency department visits, injury hospitalizations, injury mortality, mortality and violent death. *Source: Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics*
Wisconsin Uniform Crime Reporting Data Dashboard Center	The dashboards were developed and are maintained by the Bureau of Justice Information and Analysis (BJIA) of the WI Department of Justice. *Source: Wisconsin Department of Justice*

Data for each indicator is presented by race, ethnicity and gender when the data is available. In some cases data is not presented by the system from which it was pulled due to internal confidentiality policies which specify that data will not be released when the number is less than five. In other cases, the data were available but the rates or percentages are not presented in this report. This is due to the indicator having small numbers in the numerator or denominator resulting in rates or percentages that were subject to large year to year fluctuations and, as such, would not have provided a meaningful representation of the data for the population subset. When applicable, *Healthy People 2020* objectives are presented for each indictor. The objectives were not included unless the indicator directly matched with a *Healthy People 2020* objective.

Partners & Contracts: This report was sponsored by Advocate Aurora Health. The report was prepared by the Center for Urban Population Health.

Appendix C | Winnebago County Health Needs Assessment: A summary of community member and stakeholder interviews (2018) (Source #3)

The report is available at www.aurora.org/commresearch

Data Collection and Analysis: A total of 50 stakeholder interviews representing 43 organizations were conducted in May 2018. The organizations were selected based on the following criteria:

- Provided a broad interest of the community and the health needs in Winnebago County,
- Comprised of leaders within the organization with knowledge or expertise relevant to the health needs of the community, health disparities or public health, and/or
- Served, represented, partnered or worked with members of the medically underserved, low income and/or minority populations

Key informant interviews were conducted with leaders with broad representation from public health, education and community organizations. Cumulatively, these organizations focus on a range of public health issues and represent the broad interests of community, including medically underserved, low-income and/or minority populations.

Summary of the organizations representing the broad interest of the community

Organization	Description of the organizations *The description is based on information provided on the organization's website, accessed September 27, 2018*
2-1-1	"A Free and confidential service that helps people across the U.S. and in many parts of Canada find the local resources they need."
ADRC in Outagamie County	"ADRC in Outagamie County offers adults, families, professionals, and the community a no cost, single point of contact for unbiased information; assistance/referral; options, benefit and long term care enrollment counseling; short term case management; Older Americans Act Services; plus health promotion programs."
African American Heritage, Inc.	"African Heritage, Inc. provides a support system and volunteer services to the Blacks and AHI members."
Appleton Downtown, Inc.	A Not-for-profit community coalition dedicated to an economically strong, safe, attractive and exciting downtown.
Calumet County – Public Health	"Calumet County Public Health promotes health and prevents illness and injury in partnership with our community."
Calumet County Economic Development	"We work to support the community economic development needs of businesses, entrepreneurs, and communities in Calumet County."
Casa Hispana	"Founded for the purpose of developing and implementing economic development initiatives that would positively contribute to the quality of life for Hispanics/Latinos in the Fox valley, we utilize various resources and tools that allow the organization to serve as a catalyst for change within the Latino community."
Catalpa Health	"We have a robust partnership program where we partner with several local agencies and resources specializing in various aspects of mental health and wellness for kids. When you call Catalpa Health, we'll help you navigate through your care options to ensure your child gets the care he needs, when he needs it."
Childcare Resource & Referral	"CCR&R is a community based non-profit agency offering services to parents, child care providers, employers and the community that improve the quality and accessibility of early childhood education and care."
Chilton Police Dept.	"As we work together, the men and women of the Chilton Police Department can assure you of the unwavering commitment of quality service that the citizens of Chilton deserve."
Chilton School District	"We, the Chilton Public School District, believe that preparing students to achieve their potential is our highest priority. In partnership, with all members of our community, we are committed to inspiring our students to be life-long learners and responsible, contributing

