Healthy

The Prosperous section contains indicators Basic Needs, Health & Wellness, and Environment & Energy.

Opportunities for Action

For Individuals

- Keep alcohol out of the hands of youth. Model safe and responsible alcohol use.
- Educate yourselves on addiction as a chronic disease. Support local recovery efforts.
- Learn how phosphorus impacts the environment and water quality. Support efforts and practices that help minimize phosphorus and other pollutants from entering our lakes and streams.
- Advocate to State and Federal Government Officials the need to take action on the cliff of
 eligibility requirements in public benefits, providing protection to the most vulnerable portions
 of our community.

For Organizations

- Support community initiatives addressing evidence based approaches for solving the issues of substance abuse, affordable housing and basic needs for all members of the community.
- Review policies to ensure your company is a recovery-oriented organization.
- Collaborate and partner to work together to collectively reduce phosphorus impacts on surface water quality.
- Maintain and grow collaboration and partnership in working together to address the needs of all community members.

For the Community

- Come together as individuals, businesses and organizations to plan and assist in implementing strategic actions for solving the community's issues of affordable housing, substance abuse and basic needs.
- Define a community-wide plan that addresses the root causes of substance abuse both in teens and adults. Invest in evidence based solutions, intervention and policy strategies to reduce/eliminate substance abuse.
- Engage stakeholders and decision makers to address the options, costs and opportunities to reduce phosphorus from agriculture runoff to surface waters to acceptable levels.
- Promote community awareness and discussions regarding solutions for the following issues
 within the community: affordable housing, emergency family housing, supported housing,
 transitional housing, day care and women's shelters.

BASIC NEEDS

Successes & Progress

- * The Marathon County Hunger Coalition member pantries collaborated to ensure individuals/families receive the needed food to keep them healthy and fed.
- * The Marathon County Housing and Homelessness Coalition brought the non-profit housing organizations together to work collaboratively in their effort to assure people are housed.
- * School districts worked to solve hunger for their students by opening food pantries within the schools.
- * More requests for food assistance were met by pantries throughout Marathon County.

Calls to Action

- Provide quality affordable housing that is accessible to public transportation.
- Address the cliff of eligibility requirements in public benefits.
- Provide caregivers for elderly individuals wanting to continue to live within their own home.
- * Provide emergency housing units for homeless families. Only one family unit is available in all of Marathon County.
- * Create more options in Transitional Housing units for individuals coming out of treatment programs.

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

HUNGER Indicator 15

Why is this Important?

Hunger continues to be a significant issue within Marathon County. Keeping our community healthy and fed remains an important goal of the organizations that assist with this issue. In recent years, two definite segments of the population have shown an increase in need, these being students of all ages and our ever increasing senior population.

In Marathon County the utilization of free and reduced lunches range from 13.08% usage to 81.34% usage. Over 2/3 of the schools in Marathon County have at least 25% usage of this program. All schools are seeing the hunger needs of students increasing and are opening food pantries within schools to assist with meeting this need.

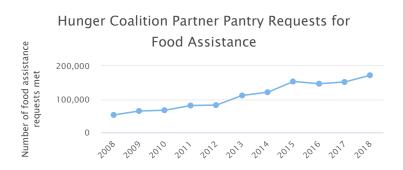
Our senior population continues to grow daily, with one in every five individuals over the age of sixty and an additional 12,000 more turning sixty each day within the United States. One in four seniors live alone with nearly 9 million seniors in the United States facing the threat of hunger. Food pantries within Marathon County are seeing an increased usage of seniors accessing their pantries, knowing there are many more that are incapable of accessing services due to transportation issues or basic pride.

Key Takeaways

In Wisconsin, one in ten individuals struggle with hunger, and of these, one in six are children.

Pantry hours and lack of transportation limits the ability for some individuals to access these services. Some pantries are assisting with this issue by allowing a 3rd party to access services for those in need.

Larger pantries are located within the Wausau metro area while many of the outlying smaller communities provide pantry services within their communities.



Requests for Food Assistance Met

151,875

A Prior Value

(146,647)



Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Number of Individuals Served Through Food Assistance

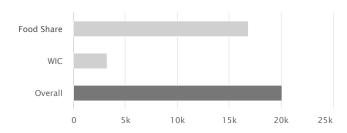
20,116



Trend

Prior Value (20,756)

Number of Individuals Served Through Food Assistance by Type of Food Assistance



LIFE Survey: Resident Perspectives

LIFE Survey respondents reported that 15% skipped one or more meals to save money in the past year.

7% of LIFE Survey respondents reported using a food pantry and/or eating at a free community meal in the past year.

HOUSING ASSISTANCE

Why is this Important?

According to national guidelines, a family should spend less than 30% of their income on housing for it to considered affordable. Housing assistance is needed for community members whose income and earnings make housing unaffordable.

Per the Marathon County Housing Availability and Affordability Study, a person's annual income must be at least \$24,120 to be able to afford a one bedroom unit. When you move up to a four bedroom unit the family needs to be earning at least \$46,240.

There are resources available to assist with housing cost, but the needs continue to outweigh the available resources. Public Housing and Section 8 wait lists, the limitations of both Section 8 voucher funds and emergency housing funds, and limited resources of individuals all factor into a less than ideal situation for those needing housing assistance.

The Housing and Homelessness Coalition focuses on increasing the amount of quality, affordable housing in Marathon County.

Key Takeaways

In 2018 there were 2742 request for housing assistance through United Way's 211. 321 of those requests resulted in an unmet need.

The Wausau Community Development Authority is currently utilizing 250 of their 435 vouchers based on current funding allocation. The average unit cost per voucher is based on family size and other factors, with the recipient paying the balance of the rent.

100 families are currently on the Section 8 wait list. Families can only be added to the wait list when it is officially open. There is usually between 250 to 400 applications received at the time the wait list is opened.

Renters Spending 30% or More of Household Income on Rent

40.8%

(2013-2017)



WI Counties

US Value

(50.6%)



U.S. Counties



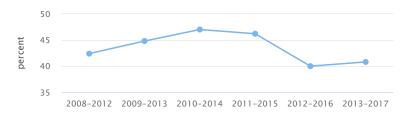
Prior Value (40.0%)



WI Value (45.7%)



Renters Spending 30% or More of Household Income on Rent



Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Number of Households Receiving Emergency Housing Assistance Funds (EHAF)

249





(2018)

Prior Value (246)

Average monthly rents for home/apartments in Marathon County.

Type of Apartment	Monthly Rent
Overall Average Rent	\$1,034
Studio Apartment	\$497
1 Bedroom	\$605
2 Bedroom	\$774
3 Bedroom	\$970
4 Bedroom	\$1,178

LIFE Survey: Resident Perspectives

49% of LIFE Survey respondents state they spend more than 30% of their income on housing.

The number of individuals spending more than 30% of their income on housing has increased by 3% since the 2017 survey.

40% of LIFE Survey respondents state they do not have 3 months of savings to cover their expenses in the event of an emergency.

HOUSEHOLD UTILITIES

Why is this Important?

The cost of owning or renting a home are numerous and include water and sewer, electricity, natural gas, LP or propane gas as well as non-essential services such as phone, cable television and internet services. Added together, the total costs of these services can exceed family budgets. If this happens and the bills go unpaid, the utilities can and do shut off the services. Utilities are a life necessity.

In the event of a service shut off, safety and health issues can arise. Lack of proper water and sewer can result in unsanitary conditions. Without proper heating individuals may turn to unsafe alternatives for keeping their home warm. In today's world, the lack of electricity can have an effect on children's ability to complete homework, adult's ability to apply for employment and many other activities that have become necessary to handle via the internet.

There are energy programs available to assist with heating and electrical needs. Two of the major energy assistance programs available to residents with limited income are the Wisconsin Home Energy Assistance Program administered by Energy Services, Inc. and Public Benefits Energy Assistance Program. While available resources in the community provide much needed assistance, there are still needs not being met in Marathon County.

Key Takeaways

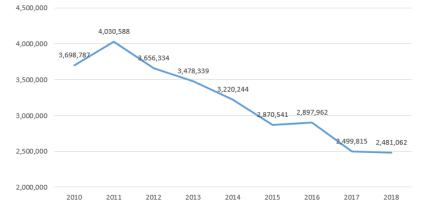
The average water bill for a Marathon County residential customer using 18,750 gallons in a quarter was \$195.19, with an additional charge for sewer cost.

