# Winnebago County 2016 Community Health Assessment



Photo credit: Mark Hoffman, Milwaukee Journal Sentinel



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# **Executive Summary**

Dear Winnebago County Residents,

April 2016

One of the core functions of public health is to monitor and measure the health of the community served. For the Winnebago County Health Department (WCHD) that is all who live in the cities (Menasha has its own Health Department), towns, villages and unincorporated areas within Winnebago County. We measure health by performing a community health assessment. The assessment includes a comprehensive review of locally collected data supplemented by data from state and national sources, conducting interviews with members of the community and this document that shares the results of the assessment. We hope this document also proves valuable to our many community partners and funders. This document also contributes to the development of a Community Health Improvement Plan where we help the community see opportunity for engagement to help make Winnebago County a healthier place to be.

Conducting a community health assessment is a collaborative process. There is not one entity responsible for the health of a community but rather a complex network of organizations that provide healthcare and prevention services, businesses that provide insurance to their employees, local agencies who provide social services, businesses focused on making our community and residents healthier, schools, families, and individuals who make up our community. And the list goes on.

Health in the 21st century is a complicated system of organizations and agencies working on various aspects of the healthcare system. With the Affordable Care Act, more people have access to insurance, however healthcare costs continue to be a major expense for many. Chronic diseases are leading causes of hospitalizations and death yet infectious disease, such as flu, continue to threaten health.

The silver lining for health in today's world is many chronic diseases are preventable and many infectious diseases have vaccines to prevent individuals from becoming ill. Additionally, science and evidence-based practices guide health interventions to make sure we are using resources wisely. Health is impacted by many factors, not just illness. For public health, that means working with community partners on various initiatives including:

- Increasing access to fresh fruits and vegetables to improve nutrition
- Safe walking and biking opportunities to increase physical activity
- Limiting exposure to tobacco and outdoor air pollutants
- Reducing excessive alcohol consumption and drug use
- Increasing access to mental health services

Improving community health also means focusing on specific populations that face health disparities. Social disadvantages impact health. In order to level the playing field, we must prioritize vulnerable populations. Equalizing health opportunities will greatly improve community health.

The following report includes numerous health indicators. This data shows trends, where health advances are occurring as well what is getting worse. Armed with data, community input, community partners, and a commitment to improving the health of all residents in Winnebago County, it is my hope that this report will encourage more partnerships and collaborations of residents, businesses, governmental agencies, and non-profits to create opportunities to improve health through programs and policy that will impact where we work, live and play.

Sincerely,

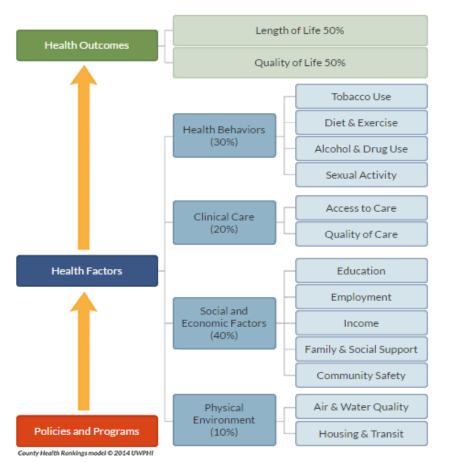


# Using Data to Improve Health

The purpose of the community health needs assessment is to help drive community health improvements. We know data is a key component to this process. Understanding the data is essential as well. Health statistics show a moment in time, trends show where we've been and perhaps where we are headed if no action is taken. Health disparities show how specific sub-populations are impacted. Different ethnicities or income groups may have different health status compared to the larger population. It is important to understand disparities to find solutions that work for different populations.

When examining community health outcomes, what we know today is that clinical care accounts for only 20% of the factors that determine length of life and quality of life. Social and economic factors, health behaviors, and the physical environment all impact health. Armed with this information, health interventions must focus on more than clini-

### **County Health Rankings Model**



cal care. Education, income, employment matter to health, more so than health behaviors. Where a person lives, matters to their health. Communities that prioritize health through policies and programs can alter their residents' health for better. Communities that prevent youth access to alcohol and tobacco, help children grow up drug free. Communities that build bike lanes and multi-use trails increase access to physical activities. Daycares, preschools, and k-12 schools that use locally grown fruits and vegetables in their meals, offer salad bars, and update nutritional policies play a significant role in health throughout a person's lifetime.

The community health assessment provides an opportunity to review multiple sources of data related to Winnebago County. This report can assist in identifying significant health needs. This report can help community partners align their efforts with

other local efforts or with state priorities. The community health assessment provides data on population level indicators related to many aspects of health. Armed with data, the community is able to prioritize strategies and activities that can improve health.

For more information on WCHD CHIP visit: https://www.co.winnebago.wi.us/health/units/administration/community-health-data

# **Community Health Assessment Process**

## Process and purpose of a shared Community Health Assessment

Residents of the greater Fox Valley are not limited by county lines and as such, leaders involved in community assessment and planning want to reflect how residents live, work and utilize healthcare and community services. For this reason, as well as a commitment to fiscal responsibility, the decision was made to combine efforts and work together on community assessment and improvement planning.

In 2015, the Fox Valley Community Health Improvement Coalition formed to streamline the process for conducting a community health assessment. As our communities cross county and municipal boundaries, we all share the same data. In an effort to be good stewards of limited community resources, we formed the coalition with the goal of creating a strong partnership dedicated to gathering and sharing community level data. The process of collecting data and working together are recommended steps of the Wisconsin Way Action Cycle, a model practice using state and national models applied to WI.

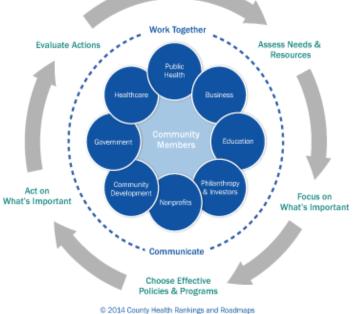
The Fox Valley Community Health Improvement Coalition includes:

- Affinity Healthy System
- Aurora Health Care,
- Calumet County Health Department
- Children's Hospital of Wisconsin Fox Valley
- City of Appleton Health Department
- City of Menasha Health Department
- Outagamie County Health Department
- ThedaCare
- Winnebago County Health Department

As this is the first year actively collaborating, one of the critical components for success is timelines for each organization. Hospital systems are required to complete a community health assessment every three years while local public health departments are on a five year cycle, independent of one another. To address this, organizations agreed to collect data collaboratively, sharing costs and sharing results. Each organization is responsible for submitting their own reports.

Moving forward, the plan is to create a report that all partner organizations can use and/or edit. Sharing this resource will allow for flexibility for organizational requirements while creating uniformity when it comes to data sets.





University of Wisconsin Population Health Institute, 2012

# Community Health Assessment Process: Data Collection

## **Primary Data**

Primary data can be both quantitative and qualitative. It is collected through various means including surveys, listening sessions, interviews and observations. Primary data is important to capture the community's perspective and to identify assets and resources needed to address community priorities. In spring 2016, re:TH!NK, Winnebago's Healthy Living Partnership, or the community engagement arm of the health department, organized a series of eight community conversations to ask questions and listen to residents discuss various aspects of health including nutrition, physical activity, AODA, and mental health. Conversations were held during the afternoon and evening in various locations throughout the county.