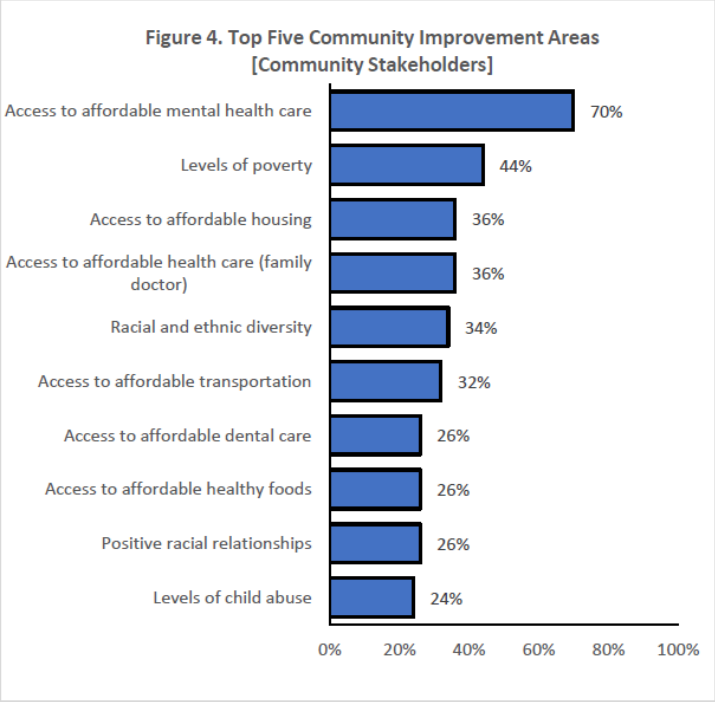
	members in a global society."
Community Development	
Community for Hope	"We are community members united for the purpose of promoting and supporting mental wellness and building awareness about suicide prevention, intervention and response, as well as grief support for surviving family members and friends."
ESTHER	"ESTHER is an interfaith social-justice organization. We are grassroots and non-profit, focusing our work in the Fox Valley region of Wisconsin."
Fit Oshkosh	"Fit Oshkosh, Inc. is a 501(c)(3) nonprofit organization located in Oshkosh, Wisconsin. Established July 2014. Our mission is to promote social transformation through Color-Brave conversations, education, advocacy, and research in order to achieve race equity and justice within our community."
Goodwill Industries Neighborhood Partners	"Neighborhood Partners, including its elder-focused component NeighborCARE, is a grassroots, asset-based approach to supporting communities at a neighborhood level where all people can work together to produce the quality of life they want and deserve."
Hmong American Partnership	"HAP is a non-profit organization focused on empowering the refugee and immigrant community by moving our clients out of poverty and towards social and financial prosperity."
Homeless Connections	"Ending homelessness by connecting individuals and families to resources that promote self-sufficiency and prevent future homeless episodes."
Menasha Board of Health	"The Menasha Health Department, in partnership with the community protects and promotes health and safety."
Menasha Police Dept.	"Our Mission is to be a model of modern police services built upon a strong partnership with the community using respect, creativity and technology to find solutions and improve the quality of life and safety for all."
Menasha Senior Center	"Our mission is to enhance the quality of life of older adults by providing educational, recreational, social, and wellness programs and to meet these needs as requested by the community."
New Holstein Chamber of Commerce	"Our mission is to promote a good business climate in and surrounding the City of New Holstein."
NEWMHC – Northeast Wisconsin Mental Health Connection	"Lead the collaboration of community stakeholders to create and continuously improve an exceptional mental health system of care."
Oshkosh Area School District	"The mission of the Oshkosh Area School District System is to create citizens who are critical, creative thinkers, responsible in their actions, and committed to learning for life by working together with families and communities."
Oshkosh Area United Way	"United Way fights for the health, education and financial stability of every person in our community."
Outagamie & Winnebago Early Intervention (Birth to Three)	"Early Intervention Services (EIS) is a program that provides services and supports to children from birth until age three with developmental delays and disabilities and their families who live in Winnebago County."
Outagamie County HHS	"The mission of the Outagamie County Department of Health & Human Services is to promote healthy, independent individuals."
Outagamie County PH	"Prevent disease and injury, promote wellness, and protect the health of the community."
Outagamie Sheriff's Office	"The mission of the Outagamie County Sheriff's Department is to enhance the quality of life in Outagamie County by working cooperatively with the public and within the framework of the U.S. Constitution to enforce the laws, preserve the peace, reduce fear and provide for a safe environment."

Rural Health Initiative	"We bring wellness services and information directly to you at your kitchen table. The Rural Health Initiative Inc. (RHI) is a 501(c)(3), non-profit program focused on the growing concerns and barriers related to the health and safety of today's farm families."
Samaritan Counseling	"We connect mind and spirit so individuals, families, organizations and communities thrive."
UW Oshkosh Head Start Program (Valeri Donnelly)	"UW Oshkosh Head Start works together with children, families, staff and communities to facilitate learning and support growth, empowering all partners in shaping their future. It provides an enriching and supportive atmosphere for all who are involved in the program."
UWO	"The mission of the University of Wisconsin System is to develop human resources, to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its campuses, and to serve and stimulate society by developing in students heightened intellectual, cultural, and humane sensitivities, scientific, professional and technological expertise, and a sense of purpose."
Winnebago County	"The mission of Winnebago County is to economically and efficiently provide and manage delivery systems for diverse programs and services to meet basic human needs."
YMCA	"To put Christian principles into practice through programs that build healthy spirit, mind and body for all."

The key informant interviews were conducted by members of the Fox Valley Community Health Improvement Coalition. The interviewers used a standard interview script that included the following elements:

1. Top five most important strengths in community
2. Top five community improvement areas
3. Top community health concerns
4. How could community health improve in the next few years

The report summarized the answers, including a list of issues which were ranked most frequently by respondents.



Partners and Contracts: This report was sponsored by the Fox Valley Community Health Improvement Coalition. The report was prepared by the JKV Research LLC.

Appendix D | Winnebago County Youth Risk Behavior Survey (2018) (Source #4)

The report is available at www.co.winnebago.wi.us/health/units/administration/communityhealth-data/youth-risk-behavior-survey-yrbs/2017-2018-yrbs

Data Collection & Analysis: During the 2017-2018 school year, the Winnebago County Youth Risk Behavior Survey (YRBS) was administered to 4,538 high school and 3,937 middle school students from the school districts of Menasha, Neenah, Omro, Oshkosh and Winneconne. The YRBS gathers student self-reported data on health behaviors, attitudes and perceptions, and protective factors. The behaviors monitored by the YRBS include traffic safety, weapons and violence, suicide, tobacco use, alcohol and other drug use, sexual behavior, diet, nutrition and exercise. These behaviors, in turn, result in the most significant causes of both mortality and morbidity during youth and adulthood.

The Winnebago County YRBS is conducted every two years using the online Wisconsin Department of Public Instruction (DPI) website system. The survey was the *2018 YRBS* questionnaire administered by the State of Wisconsin, in collaboration with the Centers for Disease Control and Prevention (CDC), with the federal reporting measures added. Survey procedures were designed to protect the privacy of students by allowing anonymous and voluntary participation. Local parent permission procedures were followed before administration, including informing parents that their child's participation was voluntary. The Cooperative Educational Service Agency 6 (CESA 6) compiled the data and created reports for each school district and the combined Winnebago County data.

