Table of Contents

Commonly Used Abbreviations .................................................................................................................. 4
2014 Community Health Assessment ......................................................................................................... 5
Acknowledgements ....................................................................................................................................... 6
Framework .................................................................................................................................................... 7
Process .......................................................................................................................................................... 8
Identified Community Assets and Resources ............................................................................................. 10
  Mental Health ........................................................................................................................................ 10
  Physical Activity and Nutrition .................................................................................................................. 10
Comprehensive Data Review ....................................................................................................................... 11
  Demographics ......................................................................................................................................... 12
  Length of Life (Mortality) ........................................................................................................................... 13
  Quality of Life (Morbidity) .......................................................................................................................... 13
    Measures of Overall Health ...................................................................................................................... 13
  Chronic Disease Prevention & Management ............................................................................................. 14
  Oral Health .............................................................................................................................................. 15
  Communicable Disease ............................................................................................................................... 16
  Mental Health ......................................................................................................................................... 17
  Injury & Violence .................................................................................................................................... 18
Health Behaviors ........................................................................................................................................ 19
  Alcohol & Drug Use ................................................................................................................................. 19
  Physical Activity & Nutrition ................................................................................................................... 20
  Tobacco ................................................................................................................................................... 21
    Reproductive & Sexual Health .................................................................................................................. 22
Health Care and Public Health ..................................................................................................................... 23
  Access to Care ....................................................................................................................................... 23
Social and Economic Factors ....................................................................................................................... 24
  Education ............................................................................................................................................... 24
  Employment .......................................................................................................................................... 25
  Adequate Income ................................................................................................................................. 26
  Community Safety ............................................................................................................................... 27
Commonly Used Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRFSS</td>
<td>Behavioral Risk Factor Surveillance System</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CHR</td>
<td>County Health Rankings</td>
</tr>
<tr>
<td>COWSS</td>
<td>County Oral Health Wisconsin Surveillance System</td>
</tr>
<tr>
<td>DCF</td>
<td>Department of Children and Families</td>
</tr>
<tr>
<td>DHS</td>
<td>Department of Health Services</td>
</tr>
<tr>
<td>DPH</td>
<td>Division of Public Health</td>
</tr>
<tr>
<td>DPI</td>
<td>Department of Public Instruction</td>
</tr>
<tr>
<td>EPHT</td>
<td>Environmental Public Health Tracking</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources and Services Administration</td>
</tr>
<tr>
<td>NAMI</td>
<td>National Alliance on Mental Illness</td>
</tr>
<tr>
<td>NAMI FV</td>
<td>National Alliance on Mental Illness Fox Valley (local affiliate)</td>
</tr>
<tr>
<td>PedNSS</td>
<td>Pediatric Nutrition Surveillance System</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USDA</td>
<td>United States Department of Agriculture</td>
</tr>
<tr>
<td>WALHDAB</td>
<td>Wisconsin Association of Local Health Departments and Boards</td>
</tr>
<tr>
<td>WEDSS</td>
<td>Wisconsin Electronic Disease Surveillance System</td>
</tr>
<tr>
<td>WI</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>WIR</td>
<td>Wisconsin Immunization Registry</td>
</tr>
<tr>
<td>WISH</td>
<td>Wisconsin Interactive Statistics on Health</td>
</tr>
<tr>
<td>YRBSS</td>
<td>Youth Risk Behavior Surveillance System</td>
</tr>
</tbody>
</table>
2014 Community Health Assessment
Acknowledgements

Thank you to the following individuals and organizations who participated in the development of the Outagamie County Community Health Assessment. In addition, we’d like to thank the Wisconsin Department of Health Services Division of Public Health Northern and Northeastern Office RADAR Teams and the Wisconsin Association of Local Health Department and Boards (WALHDAB) “Community Health Improvement Processes and Plans (CHIPP) Infrastructure Improvement Project” for valuable resources and assistance.

Community Health Assessment team:
Andrea Alpert-Buss, Parent Connection
Diana Aronson, Head Start
Heather Bogard, Appvion, Inc.
Shawn Boogaard, UW Health Fox Valley Family Medicine
Cindy Brylski, Outagamie County Public Health Division
Sarah Cecon, Outagamie County Public Health Division
Nadine Chambers, Gulfstream Aerospace Corporation
Beth Clay, NAMI Fox Valley
Joan Coenen, Town of Vandenbroek Supervisor
Sarah Companik, League of Women Voters
Pastor Larry Creamer, Valley Baptist Church
Carey Cullen, Outagamie County Public Health Division
Rosemary Davis, Outagamie County Health and Human Services
Karen Dickrell, UW-Extension
Mary Dorn, Outagamie County Public Health Division
Bonne Elias-Planner, Outagamie County ADRC
Kathy Flores, City of Appleton
Lisa Grebe, UW-Oshkosh
Mike Harer, Fox Valley Farm Management Association
Brain Harrison, Affinity Health System
Wendy Hein, Birth to Three Early Intervention Program
Marti Hemwall, Community Foundation for the Fox Valley Region, Inc.
Mike Hendrick, Outagamie County Planning Department
Rosie Hoeffner, Childcare Resource and Referral
Becky Hovarter, UW-Green Bay Nursing Program
Sue Kamien, Outagamie County Public Health Division
Jeanine Knapp, Compassionate Fox Cities
Mary Knapp, Larry’s Piggly Wiggly
Ellen Koski, Outagamie County Public Health Division
Melissa Kraemer Badke, East Central WI Regional Planning Commission
Lo Lee, Hmong American Partnership

Jon LiDonne, Outagamie County Veterans Service Office
Diane Mandler, Outagamie County Mental Health Division
Amanda Matthews, NEW Mental Health Connection
Nancy McKenney, Partnership Community Health Center
Paula Morgen, ThedaCare
Craig Moser, Outagamie County
Michelle Myers, Oneida Nation
Tony Nowak, Town of Greenville Parks, Recreation and Forestry Dept.
Jack Pautz, Kaukauna
Lynn Peters, Community Foundation for the Fox Valley Region, Inc.
Linda Pintar, Miller Electric
Roger Price, Outagamie County Sheriff’s Department
Cathy Randerson, Outagamie County Public Health Division
Tracy Ratzburg, Children’s Hospital of Wisconsin
Penny Robinson, ESTHER
Christina Romatowski, Harbor House
Keren Rosenberg, United Way Fox Cities
Julia Salomón, Affinity Health System
Sally Smarzinski, Sexual Assault Crisis Center
Lisa Smith, Childcare Resource and Referral
Laura Smith, Outagamie County Health and Human Services
Kristene Stacker, Partnership Community Health Center
Rhonda Strebel, Rural Health Initiative
Mary Swilka, Mosquito Hill Nature Center
Marcia Trentlage, Outagamie County Board of Supervisors
Cindy Vandenbarg, Kimberly School District
Wendy Vander Zanden, Community Action for Healthy Living
Natalie Vandeveld, Outagamie County Public Health Division
Karen Volkman, Outagamie County Public Health Division
Chris Wardlow, Catalpa Health, Outagamie County
Mary Wisnet, United Way Fox Cities
Framework