Using aspects of MAPP's Community Themes and Strengths Assessment along with the Forces of Change Assessment, we are able to gather qualitative information on community members' perception of the health of the community. Examples of Community Conversation questions:

- What has changed for the better and what has gotten worse over the past few years.
- What are the worries about the future, what can be done to improve our community in the next few years?

Additionally, during re:TH!NK's fifth annual Legislative Breakfast, twenty-three locally elected officials were asked the same questions and to share their unique perspectives on the current status of health in the community. re:TH!NK staff also asked the questions to neighborhood residents participating in a mobile food pantry at the Boys and Girls Club in Oshkosh. re:TH!NK staff also held a listening session at the Oshkosh Senior Center to ask the same questions to an older population.

The primary data collected on behalf of re:TH!NK and the Fox Valley Community Health Improvement Coalition includes:

- Community Conversations, 2016
- Behavior Risk Factor Surveillance Survey (BRFSS), 2015
- Key Informant Interviews, 2015
- Vulnerable Population Survey, 2015

## Secondary Data

Secondary data are data collected by another entity or for another purpose. This data is often analyzed and transformed into indicators which can be used to compare rates or trends of health outcomes. A good example of secondary data are County Health Rankings. Secondary data used in this report includes:

- Youth Risk Behavior Survey (YRBS)
- County Health Rankings
- Disparity Report (WI State Health Plan)
- Core Data Set
- Healthiest WI 2020 (WI State Health Plan)
- WI Interactive Statistics on Health (WISH)

• Life Study

• Public Health Profiles

• Healthy People 2020

# **Community Health Assessment Process**

#### What Makes A Community Healthy

While it is often health outcomes that capture our attention and motivate efforts for change, it is important to focus efforts on all of the factors that influence or drive those outcomes. That is where the greatest opportunity lies for real change and why we include data related to how we live and health behaviors.



## **Effective Policies and Systems Aligned for Improved Health**

Wisconsin Guidebook v2.0: February 2015 www.wicommunityhealth.org Wisconsin Community Health Improvement Plans and Processes (CHIPP) Infrastructure Improvement Project 10

# Demographics of 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 has many academic centers including the University of Wisconsin-Oshkosh, University of Wisconsin - Fox Valley and the Fox Valley Technical College.

### Winnebago County includes urban, suburban and rural areas

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

Current population of Winnebago County is 169,546 (2015)

## Winnebago County Population by Age and Gender, 2014

Age Group	Males	Females	Total	Percent Change from 2010
0-17	18,581	18,089	36,670	1%
18-44	31,960	29,273	61,233	-3%
45-64	23,308	22,619	45,927	1%
65+	10,959	13,960	24,919	12%
Total	84,808	83,941	168,749	1%

Source: Office of Health Informatics, Division of Public Health, WI Department of Health Services

Winnebago County is primarily white, higher than the state average. Hispanic/Latino residents comprise the second largest ethnic group, followed by Asian residents.

Racial Ethnic Group	Winnebago	WI
White, non-Hispanic/Latino	93.1%	88.1%
Black	1.7%	6.5%
Asian	2.3%	2.5%
American Indian and Alaska Native	0.6%	1.1%
Persons reporting two or more races	1.8%	1.7%
Hispanic/Latino	3.6%	6.3%

Source: US Census



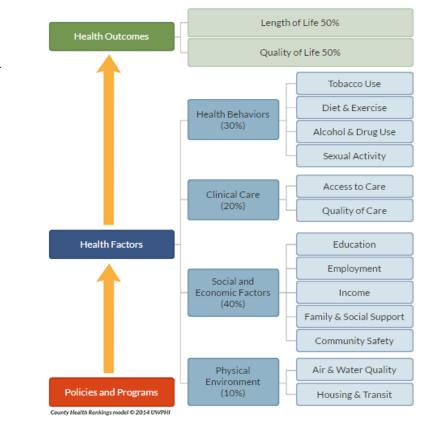


# **Health Focus Areas**

The community health assessment is organized on the County Health Rankings Model and the Core Data Set. The core data set was created for the purpose of the community health assessment to help communities identify areas they want to address by providing local data. Quality of Life indicators are listed first, followed by health behaviors, access to care, social and economical factors and the physical environment. There is also cross over with Healthiest Wisconsin 2020, the state health plan. Healthiest WI 2020 identified 12 focus areas that "would offer the greatest improvements in lifelong health, eliminate health disparities and achieve more equal access to conditions which people can be heathy." Healthiest Wisconsin 2020

### Healthiest WI 2020 Focus Areas

- 1. Alcohol and Drug Use
- 2. Chronic Disease Prevention and Management
- 3. Communicable Disease
- 4. Environmental and Occupational Health
- 5. Healthy Growth and Development
- 6. Injury and Violence Prevention
- 7. Mental Health
- 8. Nutrition and Healthy Foods
- 9. Oral Health
- 10. Physical Activity
- 11. Reproductive and Sexual Health
- 12. Tobacco Use and Exposure



#### **Key Informant Interviews**

Thirty-six individual key informant interviews were conducted between August and September 2015. Each key informant was asked about gaps and unmet needs in their community, barriers and challenges to addressing these needs and priorities in high demand. They were asked to name the top 3 health issues from the Healthiest WI 2020 focus areas.

Key informants included leaders and local experts representing education, health services, public health, support organizations, churches, police and fire departments, businesses, government and non-profit organizations. These key informants focus on a range of public health issues and represent the broad interest of the community served, including medically underserved, low income and minority populations.

# **Health Focus Areas**

Top 5 Health Issues Key Informant Interviews (Winnebago County)	Top 5 Health State Health Plan Improvement Priorities (Wisconsin)
1. Mental Health	1.Alcohol Abuse
2. Alcohol and Other Drug Use	2. Nutrition and Physical Activity
3. Nutrition	3. Opioid Abuse
4. Physical Activity	4. Suicide
5. Healthy Growth and Development	5. Tobacco

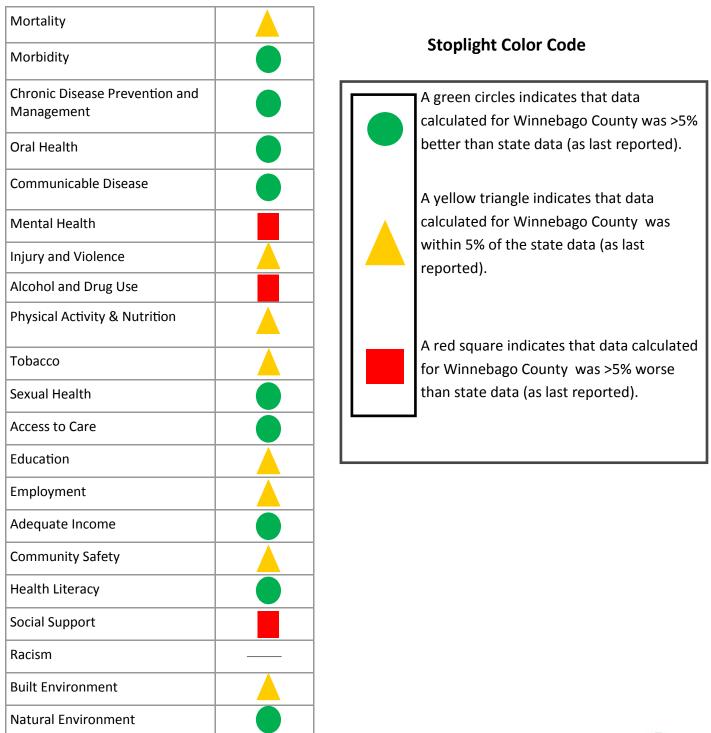
For the state health improvement priorities, there will also be an overall focus on Adverse Childhood Experiences (ACEs), trauma, and resilience, with both overall strategies and strategies tied to the priorities.