If a utility service provided the primary heat source to a home or impacts the primary heat source to a home (for example, water or steam radiators), the utility cannot disconnect that service from November 1 through April 15 each year.

70% of Wisconsin residents use natural gas for heating while only 12% use electricity for heating. More than 20% of Wisconsin households do not use air conditioning during the summer.

In 2019 the average cost per kwh of electricity in Wisconsin was \$0.148; Wisconsin Public Service cost per kwh was \$0.098.

Total Amount Paid by the Wisconsin Home Energy Assistance Program for Heating Assistance



Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

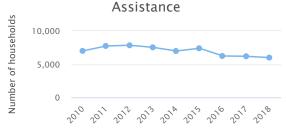
Number of Households with Utility Assistance

5,985 Number of households

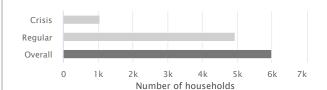
Prior Value (6,185)



Number of Households with Utility



Number of Households with Utility Assistance by Type of Payment



LIFE Survey: Resident Perspectives

19% of individuals responding on the LIFE Survey missed or were late with monthly bills (utilities, phone, etc.) in the past year.

HOUSING OPTIONS FOR AGING

Why is this Important?

As the aging population in Marathon County continues to grow, available housing options need to be considered. Nursing homes are no longer the only option available, and today's trends show that aging adults are staying in other housing options for most, if not all, of their lives. Examples of physical locations that are being utilized are: their own home or apartment with or without supportive assistance, subsidized/accessible apartments, adult children's homes, and various levels of assisted living.

Two important factors come to play in allowing an older adult the choice as to where they want to live. These are their finances and the availability of quality caregiver support. If an individual does not have the private funds to insure their choice of living situation, Medicaid funds are available to assist with helping to keep individual out of costly nursing home situations.

There is a consistent lack of paid caregivers in Marathon County and Wisconsin. Individuals that could privately pay for services to come into their own living situation or perhaps are enrolled in a Medicaid program to bring in the services are simply running out of options because there is no one to hire. Assisted living facilities as well as nursing homes are having this very same struggle.

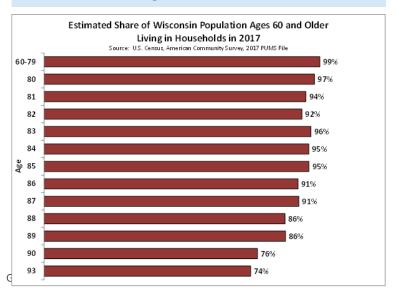
Key Takeaways

By 2040, the percent of population in Marathon County that is anticipated to be 60 or older will be 29.2%.

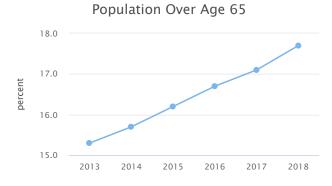
In Wisconsin if all current caregiver positions are fully staffed, it's projected that there will be a 30% increase in the number of caregivers needed by 2026.

Job titles vary for caregivers: Certified Nursing Assistant. Home Care Aide, Home Health Care Providers, Medication Aide, Patient Care Assistant, Resident Care Assistant, Personal Care Assistant.

Caregivers | 91% are female, 41% are under the age of 29, 50% work less than 36 hours per week, the average wage is \$12.60 for Home Health Aides and \$13.30 for Nursing Assistants.



Population Over Age 65 17.7% (2018) WI Value (17.0%) (16.0%) Prior Value (17.1%) Trend



LIFE Survey: Resident Perspectives

22.15% of LIFE survey respondents are concerned about the availability of elder care. 32.53% of the responses were unsure of this topic.

In 2013 the satisfaction rate of individuals responding regarding elder care was 66%, in 2019 it has dropped to 45%.

Why is this Important?

Homelessness can be caused by life experiences such as job loss, domestic violence, unexpected medical bills, inability to pay rent, or impairments such as depression, untreated mental illness, physical disabilities, alcohol/drug abuse or PTSD. Homelessness includes those individuals/families in shelters, unsheltered (non-traditional housing), couch surfing and motel stays funded by local programs. For those living in poverty or close to the poverty line, an "everyday" life issue can be the final factor in placing them on the street.

Homelessness affects many families with children. This causes school attendance to drop and the performance of the student can be affected due to the unstable housing environment.

Marathon County has a limited number of shelter facilities to house the homeless. In Wausau there is only one family unit available. The number of lodging nights and length of stays remain high as options for quality, affordable housing is limited.

The Housing and Homelessness Coalition continues working on the many issues of homelessness and looks at new innovative programs to address these needs with the goal of eradicating homelessness in Marathon County.

Key Takeaways

Seven families were turned away from the Salvation Army Shelter in December of 2018 as there was no available family unit to house them in.

Point-in-time homeless street counts increased to 194 individuals in 2018. Of these, 28 individuals were living in places not meant for human habitation.

Individuals are staying longer in shelters, with the average stay being 41.7 nights.

Number of Individuals Sheltered

500.0 Number of Individuals





Number of Individuals Sheltered



Average Number of Nights Sheltered

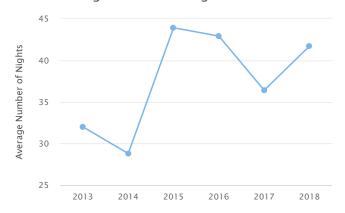
41.7
Average
Number of
Nights





werage Prior Val umber of (36.4) Nights (2018)

Average Number of Nights Sheltered



Number of Lodging Nights

135 Number of Nights (2018)



LIFE Survey: Resident Perspectives

8% of LIFE Survey respondents state they missed paying their rent one or more months in the past year.

UNMET BASIC NEEDS

Why is this Important?

When individuals and families are able to meet their basic needs, they are more likely to work towards and maintain financial stability. They are also more likely to be able to focus on improving their overall wellbeing. However, when people's basic needs are not met, challenges can arise related to housing instability and homelessness, food insecurity, inadequate clothing for different types of climate, and isolation. Stable and safe housing, food security, proper clothing, and access to transportation are interconnected. For example, in order to be able to afford proper clothing, a home, and an adequate supply of food, individuals and families need to have a form of transportation to get to a job that pays a living wage. Communities can help close basic needs gaps by working together to connect individuals and families to the support they need, and explore ways to increase access to, and availability of, services.

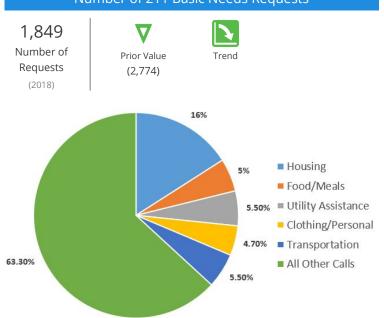
Key Takeaways

In 2016, 872,561 households, or 37.5% of households, in Wisconsin could not afford basic needs such as housing, childcare, food, transportation, and health care.

In 2018, 37% of Marathon County requests to United Way's 211 were for basic needs assistance, such as housing, food, utility assistance, clothing, and transportation.

In 2018, United Way's 211 connected people to basic needs services meeting 86% of total requests from Marathon County residents.

Number of 211 Basic Needs Requests

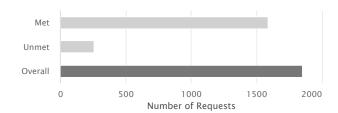


Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Number of 211 Basic Needs Requests



Number of 211 Basic Needs Requests by Type of Request



LIFE Survey: Resident Perspectives

49% of LIFE Survey respondents indicate they spend more than 30% of their income on housing.

17.8% of LIFE Survey respondents experience transportation challenges, which includes not having a car or a reliable car, unable to drive, and not having access to public transit.

19.2% of LIFE Survey respondents indicate that they are dissatisfied with their jobs because of low wages.

21.48% of LIFE Survey respondents have household income between \$25,000 and \$49,999.