A key stage in community health improvement planning is the initial assessment of health needs. While it is an important and sometimes time-consuming stage, it should not be seen as an end in and of itself: the community health needs assessment is a springboard to action. Data and stakeholder input should be analyzed to identify key opportunities for action. The Recommended Core Data Set was created by the WALHDAB “CHIPP Infrastructure Improvement Project” to meet the need for a set of community health assessment data that is both thorough and manageable. It is designed to:

- Present a focused set of indicators
- Use a framework that organizes the data as a whole and highlights a plan for prevention
- Help local communities to identify the top areas they want to address
- Help local partners to meet organizational requirements
- Provide local data (Note: if data is available at a level smaller than a county, then it is provided; if a critical indicator is not available locally, then regional or statewide data is provided)

Many communities in Wisconsin have organized their community health assessment around the health focus areas in the state health plan, Healthiest Wisconsin 2020. The Core Data Set framework incorporates those focus areas into each appropriate section. In addition, several of the state health plan infrastructure focus areas are included in the framework and data are provided specifically for a few of those areas: access to health services, public health workforce, and health literacy. For more information, visit http://www.dhs.wisconsin.gov/hw2020.
Process

The process used for the Outagamie County Community Health Assessment and Community Health Improvement Plan is adapted from the County Health Ranking’s Action Cycle. At the core of the Action Cycle are people from all walks of life because we know we can make our communities healthier if we all get involved. Each step on the Action Cycle is a critical piece of making communities healthier. One of the first steps in local health improvement is to evaluate our community's needs, resources, strengths, and assets (see Assess Needs & Resources in the Action Cycle). We want to understand what helps as well as what hinders progress toward improving our community’s health.

The Outagamie County Public Health Division began the process of conducting a Community Health Assessment in 2013. In April 2014, more than 50 key stakeholders, leaders and community members convened for a community health improvement planning session. We reviewed data related to the Healthiest Wisconsin 2020 focus areas specific to Outagamie County and identified community health priorities.

The morning session presented a comprehensive data review utilizing the WALHDAB Core Data Set and additional data to help attendees better understand the state of health in Outagamie County. For more

Planning Session Goals:
- Review health conditions and their modifiable risk factors that impact community residents
- Identify community strengths and needed resources to address given health conditions
- Select health focus areas to address the needs of our community and conditions that impact our residents
information see Appendix A- Comprehensive Data Review: Sources and Limitations. The format of the data presentation was adapted from the Wisconsin Division of Public Health Northern Region RADAR Team’s *Data-in-a-Day* resources.

In the afternoon session, participants discussed community assets (what is going well in the community) and gaps (what is needed to address problems) regarding 10 of the Healthiest Wisconsin 2020 health priority areas: chronic disease prevention and management, oral health, communicable diseases, mental health, injury and violence prevention, alcohol and drug abuse, physical activity and nutrition, tobacco use and exposure, reproductive and sexual health, and physical environment. Participants then used real-time polling to rank the data by seriousness of the problem and feasibility of change. After discussion, physical activity & nutrition and mental health were chosen as the top community health priorities for Outagamie County.

The next step is to focus our community’s efforts and resources on the most important issues to achieve the greatest impact on health. We are looking forward to engaging our community partners in striving towards living well in Outagamie County. Crosscutting priority areas identified in the group discussion include chronic disease prevention and management, overall wellness and well-being, and a commitment to diversity and marginalized populations. The Leadership Team recognizes that the improvement of the public’s health requires commitment to health equity and a focus on access. There are many areas that influence health including social, economic, and environmental factors.
Identified Community Assets and Resources

The following organizations and opportunities were identified by community members during the assessment process as existing community assets and resources. These are groups currently working to improve mental health and physical activity & nutrition in Outagamie County. To learn more about these resources, including how to get in contact, click on the link or search for them online.

**Mental Health**

- **Community Action for Healthy Living**
  - [Outagamie County Crisis Intervention](#)
  - [Outagamie County Mental Health and Drug & Alcohol Treatment Courts](#)

- **Drug Drop (Medication Disposal)**
  - [Outagamie County Substance Abuse Taskforce](#)

- **Catalpa Health**
  - [Outagamie County Pre-Action Network](#)

- **Crisis Intervention Team (CIT)**
  - Partnership Community Health Center

- **Connected Community Wellness Screen: BWell2Excel**
  - Question, Persuade, Refer (QPR)

- **Mental Health Regional Network**
  - Rural Health Initiative

- **N.E.W. Mental Health Connection**
  - United Way’s PATH for Students

- **NAMI Fox Valley**

**Physical Activity and Nutrition**

- **Breastfeeding Alliance of NE Wisconsin**
  - Rural Health Initiative

- **Community Action for Healthy Living**
  - Safe Routes to School

- **Community Garden Partnership**
  - UW-Extension Nutrition Education

- **East Central WI Regional Planning Commission**
  - Weight of the Fox Valley

- **Farmers Markets**
  - Well City Fox Cities

- **Fox Cities Greenways**
  - WIC (Women, Infants and Children)

- **Fox Valley Bike Challenge**
  - YMCA of the Fox Cities

- **Goodwill Grows**
Comprehensive Data Review

**Trend:** When possible, an arrow is shown to indicate the trend in that data over time. Ideally, this would be available for all data, but at this time we can show the trend for data gathered from the CDC’s Behavioral Risk Factor Surveillance System (BRFSS). This data was gathered in 2007, 2009 and 2011. It will be gathered again in 2015.