## Community priorities identified by the 2016 Fox Cities Life Study

Theme: Poverty	Increase in Wisconsin Works (W-2) program participants
	<ul> <li>Increase in the percentage of the population receiving food stamps</li> <li>Increase in working poor, who may be marginally above the poverty threshold, but are susceptible to food insecurity</li> <li>Increase in median gross rent in the Fox Cities' counties</li> </ul>
	Slow growth in household income
<u>Theme: Youth</u> <u>Health</u>	Decrease in alcohol consumption and binge drinking among high school students be- tween 2009-2015
	• Attempted suicide and committed suicide rates higher than state and national rates
<u>Theme: Student</u> <u>Performance</u>	• Above the state average in science, reading and math proficiency despite growing eco- nomic challenges as measured by free and reduced lunch
	Gap between economically disadvantaged students
<u>Theme: Youth</u> <u>Safety</u>	• 27% of high schoolers face bullying at school and 18% have experienced electronic bullying. Both rates are higher than the state and national averages.
	• While child abuse and neglect rates decreased, they exceed the state average in Out- agamie and Winnebago County.

# Key Findings from the Data

From the various reports on health indicators and outcomes, surveys and questionnaires, state and national level data is Winnebago County has some clear focus areas to improve the health of the residents and the community. Below is a stoplight color code that represents the majority of the results in the category.





# **Quality of Life: Mortality**

### Why this Matters:

Premature death can provide a unique and comprehensive look at overall health status. To understand mortality in a community, analyzing leading cause of death as well as years of potential life lost is essential.

### **Key Measures**

Years of potential life lost: Calculated by subtracting the age of death from the 75 year benchmark. For example a person dying at age 50 would contribute 25 years of life lost.

Mortality rates: calculated by the number of deaths per 100,000 people in a given population over a period of time. Sometimes they are "age-adjusted" to help compensate for whether a given population might be older or younger than average. Higher mortality rates tend to indicate that people are not living as long and are not as healthy.

Infant mortality: Defined as the death of an infant prior to his or her first birthday, this rate is an indicator often used to measure the health and well being of a population. High infant mortality rates are often a sign of poverty, violence, chronic stress, and a number of other issues that greatly contribute to a child not making it to his or her first birthday.

Local and State Data

Length of Life (Mortality): Death rate per 1,000 population (2013)

Winnebago County: 8.4 Wisconsin: 8.7



Years of potential life lost (YPLL)\* per 100,000 population (2011-2013)

Winnebago County: 5768 Wisconsin: 6214 Health People 2020 Target: 5317



Infant mortality rate per 1,000 live births

Winnebago County: 7.7 Wisconsin: 5.7 Health People 2020 Target: 6.0



Leading causes of death per 100, 000 population (2013)

Winnebago County	Rate	Wisconsin	Rate
1. Cancers	190.5	1. Cancers	198.85
2. Diseases of the Heart	165.5	2. Diseases of the Heart	197.35
3. Chronic Lower Respiratory Disease	54.6	3. Unintentional Acci- dents	51.07
4. Cerebrovascular Disease	42.13	4. Chronic Lower Res- piratory Disease	48.6
5. Unintentional Accidents	38.57	5. Cerebrovascular Disease	44.02

Sources: Healthiest Wisconsin 2020; Healthy People 2020 , Gift & Atchison, 1995

Sources: CHR, Behavioral Risk Factor Surveillance System (BRFSS), WISH, Wisconsin Department of Health Services (DHS), National Vital Statistics System



# **Quality of Life: Morbidity**

### Why this Matters:

Morbidity has been defined as any departure, subjective or objective from a state of physiological or psychological well-being. In practice, morbidity encompasses disease, injury, and disability, and helps to understand measures of overall health in a community.

**Key Measures:** 

Self-reported health status: Individuals reporting health as fair or poor (as opposed to good or excellent) provides an estimate of the health related quality of life. Feeling physically unhealthy can lead to reduced ability to perform normal activities such as work, recreational activities and household tasks.

Poor physical health days: This measure can help understand quality of life. Self-reported poor physical health days may be the result of chronic illness or injury.

Low birth weigh: Low birth weight infants are at high risk for health problems such as respiratory distress syndrome. This indicator can highlight the existence of health disparities.

Preventable hospitalizations: Understanding the burden on local health care systems and the community for preventable conditions where timely and effective outpatient care could have reduced the likelihood of hospitalization.

### Local and State Data

Percent of adults reporting poor or fair health (2006-2012)

Winnebago County: 9.0% Wisconsin: 12.0% National Benchmark: 10.0%



Average number of physically unhealthy days reported in the past 30 days (age-adjusted) (2006-2012)

Winnebago County: 2.8 Wisconsin: 3.2 National Benchmark: 2.5



Average number of mentally unhealthy days reported in adults in the past 30 days (age-adjusted)

(2006-2012)

Winnebago County: 3.4 Wisconsin: 3.0 National Benchmark: 2.3



Percent of birth weights less than 2,500 grams (about 5.5 pounds) (2014)

Winnebago County: 7.7% Wisconsin: 7.3%



Percent of birth weights less than 2,500 grams (about 5.5 pounds) for WIC clients (Quarterly reports April-June 2016)

Winnebago County: 8.1% Neenah: 11.1% Oshkosh: 6.1%

# **Quality of Life: Chronic Disease Prevention & Management**

#### Why this Matters:

Chronic diseases, such as heart disease, stroke, cancer, diabetes, and asthma, may be prevented through a healthy diet, physical activity, eliminating tobacco use and substance abuse. Chronic disease are vey costly. Eighty-four percent of health care spending is generated by the 50% of the population who have one or more chronic diseases (2006). Effective management can prevent more serious complications and is a measure of the quality of the outpatient health care system.

Coronary heart disease is the leading cause of death in the United States. Modifiable risk factors include high blood pressure, high cholesterol, cigarette smoking, diabetes, poor diet & physical activity, overweight & obesity.

Cancer is the 2nd leading cause of death in the US. Modifiable risk factors include us of tobacco, physical activity and nutrition, obesity, UV light exposure. Early screening and vaccination can also reduce the risk.