HEALTH & WELLNESS

Successes & Progress

- Marathon County has more children with up-to-date vaccinations at age two than most surrounding counties.
- Overall, Marathon County has better birth outcomes than state and national comparisons, with decreases in teen pregnancy, low birth weight babies, and infant mortality.
- * The Marathon County School-Based Counseling Consortium offers on-site mental health counseling in every Marathon County public school district.
- All Marathon County public middle and high schools participated in the 2019 Youth Risk Behavior Survey (YRBS), marking the third time our community has had local data about the issues that impact youth.
- * Marathon County continues to serve as a health care hub with four major health care systems in the community. Access to health care remains high in Marathon County with a higher density of primary care providers than the state of Wisconsin.
- Marathon County has experienced significant reduction in emergency detentions for individuals with a mental health crisis with the formation of two Crisis Assessment Response Teams (CART) that pair a law enforcement officer with a crisis professional.
- * As a community, Marathon County has responded to raise awareness and address the opioid epidemic with prevention, treatment, and enforcement efforts.
- * The number of mental health care providers has increased significantly in Marathon County.

Call to Action

- The impact of prescription and illegal drug use is continuing in Marathon County with an increase in overdose deaths, drug arrest rates, and felony and misdemeanor drug charges.
- * Alcohol continues to be the most frequently consumed substance of use and misuse in Marathon County, among both teens and adults.
- Marathon County has experienced a significant Increase in child abuse & neglect and out-of-home placements, impacting hundreds of children and families and resulting in an increase of Adverse Childhood Experiences (ACES) and childhood trauma.
- E-cigarettes are a growing concern with more Marathon County teens reporting that they had tried vaping e-cigarettes (38%) than smoking cigarettes (20%).
- * Falls continue to be the leading cause of unintentional injury death in Marathon County.
- * Marathon County is working on a community-wide plan to address the treatment and recovery of substance abuse.

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

PREMATURE DEATH

Why is this Important?

Overall, Marathon County is doing well compared to Wisconsin Counties in terms of life expectancy and premature death, however there are several causes of death that are significantly higher in Marathon County. Alzheimer's disease, diabetes, and falls are causes of death that are impacting Marathon County at greater rates than the rest of Wisconsin and the U.S.

Premature Death shows the Years of Potential Life Lost before age 75 per 100,000 population. Years of Potential Life Lost (YPLL) is an estimate of premature mortality. It represents the number of years a person would have lived if he or she had not died before the predetermined age of 75 years. This measure of mortality is important to help understand the leading causes of premature deaths.

Key Takeaways

Marathon County is ranked 18th out of Wisconsin's 72 counties for overall length of life.

Marathon County's life expectancy is greater than that of Wisconsin and

Marathon County's age-adjusted death rate due to Cancer was significantly lower than Wisconsin and the U.S.

Premature death is lower in Marathon County than Wisconsin and the U.S.

Premature Death

5,562.0 Years per 100,000 population (2015-2017)









US Value

(6,900.6)

(5,616.9)

Prior Value

(6,291.2)

Life Expectancy

80.5 Years (2015-2017)



U.S. Counties



(79.5)

US Value

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Several death rates in Marathon County were significantly higher than Wisconsin and the U.S.

Age-Adjusted Death Rate due to Diabetes

23.8 Deaths per 100,000 population (2015-2017)





(21.2)





WI Value (19.6)



Prior Value (26.5)

Age-Adjusted Death Rate due to Alzheimer's Disease

31.6 Deaths per 100,000 population (2015-2017)



WI Counties



US Value (30.3)



WI Value

(29.6)

Prior Value (34.6)

View all Age-Adjusted Death Rates for Marathon County

UNINTENTIONAL INJURIES

Why is this Important?

Unintentional injuries are a leading cause of death for Americans of all ages and accounted for 93 deaths in Marathon County in 2017. In Marathon County, falls are the leading cause of unintentional injury-related death, emergency department visits, and inpatient hospitalizations. Fall-related injuries disproportionately impact older adults. For adults 65 and older, falls are the leading cause of emergency department visits and hospitalizations.

Marathon County has experienced an increase in deaths due to unintentional poisoning, which is the unintentional harm to oneself as a result of consuming drugs or chemicals in excessive amounts. According to the Centers for Disease Control and Prevention, unintentional poisonings are largely due to drug overdoses, which commonly involve prescription pain medications.

Key Takeaways

Unintentional injury death rates in Marathon County are lower than the state and nation, but have increased significantly.

Falls continue to be the leading cause of injury-related death in Marathon County.

Nearly all unintentional poisoning deaths in the United States are attributed to the abuse of prescription and illegal drugs.

Age-Adjusted Death Rate due to Falls

15.5

Deaths per 100,000 population (2015-2017) WI Counties



Prior Value (14.5)



(19.4)



HP 2020 Target

(7.2)

(9.2)

Age-Adjusted Death Rate due to Unintentional Poisonings

11.3

Deaths per 100,000 population (2015-2017) WI Counties



WI Value (17.0)

US Value (19.3)

ie Trer

(8.4)
Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Age-Adjusted Death Rate due to Unintentional Injuries

42.2

Deaths per 100,000 population (2015-2017)











WI Value (53.7)



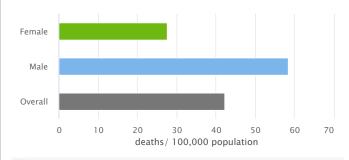
Prior Value (37.7)



(36.4)

Men are more likely to die from unintentional injuries.

Age-Adjusted Death Rate due to Unintentional Injuries by Gender



Significantly **better** than the overall value
No significant difference with the overall value

Why is this Important?

The quality and accessibility of clinical care impacts the health of a community. People with access to high-quality care are more likely to receive effective treatment for their conditions and enjoy better health. The vast majority of Marathon County residents have health insurance coverage whether through private or public sources, but gaps still exist for children and adults. Marathon County is resource-rich when it comes to access to quality health care, but according to the 2019 LIFE survey, 36% of residents reported not going to the doctor when they should have. The top responses were they couldn't afford it, chose not to, or didn't have insurance. With many private health insurance plans moving to high deductible plans, many individuals are faced with a difficult choice between medical care and high costs.

Key Takeaways

Marathon County is ranked 14th out of Wisconsin's 72 counties for clinical care.

Marathon County's life expectancy is greater than that of Wisconsin and the U.S.

Marathon County's age-adjusted death rate to due Cancer was significantly lower than Wisconsin and the U.S.

The majority of Marathon County adults have health insurance coverage.

Adults with Health Insurance: 18-64

92.8%

(2017)



WI Counties



U.S. Counties



WI Value (92.6%)



Prior Value (92.7%)



×

HP 2020 Target (100.0%)

Children with health insurance is lower than the state and nation.

Children with Health Insurance

93.2%

(2017)



WI Value (96.1%)



US Value (95.0%)



HP 2020 Target (100.0%)

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Marathon County Residents That Didn't Go to the Doctor

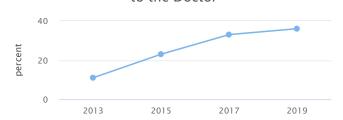
36% (2019)



Prior Value (33%)



Marathon County Residents That Didn't Go to the Doctor



The percentage of LIFE Survey respondents that reported they or someone in their family should have seen a doctor, but did not has been increasing.

Persons with Private Health Insurance Only

59.7%

(2017)



WI Value (61.9%)



Prior Value (60.1%)





Persons with Public Health Insurance Only

19.5%

(2017)



WI Value (19.4%)



Prior Value (19.0%)







PREVENTIVE CLINICAL CARE & **HOSPITALIZATIONS**

Indicator 24

Why is this Important?

The measure of preventable hospitalizations in a community indicates the quality and accessibility of primary health care services. If the access and quality of care in the outpatient setting is poor, people may be more likely to overuse the hospital as a main source of care and be hospitalized unnecessarily. An area with a higher density of primary care providers usually has lower rates of hospitalization for ambulatory care-sensitive conditions. If access to high quality primary care is increased, a community may be able to reduce its preventable hospitalizations.

In Marathon County, rates of some chronic disease conditions in the Medicare population (age 65+) are significantly higher than the state of Wisconsin and U.S. Chronic kidney disease, depression, hyperlipidemia, and osteoporosis are all higher rates in Marathon County.

