

Health Data/Statistics and Trends/Survey Results

Western Upper Peninsula 2012 Regional Health Assessment Report to the Community

Baraga, Gogebic, Houghton, Keweenaw and Ontonagon Counties, Michigan



Conducted by Western Upper Peninsula Health Department

In Partnership With

Aspirus Grand View

Aspirus Keweenaw

Aspirus Ontonagon Hospital

Baraga County Memorial Hospital

Portage Health

Copper Country Community Mental Health Services

Gogebic County Community Mental Health Authority

Western Upper Peninsula Substance Abuse Services Coordinating Agency

Welcome to the community report on the 2012 Western Upper Peninsula Regional Health Assessment, conducted by Western Upper Peninsula Health Department in partnership with Aspirus Grand View, Aspirus Keweenaw, Aspirus Ontonagon Hospital, Baraga County Memorial Hospital, Portage Health, Copper Country Community Mental Health Services, Gogebic County Community Mental Health Authority, and Western Upper Peninsula Substance Abuse Services Coordinating Agency.

The health assessment covers Michigan's Western U.P. region: Baraga, Gogebic, Houghton, Keweenaw and Ontonagon counties. The purpose of this project was to document the health status and needs of the region's 71,000 residents. Data for the assessment report were gathered from a wide array of published sources, from a locally conducted survey of more than 2,500 adults, and from local health care providers. Sources include the U.S. Census, the American Community Survey, and statistics compiled by the Michigan Department of Community Health and other agencies.

Three broad themes emerged from the year-long assessment, and will be highlighted in this report:

The Impact of an Aging Population

Aging is a major risk factor for chronic disease. The Western U.P. has a greater proportion of elderly residents than the state and nation.

The Effect of Income and Education on Health

Disparities in health status and access to care between socio-economic groups, i.e. by income and educational level, were more pronounced than differences between residents of different counties.

The Importance of Prevention: Chronic diseases such as heart disease, cancer and diabetes are the leading causes of death in the region, as they are in much of the world. The most common root causes of preventable death – tobacco use and obesity – are risk factors for about one-quarter and one-third, respectively, of the region's adults.

This 8-page community report is an abbreviated version of a 258-page report prepared for use by health care and community planners. It contains data on population characteristics; access-to-care data including rates of insurance coverage and use of preventive services; health statistics for every stage of life, from pregnancy through old age; and data on infectious and chronic diseases and health habits that are risk or preventive factors.

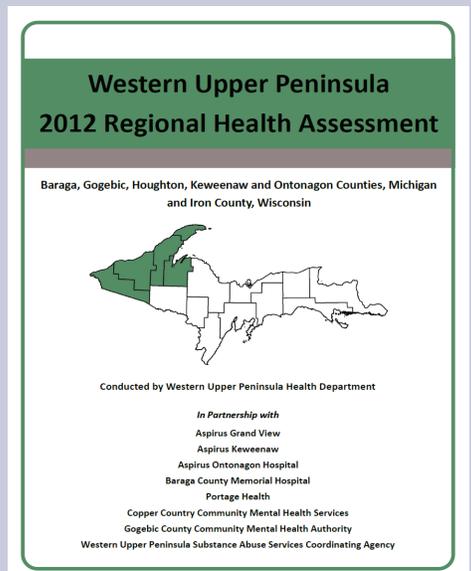
You can download the full report (shown at right) and this community report version at www.wuphd.org or call 906-482-7382 for more information.

The Local Health Survey

The local health survey was the most ambitious element of this project. In national and state health surveys, too few residents are sampled from rural counties to make reasonable county-level estimates. By analyzing the local survey responses of more than 2,500 Western U.P. residents, we now have the most accurate and complete health data ever generated for this region, covering 70 critical measures of health.

Furthermore, previously published data can tell us how many people are born in a given year and a population's leading causes of death, but they don't say much about health through the lifespan. State and national data registries are better at telling us *what* happened, but not *why* it happened. Local survey data helps fill in the missing pieces.