Diabetes is the 7th leading cause of death in the US (2013). It affects 29.1 million people in U.S (2012).

Asthma affects more than 40 million people in the US (2011). It can be aggravated by air pollution and certain indoor allergens.

Sources: National Diabetes Statistics Report, 2014 (CDC); FastStats (CDC); Economic Benefits of Preventing Disease (National Prevention Strategy); Centers for Disease Control and Prevention; Healthiest Wisconsin 2020; Healthy People 2020

### Local and State Data

Percent of Adults age 20+ with diagnosed diabetes (2015)

Winnebago County: 9.3% Wisconsin: 9.0%

Cancer incidence per 100,000 population (age-adjusted) (2008 - 2012)

> Winnebago County: 493.2 Wisconsin: 469.5

Coronary heart disease hospitalization rate per 1,000 population (2013)

> Winnebago County: 2.5 Wisconsin: 3.0



Cerebrovascular disease hospitalization rate per 1,000 population (2013)

> Winnebago County: 2.1 Wisconsin: 2.4



Percent of youth ever told by a provider that they had asthma

and still have asthma (2015)

Winnebago County: 16% Wisconsin: 15%



Percent of adults age 50+ who ever had a sigmoidoscopy or colonoscopy (2015)

> Winnebago County: 83% Wisconsin: 76%



Percent of diabetic Medicare enrollees that received HbA1c

screening in the past year (2014-2015)

Winnebago County: 94% Wisconsin: 90% National Benchmark: 90%



Percent of female Medicare enrollees age 67-69 that received mammography screening in the past 2 years (2012)

> Winnebago County: 74.6% Wisconsin: 70.2% National Benchmark: 70.7%



Percent of adults who have ever had cholesterol checked and were told it was high (2015) Winnebago County: 31%

Sources: CHR, BRFSS, WISH, WI DHS, YRBS

Wisconsin: 36%

# **Quality of Life: Oral Health**

### Why this Matters:

Proper oral health improves the ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions. Good oral health can prevent mouth pain, tooth decay, tooth loss, oral and throat cancer, birth defects, and oral disease of the mouth. Proper oral health care can also prevent other diseases through early detection of diseases that start with oral symptoms but that can affect health in other parts of the body.

Oral health and nutrition have a complex relationship. Diseases that affect a person's mouth impact individual's ability to eat and their nutrition status. Likewise, nutrition and diet can affect the development and health of the mouth and the progression of oral diseases.

Oral health and appearance contributes to general health and wellness, self– esteem, and quality of life. People who are more likely to have poor oral health include those with disabilities, other health conditions, and lower levels of education and income.

Barriers to adequate oral health care include a lack of dental insurance (public or private) and low reimbursement for dental services.

Over the past 50 years there has been a significant improvement in oral health in the US. This is mostly due to effective prevention and treatment efforts, especially community water fluoridation.

### Local and State Data

Percent of population on public water supplies with fluoride content at 0.7 PPM\* or greater (2012)

Winnebago County: 94.3% Wisconsin: 89.4%



\*0.7 PPM (parts per million) is the recommended optimal level of fluoridation for community water systems

Percent of third grade children with untreated decay (2008)

Northeast Region\*: 17.9% Wisconsin: 20.1% Healthy People 2020 Target: 20%



\*Northeast Region: Includes Public Health Departments in Brown, Calumet, Door, Fond du Lac, Green Lake, Kewaunee, Manitowoc, Marinette, Marquette, Menominee, Oconto, Outagamie, Shawano, Sheboygan, Waupaca, Waushara and Winnebago counties

# **Quality of Life: Communicable Disease**

### Why this Matters:

Communicable diseases includes food-borne and water -borne, respiratory, vaccine-preventable, and sexually transmitted diseases. Prompt identification and control can reduce illness, death, health care costs and absenteeism.

Food-borne illness causes millions of illnesses in the United States every years. Children under the age od 4 have the highest incidence rate. Adults over the age of 50 are at highest risk of serious complications.

Viral hepatitis, influenza and tuberculosis are among the leading causes of illness and death in the US. Respiratory infections (including influenza & pneumonia) are the 8<sup>th</sup> leading cause of death in the US (2013).

Each year, 42,000 adults and 300 children die of vaccine-preventable diseases in the US.

Each birth cohort vaccinated with the routine schedule of childhood vaccines saves 33,000 lives, prevents 14 million cases of disease, and reduces direct health care costs by \$9.9 billion.

### Local and State Data

Percent of population age 65+ who had a flu shot (2015 flu season).

Winnebago County: 56% Wisconsin: 65.7%



Percent of children who received the recommended doses of vaccines by age 2 (2015).

Winnebago County: 79% Wisconsin: 70.52% (2014) Healthy People 2020 Target: 80%



Hepatitis C incidence per 100,000 population (2015).

Winnebago County: 67.83 Wisconsin: 61.49



Lyme disease incidence per 100,000 population (2015).

Winnebago County: 5.90 Wisconsin: 28.12



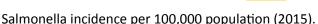
Ehrlich/Anaplasmosis (tickborne disease) incidence per 100,000 population (2015).

Winnebago County: 6.5 Wisconsin: 10.0



Pertussis (whooping cough) incidence per 100,000 population (2015).

> Winnebago County: 11.21 Wisconsin: 11.67



Winnebago County: 13.57 Wisconsin: 16.63 Healthy People 2020 Target: 11.4

Tuberculosis incidence per 100,000 population (2015).



Incidence = number of cases/100,000 population.

Winnebago County: 1.77

Wisconsin: 1.10

Sources: Healthiest Wisconsin 2020; Healthy People 2020; Centers for Disease Control and Prevention

Sources: Reports of Communicable Disease in Winnebago County - January 2016

# **Quality of Life: Mental Health**

### Why this Matters:

Mental health can be defined as a state of successful mental function, resulting in productive activities, fulfilling relationships, ability to adapt and cope with challenges. Mental health is essential to personal well-being, relationships, and the ability to contribute to society

Mental illness is the most common cause of disability in the United States. 13 million adults have seriously debilitating mental illness each year in the US. Approximately 20% of the population experiences a mental health problem during any given year.

Suicide is a major preventable public health problem, and is the 10<sup>th</sup> leading cause of death overall in the US with over 40,000 deaths per year (2013). There are an estimated 8-25 attempts for every suicide death.

Mental health issues are associated with increased rates of risk factors, such as smoking, physical inactivity, obesity, and substance abuse. These physical health problems can in turn lead to chronic disease, injury, and disability.