Key Takeaways

Marathon County is ranked 14th out of Wisconsin's 72 counties for clinical care.

Marathon County's age-adjusted death rate due to Cancer was significantly lower than Wisconsin and the U.S.

Preventable hospital stays are higher in Marathon County than the rest of Wisconsin.

Preventable Hospital Stays: Medicare Population

48.2 Discharges per 1,000 Medicare enrollees (2015)















Preventive screening rates are higher in Marathon County than Wisconsin and the U.S.

Mammography Screening: Medicare Population

73.4% (2015)







(63.2%)









Diabetic Monitoring: Medicare Population

92.3% (2015)









U.S. Counties



US Value (85.7%)



Prior Value (93.0%)



Chronic Kidney Disease: Medicare Population

26.4%

(2017)



WI Counties



U.S. Counties



WI Value (22.8%)



US Value Prior Value (24.0%)(25.4%)

ORAL HEALTH Indicator 25

Why is this Important?

Poor oral health can lead to poor overall health of the body. Oral health affects our ability to speak, smile, eat, and show emotions. Oral diseases—such as cavities, gum disease, and oral cancer—cause pain and disability to millions of Americans each year and costs billions of dollars to treat annually. Tooth decay is one of the most common chronic diseases in the United States. Receiving regular dental care is important for all. Even baby teeth need proper care to prevent cavities from forming.

While Marathon County currently has an adequate dental provider rate, this could be impacted in the coming year by the national reset of Health Provider Service Area (HPSA) scores. The new scores will affect the ability of Federally Qualified Health Centers (FQHCs) to offer loan forgiveness programs, which boosts recruitment and retention of dentists.

A key strategy that is very cost effective in preventing tooth decay is community water fluoridation. Currently 92% of Marathon County residents on a public water system have optimal levels of fluoridation.

Key Takeaways

There is currently an adequate dentist rate in Marathon County.

A majority of Marathon County residents have access to a fluoridated water system.

School-based oral health programs are effective in youth prevention of dental caries and negative health outcomes.

Teens Who Saw a Dentist (High School)

81.0%

Percent of high school students (2019)



US Value (74.4% in 2015)



Prior Value (79.6%)

Non-Traumatic Oral Health Emergency Department Visit Rate

28.1

ED visits per 10,000 population (2018)



WI Counties



WI Value (38.1)



Prior Value (38.3)

The percentage of students served by Bridging Brighter Smiles that were referred to a dentist for treatment.

Students Referred to a Dentist for Treatment

49.5%

Percent of students



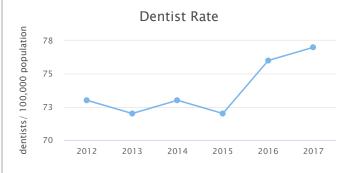
Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Dentist Rate 77 Dentists per 100,000 population (2017) WI Value US Value (68) (68)

Access to dental care is adequate in Marathon County.

Prior Value

(76)



LIFE Survey: Resident Perspectives

35% of residents that needed to go to the dentist didn't go.

18% of residents who did not go to the dentist when they needed to could not afford it and 7% did not have insurance.

6% of residents who did not go to the dentist when they needed to chose not to go.

COMMUNICABLE DISEASE

Why is this Important?

A communicable disease is a disease that can be spread from person to person. Communicable diseases impacting Marathon County include sexually transmitted diseases, hepatitis C, tuberculosis, pertussis, and tickborne, foodborne, and waterborne diseases.

The number of sexually transmitted gonorrhea cases have increased significantly within the past two years in Marathon County as well as the state and nation. It is important for medical providers to follow the recommended treatment protocol because gonorrhea can become resistant to treatment. Chlamydia continues to be the most prevalent communicable disease in Marathon County, as well as Wisconsin and the United States. It often has no symptoms so it is important for people to be tested as it could cause damage to your reproductive system and be spread without knowing.

Hepatitis C is most often spread through injection drug use in Marathon County. Most people who have this virus develop a chronic, lifelong infection that can cause serious health problems of the liver.

Key Takeaways

The number of Gonorrhea cases are increasing significantly in Marathon County.

Chlamydia has consistently been the most prevalent communicable disease in Marathon County.

Most Hepatitis C cases can be attributed to injection drug use.

Chlamydia Incidence Rate

286

Cases per 100,000 population (2016)



WI Counties



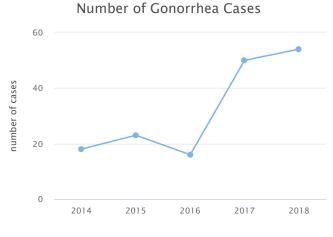


WI Value (470)

US Value

(497.3)





Gonorrhea has increased signficantly.

Hepatitis B & C cases have remained steady.

Chlamydia cases are steady in Marathon County, remaining lower than the state and nation.

Number of Chlamydia Cases 600 number of cases 400 200 0 2015 2014 2016 2017 2018

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Number of Hepatitis C Cases

25

Number of cases (2018)





Number of Hepatitis B Cases

10 Number of cases

(2018)





IMMUNIZATIONS

Why is this Important?

Immunizations continue to be one of the most effective ways to prevent communicable disease. On-time vaccination throughout childhood is essential because it helps provide immunity before children are exposed to potentially life-threatening diseases. Vaccines are tested to ensure they are safe and effective for children to receive at the recommended ages. Repeated scientific studies have shown no link between childhood vaccines and autism or other neurologic problems.

If community immunization rates are high (90-95%), it creates what is called "herd immunity" which protects individuals who are unable to be vaccinated and those with compromised immune systems. When the immunization rate of a population decreases, it causes the entire community to be more susceptible to the diseases vaccines prevent. Marathon County has a higher immunization rate than most surrounding counties. A higher immunization rate regionally would better protect the residents of Marathon County and surrounding counties.

Waivers that allow students to attend school without vaccines due to religious or personal convictions have continued to increase statewide, with four times more waivers now than 20 years ago. A majority of the waivers are for personal convictions, fewer for religious beliefs.

Key Takeaways

Children with up-to-date immunizations at age 2 is being maintained and not decreasing.

Marathon County has a higher immunization rate at age 2 than surrounding counties.

Personal conviction waivers allowing children to attend school without being immunized are increasing statewide.

Childhood Immunization Rate (by 24 months of age)

78.4%

WI Value

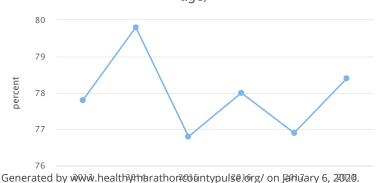
(72.93% in 2017)

Prior Value (76.9%)

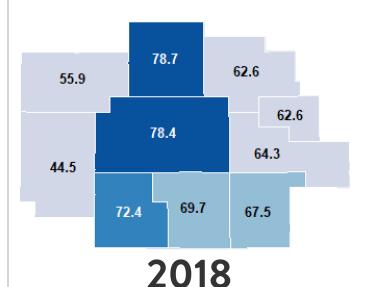


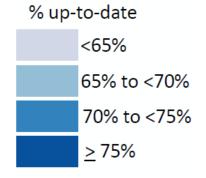
Most Marathon County 2 year olds are up-to-date with vaccines.

Childhood Immunization Rate (by 24 months of age)



Marathon County has more children with up-to-date vaccines at age two than most surrounding counties.





HEALTHY BABIES

Why is this Important?

The health and well-being of infants is a key indicator for the health of a community. Infants with poor birth outcomes are at increased risk for health problems later in life. Accessing regular prenatal care beginning early in the first trimester of pregnancy increases the likelihood babies will be born at a healthy weight. Mothers age 18-19 or who are Laotian/Hmong are significantly less likely to receive prenatal care when compared to other ages or ethnic groups.

Nicotine negatively affects fetal development. Smoking tobacco or vaping nicotine products of any kind during pregnancy can increase the likelihood of a baby with underdeveloped lungs and low birth weight. It is estimated that use of these products while pregnant causes up to ten percent of all infant deaths. The most important things a mother can do to prevent prematurity and low birth weight are to take prenatal vitamins, stop tobacco and nicotine use, stop drinking alcohol and using drugs, and getting prenatal care. The smoking rate during pregnancy is decreasing, but mothers younger than age 25 are smoking at a higher rate during pregnancy than other age groups. There has been a decrease in teen pregnancy over the past several years.