Winnebago County Middle School Youth Risk Behavior Survey Trend Data Report

This research provides valuable behavioral data, lifestyle habits, and the prevalence of risk factors of Winnebago County middle school students. The following data are highlights of the comprehensive study. Please see the full report for more details. Participating school districts include Menasha Joint, Neenah Joint, Oshkosh Area and Winneconne Community School Districts.

	Winnebago County				Tri-County	
Demographic Variables	2012	2013	2016	2018	2016	2018
Grade						
6th Grade	34%	33%	33%	33%		
7th Grade	33%	35%	33%	33%		
8th Grade	33%	32%	33%	33%		
Gender						
Female	49%	50%	50%	49%		
Male	51%	50%	50%	51%		
Race						
Nonwhite	--	--	--	31%		
White	--	--	--	69%		
n=	4,229	4,161	3,945	3,937		

	Winnebago County				Tri-County	
Protective Assets	2012	2013	2016	2018	2016	2018
Teachers Care and Give Encouragement (Strongly Agree/Agree)	75%	72%	75%	75%		
Feel Like Belong to School (Strongly Agree/Agree)[A,B]	78%	74%	76%	73%		

	Winnebago County				Tri-County	
Safety in Vehicles	2012	2013	2016	2018	2016	2018
Wear Seat Belt when Passenger (Never/Rarely)[A]	5%	3%	3%	2%		
Wear Helmet when Biking (Biking Respondents Only) (Never/Rarely)[A,B]	63%	58%	57%	54%		
Wear Helmet when Blading/Skateboarding (Blading/Skateboarding Respondents Only) (Never/Rarely)[A]	72%	68%	64%	63%		
Passenger when Driver had been Drinking Alcohol (Lifetime)[A]	27%	23%	20%	20%		

	Winnebago County				Tri-County	
Personal Safety on School Property	2012	2013	2016	2018	2016	2018
Carry Weapon (Lifetime)[A]	5%	4%	3%	3%		
Did Not Attend School Because Felt Unsafe at School (Lifetime)[A,B]	11%	14%	12%	15%		
Did Not Attend School Because Felt Unsafe on Way to/from School (Lifetime)[A]	6%	7%	6%	7%		

	Winnebago County				Tri-County	
Harassment and Bullying	2012	2013	2016	2018	2016	2018
Bullied on School Property (Lifetime)[A]	56%	59%	53%	52%		
Electronically Bullied (Past Year)	22%	23%	20%	20%		

	Winnebago County				Tri-County	
Other Personal Safety Behaviors	2012	2013	2016	2018	2016	2018
Carried Weapon (Lifetime)[A,B]	26%	26%	32%	34%		
Physical Fight (Lifetime)[A]	46%	36%	34%	36%		
Fight Resulted in Injury Treated by Doctor/Nurse (Lifetime)	6%	6%	5%	6%		

	Winnebago County				Tri-County	
Mental Health	2012	2013	2016	2018	2016	2018
Felt Sad or Hopeless Almost Every Day for at Least 2 Weeks (Lifetime)[A]	25%	27%	27%	27%		
Seriously Considered Suicide (Lifetime)	20%	23%	20%	22%		
Made Plan How to Attempt Suicide (Lifetime)[A]	13%	15%	13%	15%		
Attempted Suicide (Lifetime)[A]	6%	7%	6%	7%		

[A]Winnebago County statistical change from 2012 to 2018. [B]Winnebago County statistical change from 2016 to 2018.
[C]Tri-County statistical change from 2016 to 2018.

General Health	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever had Asthma (Lifetime)[A]	20%	18%	18%	17%		
Currently have Asthma[A]	16%	14%	14%	14%		

Physical Health	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Describe Weight						
Very/Slightly Underweight	20%	19%	20%	22%		
About the Right Weight	52%	53%	53%	52%		
Very/Slightly Overweight	28%	28%	27%	26%		
Trying to Lose Weight[A]	43%	42%	41%	40%		
Increased Physical Activity to Lose Weight/Keep from Gaining Weight (Lifetime)	65%	66%	65%	64%		
Chosen Healthier Foods/Eaten Less Food or Less Calories to Lose Weight/Keep from Gaining Weight (Lifetime)[A]	59%	62%	61%	62%		
60 or More Minutes of Physical Activity (Yesterday)[A]	69%	62%	65%	63%		
1 or More Sports Teams (Past Year)	70%	69%	69%	69%		
2 or Fewer Hours of Screen Time on Average School Day	44%	42%	46%	46%		

Nutrition	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
1 or More Cans/Bottles of Soda (Yesterday)[A]	41%	38%	32%	33%		
Breakfast (Yesterday)[A,B]	72%	76%	75%	69%		

Human Growth and Development	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever Had Sex (Lifetime)[A,B]	7%	6%	5%	4%		
Had Sex Before Age 13 (Lifetime)[A]	5%	4%	4%	3%		
Two or More Sexual Partners (Lifetime)[A]	3%	2%	2%	2%		
Last Sexual Encounter						
Used a Condom	47%	36%	37%	46%		
Taught about AIDS or HIV Infection in School[A,B]	65%	64%	58%	55%		

Tobacco Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever Tried a Cigarette, Even 1 or 2 Puffs (Lifetime)[A]	13%	11%	9%	8%		
Ever Smoked Whole Cigarette (Lifetime)[A,B]	8%	6%	5%	3%		
Tried Whole Cigarette Before Age 13[A,B]	6%	5%	3%	2%		
Ever Smoked Cigarettes Daily (1 or More Cigarettes for 30 Days)[A]	2%	2%	1%	<1%		
Current Cigarette Smoker (Past Month)[A]	4%	2%	2%	2%		
11 or More Cigarettes on Days Smoked	8%	13%	4%	5%		
Source of Cigarettes						
Borrowed/Bummed Them from Someone	32%	18%	20%	16%		
Took Them from a Store or Family Member	22%	19%	19%	26%		
Smokeless Tobacco (Past Month)[A]	2%	1%	<1%	<1%		
Cigars, Cigarillos or Little Cigars (Past Month)[A,B]	2%	2%	2%	1%		
Perceived Tobacco Risk (Great/Moderate)	2012	2013	2016	2018		
One or More Packs of Cigarettes per Day[A,B]	89%	88%	87%	85%		
Disapproval if Respondent Smoked Tobacco (Very Wrong/Wrong)	2012	2013	2016	2018		
Parent Disapproval[A]	91%	92%	93%	94%		

[A]Winnebago County statistical change from 2012 to 2018. [B]Winnebago County statistical change from 2016 to 2018.
[C]Tri-County statistical change from 2016 to 2018.