Sources: County Health Rankings (2014); Healthiest Wisconsin 2020; Healthy People 2020; Suicide Voices of Awareness (2014); Centers for Disease Control and Prevention

## Local and State Data

Average number of mentally unhealthy days reported in the past 30 days (age-adjusted) (2005-2011)

Winnebago County: 3.4 Wisconsin: 3.0 National Benchmark: 2.3

Self-inflicted hospitalization rate per 100,000 population (2010-2012)

Winnebago County: 132 Wisconsin: 95



Percentage of youth who harmed themselves on purpose, such as by cutting or burning, but did not want to die (2015/16)

Winnebago County: 22.2% Wisconsin: 17.3% (2014)



Percent of youth who seriously considered attempting suicide during the 12 months before the survey (2015/16)

Winnebago County: 19.4% Wisconsin: 13.2% (2014)



Percent of youth who made a plan about how they would attempt suicide during the 12 months before the survey (2015/16)

Winnebago County: 15.8% Wisconsin: 12.1% (2014)



Percent of youth who attempted suicide one or more times during the 12 months before the survey (2015/16)

Winnebago County: 13.8% Wisconsin: 6.0% (2014)



Suicide rate per 100,000 population (2014)

		-
	Winnebago Co	Wisconsin
All ages:	8.9	13.1
17 and under:	8.2	2.5
18-24:	10.4	16.6
25-44:	9.5	16.6
45-64:	8.7	17.5
65-74:	0	14.1
75+:	17.2	11.8

# Quality of Life: Injury and Violence

### Why this Matters:

Injuries are the leading cause of death in ages 1-44 in the US (2013), with 59% of all deaths in that age group due to injuries. Injuries include unintentional injuries related to areas such as motor vehicle accidents, poisoning, falls, and set belt use. Injuries can also be intentional acts of violence like homicide or assault.

Injury is a leading cause of disability in all ages, genders, races, ethnicities, and socio- economic status. Many think of injuries as "accidents" or "acts of fate" but most are predictable and preventable.

The burden of falls in Wisconsin:

- Falls have surpassed motor vehicle crashes as the most common cause of injury-related death.
- The vast majority of fall-related deaths (87%) and inpatient hospitalizations (70%) involve people age 65 and older.
- Hospitalizations and emergency department visits due to falls result in \$800 million in hospital charges each year.
- Over 70% of the costs for fall-related hospitalizations and emergency department visits are paid by Medicare and Medicaid.

### Local and State Data

Percent of youth who rarely or never wore a seat belt when riding in a car driven by someone else (2014) Winnebago County: 7.9%

Wisconsin: 8.3%

Ranked causes of hospitalizations for injuries (ageadjusted per 100,00 population) (2007-2009)

	Winnebago County	Wisconsin
Falls	335	441
Self-Harm	152	98
Motor Vehicle Crash (MVC)	59	78
Poisoning	28	47
Non-Traffic Transportation	24	27

Injury deaths due to falls for adults age 65+ per 100,000 population (2014)

> Winnebago County: 124.4 Wisconsin: 124.2



Sources: The Burden of Falls in Wisconsin (2010); Healthy People 2020; County Health Rankings (2014); Centers for Disease Control and Prevention

# Health Behaviors: Alcohol and Drug Use

#### Why this Matters:

An estimated 22 million people per year in the U.S. have drug and alcohol problems. Ninety-five percent (95%) of them are unaware of their problem.

Approximately 88,000 deaths annually in the U.S. are attributed to excessive drinking (2006-2010). It is a leading lifestyle-related cause of death. It is the 3rd leading lifestyle-related cause of death. 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge and heavy drinkers account for most episodes of alcohol-impaired driving

Wisconsin's rates for various measures of alcohol use and abuse are among the highest if not the highest in the nation.

Substance abuse has a major impact on individuals, families and communities. It can lease to costly physical, mental and public health problems including:

- Teenage pregnancy
- HIV/AIDS and other STDs
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide

### Local and State Data

Percent of the adult population that reports binge drinking\* (2014)

Winnebago County: 20.8%

National Benchmark: 7%

Wisconsin: 22.1%



\*Binge drinking: Consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days.

Rate of alcohol-related hospitalizations per 1,000 population (2012)

Winnebago County: 2.7 Wisconsin: 2.0

Proportion of driving deaths with alcohol involvement (2009-2013)

Winnebago County: 47% Wisconsin: 39% National 14%



Percent of adults age 18+ who reported driving after having too much alcohol to drink (2015)

Winnebago County: 5% Wisconsin: 4%



Number of arrests for drug possession: Winnebago County 2011: 948 (Adult:810, Juvenile: 138) 2012: 916 (Adult: 780, Juvenile: 136)

Percent of youth who had at least one drink of alcohol on one or more

of the past 30 days (2015/16)

Winnebago County: 27.6% Wisconsin: 32.7% (2014)



Percent of youth who had their first drink of alcohol (other than a few sips) before age 13 (2015/16)

Winnebago County: 15.8% Wisconsin: 14.6% (2014)

Percent of youth who reported driving after drinking alcohol (2015/16)

Winnebago County: 5.7% Wisconsin: 8.9% (2014)



Percent of youth who reported riding in a car or other vehicle driven by someone who had been drinking alcohol (2015/16)

Winnebago County: 14.3% Wisconsin: 20.6% (2014)



Sources: BRFSS, CHR, NHTSA-FAR, WI DHS, WI Department of Justice Office of Justice Assistance , YRBS

Sources: Centers for Disease Control and Prevention; Healthiest Wisconsin 2020; Healthy People 2020, Regier et al., 1990

# Health Behaviors: Physical Activity & Nutrition

### Why this Matters:

More than 80% of adults in the United Stats do not meet the guidelines for both aerobic and musclestrengthening activities. This is true for adolescents as well.

Regular physical activity in adults can lower the risk of early death, coronary heard disease, stroke, high blood pressure, type 2 diabetes, breast and colon cancer, falls, and depression. Physical activity in children and adolescents can improve bone health, improve cardio-respiratory & muscular fitness, decrease levels of body fat, and reduced symptoms of depression.

A healthy diet reduces risk of a number of chronic diseases, some cancers, oral disease, malnutrition, anemia and others risk factors, diseases and illnesses. At a healthy weight, one is less likely to develop chronic diseases and die at an earlier age.

Good nutrition in children is important to healthy growth and development and to maintain appropriate weight.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger. When families have ready-access to sufficient and nutritious foods, they are food secure. Ten percent of Wisconsin households are food insecure.

Annual health care costs are \$1,400 higher for people who are obese than for those are not.

### Local and State Data

Percent of adults age 20+ with BMI greater than 30\*

Winnebago County: 31% (2015) Wisconsin: 29.3% (2014) National Benchmark: 25%

\*Obesity: BMI (body mass index) of 30 or over

Body Mass Index: An index for relating weight to height. It is calculated as a person's weight in kilograms divided by his or her height in meters squared.

Percent of adults reporting no leisure time physical activity

Winnebago County: 24.0% (2015) Wisconsin: 21.0% (2014) National Benchmark: 21%

Percent of youth overweight (2011/2012) Wisconsin: 14.9% United States: 15.2%



When asked about body weight, the percent of youth reporting they were trying to lose weight (2015/16)

Winnebago County: 46.5% Wisconsin: 42.8% (2014)



Percent of youth who are not physically active\* (2015/16)

Winnebago County: 52.2% Wisconsin: 50.5% (2014)

\*Not physically active: percent of youth doing any kind of physical activity that increases heart rate and makes them breath hard for at least 60 minutes per day on less than 5 of the past 7 days.