- A green arrow indicates that the local result was at least 5% better than when the data was collected in 2007.
- A yellow arrow indicates the local results are trending similar to 2007 (within 5%).
- A red arrow indicates the local results are over 5% worse than in 2007.
Outagamie County Community Health Assessment

Demographics

Outagamie County spans 640 square miles and is located in east-central Wisconsin along the Fox River, near the northern end of Lake Winnebago. It is the sixth largest county in the state. Outagamie County features strong agricultural, manufacturing and service sectors. The jurisdiction of Outagamie County Public Health includes all of Outagamie County outside of the city of Appleton. This portion of Outagamie County is home to 117,910 residents and includes 20 towns, 10 villages, and 3 cities:

- Town of Black Creek
- Town of Center
- Town of Deer Creek
- Town of Grand Chute
- Town of Kaukauna
- Town of Maple Creek
- Town of Seymour
- Village of Black Creek
- Village of Howard
- Village of Nichols
- City of Kaukauna
- Town of Bovina
- Town of Cicero
- Town of Ellington
- Town of Greenville
- Town of Liberty
- Town of Oneida
- Town of Vandenbroek
- Village of Combined Locks
- Village of Kimberly
- Village of Shiocton
- City of New London (partial)

Quick Facts

Sex

Female 50.1%
Male 49.9%

Age

0-24 33.8%
25-44 27.2%
45-64 27.1%
65+ 11.8%

Race

White 91.3%
Black/African American 1.0%
American Indian/Alaska Native 1.7%
Asian 3.0%
Other 3.0%

Ethnicity

Hispanic or Latino 3.6%
Non-Hispanic or Latino 96.4%

Unemployment 6.5%

Median Household Income $57,584

Housing

Owner occupied 71.4%
Renter occupied 28.6%

Public School Districts

- Appleton Area School District (outside of the city of Appleton)
- Freedom Area School District
- Hortonville School District
- Kaukauna Area School District
- Kimberly Area School District
- Little Chute Area School District
- Seymour Community School District

1 U.S. Census Bureau, 2010 Census.
2 U.S. Census Bureau, 2008-2012 American Community Survey.
Length of Life (Mortality)

Death rate per 1,000 population (2012)
Outagamie County: 6.7
Wisconsin: 8.4

Leading causes of death per 100,000 population (2010)

<table>
<thead>
<tr>
<th>Leading Cause</th>
<th>Outagamie County Rate</th>
<th>Wisconsin Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cancers</td>
<td>156.7</td>
<td>198.1</td>
</tr>
<tr>
<td>2. Diseases of the Heart</td>
<td>146.0</td>
<td>194.9</td>
</tr>
<tr>
<td>3. Cerebrovascular Disease</td>
<td>40.7</td>
<td>45.7</td>
</tr>
<tr>
<td>4. Chronic Lower Respiratory Diseases</td>
<td>35.1</td>
<td>43.9</td>
</tr>
<tr>
<td>5. Unintentional Accidents</td>
<td>33.4</td>
<td>43.4</td>
</tr>
</tbody>
</table>

Years of potential life lost (YPLL)* per 100,000 population (2008-2010)
Outagamie County: 5,016
Wisconsin: 5,878
National Benchmark: 5,317

*YPLL: Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county’s YPLL.

Infant mortality rate per 1,000 population (2010)
Outagamie County: 5.3
Wisconsin: 5.7
Healthy People 2020 Target: 6.0

Quality of Life (Morbidity)

Measures of Overall Health

Percent of adults reporting poor or fair health (2005-2011)
Outagamie County: 8.0%
Wisconsin: 12.0%
National Benchmark: 10.0%

Average number of physically unhealthy days reported in the past 30 days (age-adjusted) (2005-2011)
Outagamie County: 2.8
Wisconsin: 3.2
National Benchmark: 2.6

Average number of mentally unhealthy days reported in adults in the past 30 days (age-adjusted) (2005-2011)
Outagamie County: 2.3
Wisconsin: 3.0
National Benchmark: 2.3

Percent of birth weights less than 2,500 grams (about 5.5 pounds) (2004-2010)
Outagamie County: 7.1%
Wisconsin: 7.0%
National Benchmark: 6.0%

Sources: CHR, Behavioral Risk Factor Surveillance System (BRFSS), WISH
Chronic Disease Prevention & Management

Chronic diseases, such as heart disease, stroke, cancer, diabetes, and asthma, may be prevented through healthy diet, physical activity, eliminating tobacco use and substance abuse, and early screening and detection. Mental illnesses are also chronic diseases. Among adults, half of all mental, emotional and behavioral disorders were first diagnosed by age 14 and three-quarters by age 24. Chronic diseases are very costly. 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.
- Cardiovascular disease accounts for 20% of medical expenditures in the United States.
- Cancer is the 2nd leading cause of death in the United States. Modifiable risk factors include use of tobacco, physical inactivity & poor nutrition, obesity, UV light exposure. Early screening and vaccination can also reduce risk.
- Diabetes is the 7th leading cause of death in the United States. It affects 23.6 million people. One in every five health care dollars is spent caring for people with diagnosed diabetes.
- Asthma affects more than 23 million people in the United States.
- Individuals living with serious mental illness face an increased risk of having chronic medical conditions. Mental illnesses are the 3rd most costly after cancer and heart disease.

Types of screening for chronic diseases include:
- Cervical cancer
- Cholesterol
- Colon cancer
- Diabetic
- Mammography
- Mental health

Sources: Kessler et al., 2005; Economic Benefits of Preventing Disease (National Prevention Strategy); Healthiest Wisconsin 2020; Healthy People 2020; CHR; Colton & Manderscheid, 2006

Local and State Data

Percent of Adults age 20+ with diagnosed diabetes (2009)
Outagamie County: 9.0%  
Wisconsin: 8.0%

Cancer incidence per 100,000 population (age-adjusted) (2007-2011)
Outagamie County: 473.5  
Wisconsin: 471.2

Coronary heart disease hospitalization rate per 1,000 population (2010)
Outagamie County: 2.3  
Wisconsin: 3.3

Cerebrovascular disease hospitalization rate per 1,000 population (2010)
Outagamie County: 2.1  
Wisconsin: 2.4

Percent of youth ever told by a provider that they had asthma and still have asthma (2007)
Outagamie County: 21.5%  
Wisconsin: 20.3%

Percent of women age 18+ who had a pap test in the last 3 years (2010)
Outagamie County: 84%  
Wisconsin: 84%

Percent of adults age 50+ who ever had a sigmoidoscopy or colonoscopy (2010)
Outagamie County: 67%  
Wisconsin: 69%

Percent of diabetic Medicare enrollees that received HbA1c screening in the past year (2010)
Outagamie County: 91%  
Wisconsin: 90%  
National Benchmark: 90%

Percent of female Medicare enrollees age 65-69 that received mammography screening in the past 2 years (2010)
Outagamie County: 74.2%  
Wisconsin: 73.0%  
National Benchmark: 74%

Percent of adults who have ever had cholesterol checked and were told it was high (2010)
Outagamie County: 30%  
Wisconsin: 36%

Sources: CHR, BRFSS, WISH, WI DHS, Youth Risk Behavior Surveillance System (YRBSS)
Oral Health

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, preterm labor, and diseases 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 an 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 are related to self-confidence and social interaction. Oral health 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.

Lack of access to preventive dental care increases rates of oral diseases. Factors include education level, income, race and ethnicity. In Wisconsin, people on BadgerCare and those without dental insurance coverage are less likely to visit a dentist for routine (preventive) dental care.