Because it is not possible to survey every single person in the region, the data are estimates calculated by scientific sampling. Local survey data will be prefaced by words like *estimated*, or *about*; for example, "*an estimated 18.6% of Western U.P. adults between the ages of 18 and 64 have no health care coverage.*" For the 95% confidence intervals (popularly known as 'margins of error') and detailed explanations of survey and statistical methods, please see the full report at the health department web site.



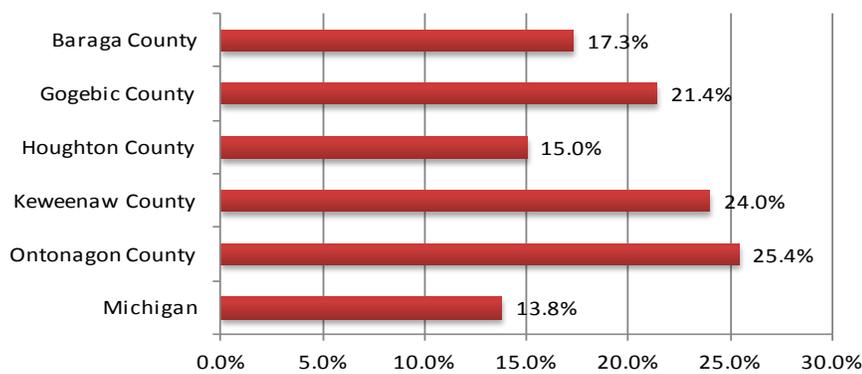
Demographics are the starting point for understanding community health. Age, gender, income and educational attainment are among the population characteristics that are most predictive of health status, needs, and access to care. In this report, we will explore the similarities and differences in health data between demographic groups.

The total population of the five Western U.P. counties declined by about 1 percent from 2000 to 2010, to around 71,000, with declines in Gogebic, Keweenaw and Ontonagon counties largely offset by modest increases in Houghton and Baraga counties. With an aging population, Western U.P. counties can expect an increasing burden of chronic disease and rising needs for services for the elderly.

4th, 7th

Ranks of **Ontonagon** and **Keweenaw** counties, among Michigan's 83 counties, for the highest percentage of residents age 65 and older. Gogebic County ranks 18th, Baraga County ranks 33rd, and Houghton County ranks 45th out of 83 counties for proportions of seniors. Counties with large minority populations or universities have more young people.

Percent of Residents Age 65 and Older: U.S. Census 2010



- Approximately 19% of Western U.P. adults age 65 and older reported experiencing at least 14 days of poor health in the last 30 days in the local survey.
- An estimated 38.4% of adults age 65-plus reported being limited in their activities by physical, mental or emotional problems, or required the use of special equipment such as a cane or wheelchair.

Poverty and Vulnerable Populations

People living in low income households, the unemployed and uninsured, and adults who have not completed high school tend to have poorer health and less access to healthcare services.

- Local per capita and median household incomes are between two-thirds and three-quarters of Michigan and national figures.
- Baraga County had one of the nation's highest unemployment rates in 2010 and 2011, at greater than 23%.
- An estimated 25% of the region's children live in poverty.
- An estimated 18% of the region's adults age 18-64 have no health insurance. Low-income adults are much less likely to have a personal health care provider and to get annual check-ups and recommended screenings for cancer.
- Adults with household incomes less than \$25,000 report higher rates of either "Fair" or "Poor" health (27.1%) than adults with incomes of \$50,000 or more (11.6%).
- An estimated 17% of adults with incomes under \$25,000 reported 14 or more days of poor mental health in the past month, compared with 5% for those with higher incomes.
- About 35% of low-income adults reported having a disability, compared with about 18% for all others.
- An estimated 60% of Western U.P. adults earning less than \$25,000 per year received no dental care in the past year compared with 30% for all others, and a third of children on Medicaid did not visit a dentist in the past year.

41st

The rank of the United States among 45 industrialized nations in infant mortality. The local rate over the past 20 years, at about 6 deaths before age 1 per 1,000 live births, is slightly better than Michigan and national rates.