Percent of youth that did not eat fruit (2015/16)

Winnebago County: 8.7% Wisconsin: 7.2% (2014)

Percent of youth that drink one or more soda per day (2015/16) Winnebago County: 17.5%

Wisconsin: 19.6% (2014)



Percent of infants receiving WIC who are exclusively breastfed through the first three months of life (Quarterly reports 2016)

Winnebago County: 31.1% (June 2016) Wisconsin: 27.8%(June 2016) Healthy People 2020 Target: 46%



# Health Behaviors: Tobacco

### Why this Matters:

Tobacco use is the single most preventable cause of death and disease in the U.S. Every year in the U.S. there are 480,000 deaths due to tobacco. For every death from tobacco use, 20 more people suffer with at least one serious tobaccorelated illness.

Every year in Wisconsin there are over 6600 deaths due to tobacco use (2008-2012 data), \$3 billion in direct health care costs, and \$1.6 billion in lost productivity. Annual health care costs are \$2,000 higher from smokers than nonsmokers. Tobacco use accounts for 11% of Medicaid costs and nearly 10% of Medicare costs.

Tobacco use can cause cancer, heart disease, lung disease, premature birth, low birth weight, still birth, and infant death. Smokeless tobacco use can cause cancer of the mouth and gums, periodontitis, and tooth loss. Smoking can cause both immediate and long-term effects on your body.

Secondhand smoke exposure can cause heart disease, lung cancer, sever asthma attacks, respiratory infections, ear infections, and Sudden Infant Death Syndrome (SIDS)

## Local and State Data

Percent of adults reporting smoking more than 100 cigarettes in their lifetime and currently smoking (every day or most days) (2014)

> Winnebago County: 16.5% Wisconsin: 17.4% National Benchmark: 14%



Percent of adults age 18+ who reported currently using chewing tobacco, snuff, or snus every day or some days (2013)

Winnebago County: 4% Wisconsin: 4%

4

Percent of mothers who report smoking during pregnancy (2010-2013)

Winnebago County : 16% Wisconsin: 14%



Percent of illegal tobacco sales to minors (2015)

Winnebago County: 11.1% Wisconsin: 8.6%\*



\*This is only the percent of illegal tobacco sales to minor in Wisconsin. The Winnebago County data includes all tobacco products.

Percent of youth who smoked cigarettes on one or more of the past 30 days (2015/16)

Winnebago County: 12.1% Wisconsin: 11.8% (2014)



Percent of youth who used chewing tobacco, snuff or dip on one or more of the past 30 days (2015/16)

Winnebago County: 4.9% Wisconsin 8.0% (2014)



Sources: Economic Benefits of Preventing Disease (National Prevention Strategy); Healthiest Wisconsin 2020; Healthy People 2020; Center for Urban Initiatives and Research, University of Wisconsin-Milwaukee (Burden of Tobacco in Wisconsin, 2015); Centers for Disease Control and Prevention

# Health Behaviors: Reproductive & Sexual Health

### Why this Matters:

There are approximately 19 million new sexually transmitted infections (STIs) each year in the United States almost half of them among young people ages 15 to 24. The cost of STIs to the US health care system is estimated to be as much as \$15.9 billion annually.

Sexually transmitted infections can lead to reproductive health problems, fetal and perinatal health problems, cancer, and can aid in HIV transmission. For every HIV infection prevented, an estimated \$355,000 is saved in the cost of providing lifetime HIV treatment.

Family planning services help with desired birth spacing and family size, and improved health outcomes for infants, children, women and families.

When a pregnancy is unintended, it can lead to delays in starting prenatal care, decreased rate of breastfeeding, increased rate of maternal depression, and an increased risk of physical violence during pregnancy. Children from unintended pregnancies are more likely to have poor mental and physical health, lower educational attainment, and more behavioral issues as teens.

Teen mothers are less likely to graduate from high school. They earn approximately \$3,500 less per year than non-mothers. Teen fathers are more likely to have lower educational attainment and lower income than non-fathers. In addition, teen fathers are more likely to have less involvement with parenting of the child or children.

Sources: Economic Benefits of Preventing Disease (National Prevention Strategy); Healthy People 2020; Guttmacher Institute, 2003

#### Local and State Data

Chlamydia cases per 100,000 population (2015) Winnebago County: 375.1 Wisconsin: 424.0 National Benchmark: 138 Gonorrhea cases per 100,000 population (2015) Winnebago County: 24 Wisconsin: 93 Percent of women age 18+ who had a pap test in the last 3 years (2015) Winnebago County: 77% Wisconsin: 76% Number of new cases diagnoses with HIV (2015) Winnebago County: 3 Wisconsin: 240 (2014) Rate of persons living with a diagnosis of HIV per 100,000 population (2010) Winnebago County: 48 Wisconsin: 107 Birth rate per 1,000 females age 15-19 (2014) Winnebago: 12.3 Wisconsin: 18.3 National Benchmark: 20 Percent of births at less than 37 weeks\* gestation (2014) Winnebago County: 10.6% Wisconsin: 9.1% \*Preterm birth is the birth of an infant prior to 37 weeks of pregnancy. Percent of youth who have ever had sexual intercourse (2015/16)Winnebago County: 31.5% Wisconsin: 35.3% (2014)

Among youth who had sexual intercourse, the percentage who used a condom during last sexual intercourse (2015/16)

Winnebago County: 58.1% Wisconsin: 62.5% (2014)



Sources: WEDSS, CHR, Centers for Disease Control and Prevention (CDC), STDSS, NVSS, WISH, YRBS, WI HIV Profile

# Health Care and Public Health: Access to Care

#### Why this Matters:

Access to health care includes medical, dental and mental health care.

There are many aspects to having access to care. Coverage (having health insurance) is essential but does not ensure access. It is also necessary to have, comprehensive coverage (including of preventive services), providers that accept the individual's insurance. relatively close geographic location of providers to patients, and services from a usual and ongoing source.

Having a usual and ongoing source of primary care is associated with a greater patient trust in the provider, better patient-provider communication, and an increased likelihood that the patient will receive appropriate care. This can lead to better health outcomes, fewer disparities, and lower costs.

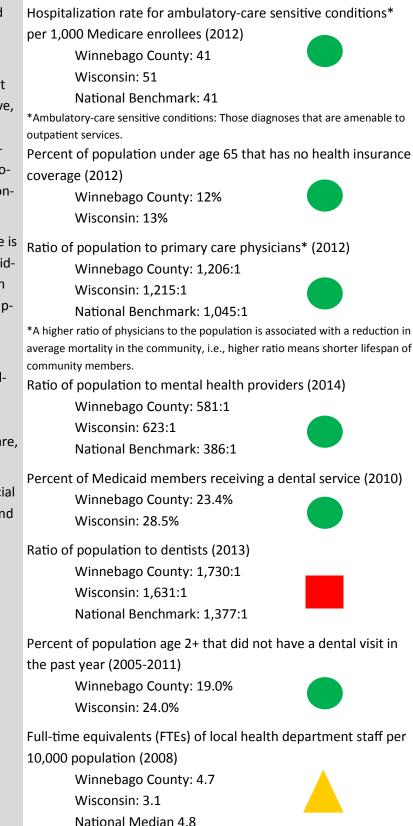
Additional barriers to care that may need to be addressed include transportation to the provider's office, long waits to get an appointment, lack of knowledge about the importance of preventive care, and low health literacy.