Currently, there are not significant disparities in babies with low birth weight by maternal age or race of the mother in Marathon County. Overall, Marathon County has better birth outcomes when compared to state and national rates.

Key Takeaways

Access to early prenatal care is critical for the health of babies.

Tobacco use during pregnancy is more common in mothers under age 25.

Marathon County has better birth outcomes that state and national comparisons, with decreases in teen pregnancy, low birth weight babies, and infant mortality.

Mothers who Smoked During Pregnancy

13.1%

(2017)



WI Counties

Prior Value

(13.8%)







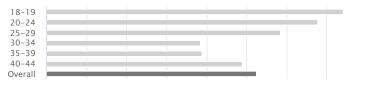
(6.9%)

HP 2020 Target (1.4%)

US Value

Younger mothers are more likely to smoke during pregnancy.

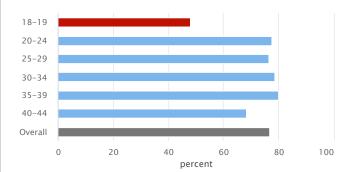
Mothers who Smoked During Pregnancy by Maternal Age



Generated by www.healthymarathoncountypulse.org/ on January 6,72020.

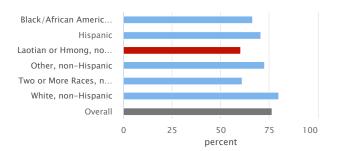
Young mothers and those who are Laotian/Hmong are less likely to start early prenatal care.

Mothers who Received Early Prenatal Care by Maternal Age



Significantly worse than the overall value No significant difference with the overall value

Mothers who Received Early Prenatal Care by Maternal Race/Ethnicity



Significantly worse than the overall value No significant difference with the overall value

INFANT & CHILD MORTALITY

Why is this Important?

Infant mortality is one of the most widely used indicators of the overall health status of a community. Infant mortality is the death of a baby within the first year of life. The infant mortality rate in Marathon County is decreasing and is lower than the state and nation. Congenital malformations, deformations & chromosomal abnormalities remain the leading causes of infant death in recent years. Other causes include preterm and low birth weight, pregnancy complications, accidents, and unsafe sleep environments as a contributing factor in a death. Infant death is more common if the mother is younger than 25.

Child mortality is the death of a child aged 1-17. Losing a child affects the immediate families and the broader community. Child mortality in Marathon County is trending upward at this time. Leading causes of child death include accidents (unintentional injuries) and birth defects.

Overall, Marathon County infant and child mortality is lower than the state and nation. While not all infant and child deaths are preventable, it is important to look at how deaths can be prevented when possible.

Key Takeaways

Infant mortality is decreasing over time in Marathon County.

Child mortality is increasing over time in Marathon County.

Every year Marathon County has an infant death with unsafe sleep as a contributing factor.

Child Mortality Rate

41.9
Deaths per 100,000
population under 18
(2015-2017)

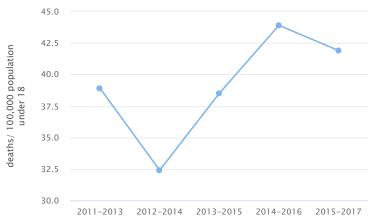








Child Mortality Rate

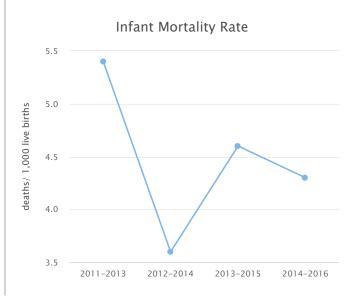


Child deaths in ages 1-17 are increasing.

Generated by www.nearthymarathoncountypulse.org/ orrjanuary o, zozo.

Infant Mortality Rate 4.3 Deaths per WI Counties WI Value 1,000 live (5.9)births (2014-2016) US Value Prior Value (5.9)(4.6)HP 2020 Target Trend (6.0)

Infant deaths before age 1 are decreasing.



CHILDHOOD LEAD POISONING

Why is this Important?

Lead is poisonous, and exposure to lead has a number of health effects, from causing high blood pressure and anemia to permanent damage to the nervous system. A child with lead poisoning is at risk for lowered IQ and attention span, learning disabilities, and developmental delays. A person cannot see physical symptoms of the initial exposure and rising levels, so it is important to have children tested who have risk factors for exposure. A common source of exposure is lead paint that was used in homes prior to being banned in 1978.

Marathon County intervenes with child blood lead levels at five micrograms/deciliter as recommended by the Centers for Disease Control and Prevention (mandates begin at 10 micrograms/deciliter). It is critical to identify child lead exposure at a lower level with early prevention, because there are few contractors to do lead abatement of properties once levels reach a higher amount. There can be a one to two year waitlist to get a lead abatement contractor onsite and it is very expensive.

Overall, there are fewer children testing above five micrograms per deciliter and more children are living in newer housing stock than ten years ago. Children's blood lead levels are monitored until the child's levels return to less than four micrograms/deciliter.

Key Takeaways

The number of children screening positive for lead is decreasing.

Early intervention is critical for preventing lead numbers increasing to over 10 micrograms/deciliter.

Lead abatement contractors have long wait lists so it is important to catch lead poisoning early.

Number of Children with Positive Blood Lead Test(s)

12 Number of Children (2018)





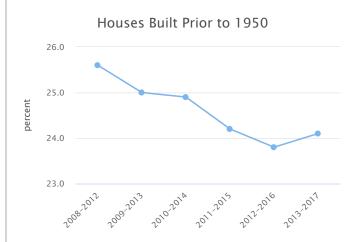


Number of Children with Positive Blood Lead Test(s)

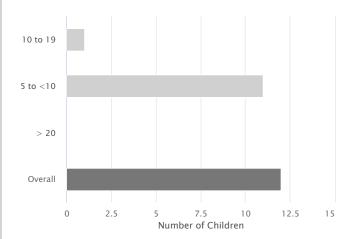


Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Older housing stock in the area is decreasing.



Number of Children with Positive Blood Lead Test(s) by Test Levels in Micrograms/Deciliter



Why is this Important?

Good mental health is a state of balance in our thoughts, emotions and behaviors. Mental health matters and it's okay to ask for help and talk with someone you trust about your feelings or worries can help you feel better. In Marathon County, 1 in 3 teenagers reported having poor mental health and 1 in 4 reported feeling depressed. Treating mental health concerns is just as important as treating physical health concerns.

Mental health is one of many factors than can influence suicide risk. Suicide is a complex health issue influenced by a variety of factors such as mental illness, substance abuse, social isolation, lack of support from family or friends, or exposure to violence. Marathon County has been experiencing an increase of deaths by suicide.

Key Takeaways

Mental health is among the top concerns reported by Marathon County teens in the Youth Risk Behavior Survey.

Collecting local data on youth mental health is critical to raising awareness and reducing stigma.

Youth who have a trusting adult they can talk to when they have a problem is critical to their mental health.

Teens Who Reported Feeling Depressed (High School)

26.0%

(2019)



(27.0% in 2017) (31.5% in 2017)



Prior Value (25.2%)

74.0%

Talk to (High School)

Percent of high school students

Teens Who Have an Adult to Teens Who Feel They Belong at School (High School)

65.0%

Percent of high school students

Teens Who Considered Suicide (High School)

15.0%

Percent of high school students



WI Value (16.4% in 2017) (17.2% in 2017)



US Value



Prior Value (14.4%)

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

On average adults report poor mental health 3 days per month.

Poor Mental Health: Average Number of Days



3.3 Days

Mental Health Provider Rate

175

Providers per 100,000 population (2018)



WI Counties



WI Value (189)



Prior Value (154)



LLS Counties

US Value (229)

Mental health providers are significantly increasing in Marathon County, but remain at a lower rate than Wisconsin and the U.S.

LIFE Survey: Resident Perspectives

Marathon County Residents That Didn't Go to a Mental Health Provider

20%

Marathon County Residents Who Have Someone to Talk to

96%

Why is this Important?