Alcohol Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever Drank Alcohol (Lifetime)[A]	23%	21%	19%	20%		
Drank Alcohol Before Age 13[A]	19%	17%	15%	16%		
Drank Alcohol (Past Month)[A]	7%	5%	5%	4%		
Binged (5 or More Drinks on an Occasion; Past Month)[A]	2%	2%	1%	1%		
Perceived Alcohol Risk (Great/Moderate)	2012	2013	2016	2018		
One or Two Drinks Nearly Every Day	72%	73%	72%	71%		
Disapproval if Respondent Drank Alcohol at Least Twice						
A Month (Very Wrong/Wrong)	2012	2013	2016	2018		
Parent Disapproval[B]	84%	85%	85%	83%		

Marijuana Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever Tried Marijuana (Lifetime)[A]	8%	7%	6%	6%		
Tried Before Age 13[A]	6%	5%	4%	4%		
Past Month Use[A]	3%	2%	2%	2%		
Perceived Risk (Great/Moderate)	2012	2013	2016	2018		
Smoke Marijuana Once or Twice a Week[A,B]	85%	83%	81%	76%		
Disapproval if Respondent Smoked Marijuana (Very Wrong/Wrong)	2012	2013	2016	2018		
Parent Disapproval	93%	92%	92%	92%		

Other Drugs	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Ever Tried Inhalants (Lifetime)[A]	7%	6%	5%	4%		
Ever Misused Prescription Medication (Lifetime)	4%	3%	3%	3%		
Ever Misused Over-the-Counter (Lifetime)[A]	2%	2%	1%	1%		

Illegal Drugs on School Property	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018
Offered, Sold, or Given Illegal Drugs (Past Year)	4%	3%	3%	3%		

[A]Winnebago County statistical change from 2012 to 2018. [B]Winnebago County statistical change from 2016 to 2018.
[C]Tri-County statistical change from 2016 to 2018.

Winnebago County High School Youth Risk Behavior Survey Trend Data Report

This research provides valuable behavioral data, lifestyle habits, and the prevalence of risk factors of Winnebago County high school students. The following data are highlights of the comprehensive study. Please see the full report for more details. Participating school districts include Menasha Joint, Neenah Joint, Oshkosh Area and Winneconne Community School Districts.

	Winnebago County				Tri-County		*WI*	*US*
Demographic Variables	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Grade								
9th Grade	27%	27%	29%	27%			*25%*	*27%*
10th Grade	25%	26%	26%	27%			*25%*	*26%*
11th Grade	25%	25%	24%	25%			*25%*	*24%*
12th Grade	23%	21%	21%	20%			*24%*	*23%*
Gender								
Female	50%	51%	51%	51%			*49%*	*51%*
Male	50%	49%	49%	49%			*51%*	*49%*
Race								
Non-White	--	--	--	23%			*26%*	*47%*
White	--	--	--	77%			*74%*	*54%*
Sexual Orientation								
Heterosexual (Straight)	89%	88%	86%	84%			*86%*	*85%*
Gay or Lesbian	2%	2%	3%	3%			*2%*	*2%*
Bisexual	6%	6%	7%	8%			*8%*	*8%*
Not Sure	3%	4%	5%	5%			*4%*	*4%*
Transgender								
No	--	--	--	95%			*NA*	*NA*
Yes	--	--	--	2%			*2%*	*NA*
Not Sure	--	--	--	2%			*NA*	*NA*
Don't Know What Question is Asking	--	--	--	2%			*NA*	*NA*
Academic Grades								
Mostly A's	40%	41%	38%	44%			*NA*	*NA*
Mostly B's	36%	37%	38%	34%			*NA*	*NA*
Mostly C's	17%	17%	17%	16%			*NA*	*NA*
Mostly D's/Mostly F's	7%	6%	6%	6%			*NA*	*NA*
n=	5,646	5,237	5,097	4,538				

	Winnebago County				Tri-County		*WI*	*US*
Protective Assets	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Family Loves Me and Gives Me Support (Strongly Agree/Agree)	84%	85%	86%	85%			--	--
Teachers Care and Give Encouragement (Strongly Agree/Agree)[A]	63%	66%	67%	65%			--	--
Feel Like Belong to School (Strongly Agree/Agree)[B]	68%	68%	70%	67%			*71%*	--
At Least 1 Teacher/Other Adult at School that Respondent can Talk to if Had a Problem[A,B]	70%	70%	72%	74%			*72%*	--

	Winnebago County				Tri-County		*WI*	*US*
Safety in Vehicles	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Wear Seat Belt when Passenger (Never/Rarely)[A,B]	10%	8%	8%	5%			*6%*	*6%*
Passenger when Driver had been Drinking Alcohol (Past Month) [HP2020 Goal: 26%][A]	20%	16%	14%	15%			*17%*	*17%*
Drive After Drinking Alcohol (Drivers 16 and Older) (Past Month)[A,B]	11%	10%	8%	6%			*6%*	*6%*
Texted/Emailed while Driving (Drivers 16 and Older) (Past Month)[A]	--	56%	53%	51%			*46%*	*39%*

[A]Winnebago County statistical change from 2012 (or 2013 if there is no 2012 data) to 2018. [B]Winnebago County statistical change from 2016 to 2018. [C]Tri-County statistical change from 2016 to 2018.