Access to health care impacts overall physical, social and mental health status, prevention of disease and disability, detection and early treatment of health conditions, quality of life, preventable death, and life expectancy.

Sources: County Health Rankings (2014); Healthy People 2020

Sources (right side): CHR, US Census, Health Resources and Services Administration (HRSA), HHS, WI DHS

### Local and State Data



# **Social and Economic Factors: Education**

#### Why this Matters:

Years of formal education are correlated strongly with improved work and economic opportunities including higher income, better working conditions, access to health care (through work situation), and more stability during variations in the job market. Years of formal education are also related to better housing, a great sense of person control, and more opportunities for a healthier lifestyle.

Even after controlling for income and insurance status, education still has a significant positive effect on health outcomes. In addition, there are multigenerational health effects. Children born to parents with lower education are at higher risk for decreased cognitive development, increased tobacco and drug use, and a higher risk of some chronic mental and physical diseases.

Reading is a critical predictor of high school success or failure. Poor readers are more likely to drop out of school. Less education negatively impacts health.

### Local and State Data

High School graduation percentage Winnebago County: 91.9% (2010-2014) Wisconsin: 88.4% (2015)

Percent of adults age 25-44 with some college or associate's degree (2009-2013)

Winnebago County: 64% Wisconsin: 65.9% National Benchmark: 71%



Percent of fourth grade students proficient or advance in reading (2014)

Winnebago County: 36.6% Wisconsin: 36%



# Social and Economic Factors: Employment

### Why this Matters:

Almost 25% of adults in the United States earn less than \$27,000 a year in jobs that offer no health care, vacation, or paid sick leave. 40% of all households in the US earn below \$250 of the federal poverty line. Families with low incomes often struggle to afford food, rent, childcare, and transportation.

Individuals who are unemployed are more than 50% more likely to be in fair or poor health when compared to those who are employed. When compared to higher wage earners, individuals who are underemployed are less likely to have insurance and preventive care, more likely to work in hazardous conditions, less able to afford quality child care, and often have less access to paid leave.

Working non-standard hours and having little control over working conditions are associated with increased illness, injury and mortality.

### Local and State Data

Percent of population age 16+ unemployed but seeking work (2013)

Winnebago County: 6.2% Wisconsin: 6.7% National Benchmark: 4.0%



Count of individuals enrolled in Wisconsin Works (W-2)\* on that last working day of the month (2015-2016)

Winnebago County:

December: 314 January: 313 February: 301

\*This program provides benefits to eligible enrollees who are unemployed or underemployed.

Sources: County Health Rankings (2014); United Way Worldwide (2014), US Department of Health and Human Services

# Social and Economic Factors: Adequate Income

#### Why this Matters:

While poverty data usually uses the federally established poverty level, a good general definition of poverty is insufficient income to meet the needs for food, clothing, and shelter. Adequate income is important in obtaining health insurance, paying for medical care, and having access to other basic goods.

Poverty leads to increased risk of a variety of medical conditions and diseases, depression, intimate partner violence, poor health behaviors, and death.

Children in poverty have higher rates of illness and death largely due to accidental injury and lack of health care access. There is some evidence that poverty at a very early age may result in developmental damage. Children's IQ at age five has been shown to be more strongly related to income than to ethnicity, the mother's educational level, or having a female-headed household.

#### Local and State Data

Median household income (all residents of a household age 18+) (2014)

Winnebago County: \$52,700 Wisconsin: \$52,600



Percent of population living below the Federal Poverty Line (FPL) (2014)

Winnebago County: 12.5% Wisconsin: 13.3%



Percent of population age 65+ living below the FPL (2014)

Winnebago County: 7.1% Wisconsin: 7.4%

Percent of children enrolled in public schools that are eligible for free school lunch (2013)

Winnebago County: 32% Wisconsin: 35%



# Social and Economic Factors: Community Safety

#### Why this Matters:

Violence against others has a major impact in the United States. There are approximately 18,000 deaths per year and 268,000 cases of hospitalized violence related injury. Injuries from accidents and violence are the leading cause of death for those between the ages of 1 and 44. Homicide is the 2nd leading cause of Child abuse rate per 1,000 population (allegation of maltreatdeath in ages 15--24.

Community safety affects both physical safety and psychological well-being. Exposure to crime and violence increases stress and anxiety, which is linked to higher rates of preterm births and low birthweight babies.

Post-traumatic stress can affect children who experienced unsafe circumstances, which may, in comparison to peers in safer situations, result in more aggressive behaviors, more alcohol and tobacco use, and more sexual risk-taking.

Lack of safety also deters people from healthy behaviors such as exercising out-of-doors. Direct and indirect health impacts of intentional and unintentional injuries include poor mental health, poor physical health, premature death, high medical cost, and productivity costs.

#### Local and State Data

Violent crime rated per 100,000 population (2010-2012)

Winnebago County: 197 Wisconsin: 255 National Benchmark: 59



ment substantiated) (2012) Winnebago County: 3.2 Wisconsin: 4



Percent of youth who have been bullied on school property

during the past 12 months (2015/16) Winnebago County: 27.4% Wisconsin: 22.7% (2014)



Percent of youth who have ever been forced, either verbally or physically, to take part in sexual activity (2015/16)

> Winnebago County: 10.6% Wisconsin: 7.5% (2014)



# Social and Economic Factors: Health Literacy

#### Why this Matters:

Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.

There is a striking difference between health literacy levels based on education. The percent of people with below basic literacy skills is 3% in college graduates, 15% in high school graduates, 49% in adults who have not completed high school (2003).

Only 12% of U.S. adults have proficient health literacy (2003). Adults with low literacy are more likely to take more prescriptions, have chronic conditions, use more health services, and have poor health outcomes.

There is limited data on "health literacy" in Wisconsin. Therefore, general literacy data is used as a proxy to represent this topic.

### Local and State Data

Percent of the population age 16+ that lacks basic prose literacy skills (2003)

Winnebago County: 7.0% Wisconsin:7.3%



Percentage of 4th grader proficient or advanced at reading (2014)

Winnebago County: 36.6% Wisconsin: 36%



Source: County Health Rankings (2014); U.S. Department of Health and Human Services; National Assessment of Adult Literacy

# Social and Economic Factors: Social Support

### Why this Matters:

Family and social support includes the quality of relationships (among family members, friends, colleagues, acquaintances), and involvement in community life.

Social isolation is includes poor family support, minimal contact with others, and limited involvement in community life. There is a strong association between social isolation and poor health outcomes. One study found that the magnitude of risk associated with social isolation is similar to the risk of cigarette smoking in terms of adverse health outcomes.

Social isolation is also related to stress which has been linked to cardiovascular disease, unhealthy behaviors in adults, and obesity in children and adolescents

Both adults and children in single-parent households are at higher risk for illness, mental health problems and mortality, and engagement in unhealthy behaviors. Selfreported health among single parents (both male and female) were found to be worse than for parents living as couples, even after controlling for socioeconomic characteristics.