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

Local and State Data

Percent of population on public water supplies with fluoride content at 0.7 PPM* or greater (2011)
Outagamie County: 95.9%
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

Sources: County Oral health Wisconsin Surveillance System (COWSS), WI Division of Public Health (DPH)
Communicable Disease

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

Food-borne diseases cause millions of illnesses every year in the United States. Children under 4 have the highest incidence. Adults over 50 are at highest risk for serious complications.

Respiratory infections (including influenza and pneumonia) are the 8th leading cause of death in the United States. Viral hepatitis, influenza and tuberculosis (TB) are among the leading causes of illness and death in the United States.

42,000 adults and 300 children die of vaccine-preventable diseases each year in the United States.

Childhood immunization programs are effective at reducing rate of disease and provide a very high return on investment. For example, for each birth cohort vaccinated with the routine immunization schedule (this includes DTap, Td, Hib, Polio, MMR, Hep B, and varicella vaccines), society saves 33,000 lives, prevents 14 million cases of disease, reduces direct health care costs by $9.9 billion, and saves $33.4 billion in indirect costs.

Local and State Data

Percent of population age 65+ who had a flu shot (2012-2013 flu season)
Outagamie County: 46.7%
Wisconsin: 65.7%

Percent of children who received the recommended doses of vaccines by age 2 (2010-2012)
Outagamie County: 77.4% (2010), 79.4% (2011), 81.2% (2012)
Wisconsin: 63.9% (2010), 66.8% (2011), 69.5% (2012)
Healthy People 2020 Target: 80%

Hepatitis C incidence per 100,000 population (2013)
Outagamie County: 36.5
Wisconsin: 45.5

Lyme disease incidence per 100,000 population (2013)
Outagamie County: 22.5
Wisconsin: 39.0

Pertussis (whooping cough) incidence per 100,000 population (2013)
Outagamie County: 25.9
Wisconsin: 22.0

Salmonella incidence per 100,000 population (2013)
Outagamie County: 20.2
Wisconsin: 15.8
Healthy People 2020 Target: 11.4

Tuberculosis incidence per 100,000 population (2012)
Outagamie County: 1.7
Wisconsin: 1.5

Sources: Healthiest Wisconsin 2020; Healthy People 2020; WI Immunization Program, WI Immunization Registry (WIR), Wisconsin Electronic Disease Surveillance System (WEDSS)
Mental Health

Mental health can be defined as a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community. Mental health is essential to personal well being, healthy relationships, and the ability to contribute to society.

When a person experiences mental health problems, they are experiencing signs and symptoms of mental illness, but they are of insufficient intensity or duration to meet the criteria for any diagnosable mental disorder. Mental health problems warrant active efforts in health promotion, prevention, and treatment. Mental illnesses are medical conditions that disrupt a person’s thinking, feeling, mood, behavior and ability to relate to others, and cause the person distress and difficulty in daily functioning.

Mental disorders are one of the most common causes of disability. 13 million adults have seriously debilitating mental illness each year in the United States and one in 4 adults (approximately 57.7 million Americans) experience a mental health problem during any given year. One in 17 Americans lives with a serious mental illness, such as schizophrenia, major depression or bipolar disorder. Approximately one in 10 children lives with a serious mental or emotional disorder.

Suicide is a major preventable public health problem and is the 10th leading cause of death overall in the United States with almost 40,000 deaths per year. There are an estimated 8-12 attempts for every suicide death.

Mental health issues are associated with risky behaviors, such as smoking, physical inactivity, obesity, and substance abuse. These behaviors can in turn lead to chronic disease, injury, or disability.

Adequate nutrition is required for proper brain functioning and overall mental health. Poor diet may be a modifiable risk factor for depression. Increased physical activity may increase general well being and mood, and decrease levels of anxiety and depression.

Local and State Data

Average number of mentally unhealthy days reported in the past 30 days (age-adjusted) (2005-2011)
Outagamie County: 2.3
Wisconsin: 3.0
National Benchmark: 2.3

Self-inflicted hospitalization rate per 100,000 population (2012)
Outagamie County: 92.3
Wisconsin: 97.1

Percentage of youth who harmed themselves on purpose, such as by cutting or burning, but did not want to die (2011/2012)
Outagamie County: 21.3%
Wisconsin: 17.2%

Suicide rate per 100,000 population (2007-2011)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>14.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Age 15-24</td>
<td>17.4</td>
<td>12.6</td>
</tr>
<tr>
<td>Age 25-34</td>
<td>19.5</td>
<td>15.7</td>
</tr>
<tr>
<td>Age 35-44</td>
<td>13.5</td>
<td>17.6</td>
</tr>
<tr>
<td>Age 45-54</td>
<td>23.6</td>
<td>20.3</td>
</tr>
<tr>
<td>Age 55-64</td>
<td>25.8</td>
<td>17.1</td>
</tr>
</tbody>
</table>

Percent of youth who seriously considered attempting suicide during the 12 months before the survey (2011/2012)
Outagamie County: 17.9%
Wisconsin: 13.5%

Percent of youth who made a plan about how they would attempt suicide during the 12 months before the survey (2011/2012)
Outagamie County: 15.2%
Wisconsin: 11.5%

Percent of youth who attempted suicide one or more times during the 12 months before the survey (2011/2012)
Outagamie County: 13.1%
Wisconsin: 6.7%

Sources: World Health Organization; NAMI; CDC; U.S. Department of Health and Human Services, 1999; CHR; Healthiest Wisconsin 2020; Healthy People 2020; Stephens, 1988
Injury & Violence

Injuries are the leading cause of death in people age 1-44 in the United States. Injuries can include unintentional injuries such as those related to sports injuries, poisoning, falls, and seat belt use. Injuries can also be intentional such as acts of violence like homicide and assault.

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

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.

The impact of violence in communities is far-reaching: when people don’t feel safe in their communities, they are less likely to use local parks and community centers and access services such as public transportation. When parents don’t feel safe in their communities, they are hesitant to let their children play outside or walk to school. Communities perceived as being unsafe are less likely to benefit from investments such as grocery stores.

Rates for both intentional (e.g., homicide, suicide) and unintentional (e.g., motor vehicle accidents) injuries are 26 times higher among people with a mental illness than in the population overall. People with psychiatric disabilities are more likely to be victims than perpetrators of violent crime. People with severe mental illnesses (schizophrenia, bipolar disorder or psychosis) are 2½ times more likely than the general population to be attacked, raped or mugged.