Personal Safety on School Property	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Carry Weapon (Past Month) [HP2020 Goal: 5%][A]	5%	4%	4%	3%			*5%*	*4%*
Someone Threatened/Injured Respondent with Weapon (Past Year)[A,B]	7%	7%	7%	6%			*7%*	*6%*
Physical Fight (Past Year)[A,B]	9%	7%	8%	6%			*7%*	*9%*
Someone Tried to Hurt Respondent (Past Year)	17%	15%	16%	16%			*15%*	--
Did Not Attend School Because Felt Unsafe at School or on Way to/from School (Past Month)[A,B]	5%	5%	6%	8%			*6%*	*7%*
Feel Safe at School (Never/Rarely)[A]	11%	12%	13%	12%			*12%*	--
Violence is Problem at School							--	--
Strongly Agree/Agree[A,B]	27%	25%	26%	29%			--	--
Strongly Disagree/Disagree[A,B]	39%	39%	37%	33%			*52%*	--

Harassment and Bullying	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Harassment/Bullying is Problem at School								
Strongly Agree/Agree[A,B]	53%	52%	53%	50%			--	--
Strongly Disagree/Disagree[A]	21%	19%	18%	18%			*27%*	--
Bullied on School Property (Past Year) [HP2020 Goal: 18%][A,B]	30%	28%	28%	25%			*24%*	*19%*
Electronically Bullied (Past Year)[A]	22%	20%	20%	20%			*18%*	*15%*
Victim of Teasing/Name Calling because of Gender (Past Year)	--	--	--	9%			*8%*	--

Other Personal Safety Behaviors	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Carry Weapon (Past Month)[A]	13%	12%	13%	12%			--	*10%*
Physical Fight (Past Year) [HP2020 Goal: 28%][A]	22%	18%	17%	16%			*20%*	*24%*
Respondents who Dated in Past Year								
Physical Dating Violence[A,B]	8%	7%	6%	12%			*7%*	*8%*
Sexual Dating Violence	--	--	--	13%			*10%*	*7%*
Verbally/Physically Forced to Take Part in Sexual Activity (Lifetime)	11%	10%	11%	11%			--	--

Mental Health	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Self-Harm (Past Year)[B]	20%	22%	22%	20%			*17%*	--
Mental Health Not Good (Past Month)[B]	67%	65%	65%	68%			--	--
Significant Problems with Feeling Very Anxious, Nervous, Tense, Scared or Something Bad Going to Happen (Past Year)	--	--	--	45%			*40%*	--
When Feeling Sad, Empty, Hopeless, Angry, Anxious								
Get Help When Needed (Always/Most of the Time)	--	--	--	27%			*28%*	--
Who Respondent Talks to								
Parent or Other Adult Family Member	--	--	--	22%			*22%*	--
Friend	--	--	--	49%			--	--
Felt Sad or Hopeless Almost Every Day for at Least 2 Weeks (Past Year)[A]	24%	26%	29%	27%			*27%*	*32%*
Seriously Considered Suicide (Past Year)[A,B]	19%	19%	20%	16%			*16%*	*17%*
Made Plan How to Attempt Suicide (Past Year)	16%	16%	16%	14%			*15%*	*14%*
Attempted Suicide (Past Year)[A,B]	9%	9%	9%	7%			*8%*	*7%*
Suicide Attempt Resulted in Injury that Needed Treatment by Doctor or Nurse [HP2020 Goal: 2%][A,B]	3%	3%	3%	2%			*3%*	*2%*

[A]Winnebago County statistical change from 2012 (or 2013 if there is no 2012 data) to 2018. [B]Winnebago County statistical change from 2016 to 2018. [C]Tri-County statistical change from 2016 to 2018.

General Health	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Told have Asthma by Doctor or Nurse (Lifetime)[A,B]	--	23%	23%	20%			21%	23%
Saw Dentist (Past Year)	--	78%	79%	79%			79%	76%
General Health								
Excellent/Very Good[A,B]	59%	57%	57%	52%			55%	--
Good	30%	32%	31%	35%			--	--
Fair or Poor Health[A]	11%	11%	12%	13%			--	--

Physical Health	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Trying to Lose Weight	47%	46%	47%	47%			45%	47%
At Least One Day Physical Health Not Good[A]	65%	64%	63%	63%			--	--
Seven Days of 60 Minutes of Physical Activity (Past Week) [HP2020 Goal: 32%][B]	24%	24%	26%	24%			25%	26%
Attend PE Classes 5 Days in Average School Week [HP2020 Goal: 37%][A]	50%	50%	44%	45%			37%	30%
2 or Fewer Hours of Screen Time on Average School Day[A,B]	29%	26%	29%	21%			--	--
8 or More Hours of Sleep on Average School Night [HP2020 Goal: 33%][A]	31%	33%	27%	27%			26%	25%
Sleep at Home or Friend's/Relative's Home with Parents/Guardians at Night[A]	--	90%	91%	92%			--	--

Nutrition	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Fruit (2 or More Times/Day in Past Week)	37%	38%	36%	35%			*30%*	*31%*
Vegetables (3 or More Times/Day in Past Week)[A,B]	18%	9%	8%	13%			*14%*	*14%*
Met 2 Fruit/3 Vegetables Recommendation[A,B]	12%	7%	6%	10%			--	--
Soda (At Least One/Day in Past Week)[A]	24%	19%	18%	17%			*15%*	*19%*
High Caffeine Drink (At Least One/Day in Past Week)	--	--	11%	11%			*10%*	--
Breakfast (5 or More Times in Past Week)	54%	55%	53%	53%			--	--
Went Hungry because not Enough Food in Home (Always/Most of Time in Past Month)[B]	4%	4%	5%	4%			--	--