### Local and State Data

Percent of adults who report they do not always get the social or emotional support they need (2015)

Winnebago County: 51% National : 43%



Percent of children that live in a household headed by a single parent (2009-2013)

Winnebago County: 29% Wisconsin: 31% National Benchmark: 20%

Percent of adults age 65+ who live alone (2009-2013)

Winnebago County: 32.3% Wisconsin: 30%

Number of new refugees in 2015\*

Winnebago County: 89

\*Refugee: Someone who has been forced to flee his or her country because of persecution, war, or violence. Most likely, they cannot return home or are afraid to do so.

Sources: CHR;Benzeval, M. The Self-Reported Health Status of Lone Parents. Social Science Medicine 1998 May; 46(10):1337-53.;House, JS. Social Isolation Kills, but How and Why? Psychosomatic Medicine 2001; 63:273-274.

Source: CHR, BRFSS, US CENSUS, WI DCF

# Social and Economic Factors: Racism

#### Why this Matters:

The relationship between experiencing racism and negative health outcomes is an emerging area of research.

While still evolving, the research clearly indicates a strong relationship between self-reported racism and ill health, particularly negative mental health outcomes and health-related behaviors.

Research also indicates that stress from experiencing chronic hostility and fear can lead to negative health outcomes. These outcomes are seen even after controlling for differences such as income and access to adequate health care. The effect can be direct (high blood pressure or lower immune function) or indirect (higher rates of smoking, drinking or lower rates of exercise and social support).

## Local and State Data

Number of hate crimes per 100,000 population (2012) Winnebago: 0 Wisconsin: 1

### Percent of population by race

	Winnebago	Wisconsin
White	93.1%	88.1%
Black/African American	1.7%	6.5%
American Indian/Alaska Native	0.6%	1.1%
Asian	2.3%	2.5%
Hispanic or Latino	3.6%	6.3%
2+ Races	1.8%	1.7%

Sources: Paradies, Y. "A Systematic Review of Empirical Research on Self-Reported Racism and Health," International Journal of Epidemiology (August 2006), 35(4): 888-901.;"The Toxic Power of Racism," Dean Ornish, Boston Globe, 3/24/08.

# **Physical Environment: Built Environment**

#### Why this Matters:

The built environment includes human-made resources and infrastructure, such as buildings, roads, parks, restaurants, and grocery stores. Major disparities in health conditions such as childhood lead poisoning and asthma result from inequities in the quality of home and neighborhood environments. These built environment hazards can be reduced through engineering, regulation, safe work practices and other methods.

One critical aspect of the built environment is having access to healthy foods. Not having access to fresh fruits and vegetables is related to premature mortality. Too much access to fast food restaurants and residing in a food desert correlate with: overweight, obesity, and premature death. A "food desert" is a neighborhood where a high proportion of the residents have low access to a supermarket or large grocery store (more than a mile in urban areas and more than ten in rural areas).

Access to recreational facilities has a strong relationship with physical activity levels in adults and children and is linked to lower obesity levels. Increasing access to recreational facilities is one of the CDC's 24 recommended strategies to reduce obesity.

### Local and State Data

Percent of population in poverty that also are far from a grocery store (10 miles: rural/1mile: urban) (2012)

Winnebago County: 8.0% Wisconsin:5.0% National Benchmark: 0%



Proportion of all restaurants that are fast food restaurants (2010)

Winnebago County: 47.0% Wisconsin: 41.0% National Benchmark: 25%



Number of farmer markets

Winnebago County: 8

Number of recreational facilities\* per 1,000 population (2011)

Winnebago County: 0.08 Outagamie County: 0.18 Calumet County: 0.11

\*Recreational facilities includes only proprietary facilities not government, public, or nonprofit facilities.

Prevalence of elevated blood lead levels\* among children age 6 and under (2010)

Winnebago County: 1.0 Wisconsin: 1.3



\*Lead poisoned: When a child has a capillary or venous blood lead level great than or equal to 10 mcg/dL

Percent of housing units built prior to 1950 (2009-2013)

Winnebago County: 27.5% Wisconsin: 27.1%



# **Physical Environment: Natural Environment**

#### Why this Matters:

Natural environment includes a variety of factors but, in particular air and water quality. Poor air and water quality have the greatest impact on the very young, the old, and those with chronic health conditions. Air pollution can aggravate chronic bronchitis, asthma, and other lung diseases. Contaminants in water, such as prescription drugs, pesticides, and chemicals, can lead to illness, infection and increased risk for cancer. By one estimate, a 10% reduction in fine particulate matter could prevent over 13,000 deaths in the U.S.

### Local and State Data

Annual average number of unhealthy air quality days due to fine particulate matter (2015)

Winnebago County: 10.7 Wisconsin: 9.4 National Benchmark: 9.5



Estimated percent of population on municipal water (2011)

Winnebago County: 74.0% Wisconsin: 71.0%



Percentage of population on municipal water exposed to any maximum contaminant limit (MCL) violation in a calendar year (2010)

Winnebago County: 23.0% Wisconsin: 10.0%



Percent of homes with radon levels greater than 4 pCi/L (2002-2010)

Winnebago County: 62.5% Wisconsin: 7.5% (2010)

# Appendix A

### **Data Review and Limitations:**

#### **Data Collections**

The 2016 Winnebago County Community Health Assessment is modeled on the Core Data Set. The core data set is a result of a 2011-2014 Wisconsin Community Health Improvement Process and Planning (CHIPP) Infrastructure Improvement Project funded by University of Wisconsin School of Medicine and Public Health from the WI Partnership Program. The project was a community -academic collaboration between Wisconsin Association of Local Health Departments and Boards (WALHDAB) and the University of Wisconsin Population Health Institute. The core data set is recommended measures compiled from the annual county health rankings and other health data collections including the Behavior Risk Factor Surveillance System (BRFSS), the Youth Risk Behavior Survey (YRBS), US Census, American Community Survey, Uniform Crime Reporting Program and the National Vital Records System. Other state specific data collections include the Make Your Smile Count Survey, Public Water Fluoridation Census, Wisconsin Inpatient Hospitalization Discharge file and Wisconsin Hospital Emergency Department data. Additional data was provided by the Wisconsin Department of Health Services, Wisconsin Department of Children and Families, WI Wins, CESA 6 and the Winnebago County Health Department.

#### Limitations

There are many limitations on data. While the intent of this report was to provide up-to-date data, the truth is many data points are several years old. County level data is often compiled by the state and then provided back to the county, hence there is often a lag time for reports to be compiled. As we learn more about population health and the sub-populations within our county, we have found that disaggregated data is often not available. This is an area that public health informatics needs to improve. For example, there is inadequate data based on ethnicity, age, sex, especially at the county level.

Additionally, this report does not include data trends and most indicators lack targets. A goal for the next report is to include trends and targets.

#### **Opportunities for Improvement**

Public health is rooted in data. The Winnebago County Health Department is committed to using the most current data for surveillance, program/service planning and evaluation and providing data to the community.

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