Local and State Data
Percent of youth who rarely or never wore a seat belt when riding in a car driven by someone else (2011/2012)
Outagamie County: 9.2%
Wisconsin: 10.3%

Ranked causes of hospitalizations for injuries (age-adjusted per 100,000 population) (2007-2009)

<table>
<thead>
<tr>
<th></th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Falls</td>
<td>321</td>
<td>441</td>
</tr>
<tr>
<td>Self-Harm</td>
<td>119</td>
<td>98</td>
</tr>
<tr>
<td>Motor Vehicle Crash</td>
<td>64</td>
<td>78</td>
</tr>
<tr>
<td>Poisoning</td>
<td>32</td>
<td>47</td>
</tr>
<tr>
<td>Non-Traffic</td>
<td>21</td>
<td>27</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Injury deaths due to falls for adults age 65+ per 100,000 population (2011)
Outagamie County: 15.7
Wisconsin: 18.2

Sources: Healthy People 2020; The Burden of Falls in Wisconsin, 2010; CDC; Hiday, 2006; Cohen et al., 2010

Sources: YRBSS, The Burden of Injury in Wisconsin (2011), WISH


**Health Behaviors**

**Alcohol & Drug Use**

Every year in the United States, an estimated 22 million people have difficulties with the negative effects of drugs and alcohol. 95% of them are unaware of their problem. Drug and alcohol problems can lead to alcohol and drug dependencies, alcohol poisoning, fetal alcohol spectrum disorders, hypertension, heart attack, and liver, brain, and heart disease.

Approximately 80,000 deaths annually in the United States are attributed to excessive drinking. 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 in the nation.

About 40% of individuals with alcoholism and more than half of individuals with drug addictions have at least one serious mental illness. Approximately 50% of individuals diagnosed with severe mental illness are affected by substance abuse.

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

- Teenage pregnancy
- HIV/AIDS and other STIs
- Domestic violence
- Child abuse
- Motor vehicle crashes
- Physical fights
- Crime
- Homicide
- Suicide
- Addiction
- Fetal alcohol spectrum disorders

**Local and State Data**

Percent of the adult population that reports either binge drinking* or heavy drinking** (2005-2011)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>31%</td>
<td>24%</td>
</tr>
<tr>
<td>2011</td>
<td>31%</td>
<td>24%</td>
</tr>
</tbody>
</table>

National Benchmark: 7%

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

**Heavy drinking: Consuming more than 1 (women) or 2 (men) alcoholic beverages per day on average.

Rate of alcohol-related hospitalizations per 1,000 population (2010)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2.1</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Proportion of driving deaths with alcohol involvement (2008-2012)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>29%</td>
<td>39%</td>
</tr>
<tr>
<td>2012</td>
<td>29%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Percent of adults age 18+ who reported driving after having too much alcohol to drink (2011)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>9%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Percent of youth who had at least one drink of alcohol on one or more of the past 30 days (2011/2012)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>32.0%</td>
<td>39.2%</td>
</tr>
<tr>
<td>2012</td>
<td>32.0%</td>
<td>39.2%</td>
</tr>
</tbody>
</table>

Percent of youth who had their first drink of alcohol (other than a few sips) before age 13 (2011/2012)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>18.7%</td>
<td>18.6%</td>
</tr>
<tr>
<td>2012</td>
<td>18.7%</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

Percent of youth who reported driving after drinking alcohol (2011/2012)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>7.5%</td>
<td>8.7%</td>
</tr>
<tr>
<td>2012</td>
<td>7.5%</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

Percent of youth who reported riding in a car or other vehicle driven by someone who had been drinking alcohol (2011/2012)

<table>
<thead>
<tr>
<th>Local</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>20.4%</td>
<td>22.9%</td>
</tr>
<tr>
<td>2012</td>
<td>20.4%</td>
<td>22.9%</td>
</tr>
</tbody>
</table>

Number of arrests for drug possession: Outagamie County (2011/2012)

<table>
<thead>
<tr>
<th>Year</th>
<th>Adult</th>
<th>Juvenile</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>307</td>
<td>74</td>
</tr>
<tr>
<td>2012</td>
<td>397</td>
<td>52</td>
</tr>
</tbody>
</table>

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

Sources: Healthiest Wisconsin 2020; Healthy People 2020; CHR; Regier et al., 1990; Denney & Johnson, 1984
Physical Activity & Nutrition

More than 80% of adults in the United States do not meet the guidelines for both aerobic and muscle-strengthening activities. Similarly, more than 80% of adolescents do not meet the aerobic physical activity guidelines for youth.

Regular physical activity in adults can lower the risk of early death, coronary heart 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 cardiorespiratory and muscular fitness, decrease levels of body fat, and reduce symptoms of depression.

Adults currently or previously diagnosed with depression are 60% more likely to be obese and those with anxiety disorders are 30% more likely to be obese than people without depression or anxiety.

The goal of promoting healthful diets and healthy weight encompasses increasing household food security and eliminating hunger. Healthy diet reduces risk of overweight/obesity, malnutrition, anemia, heart disease, high blood pressure, type 2 diabetes, osteoporosis, oral disease, diverticulitis, and some cancers. People at healthy weight are less likely to develop chronic disease risk factors (such as high blood pressure), develop chronic diseases (such as type 2 diabetes, heart disease, osteoarthritis, and some cancers), have complications during pregnancy, and die at an earlier age.

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

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

Local and State Data

Percent of adults age 20+ with BMI greater than 30* (2009)
Outagamie County: 29.0%
Wisconsin: 29.0%
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 (2009)
Outagamie County: 22.0%
Wisconsin: 23.0%
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 (2011/2012)
Outagamie County: 45.6%
Wisconsin: 44.4%

Percent of youth who are not physically active* (2011/2012)
Outagamie County: 52.1%
Wisconsin: 48.4%

*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 (2011/2012)
Outagamie County: 8.7%
Wisconsin: 8.3%

Percent of youth that drink one or more soda per day (2011/2012)
Outagamie County: 20.9%
Wisconsin: 23.1%

Percent of infants receiving WIC who are exclusively breastfed through the first three months of life (2011)
Outagamie County: 22.7%
Wisconsin: 20.7%
Healthy People 2020 Target: 46%

Sources: Healthiest Wisconsin 2020; Healthy People 2020; Strine et al., 2008

Sources: BRFSS, YRBSS, Pediatric Nutrition Surveillance System (PedNSS)
**Tobacco**

Tobacco use is the single most preventable cause of death and disease in the United States. Every year there are 443,000 deaths in the United States and 8,000 deaths in Wisconsin due to tobacco-related illnesses. For every death from tobacco use, 20 more people suffer with at least one serious tobacco-related illness.

The economic costs of tobacco use in Wisconsin are overwhelming. Smoking-attributable health care costs from tobacco use in Wisconsin are approximately $2.8 billion paid in direct health care costs and $1.7 billion dollars in lost productivity. Annual health care costs are $2,000 higher for 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 diseases, premature birth, low birth weight, stillbirth and infant death. Smoking causes both immediate and long-term effects on exercise and physical activity. Smokers have less endurance, poorer physical performance, and increased rates of injury from physical activity.