Adverse Childhood Experiences (ACEs) are traumatic experiences that happen to children before the age of 18 and result in ongoing activation of a stress response. ACEs negatively impact childhood brain development and influence how a child interacts with and behaves in the world.

Adults who have a history of ACEs are much more likely to have negative health outcomes, such as higher rates of alcoholism, illegal drug use, depression, suicide, smoking, obesity, cancer, and heart disease.

Child neglect, which is an ACE, is the number one reason for substantiated child maltreatment cases in Marathon County. There is a correlation with rising child neglect cases and the number of drug charges which also continue to rise in the county. There is also a wide range of economically disadvantaged children in the schools throughout the county that at times is correlated with single-parent households which can add financial and other stress to a family.

Resilience is the ability to be healthy and hopeful after these bad experiences happen. Resilience is not about the child "getting over it", rather it means that a caring, loving adult has the power to buffer rather than cement the effects of ACEs in a child's life.

Key Takeaways

Child neglect is the number one reason for substantiated child maltreatment in Marathon County.

There is a wide range of economically disadvantaged children in Marathon County schools.

More teens feel they have an adult to talk to at school than in the past.

Teens Who Have an Adult to Talk to (High School)

74.0% Percent of high school students (2019)



Substantiated Child Abuse Rate

5.7 Cases per 1,000 children (2017)











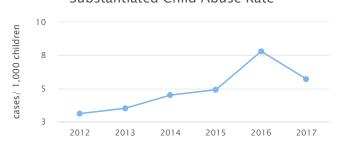


(9.1 in 2016)

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

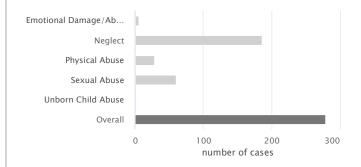
Child abuse has had a significantly increasing trend the past five years.

Substantiated Child Abuse Rate



Neglect is the number one type of child maltreatment.

Substantiated Cases of Child Maltreatment in Marathon County by Child Maltreatment Type



Indicator 33 TOBACCO USE

Why is this Important?

Youth smoking rates are at an all-time low, however, 1 in 5 Wisconsin high school students use e-cigarettes. E-cigarettes are electronic devices that heat a liquid and produce an aerosol, or mix of particles in the air. As commercial tobacco and nicotine products continue to change, so does the health impact on individuals with nicotine addiction and those exposed to secondhand smoke or aerosol. Most e-cigarettes contain nicotine which is highly addictive and can harm adolescent brain development. E-cigarettes contain other harmful substances besides nicotine and do not produce a harmless "water vapor". These products have been rapidly produced and marketed. JUUL is a brand of e-cigarette that consumes a majority of the market and has as much nicotine as a pack of 20 regular cigarettes.

The percentage of Marathon County teens who have ever tried smoking cigarettes or used other tobacco products has remained stable and not increased. However, the adult smoking rate is significantly higher than the state value. The number of illegal sales of tobacco products to minors in compliance checks has decreased over the past several years.

Key Takeaways

The use of e-cigarettes is unsafe for kids, teens, and young adults.

Overall teens are smoking less, but the use of e-cigarettes is steadily rising.

Adult smoking in Marathon County is significantly higher than Wisconsin or national values.

Teens Who Smoked Cigarettes In the Past 30-days (High School)

7.0% Percent of high school students

(2019)



WI Value (7.8% in 2017)



US Value (8.8% in 2017)



(9.9%)

Teens Who Chewed Tobacco in the Past 30-days (High School)

5.0% Percent of high school students

(2019)



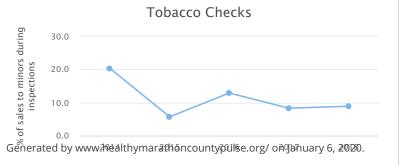




(5.5% in 2017)

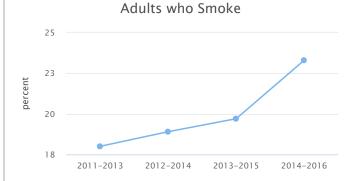


(6.4%)



Adults who Smoke 23.3% (2014-2016) WI Counties (17.9%)Prior Value (19.7%)× HP 2020 Target (12.0%)

Adult smoking is increasing.



Teens Who Smoked Cigars, Cigarillos, or Little Cigars (High School)

5.0% Percent of high school students (2019)





US Value (7.6% in 2017) (8.0% in 2017)



ALCOHOL MISUSE & ABUSE

Why is this Important?

Alcohol continues to be the most frequently consumed substance of use and misuse in Marathon County, among both teens and adults, contributing to consequences that affect all residents. Underage drinking, adult binge drinking, and drinking and driving have potential devastating impacts families and safety of the community.

Marathon County adults binge drink more than the rest of Wisconsin and set an example for our youth. More youth in Marathon County begin drinking before the age of 13 compared to Wisconsin. 1 out of 3 Marathon County high school students said their parents didn't think it was wrong for them to drink alcohol underage.

Wisconsin's pervasive alcohol culture combined with the availability and accessibility continue to drive high local alcohol use and abuse.

Key Takeaways

Alcohol continues to be the number one substance of abuse in Marathon County.

Only 65% of Marathon County high school students said their parents felt it was wrong or very wrong for them to drink alcohol.

Teen drinking habits in Marathon County have not changed from 2015 to 2019.

Adults who Binge Drink

27.0%

(2014-2016)



WI Counties



Trend



WI Value (24.6%)

Prior Value

(29.1%)



HP 2020 Target (24.2%)

Adult binge drinking is above the state average.

LIFE Survey: Resident Perspectives

30% of LIFE Survey respondents binge drank (consumed 5 or more drinks on one occasion) in the past 30 days.

Rates of reported drinking and driving is not getting worse. Generated by www.healthymarathoncountypulse.org/ on January 6, 2020. Marathon County teens begin drinking at younger ages than the rest of Wisconsin.

Teens Who Drank Alcohol Before Age 13 (High School)

33.0%

Percent of high school students (2019)



WI Value (14.6% in 2017) (15.5% in 2017)



Prior Value (17.2%)

Teens Who Drank Alcohol in the Past 30-days (High School)

28.0%

Percent of high school students (2019)



WI Value (30.4% in 2017) (29.8% in 2017)

Prior Value (24.1%)

Teen Binge Drinking (High School)

11.0%

Percentage of high school students (2019)



WI Value



(16.4% in 2017) (13.5% in 2017)



Prior Value (9.2%)

Why is this Important?

Methamphetamine, prescription and illicit opioids, and marijuana are having a significant impact on the community. As a result of this growing national epidemic, Marathon County is experiencing significantly higher drug arrest rates, felony and misdemeanor drug charges, and cases of child maltreatment. The burden on local law enforcement, social services, healthcare organizations, and treatment providers due to the increased rates of illegal drug use has never been higher.

Drug overdose deaths are the leading cause of injury death in the United States, with over 100 drug overdose deaths occurring every day. The death rate due to drug overdose has been increasing over the last few decades. The majority of deaths due to pharmaceutical overdose involve opioid analgesics (prescription painkillers).

In Wisconsin, THC-based marijuana continues to be illegal to possess and use, but surrounding states have legalized medicinal and/or recreational marijuana which will impact our local communities.

Key Takeaways

Illegal drug use in Marathon County has increased significantly, with more overdose deaths and drug arrests than ever before.

3 out of 4 Marathon County residents are aware of the medication disposal sites in the community and 43% disposed of medications

Locally, teen marijuana use is on the rise, but still remains below state and national levels.

Teen - Ever Used Marijuana (High School)

19.0%

Percent of high school students (2019)



(30.2% in 2017) (35.6% in 2017)



Prior Value

(17.8%)

Teens Who Used Marijuana in the Past 30-days (High School)

10.0%

Percent of high school students (2019)

WI Value **US Value** (16.0% in 2017) (19.8% in 2017)



Prior Value

(9.6%)

LIFE Survey: Resident Perspectives

Illegal drug use was the top concern for Marathon County residents.

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Drug overdose deaths are increasing significantly.

Drug Overdose Deaths



Death Rate due to Drug Poisoning

12.3

Deaths per 100,000 population (2015-2017)



WI Value (18.0)











Teen Drug Use at High School

Percent of high school students

Teens - Ever Used Prescription Drugs without a Prescription (High School)

9.0%

Percent of high school students

HEALTHY WEIGHT

Why is this Important?