Human Growth and Development	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Had Sex (Lifetime)[A]	39%	33%	30%	31%			*34%*	*40%*
Had Sex Before Age 13[A]	4%	3%	3%	3%			*3%*	*3%*
Four or More Sexual Partners in Lifetime (All Respondents)[A]	11%	8%	6%	6%			*7%*	*10%*
Currently Sexually Active (Sex in Past 3 Months) (All Respondents)[A]	29%	23%	21%	21%			*25%*	*20%*
Last Sexual Encounter of Currently Sexually Active Respondents:								
Had Alcohol or Drugs Before[A]	24%	21%	19%	17%			*17%*	*19%*
Used a Condom	57%	58%	57%	55%			*63%*	*54%*
Partner at Least 3 Years Older than Respondent	--	--	--	10%			*9%*	--
No Method Used to Prevent Pregnancy[A]	12%	9%	8%	8%			*8%*	*14%*
With Whom Have Had Sexual Contact (All Respondents)								
Opposite Sex Only[A]	48%	42%	37%	37%			*45%*	*45%*
Same Sex Only	3%	2%	3%	2%			*3%*	*2%*
Both Sexes	5%	5%	4%	4%			*4%*	*5%*
No Sexual Contact[A]	45%	51%	56%	57%			*49%*	*48%*
Ever Told Have an STD (Lifetime)	--	4%	4%	4%			--	--
Taught about AIDS or HIV Infection in School (Lifetime)[A,B]	88%	90%	87%	83%			*81%*	--
Ever Talked to Parents/Other Adult Family Member about AIDS or HIV Infection (Lifetime)[B]	39%	41%	42%	38%			--	--

[A]Winnebago County statistical change from 2012 (2013) to 2018. [B]Winnebago County statistical change from 2016 to 2018.
[C]Tri-County statistical change from 2016 to 2018.

Tobacco Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Tried Cigarettes, Even 1 or 2 Puffs (Lifetime)[A]	37%	33%	28%	27%			*24%*	*29%*
Ever Smoked Whole Cigarette (Lifetime)[A,B]	29%	24%	21%	13%			--	--
Tried Whole Cigarette Before Age 13[1,A,B]	9%	8%	7%	4%			*8%*	*10%*
Ever Smoked Cigarettes Daily (1 or More Cigarettes for 30 Days)[A,B]	12%	10%	7%	5%			--	--
Current Cigarette Smoker (Past Month) [HP2020 Goal: 16%][A,B]	18%	15%	12%	9%			*8%*	*9%*
11 or More Cigarettes on Days Smoked[A]	11%	9%	7%	7%			*10%*	*10%*
Smoked Cigarettes on School Property (Past Month)[A,B]	6%	4%	3%	2%			--	--
Smokeless Tobacco (Past Month) [HP2020 Goal: 7%][A,B]	7%	6%	5%	4%			*6%*	*6%*
Cigars, Cigarillos or Little Cigars (Past Month) [HP2020 Goal: 8%][A,B]	14%	9%	8%	6%			*8%*	*8%*
Electronic Vapor Product Use (Past Month)[B]	--	--	21%	29%			*12%*	*13%*
Respondents Who Used Any Tobacco Product in Past 12 Months:								
Tried to Quit All Tobacco Products (Past Year)[2,A,B]	55%	55%	57%	42%			*38%*	*41%*
Perceived Tobacco Risk (Great/Moderate)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
One or More Packs of Cigarettes per Day[A,B]	89%	89%	87%	84%			--	--
Disapproval if Respondent Smokes Tobacco (Very Wrong/Wrong)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Parent Disapproval[A]	86%	93%	94%	93%			--	--
Friend Disapproval[A,B]	--	74%	78%	76%			--	--

Alcohol Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Drank Alcohol (Lifetime)[A]	60%	56%	51%	50%			*65%*	*60%*
Drank Alcohol Before Age 13[A]	19%	17%	16%	15%			*16%*	*16%*
Drank Alcohol (Past Month)[A]	36%	30%	28%	27%			*30%*	*30%*
Binged (Past Month)[3,A,B]	22%	17%	14%	12%			*16%*	*14%*
Perceived Alcohol Risk (Great/Moderate)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
5 or More Drinks Once or Twice a Week	--	74%	75%	74%			--	--
Disapproval if Respondent Had 1 or 2 Drinks of Alcohol Nearly Every Day (Very Wrong/Wrong)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Parent Disapproval[A,B]	--	89%	89%	87%			--	--
Friend Disapproval[A]	--	69%	72%	72%			--	--
Respondent Disapproval of People's Alcohol Use (Strongly Disapprove/Disapprove)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
5 or More Drinks in a Row Once or Twice Each Weekend[A]	45%	48%	48%	48%			--	--

--Not asked

[1]Wisconsin and US data is "even 1 or 2 puffs."

[2]In 2018, tobacco cessation was asked of all tobacco product users. In prior years, the question was asked of tobacco cigarette smokers only.

[3]In 2018, US binge drinking was defined as 4 or more drinks for females and 5 or more drinks for males to take into account metabolism differences. In all Winnebago County and Tri-County years, binge drinking was 5 or more drinks, regardless of gender.

[A]Winnebago County statistical change from 2012 (or 2013 if there is no 2012 data) to 2018. [B]Winnebago County statistical change from 2016 to 2018. [C]Tri-County statistical change from 2016 to 2018.