People living with mental illness are almost two times as likely to smoke as other persons. 44.3% of all cigarettes in America are consumed by individuals who live with mental illness and/or substance abuse disorders.

Secondhand smoke exposure can cause heart disease, lung cancer, severe asthma attacks, respiratory infections, ear infections and SIDS.

Smokeless tobacco use can cause cancer of the mouth and gums, periodontitis and tooth loss.

**Local and State Data**

- Percent of adults reporting smoking more than 100 cigarettes in their lifetime and currently smoking (every day or most days) (2005-2011)
  - Outagamie County: 18%
  - Wisconsin: 19%
  - National Benchmark: 14%

- Percent of adults age 18+ who reported currently using chewing tobacco, snuff, or snus every day or some days (2011)
  - Outagamie County: 2%
  - Wisconsin: 4%

- Percent of mothers who report smoking during pregnancy (2007-2010)
  - Outagamie County: 13%
  - Wisconsin: 14%

- Percent of illegal tobacco sales to minors (2013)
  - Outagamie County: 26.1%
  - Wisconsin: 13.5%

- Percent of youth who smoked cigarettes on one or more of the past 30 days (2011/2012)
  - Outagamie County: 17.6%
  - Wisconsin: 14.6%

- Percent of youth who used chewing tobacco, snuff or dip on one or more of the past 30 days (2011/2012)
  - Outagamie County: 5.2%
  - Wisconsin: 8.3%

**Sources:** Economic Benefits of Preventing Disease (National Prevention Strategy); Healthiest Wisconsin 2020; Healthy People 2020; WI Tobacco Prevention and Control Program; Lasser et al., 2000; Cleveland Clinic
Reproductive & Sexual Health

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.

Untreated STIs can lead to serious long-term health consequences, especially for adolescent girls and young women. It is estimated that undiagnosed and untreated STIs cause at least 24,000 women in the United States each year to become infertile. 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.

Obesity and diabetes are associated with maternal and fetal complications, including birth defects, miscarriage and stillbirth.

Local and State Data

<table>
<thead>
<tr>
<th>Disease</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
<th>National Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia cases per 100,000 population (2013)</td>
<td>324.9</td>
<td>417.9</td>
<td>92</td>
</tr>
<tr>
<td>Gonorrhea cases per 100,000 population (2013)</td>
<td>29.8</td>
<td>81.9</td>
<td></td>
</tr>
<tr>
<td>Rate of persons living with a diagnosis of HIV per 100,000 population (2010)</td>
<td>50</td>
<td>107</td>
<td></td>
</tr>
<tr>
<td>Birth rate per 1,000 females age 15-19 (2004-2010)</td>
<td>21.0</td>
<td>29.0</td>
<td>22.0</td>
</tr>
<tr>
<td>Percent of births at less than 37 weeks* gestation (2010)</td>
<td>11.3%</td>
<td>10.8%</td>
<td></td>
</tr>
</tbody>
</table>

*Preterm birth is the birth of an infant prior to 37 weeks of pregnancy.

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

Percent of youth who have ever had sexual intercourse (2011/2012)

<table>
<thead>
<tr>
<th>Outagamie County</th>
<th>Wisconsin</th>
<th>National Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>32.3%</td>
<td>41.6%</td>
<td></td>
</tr>
</tbody>
</table>

Percent of youth who have ever had sexual intercourse during the past three months, the percentage who used a condom during last sexual intercourse (2011/2012)

<table>
<thead>
<tr>
<th>Outagamie County</th>
<th>Wisconsin</th>
<th>National Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.7%</td>
<td>64.1%</td>
<td></td>
</tr>
</tbody>
</table>

Sources: WEDSS, CHR, Centers for Disease Control and Prevention (CDC), National Vital Statistics System, WISH, YRBSS
Health Care and Public Health

Access to Care

Access to health care includes medical, dental and mental health. Coverage (having health insurance) is essential but does not ensure access. It is important 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, also called a “medical home.”

Having a medical home for primary care is associated with greater patient trust in the provider, better patient-provider communication, and 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 may 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. 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.

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.

In the United States, less than one-third of adults and one-half of children with a diagnosable mental disorder receive mental health services in a given year.

Despite effective treatments for mental health problems and mental illness, there are long delays—sometimes decades—between the first onset of symptoms and when people seek and receive treatment.

Local and State Data

Hospitalization rate for ambulatory-care sensitive conditions* per 1,000 Medicare enrollees
Outagamie County: 43.0
Wisconsin: 55.0
National Benchmark: 47.0

*Ambulatory-care sensitive conditions: Those diagnoses that are amenable to outpatient services.

Percent of population under age 65 that has no health insurance coverage (2010)
Outagamie County: 10%
Wisconsin: 11%
National Benchmark: 11%

Ratio of population to primary care physicians* (2011-2012)
Outagamie County: 1,196:1
Wisconsin: 1,247:1
National Benchmark: 631:1

*A higher ratio of physicians to the population is associated with a reduction in average mortality in the community, i.e., higher ratio means shorter lifespan of community members.

Ratio of population to mental health providers (2011-2012)
Outagamie County: 3,847:1
Wisconsin: 2,714:1

Percent of Medicaid members receiving a dental service (2008)
Outagamie County: 15.6%
Wisconsin: 23.0%

Ratio of population to dentists
Outagamie County: 1,560:1
Wisconsin: 2,206:1

Percent of population age 2+ that did not have a dental visit in the past year (2004-2010)
Outagamie County: 19.0%
Wisconsin: 25.0%

Full-time equivalents (FTEs) of local health department staff per 10,000 population (2008)
Outagamie County: 2.0
Wisconsin: 3.1
National Median 4.8

Sources: CHR, Healthy People 2020; U.S. Department of Health and Human Services; Wang et al., 2005
Social and Economic Factors

Education

Years of formal education are strongly correlated 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 strongly correlated with reduced psychosocial stress through a greater sense of personal control and healthier lifestyles.

Even after income and insurance status are taken into account, education still has a significant effect on health outcomes. In addition, there are multigenerational health effects because the educational level of parents affects the health of their children through resources available for the children and through the quality of the schools their children attend.

Reading is a critical predictor of high school success or failure. Poor readers are more likely to drop out of school. Dropouts are more likely to be unemployed, to earn low wages and to end up on welfare or in prison.

Over 50% of students with a mental disorder who are age 14 and older drop out of high school—the highest dropout rate of any disability group.