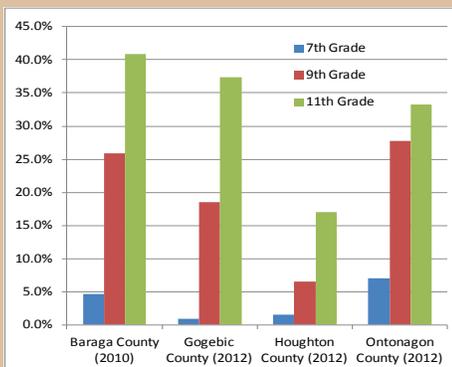
40%

The percentage of babies born in Baraga County in 2010 to women who smoked while pregnant, compared with 18% statewide.

30-40%

The percentage of teens who are either overweight or obese, in school surveys, grades 7-9-11. About a quarter of local teens reported watching 3 or more hours of television on most school days, and about a third said they play video games or use a computer for 3 or more hours for other than school work.

Percentage of Students Who Drank Alcohol, Past 30 Days



Many teens experiment with alcohol, tobacco and other drugs in middle school, making early adolescence a critical age for targeted prevention programs.

At every age and stage of life there are important health needs. On pages 4-7, we examine the health of Western U.P. residents, focusing on what we have common across the five counties, and on disparities in health status, risk factors and access to care between people of different ages, genders, incomes and education levels.

Child Health

- Between one quarter and one half of local births in recent years were to single-parent households. In 2010, 58.8% of births to Baraga County residents, and 52.2% in Gogebic County, were to unmarried women. Studies show that unmarried mothers as a group have lower incomes, are less apt to receive adequate prenatal care, are more likely to smoke and less likely to gain adequate weight during pregnancy.
- Half to three quarters of local births are paid by Medicaid, with rates above 60% in Gogebic and Ontonagon counties in recent years, and as high as 73% in Baraga County in 2009, indicative of high rates of poverty.
- Tobacco use during pregnancy is common, exceeding 20% in all counties, 30% in Ontonagon County and 40% in Baraga County. Smoking while pregnant is a risk factor for Sudden Infant Death Syndrome (SIDS), low birth weight, and other poor health outcomes
- Childhood immunization rates (the percentage of children age 19-35 months who have completed the recommended vaccination series) hover around 70% in Baraga, Gogebic and Ontonagon counties, and 60% in Houghton-Keweenaw, leaving too many young children vulnerable to serious vaccine-preventable diseases.

Adolescent Health

- Teens in most Western U.P. schools participate in the Michigan Profile for Healthy Youth (MIPHY) survey at grades 7, 9 and 11. In survey results, health-risk behaviors including use of tobacco, alcohol, drugs, and unprotected sex, increase markedly from 7th to 11th grade.
- By 11th grade, about a third of students reported drinking alcohol within the last 30 days, a quarter smoked cigarettes in the past month, and a quarter rode in a vehicle with someone who had been drinking.
- 15-20% of teens are obese, and another 15-20% are overweight, raising their risk of adult obesity and elevating their lifetime risk for heart disease, diabetes and certain cancers.

Infectious Disease

- Chlamydia is the most common laboratory-confirmed sexually transmitted disease (STD) in the region. In 2011, there were 91 confirmed cases, including 72 among people age 15-24.
- Human Papillomavirus (HPV), the leading cause of cervical cancer, is now largely preventable by the widely available HPV vaccine. Only 24% of the region's girls age 13-18 had completed the three-shot series. HPV vaccination is now available for males and females age 11-26.

Chronic Disease and Mortality

Chronic diseases – such as heart disease, cancer and diabetes – are among the most common and costly health problems in terms of health care spending and years of potential life lost.