Marijuana Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Tried Marijuana (Lifetime)[A]	34%	31%	28%	27%			*30%*	*36%*
Tried Marijuana Before Age 13[A]	8%	7%	6%	5%			*5%*	*7%*
Past Month Use[A]	20%	18%	16%	16%			*16%*	*20%*
Perceived Risk (Great/Moderate)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Smoke Marijuana Once or Twice a Week[A,B]	58%	49%	49%	46%			--	--
Disapproval if Respondent Smoked Marijuana (Very Wrong/Wrong)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Parent Disapproval[B]	85%	87%	85%	84%			--	--
Friend Disapproval[A,B]	--	59%	59%	56%			--	--
Respondent Disapproval of People's Marijuana Use	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Strongly Dispprove/Disapprove[A,B]	51%	46%	44%	39%			--	--

Cocaine Use	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Used (Lifetime)[A]	7%	6%	5%	5%			*4%*	*5%*
Past Month Use[A,B]	4%	3%	3%	2%			--	--

Ever Used Other Drugs (Lifetime)	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Synthetic Marijuana[B]	--	--	7%	5%			--	*7%*
Inhalants[A]	10%	8%	7%	6%			*6%*	*6%*
Meth-Amphetamines[A]	5%	4%	3%	3%			--	*3%*
Ecstasy (MDMA)[A,B]	9%	7%	6%	5%			--	*4%*
Heroin[A,B]	5%	3%	3%	2%			--	*2%*

Prescription Drug Misuse	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Misused (Lifetime)[A,B]	21%	17%	16%	12%			--	--
Past Month Misuse[A]	--	9%	7%	6%			--	--
Perceived Risk if Not Prescribed to You	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Great or Moderate Risk	--	87%	86%	86%			--	--
Disapproval if Respondent Misused Prescription Drugs Not Prescribed to Them (Very Wrong/Wrong)	2012	2013	2016	2018	2016	2018	*2017*	*2017*
Parent Disapproval[B]	--	94%	94%	95%			--	--
Friend Disapproval[A]	--	83%	85%	86%			--	--

Over-the-Counter Medication Misuse	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Ever Misused (Lifetime)[A,B]	13%	10%	9%	7%			*6%*	--

Illegal Drugs on School Property	Winnebago County 2012	2013	2016	2018	Tri-County 2016	2018	*WI 2017*	*US 2017*
Attend School Under Influence of Alcohol or Other Illegal Drugs (Past Year)[A]	--	14%	11%	10%			*12%*	--
Offered, Sold, or Given Illegal Drugs (Past Year) [HP2020 Goal: 20%][A]	20%	18%	17%	15%			*18%*	*20%*

[A]Winnebago County statistical change from 2012 (or 2013 if there is no 2012 data) to 2018. [B]Winnebago County statistical change from 2016 to 2018. [C]Tri-County statistical change from 2016 to 2018.

Appendix E | Hanlon Method for Prioritizing Health Problems

In order to prioritize health issues, we recommend use of the Hanlon Method. Developed by J.J. Hanlon, the *Hanlon Method for Prioritizing Health Problems* is a well-respected technique which quantitatively and objectively ranks specific health problems based on the criteria of seriousness, magnitude, and effectiveness. Below is a description of this method. *Scales have been customized for Aurora's CHNA purposes.*

Step #1: Give each health problem a numerical rating on a scale of 0-10 for each of the three criteria shown in the columns.

Rating	Size of Health Problem (% of population) A	Seriousness of Health Problem B	Effectiveness of Interventions C
9 or 10	>50%	Very Serious	46% - 100% effective
7 or 8	40% - 49.9%	Relatively Serious	36% - 45% effective
5 or 6	30% - 39.9%	Serious	26% - 35% effective
3 or 4	20% - 29.9%	Moderately Serious	16% - 25% effective
1 or 2	10% - 19%	Relatively Not Serious	5% - 15% effective
0	<10%	Not Serious	<5% effective
Guiding considerations when ranking health issues against the three criteria	Size of the health problem should be based on data collected from the individual community	Does it require immediate attention? Is there public demand? What is the economic impact? What is the impact on quality of life? Is there a high hospitalization rate? Does it affect other health issues?	Determine upper and lower measures for effectiveness and rate health issues relative to those limits.

Step #2: Apply the 'PEARL' Test – Once health problems have been rated for all criteria, use the 'PEARL' Test to screen out health problems based on the following feasibility factors:

Propriety – Is a program for the health problem suitable?

Economics – Does it make economic sense to address the problem? Are there economic consequences if a problem is not carried out?

Acceptability – Will a community accept the program? Is it wanted?

Resources – Is funding available or potentially available for a program?

Legality – Do current laws allow program activities to be implemented?

Step #3: Calculate priority scores – Based on the three criteria rankings assigned to each health problem in Step 1 of the Hanlon Method, calculate the priority scores using the following formula:

D = [A + (2 x B)] x C

Where: D = Priority Score
A = Size of health problem ranking
B = Seriousness of health problem ranking
C = Effectiveness of intervention ranking

Step #4: Rank the health problems– Based on the priority scores calculated in Step 3 of the Hanlon Method, assign ranks to the health problems with the highest priority score receiving a rank of '1,' the next high priority score receiving a rank of '2,' and so on.