Local and State Data

High school graduation percentage (2010/2011)
Outagamie County: 92.0%
Wisconsin: 88.0%

Percent of adults age 25-44 with some college or associate’s degree (2007-2011)
Outagamie County: 67.3%
Wisconsin: 64.0%
National Benchmark: 68%

Percent of fourth grade students proficient or advanced in reading (2012)
Outagamie County: 84.8%
Wisconsin: 81.0%
Healthy People 2020 Target: 36.3%

Sources: CHR, United Way Worldwide; U.S. Department of Education
Employment

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 United States earn below 250% of the federal poverty level. These workers often struggle to afford food, rent, childcare, and transportation.

Unemployment and under-employment affect health outcomes and can lead to an increase in unhealthy behaviors, such as alcohol use, tobacco use, unhealthy diet, and lack of exercise. These behaviors can lead to higher risk of disease and death.

Some studies indicate that unemployment can lead to physical illness and even death (especially by suicide). Unemployment can also reduce access to health care because insurance may be a benefit of employment.

The annual economic, indirect cost of mental illnesses in the United States is estimated to be $79 billion. Most of that amount (approximately $63 billion) reflects the loss of productivity as a result of illnesses. Major depression is associated with more annual sick days and higher rates of short-term disability than other chronic diseases.

Local and State Data

Percent of population age 16+ unemployed but seeking work (2011)
Outagamie County: 7.0%
Wisconsin: 7.5%
National Benchmark: 5.4%

Count of individuals enrolled in Wisconsin Works (W-2)* on the last working day of the month (2012-2014)

Outagamie County

<table>
<thead>
<tr>
<th>Month</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2012</td>
<td>158</td>
</tr>
<tr>
<td>July 2012</td>
<td>160</td>
</tr>
<tr>
<td>January 2013</td>
<td>168</td>
</tr>
<tr>
<td>July 2013</td>
<td>232</td>
</tr>
<tr>
<td>January 2014</td>
<td>321</td>
</tr>
</tbody>
</table>

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

Sources: CHR; United Way Worldwide; U.S. Department of Health and Human Services, 1999; NAMI

Sources: CHR, Bureau of Labor Statistics, WI Department of Children and Families (DCF)
Adequate Income

While poverty data typically uses the federally established poverty level, a 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.

Living in poverty has the most measurable effect on the rates of mental illness. People in the lowest socioeconomic status are about two to three times more likely than those in the highest strata to have a mental disorder.

26% of the homeless population in the United States lives with severe mental illness—more than four times the rate of serious mental illness in the general population.

Food insecurity occurs whenever the availability of nutritionally adequate and safe food, or the ability to acquire acceptable foods in socially acceptable ways, is limited or uncertain. Hunger is defined as the uneasy or painful sensation caused by a recurrent or involuntary lack of food and is a potential, although not necessary, consequence of food insecurity. Over time, hunger may result in malnutrition.

Hunger and food insecurity affect more than 30 million Americans each year. Low-income households are much more likely than others to suffer from hunger and food insecurity since they have fewer resources to buy food.

Local and State Data

Median household income (all residents of a household age 18+) (2011)
Outagamie County: $56,901
Wisconsin: $50,401

Percent of population living below the Federal Poverty Line (FPL) (2010)
Outagamie County: 9.1%
Wisconsin: 13.2%

Percent of population age 65+ living below the Federal Poverty Line (FPL) (2012)
Outagamie County: 6.7%
Wisconsin: 7.4%

Percent of children under age 18 living below the Federal Poverty Line (FPL) (2011)
Outagamie County: 11.0%
Wisconsin: 18.0%
National Benchmark: 13.0%

Percent of children enrolled in public schools that are eligible for free school lunch (2011)
Outagamie County: 23.0%
Wisconsin: 33.0%

Percent of households that pay 30% or more of their household income on housing costs (2007-2011)
Outagamie County: 28.0%
Wisconsin: 33.0%

Source: CHR; U.S. Department of Health and Human Services; U.S. Conference of Mayors, 2009; Center on Hunger and Poverty and Food Research and Action Center

Sources: CHR, US Census, USDA Food Environment Atlas
Community Safety

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. Homicide is the 2nd leading cause of death in ages 15-24.

Community safety affects both physical safety and psychological well-being. Exposure to crime and violence increases stress which can increase hypertension and other stress-related disorders, smoking rates, substance abuse, sexual risk-taking behavior and risky driving practices. Increased stress levels due to lack of safety may contribute to obesity prevalence. Some evidence indicates that this is true even after controlling for diet and physical activity levels.

Direct and indirect health impacts of lack of community safety include the impact of violence on the victim, post-traumatic stress disorder (PTSD), other psychological distress, upper respiratory illness and asthma, low birth weight, unhealthy diet and not enough exercise, and lack of family and social support. Feeling unsafe also deters people from healthy behaviors such as exercising out-of-doors.

Local and State Data

Violent crime rate per 100,000 population (2008-2010)
Outagamie County: 136.0
Wisconsin: 261.0
National Benchmark: 73.0

Child abuse rate per 1,000 population (allegation of maltreatment substantiated) (2011)
Outagamie County: 3.1
Wisconsin: 3.5

Percent of youth who have been bullied on school property during the past 12 months (2011/2012)
Outagamie County: 29.4%
Wisconsin: 24.0%

Percent of youth who have been electronically bullied during the past 12 months (includes being bullied through email, chat rooms, instant messaging, websites or texting) (2011/2012)
Outagamie County: 21.3%
Wisconsin: 16.6%

Percent of youth who have ever been forced, either verbally or physically, to take part in a sexual activity (2011/2012)
Outagamie County: 10.8%
Wisconsin: 10.3%

Sources: CHR, Uniform Crime Reporting Program, WI DCF, YRBSS
Health Literacy

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 significant 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 and 49% in adults who have not completed high school.

Adults with less than average health literacy are more likely to have poor health status.

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

For major physical diseases, it is widely accepted that members of the public will benefit by knowing what actions they can take for prevention, early intervention, and treatment. However, this type of public knowledge about mental disorders (mental health literacy) has received much less attention. Increasing the community's mental health literacy needs to be a focus for national policy and population monitoring so that the whole community is empowered to take action for better mental health.

Local and State Data

Percent of the population age 16+ that lacks basic prose literacy skills (2003)
Outagamie County: 6.8%
Wisconsin: 7.3%

Source: CHR, Healthy People 2010; Jorm et al., 2000
Sources: CHR, National Center for Education Statistics
Social Support

Family and social support includes the quality of relationships (among family members, friends, colleagues, acquaintances) and involvement in community life. Social support networks are powerful predictors of healthy behaviors.

Social isolation 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.