- Half of local deaths are attributed to heart disease or cancer, similar to Michigan and U.S. rates. Age-adjusted death rates, and years of potential life lost below age 75, are similar as well.
- Almost 28% of the region's deaths in 2010 were caused by heart disease, which was the leading cause of death.
- Cancer is the second leading cause of death in the Western U.P., Michigan, and the United States, after heart disease. Among Western U.P. adults, an estimated 11.6 percent have ever been told they had cancer.
- Local age-adjusted cancer mortality rates are around 200 per 100,000 population per year, with no evidence that any county differs significantly from the Michigan rate.
- Prostate cancer is the most common cancer among men, and breast cancer is the most common cancer among women.
- Lung cancer is the second most common cancer among both genders, and overall the leading type of cancer death. Men who smoke are about 23 times more likely to develop lung cancer, and women who smoke are 13 times more likely, than non-smokers.
- Type 2 diabetes is a progressive disease that usually emerges later in life. From the local health survey, 2.3% of the region's adults age 18-39, 11.5% age 40-64, and 21.8% age 65 and older had been diagnosed with diabetes. With high percentages of children and young adults overweight or obese, and too few people getting adequate physical activity, future diabetes rates may skyrocket.

Spotlight: Cancer

Are local cancer rates higher than in other parts of the country?

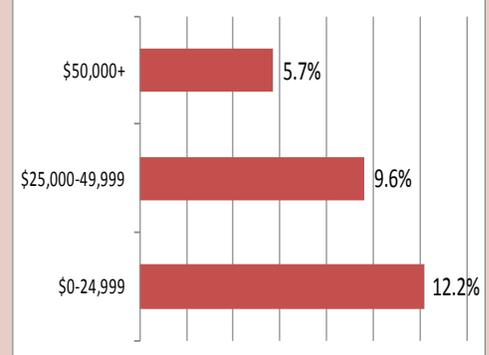


Actually, the data demonstrate that from 2005-09, age-adjusted cancer incidence rates (new cancer cases diagnosed per year per 100,000 people) were lower in Gogebic, Keweenaw, and Ontonagon counties than for the state of Michigan overall, while the rates in Baraga and Houghton counties were estimated as slightly lower, but this difference was not shown to be statistically significant.

Diabetes: A Growing Problem

Age-adjusted death rates due to diabetes in recent years were higher in Houghton and Keweenaw counties than statewide. About 10% of adults in the local health survey reported that they had been diagnosed with diabetes, a rate expected to rise given the dramatic increase in obesity in recent years. Experts predict that one third to one half of today's youth will develop diabetes in their lifetimes, if obesity trends are not reversed.

Adult Diabetes Prevalence By Household Income



68.7%

The estimated percent of Western U.P. adults who are overweight (39.2%) or obese (29.5%).

- In the local health survey, high rates of obesity and overweight are observed among both genders, and across all ages, incomes, and education levels.
- For Baraga, Gogebic and Ontonagon counties, the rates of obesity (defined as a Body Mass Index of 30.0 or greater) among adults were estimated at 37.1%, 32.7% and 40.6%.
- In Houghton-Keweenaw counties, which taken together have a relatively younger and higher educated population, the obesity rate was 24.7%, but an additional 40.7% were overweight, bringing the percentage overweight or obese to 65.4, similar to state and national figures.

12.1%

The estimated percentage of Western U.P. adults considered heavy drinkers (men who reported consuming more than two drinks per day in the past month, or more than one drink per day for women.)

The Michigan rate for heavy drinking is lower, at 7.1%.

Longterm heavy drinking raises the risk of liver disease and other chronic conditions.