Obesity is a complex health issue that impacts people throughout the lifespan. Being overweight or obese can lead to high blood pressure, type 2 diabetes, heart disease, stroke, sleep apnea/breathing problems, mental illness such as clinical depression, and other negative health outcomes. The key to achieving and maintaining a healthy weight is not about short-term dietary changes, but rather about living a healthy lifestyle that supports overall physical and mental well-being, as well as healthy eating with regular physical activity.

Research shows the link between Adverse Childhood Experiences and the increased risk for being overweight or obese. Individuals with traumatic childhoods or chaotic homes, often find it more difficult to live a healthy lifestyle that supports good mental and physical health. Creating healthy community environments and supporting overall mental well-being is critical to ensure residents have an opportunity to have a healthy weight.

The places in which we live, learn, work, and play are essential to our overall health. Marathon County has abundant outdoor phycical activity opportunities during all seasons and has a farmers market every day of the week.

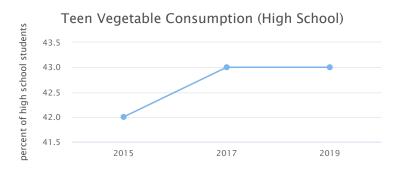
Key Takeaways

Fruit and vegetable consumption is increasing among youth.

Marathon County has an abundant amount of outdoor recreation opportunities.

Several complex factors contribute to the obesity problem.

Teen fruit and vegetable consumption is increasing.



Teen Fruit Consumption (High School)

29.0% Percent of high school students (2017)



LIFE Survey: Resident Perspectives

63% of residents ate a meal at a table with family and/or friends at least 3 days per week.

^C 71% of residents reported being overweight or obese.

Adults Who Are Obese

31.6%

(2014-2016)



WI Counties





Prior Value (26.8%)

Adult obesity continues to increase.

Adults Who Are Obese



Change in methodology for 2011-2013:

The BRFSS 2011-2013 prevalence data should be considered a baseline year for data analysis and is not directly comparable to previous years of BRFSS data because of the changes in weighting methodology and the addition of the cell phone sampling frame.

Adults who are Sedentary

25.0% (2014-2016)



WI Counties



Prior Value (24.8%)



HP 2020 Target (32.6%)





HEALTH OF OLDER ADULTS

Why is this Important?

Currently in Marathon County, 17.1% of the population is over the age of 65, which continues to trend upward. People over age 65 experience a large burden of chronic conditions and disabilities.

People with an independent living difficulty encounter challenges performing instrumental activities of daily living (IADLs) due to a physical, mental, or emotional condition. Examples of IADLs include grocery shopping or visiting a doctor's office alone. Older adults may have more difficulty accessing food or health services due to inability to drive or navigate public transportation, physical limitations (walking, reaching, lifting, etc.), and financial limitations. Without assistance, older people with an independent living difficulty may not be able to successfully perform daily activities and can experience a decline in quality of life.

People over age 65 who live alone may be at risk for social isolation, limited access to support, or inadequate assistance in emergency situations. Living alone should not be equated with being lonely or isolated, but many older people who live alone are vulnerable due to social isolation, poverty, disabilities, lack of access to care, or inadequate housing.

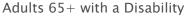
Key Takeaways

Marathon County's 65+ population continues to increase.

1 in 4 people over the age of 65 live alone in Marathon County.

Medicare beneficiaries in Marathon County are treated for a variety of chronic conditions.

Adults age 65+ are impacted by living difficulties.





Hearing Difficulty

Vision Difficulty

15.7%

5.8%

Self-Care Difficulty

Independent Living Difficulty

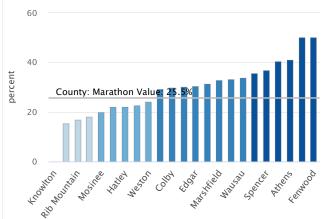
5.8%

5.8%

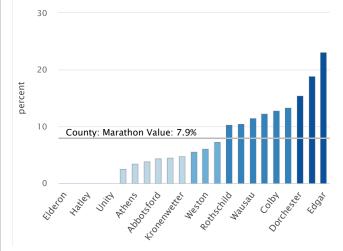
Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Aging differs greatly throughout Marathon County.





People 65+ Living Below Poverty Level



ENERGY & ENVIRONMENT

Successes & Progresses

Prosperous: (Energy)

- * Since 2017, Marathon County residents have increased their energy bill savings through the Focus on Energy program.
- The entire north central Wisconsin region's economy and environment has benefited from the generation of electricity from diverse energy sources located in Marathon County.
- Since 2008, Marathon County Government has completed 48 energy conservation projects in collaboration with Focus on Energy and Wisconsin Public Service. Marathon County Government is committed to being an environmentally responsible county government which includes policies and programs that conserve energy, and reduce fuel, utility, and resource consumption to save tax dollars that can be redirected to support services to the public.

Healthy: (Environment)

- The Marathon County Board of Supervisors has identified the protection and enhancement of surface water and groundwater quality and quantity as a priority objective in their 2018-2022 Strategic Plan.
- Marathon County residents have recognized the benefits to our ample and clean water resources. The 2019 LIFE Survey indicates 78.17% of the respondents are either very concerned or concerned about the cleanliness of local lakes and rivers. The survey also revealed a high public awareness of the importance of protecting open and natural areas.
- Marathon County residents have remained committed to reducing their waste and improving the health of our local environment. According to the LIFE Survey, 77.23% of Marathon County residents recycle, donate, re-use or compost waste.
- Marathon County is home to a number of parks, recreation, and open natural areas that provided an abundance of opportunities for residents to
 enjoy the outdoors and be physically active. The majority, 86.65% of LIFE Survey respondents were satisfied with the availability of these outdoor
 spaces.

Calls to Action

- Residents, businesses, industries, and communities should take more smart energy efficiency measures by using less and conserving more along with securing energy from diverse sources.
- * Private well owners should have their water tested annually or whenever a change in taste or appearance occurs.
- Residents should have their homes tested for radon.
- The community should engage key stakeholders and decision makers to address the options, costs, and opportunities to reduce phosphorous from agricultural runoff to surface waters to acceptable levels.

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

AIR QUALITY

Why is this Important?

Overall air quality is based on trends in air emissions. People with asthma, particularly children and the elderly are sensitive to the effects of air pollution emissions. Those who are vigorously exercising or performing outdoor work may be affected. Sources of these emissions include stationary (facilities), mobile (vehicles), and area (households, wood burning). Air pollutant emissions for nitrogen oxide, volatile organic compounds, and sulfur dioxide decreased from the prior years.

Radon is the largest indoor air quality concern in Marathon County and the leading cause of lung cancer in non-smokers. Radon is an odorless radioactive gas that cannot be seen or smelled so it is important to test homes to determine the amount of radon. Marathon County's geology contributes to the area having some of the highest rates of elevated radon levels in the state. Household radon mitigation systems cost around \$1,000.

Sulfur dioxides are produced by coal or gas power plants and other industrial facilities such as petroleum refineries, cement manufacturing, paper pulp manufacturing, and metal smelting and processing facilities.

Nitrogen dioxide is a gas produced from cars, trucks and buses, power plants, and off-road equipment exhaust emissions.

Volatile organic compounds react with nitrogen oxides in the presence of sunlight to produce ground level ozone.

Particulate matter is solid particles or liquid droplets suspended in air. Fine particulate matter, PM 2.5, is particles smaller than 2.5 microns. The average human hair is 70 microns or 30 times larger. PM 2.5 can be emitted into the air from forest fires and wood burning appliances or be present

Key Takeaways

In 2017, 54% of the radon tests done in Marathon County were over the U.S. Environmental Protection Agency (EPA) action level of 4pCi/L.

Test your home for radon—it's easy and inexpensive.

Air pollutant emissions of volatile organic compounds, nitrogen oxide, and sulfur dioxide have decreased in Marathon County.

Percent of Radon Tests with Elevated Levels

54.0% Percent of radon tests Prior Value (61.0%)



Percent of Radon Tests with Elevated Levels



Generated by www.healthymarathoncountypulse.org/ @Alfanuary 6, 20020.