Both adults and children in single-parent households are at higher risk for unhealthy behaviors, such as smoking and excessive alcohol use, adverse health outcomes such as substance abuse, depression, and suicide, and early death. Self-reported 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 without social or emotional support (2005-2010)
Outagamie County: 12.0%
Wisconsin: 17.0%
National Benchmark: 14.0%

Percent of children that live in a household headed by a single parent (2007-2011)
Outagamie County: 22.0%
Wisconsin: 30.0%
National Benchmark: 20.0%

Percent of adults age 65+ who live alone (2009-2011)
Outagamie County: 32.2%
Wisconsin: 29.9%

Number of refugees* (2005-2009)
Outagamie County: 168
*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.

Source: CHR
Sources: CHR, BRFSS, US Census, WI DCF
Racism

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 (including higher blood pressure and lower immune function) or indirect (including higher rates of smoking, drinking and overeating and lower rates of exercise and social support).

Local and State Data

Number of hate crimes (2009)
Outagamie County: 7*
Wisconsin: 63
*11% of the hate crimes in Wisconsin in 2009 occurred in Outagamie County; all were race-based.

Percent of population by race (2010-2012)

<table>
<thead>
<tr>
<th>Race</th>
<th>Outagamie County</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>91.6%</td>
<td>87.0%</td>
</tr>
<tr>
<td>Black/African American</td>
<td>1.1%</td>
<td>6.2%</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>1.5%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>3.1%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Other</td>
<td>0.9%</td>
<td>1.6%</td>
</tr>
<tr>
<td>2+ races</td>
<td>1.8%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Sources: Paradies, 2006; Ornish, 2008

Sources: WI Department of Justice OJA, US Census
Physical Environment

Built Environment
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. Limited 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/1 mile: urban) (2012)
Outagamie County: 3.0%
Wisconsin: 5.0%
National Benchmark: 0%

Proportion of all restaurants that are fast food restaurants (2010)
Outagamie County: 40.0%
Wisconsin: 41.0%
National Benchmark: 25.0%

Number of farmers markets per 1,000 population (2013)
Outagamie County: 0.04
Winnebago County: 0.04
Calumet County: 0.08

Number of recreational facilities* per 1,000 population (2011)
Outagamie County: 0.18
Winnebago County: 0.08
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)
Outagamie County: 0.5
Wisconsin: 1.3
*Lead poisoned: When a child has a capillary or venous blood lead level greater than or equal to 10 mcg/dL.

Percent of housing units built prior to 1950 (2010-2012)
Outagamie County: 21.0%
Wisconsin: 27.1%

Sources: CHR, USDA, US Census, WI DHS

Sources: CHR, Healthiest Wisconsin 2020
Natural Environment

Natural environment includes a variety of factors, which include 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 lead to decreased lung function, chronic bronchitis and asthma. Exposure to high levels of ozone or fine particulate matter leads to higher rates of emergency room visits and hospitalizations for people with asthma and other respiratory problems and higher risk of death due to heart and lung conditions.

Municipal water supplies are regularly tested and treated so they pose less of a risk. Two measures are used to indicate the potential impact of the water supply on the community: percent of the population using municipal water and percent of the population exposed to contaminants in municipal water each year. Limited exposure to contaminants does not pose immediate health risks.

Local and State Data

Annual number of unhealthy air quality days due to fine particulate matter (2008-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Outagamie County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>3</td>
</tr>
<tr>
<td>2009</td>
<td>6</td>
</tr>
<tr>
<td>2010</td>
<td>9</td>
</tr>
</tbody>
</table>

National Benchmark: 0

Estimated percent of population on municipal water (2011)

Outagamie County: 89.0%
Wisconsin: 71.0%

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

Outagamie County: 9.0%
Wisconsin: 10.0%

Population served and arsenic level in community water supply (2010)

<table>
<thead>
<tr>
<th>Arsenic Level</th>
<th>Outagamie County</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5 mcg/L</td>
<td>84.4%</td>
</tr>
<tr>
<td>5-10 mcg/L</td>
<td>0.6%</td>
</tr>
<tr>
<td>No data</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Population served where maximum nitrate level is 3 mg/L or greater (2008-2010)

<table>
<thead>
<tr>
<th>Year</th>
<th>Outagamie County</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0.2% 99.8%</td>
</tr>
<tr>
<td>2009</td>
<td>38.6% 61.4%</td>
</tr>
<tr>
<td>2010</td>
<td>38.8% 61.2%</td>
</tr>
</tbody>
</table>

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

Outagamie County: 40.3%
Wisconsin: 7.5%

Sources: WI Environmental Public Health Tracking (EPHT) System, CHR, WI DHS
Appendix A

Comprehensive Data Review: Sources and Limitations

This assessment drew heavily from resources available through the CHIPP Infrastructure Improvement Project from the Wisconsin Association of Local Health Departments and Boards (WALHDAB) and the University of Wisconsin Population Health Institute. The assessment is largely based on the Recommended Core Data Set for Community Health Improvement (version 1.0). The data set draws on information compiled for the annual county health rankings report through ongoing data collection systems (e.g., Behavioral Risk Factor Surveillance System, Youth Risk Behavior Surveillance System, US Census, American Community Survey, Uniform Crime Reporting Program and the National Vital Records System). Other state-specific sources of data used in this assessment include the Make Your Smile Count Survey, Public Water Fluoridation Census, Wisconsin Inpatient Hospitalization Discharge file and Wisconsin Hospital Emergency Department data system. Additional county-level data was provided by the Wisconsin Department of Health Services, the Wisconsin Department of Children and Families, WI Wins, CESA 6 and the Outagamie County Division of Public Health.

Key online data sources include:

- Wisconsin Department of Health Services, 2010 Profile for Outagamie County: www.dhs.wisconsin.gov/localdata/pdf/10pubhlth/outagamie10.pdf
- Wisconsin Department of Health Services, Wisconsin Interactive Statistics on Health (WISH) data query system: www.dhs.wisconsin.gov/wish
- University of Wisconsin Population Health Institute, County Health Rankings for Outagamie County: www.countyhealthrankings.org
- United States Department of Commerce, U.S. Census Bureau, American Fact Finder: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

Limitations

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

- There can be a lag time between data reporting and availability (i.e., the timeliness of data)
- Small numbers can make comparisons difficult
- Health information is generally not available for jurisdictions smaller than counties (e.g., individual communities within Outagamie County)
- There is inadequate data for some topic areas, including data that is stratified by sex, race, ethnicity, age, etc.
- There are jurisdictional challenges within data collection systems (e.g., reporting issues across county and state lines)
- Crossover of partners’ multiple jurisdictions (e.g., there are 5 public health jurisdictions in the tri-county area of Calumet, Outagamie and Winnebago counties)
Sources


Wisconsin Department of Children and Families. Refugee Assistance Services Program Section. Statistics, Population & Census Data, Wisconsin’s
Outagamie County Community Health Assessment