Chronic Disease (continued)

- About one third of local adults report having been diagnosed with hypertension. Among residents age 65-plus, the prevalence of a high blood pressure is greater than 60%.
- About 15% of Western U.P. adults have ever been told they had asthma, and 8% currently have asthma. Locally, asthma rates do not vary significantly between socioeconomic groups, and appear to decline with age.
- About 7% of all local adults report chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis. COPD prevalence increases to 12% among the age 65 and older group.
- Arthritis and rheumatism are the leading causes of disability in the United States. More than one third of Western U.P. adults, and an estimated 60.7 percent of those aged 65 and older, have ever been told by a doctor they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia. Among those with doctor-diagnosed arthritis, an estimated 54.1 percent reported that their usual activities were limited by this condition. Low-income adults with arthritis were more likely to be limited in their usual activities.
- About 24% of local adults report having been diagnosed with chronic or episodic depression and related diagnoses, including about 29% of women and 18% of men. About 28% of adults with household incomes below \$25,000, 23% with incomes between \$25,000 and \$50,000, and 17% with incomes above \$50,000 report they have been depressed. Surveys of local mental health providers indicate a need for more mental health services, especially for low-income patients.

Substance Abuse

- Local admissions data from publicly funded substance abuse treatment programs follow the national pattern: alcohol was the most common substance indicated as a primary reason for admission in the Western U.P. from 2009 through 2011 in publicly funded programs. The categories other opiates (non-heroin), and marijuana, were second and third most commonly reported reasons for admission.
- Baraga County had the highest per capita admissions rates for each of the three classes of substance cited above.
- Treatment admissions data and information from health care providers indicate that rates of prescription painkiller abuse and of babies born addicted to medications are increasing. State registries indicate that painkiller prescriptions on a per capita basis are higher in Baraga County than in other Western U.P. counties and in Michigan as a whole.

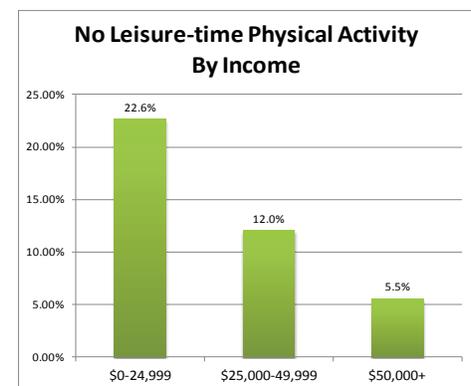
In the face of the daunting statistics on chronic disease burden, it is important to focus on prevention of disease by promoting healthy behaviors like good nutrition, exercise and no tobacco use, along with early detection of cancer, hypertension, diabetes and other treatable conditions through access to regular check-ups and screenings. Local health survey findings document the need for healthier lifestyles and improved access to screening.

Healthy Eating



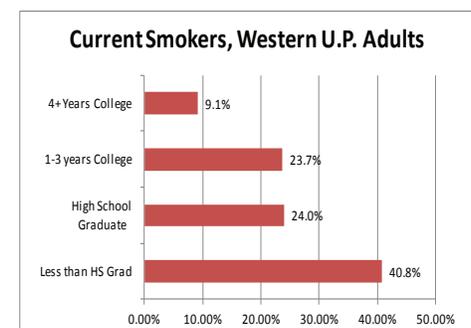
Just 11.5% of Western U.P. adults say they eat the recommended 5 or more fruit and vegetable servings per day.

Physical Activity



Low-income adults are less likely to exercise.

Tobacco Use

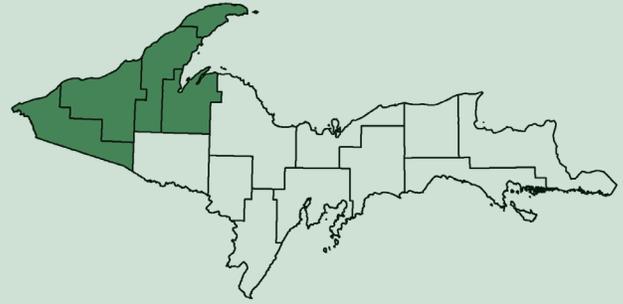


Tobacco use is significantly lower among adults with university degrees.