Aurora Medical Center in Oshkosh Hanlon Rankings of Health Problems					
Ranking	**Health Issue Based on CHNA Data**	**A**	**B**	**C**	**D**
1	**Mental health condition**	**3**	**9**	**9**	**189**
	Did not get recommended moderate/vigorous activity	**9**	**5**	**4**	
2	**Overweight**	**9**	**8**	**4**	**176**
3	**Binge drinking**	**4**	**8**	**4**	**80**
4	**Smoking**	**2**	**9**	**4**	**80**
5	**High blood cholesterol**	**3**	**6**	**5**	**75**
6	High blood pressure	4	6	4	64

Appendix F | Evaluation of Impact

Focus | Access

Intended Impact

- An increase in medical home capacity and utilization by underserved populations, low-income individuals who are uninsured and underinsured
- Medicaid-eligible, uninsured and underinsured individuals seeking primary care and all persons seeking mental health services in our emergency department (ED) will:
  - Understand the benefits of routine primary care services
  - Successfully transition to Aurora Health Care Medical Group (AHCMG) and Living Healthy Community Clinic (LHCC) providers for primary care
  - Receive appropriate referrals for Aurora Behavioral Health Services and LHCC
  - Obtain affordable health insurance coverage

Results

2016

- 460 non-emergent ED visits without a primary care physician (partial year)
- 119 patients referred from our hospital ED to AHCMG primary care provider or LHCC
- 1,023 uninsured patients screened for financial assistance/insurance eligibility
- 624 uninsured patients enrolled in financial assistance programs
- 38 uninsured patients enrolled in Marketplace
- 54 ED behavioral health screenings
- 25 telepsychiatric referrals
- 32 informational toolkits distributed

2017

- 1,740 non-emergent ED visits without a primary care physician
- 86 patients referred from our hospital ED to LHCC
- 64 patients seen by AHCMG family practice physician at LHCC
- 316 ED behavioral health assessments
- 100 individuals provided with tele-intake services in the ED
- 8 inpatient telepsychiatric consultations provided

Focus | Healthy weight – addressing overweight/obesity

Intended Impact

- Increase the percentage of the community with a healthy weight from 37% to 40% within 5 years (*Weight of the Fox Valley* or WOTFV goal)
- Participants in our community programs will realize lasting benefits of regular exercise and healthy eating
- Our pediatric patients achieve a reduction in body mass index (BMI) and live healthier lifestyles with their families
- Adults in our diabetes education program achieve permanent improvements in diet and exercise, contributing to glycemic control and weight loss and maintenance as appropriate
- Increased number of local employers adopt some level of worksite wellness programming to achieve and maintain a healthy weight

Results

2016

- Participated in the WOTFV Coalition initiatives:
  - Finalized metrics, geocoding methodology, memorandums of understanding and business agreements to combine geo coded BMI data among three health care systems to map our communities to identify specific areas where the WOTFV teams can focus efforts
  - 5 lectures delivered on Diabetes and Obesity emphasizing the importance of understanding and restricting carbohydrate consumption

2017

- Participated in the WOTFV Coalition initiatives:
  - submitted BMI geocoded data
  - promoted Weight of the Fox Valley Worksite Wellness Toolkit
  - promoted WOTFV Passport program, a stamping type effort getting as many people to become aware and actively use the bike trails and walking paths

Focus | Alcohol and substance use in our community

Intended Impact

- Decrease in drug overdose deaths in Winnebago County
- Increase in heroin and opioid treatment and harm-reduction efforts resulting from increased awareness in Winnebago County

Results

2016

- 24 drug overdose deaths
- 163 individuals screened for alcohol use in primary care
- 8 individuals provided brief interventions in primary care with 100% offered treatment

2017

- Implemented protocols on preventing opioid overdose and opioid use disorder and expanding access to medication-assisted treatment (MAT)
- Educated Aurora's Care Management Department on the above protocol
- 111 one-on-one internal education to primary care providers, pharmacists and pain management providers on the CDC Guidelines for Prescribing Opioids for Chronic Pain

Focus | Sexual assault and other violence

Intended Impact

- Awareness of, and access to, services and advocacy for those who have been sexually assaulted
- Increased community knowledge of available resources
- Increased awareness in the community about sexual assault and domestic violence

Results

2016

- Provided Aurora's Forensic Program services to:
  - 117 people related to sexual assault
  - 11 people related to domestic violence
  - 6 people related to strangulation
  - 3 people related to human trafficking
  - 19 people related to child abuse
  - 1 people related to elder abuse
  - 5 people related to any other forensic service referral
- 45 community education/prevention/outreach trainings with 1,009 attendees
- 7 referrals from physician offices and/or other community resources that received education
- 128 referrals to community resources
- 49 patients for which follow up connection is made
- 121 contacts with advocacy agencies established
- 8,059 scheduled on-call hours

2017

- Provided Aurora's Forensic Program services to:
  - 115 people related to sexual assault
  - 24 people related to domestic violence
  - 23 people related to strangulation
  - 1 people related to human trafficking
  - 22 people related to child abuse
- 75 community education/prevention/outreach trainings with 1,925 attendees
- 7 referrals from physician offices and/or other community resources that received education

Focus | Cancer

Intended Impact

- Increased public awareness of cancer prevention, diagnosis, and treatment
- Early detection of cancer diagnoses
- Increased survivorship plans of patients with selected cancers

Results

2016

- 2,334 breast cancer screenings provided with 130 referrals
- 86 lung cancer screenings provided with 20 referrals
- 11 skin cancer screenings provided with 6 referrals
- 525 individuals completed distress tool
- 58 individuals achieved survivorship goals
- 3 businesses engaged in promoting cancer screenings

2017

- 797 breast cancer screenings provided with 28 referrals
- 225 lung cancer screenings provided
- 470 individuals completed distress tool

- 167 individuals educated on various cancers

Focus | Hepatitis C*

2017 Results

- As part of the Oshkosh & Fond du Lac service area, 1,067 patients were tested for hepatitis C with 22 testing positive of which 10 had positive confirmatory tests resulting in 9 patients entering treatment*

**New initiative or activity in 2017*