Air Pollutant Emissions- Volatile Organic Compounds (VOC)

13,144

Tons (2015)

Prior Value (13,365)

Air Pollutant Emissions- Nitrogen Oxide (NOx)

7,145

Tons (2015)

Prior Value (8,792)

Air Pollutant Emissions- Sulfur Dioxide (SO2)

5,717

Tons (2015)

Prior Value

(8,626)

Air Pollutant Emissions- Fine Particulate Matter (PM 2.5)

2,733

Tons (2015) Prior Value (2,719)

DRINKING WATER QUALITY

Why is this Important?

Clean, safe drinking water is one of the most important elements of good health. Private well owners are responsible for testing their drinking water.

Coliform are a group of bacteria that are common in nature. Some coliform bacteria can cause illness while others do not. Drinking water should not have coliform bacteria in it. When coliform are present, the well may have been contaminated by soil or feces and could indicate the presence of a disease-causing organism called E. Coli.

Nitrate can enter groundwater from fertilizers and from animal and human waste. If the nitrate level is less than 10 parts per million (ppm) it is safe for drinking, preparing food, or showering. High levels of nitrate can cause birth defects, thyroid problems, and certain kinds of cancer. For infants on formula made with high nitrate water, the nitrates interfere with the ability of the blood to carry oxygen.

Fluoride naturally occurs in water and is a safe and effective way to reduce tooth decay. While rare, too high of levels could harm your health so regular testing of water is advised.

Key Takeaways

Fewer coliform samples tested safe than in prior years.

Nitrate levels were safe for 90 % of the water samples in 2017.

The right amount of fluoride is a safe, effective means to prevent tooth decay. Fluoride supplements can be used to ensure children get the right amount of fluoride when private well water fluoride is below the optimal level.

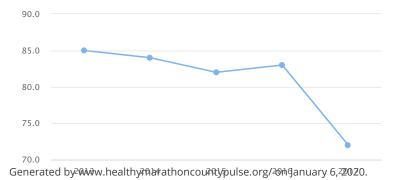
Percentage of Private Well Water Samples Testing Safe for Coliform Bacteria

72.0





Percentage of Private Well Water Samples Testing Safe for Coliform Bacteria



Percentage of Private Well Water Samples Testing Safe for Nitrate

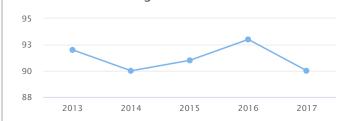
90.0



(93.0)

Trend

Percentage of Private Well Water Samples
Testing Safe for Nitrate



Percentage of Private Well Water Samples Testing Safe for Fluoride

92.0

Prior Value (95.0)

Trend

LIFE Survey: Resident Perspectives

59% of LIFE Survey respondents feel concerned or very concerned about drinking water quality (2019).

13% of LIFE Survey respondents did not have their private well tested in the last year because they did not know how or it was too costly (2019).

GROUND WATER QUALITY

Why is this Important?

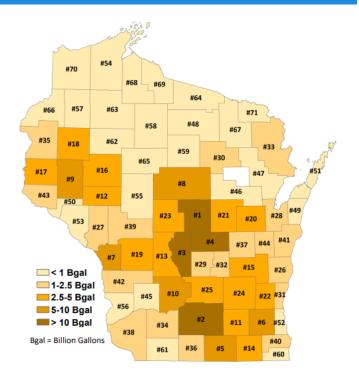
Ground water quantity and quality is vital for the sustainability, growth, and health of local communities. The need for clean ground water is not only a health issue, but it is also an economic issue. Where ground water becomes polluted, property values drop and land development may become adversely affected. Business, industry, and agricultural growth rely on clean and abundant ground water for expansion and development. In Marathon County, most of the general public depend on ground water as a source of clean drinking water. According to the 2017 DNR Wisconsin Water Use Summary, Marathon County ranked 8th out of 72 counties in terms of total groundwater withdrawals.

Key Takeaways

According to the 2017 DNR Wisconsin Water Use Summary – Marathon County ranked 8th out of 72 counties in terms of Total Groundwater Withdrawals by County.

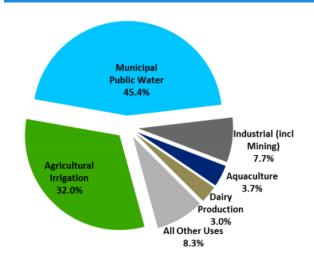
There are 425 approved DNR high capacity wells in Marathon County, serving communities, industries, and agriculture.

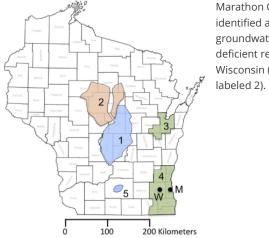
Marathon County is 8th in the State for Average **Groundwater Withdrawals by County**



Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Agricultural Irrigation is the Second Largest Withdrawer of Groundwater in the State





Marathon County identified as a groundwater deficient region in Wisconsin (region

LIFE SURVEY: Resident Perspectives

In the 2019 LIFE survey, 24.7% of the respondents indicated that they are very concerned about drinking water quality.

SURFACE WATER QUALITY

Why is this Important?

Phosphorus is an essential nutrient for plant and aquatic life; however, elevated concentrations of phosphorus in rivers and lakes primarily from agricultural runoff can lead to nuisance algal blooms impacting aquatic life and recreational activities. High phosphorus levels cause algal blooms in Lake DuBay, Big Eau Pleine, Pentenwell and Castle Rock Reservoirs that deplete oxygen levels which stresses aquatic life and fish communities, and on occasion, cause large fish kills.

The Wisconsin Department of Natural Resources maintains a list of surface waters that do not meet specific water quality standards in the state, and is required to update the list every two years by the United States Environmental Protection Agency. The 2019 Wisconsin River Total Maximum Daily Load Report identifies the number of river miles in Marathon County considered to be impaired by high levels of phosphorus concentrations.

Key Takeaways

Marathon County streams are a major source of phosphorus in the Wisconsin River Basin.

The Big Eau Pleine River and Little Eau Pleine River significantly exceeded the phosphorus criteria.

Runoff from land use activities, primarily form agricultural sources mobilize and transport phosphorus to water bodies in the Wisconsin River watershed.

LIFE Survey: Resident Perspectives

78% of 2019 LIFE survey respondents indicated they are concerned or very concerned about cleanliness of local lakes/rivers.

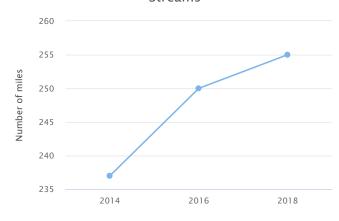
Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Number of Miles of Phosphorus Impaired Streams

255 Number of miles

Prior Value (250)

Number of Miles of Phosphorus Impaired Streams



SOLID WASTE MANAGEMENT

Why is this Important?

Waste management services are essential to a community's health, safety, and prosperity. The collection of garbage and recycling from local businesses, industries and households occurs almost unnoticed every day, yet it is essential to protecting human health and the environment. It is also essential to economic development. The Marathon County Solid Waste Department not only provides landfill disposal services for the central Wisconsin region, but also a wide variety of environmental education, waste reduction and consulting services to help us all reduce waste and recycle more

View the Marathon County Community Assessment on Prevalence and Perceptions of Medication Abuse dashboard for data on medication disposal.

Key Takeaways

Providing residents medication disposal sites for unused or unwanted medications helps protect community safety.

Proper disposal and management of hazardous waste is vital to protect the environment and public health.

Providing easily accessible, affordable and convenient landfill disposal services helps drive economic development and expansion of a wide array of businesses.

Marathon County Residents Who Use a Medication Drop Box

27.0% Prior Value (27.0%)

Marathon County Residents Who Use a Medication Drop Box



Marathon County Residents Who Compost

Generated by www.healthymarathoncountypulse.org/ on January 6, 2020.

Marathon County Residents Who Recycle

86.0%

V

Trend

Prior Value (92.0%)

Marathon County Residents Who Recycle



Marathon County Residents Who Properly Dispose of Hazardous Waste

20.0%

A Prior Value

(17.0%)

Trend

Marathon County Residents Who Properly Dispose of Hazardous Waste