- Roughly 1 in 7 Western U.P. adults reported no leisure time physical activity. No leisure time physical activity was more prevalent with increased age, lower levels of education and lower income.
- Men were significantly more likely than women to report inadequate fruit and vegetable consumption (93.5% vs. 84.3%).
- Only 5.3% of adults with household incomes below \$25,000 indicated that their daily consumption of fruits and vegetables met the recommendation, compared with 15% among the rest of the population.
- Over half of Western U.P. adults are current or former smokers (22.9% current; 29.8% former).
- Current smoking prevalence is highest among those with household incomes below \$25,000, estimated to be 36.1%, versus 17.6% and 12.8% for middle- and upper-income groups, respectively.
- Binge drinking prevalence, the consumption of 5 or more drinks in 2 hours for men or 4 or more drinks in 2 hours for women, was estimated to be 14.7% among Western U.P. adults. Both heavy drinking and binge drinking are more common with younger adults.
- Cost presents a barrier to accessing health care for an estimated 22.3% of Western U.P. adults.
- Lack of transportation was cited as a barrier to accessing health care services for 8.5% of adults with incomes below \$25,000.
- Local residents, particularly those with low income and/or low educational attainment, reported under-utilization of age-appropriate screening tests to detect diseases such as breast cancer (mammography), prostate cancer (PSA) and colon cancer (sigmoidoscopy or colonoscopy) compared to their Michigan peers. In fact, only 53.1% of Western U.P. women over 40 reported receiving a mammogram in the past year, only 54.4% of males over 50 reported having a PSA test in the past year and only 49.8% of adults over 50 years reported undergoing a sigmoidoscopy or colonoscopy in the past five years.

CONCLUSIONS

This community report describes the health status of our local population. It is of unprecedented scope and detail for such a sparsely populated rural region. And with every challenge identified – differences in health status, access to care and health behaviors – comes an opportunity to work together to address community health needs through education, targeted prevention, expanded access, and collaboration. This report raises questions but does not dictate specific solutions. It can, however, be used to support the development and implementation of new strategies to improve health outcomes.



After reviewing the thousands of health indicators contained in this assessment, three major themes emerge.

First, aging can be thought of as the number one risk factor for the development of chronic disease. As fewer people die in infancy, childhood and young adulthood as a result of infections and vaccine-preventable diseases, more people live long enough to develop progressive conditions like cardiovascular disease, cancer, Alzheimer’s Disease, and chronic diseases of the lungs, kidneys and other organs that can take decades to emerge. With local counties having up to twice the percentage of residents aged 65-plus as the state and nation, the Western U.P. is already coming face to face with the increasing healthcare needs slated to hit the rest of the United States in 10-20 years, as Baby Boomers retire.

Next, analysis of county-level health statistics such as leading causes of death, combined with the results of the locally conducted behavioral risk factor survey of the health status, habits and access to care of more than 2,500 Western U.P. adults, demonstrates that health outcomes are more strongly correlated with socioeconomic factors like employment status, income and education than with county of residence within this region. And, while similarities outweigh differences when looking exclusively at Western U.P. counties, there are significant differences identified when comparing the Western U.P. to the state as a whole for many health indicators.

Last, we note that life expectancies have lengthened in the last century due to developments in medical care, antibiotics and vaccines, improved sanitation and worker safety. Increasingly, mortality and morbidity are now the result of largely preventable chronic diseases. Heart disease, cancer and diabetes are the leading causes of death in our region, just as they are in Michigan as a whole, and indeed in all affluent countries. Tobacco use and obesity are currently the leading root causes of preventable death in the United States. Assuming tobacco use continues to decline, poor diet and inadequate physical activity are slated to become the leading killers of the 21st Century.

If, as a community, we want our residents to enjoy longer lives without having to endure the burden of chronic disease, adoption of effective prevention strategies will be critically important in the years to come. These strategies, aimed at alleviating or delaying the onset of chronic disease, must focus on improving access to and utilization of affordable, appropriate and quality health care, as well as the adoption of healthy behaviors. It is the intent of the partners in this project that this document be read as a call to action to develop such strategies in order to ensure that all Western Upper Peninsula residents have the opportunity to live healthier lives. This report can then be used as a baseline assessment against which to measure the success of future community health improvement efforts.