



Waupaca County Public Health

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**2022 COMMUNITY  
HEALTH ASSESSMENT**

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## EXECUTIVE SUMMARY

The Community Health Assessment (CHA) process helps identify key health issues impacting the health of a local community using comprehensive data collection and analysis, and is meant to give community members and partner organizations information about a community's health status, needs, and issues. Local health departments are required to complete a CHA every five years. A CHA also provides the groundwork for developing a Community Health Improvement Plan, which is used to help justify how and where resources can be allocated to best meet community needs over the next five years.

Existing secondary data from credible national, state, and local partners were compiled and analyzed. This secondary data provides community-level health indicators and health outcomes that can be used to compare local data to other communities and the state of Wisconsin as a whole. The most recent data sets were used for the 2022 CHA, but you may notice data sets with different date ranges or years for data used. Due to the time it takes to analyze and report data sets to the public, the most recent, publicly available information may be several years old. Secondary sources may update their data on a rolling basis, so data from secondary sources in this report are current as of publication in January 2023.

Primary data was collected in 2022 through a community survey and key informant interviews. While 602 surveys were collected from Waupaca County residents, this is representative of only 1.5% of the adult population in Waupaca County. The results of the survey cannot be considered representative of the population due to the low sample size, but there is important information that can be drawn from survey results. Key informant interview responses acknowledge each community stakeholder's unique perspective and experience on how health impacts the population(s) they serve. Representatives from healthcare, law enforcement, language translation services, city administration, and school districts participated in this process.

The COVID-19 pandemic has had unprecedented impacts on families across the world and in Waupaca County. Jobs, housing, transportation, finances, social connections, and mental and physical health have all been affected by the pandemic. Rural areas like Waupaca County faced unique challenges that amplified the negative effects of COVID-19. These challenges include higher rates of uninsured residents, fewer healthcare resources, older populations, and higher risk of workplace exposure due to more people employed within industries such as the service or tourism industry and manufacturing. Lower rates of broadband access meant utilizing telehealth may not be a viable option to receive medical care or advice, and healthcare systems were stressed to meet the demands of COVID-19. Some of the lasting impacts of the pandemic have been captured in the information provided in this report; however, the total impact on Waupaca County may not be fully realized for several years.



Photo credit: Public Health



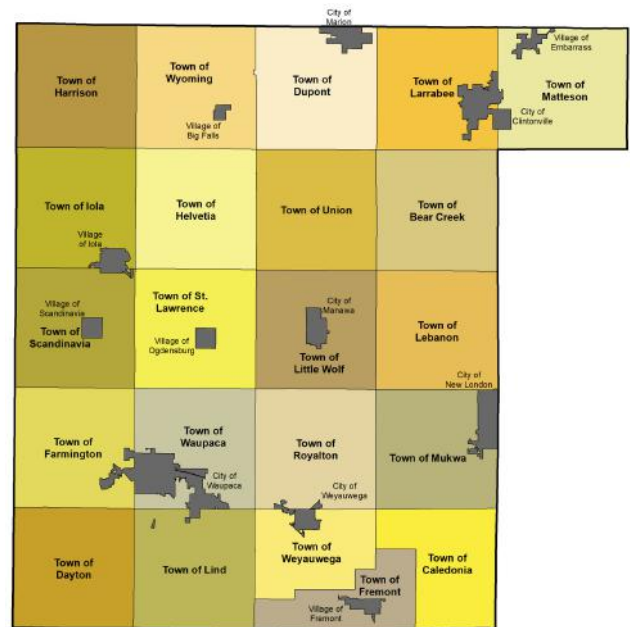
Photo credit: City of Waupaca

# ABOUT WAUPACA COUNTY

Waupaca County is located in east central Wisconsin approximately midway between Green Bay and Stevens Point. The Menominee occupied about 10 million acres, including Waupaca and the Chain O'Lakes area, for more than 10,000 years. "Waupaca" is a Menominee word, Wāpahkoh, which means "Place of Tomorrow Seen Clearly." The Menominee eventually ceded their lands to the United States in a series of treaties. White settlers were first drawn to the area for its river. Logging played a major role in the area's early development.

Waupaca County was officially established by an act of the legislature on February 17, 1851. Boundary changes were made until the present 22 townships were established in 1891. Waupaca County encompasses approximately 750 square miles of which about 17 square miles is surface water, including 240 lakes and 74 rivers and streams. The county features a combination of rural and small urban communities. The percentage of the county population living in rural areas is 64.9%.

Waupaca County features top national manufacturing businesses and strong tourism, hospitality, and retail business. The county offers some of the best outdoor recreational opportunities in the state with its multiple lakes, rivers, and parks, including Hartman Creek State Park. Within Waupaca County are seven town public school districts along with five private schools and one technical college.



*Cities:* Clintonville, Manawa, Marion, New London, Waupaca, Weyauwega  
*Villages:* Big Falls, Fremont, Iowa, Scandinavia  
*Towns:* Caledonia, Dayton, Dupont, Farmington, Fremont, Harrison, Helvetia, Iowa, Lebanon, Lind, Little Wolf, Matteson, Mukwa, Royalton, St. Lawrence, Union, Waupaca, Weyauwega, Wyoming

# WAUPACA COUNTY DEMOGRAPHICS

The charts in this section show demographic information for Waupaca County based on the U.S. Census Bureau's 2020 Census data. **The total population of Waupaca County from the 2020 Census is 51,812**, which is a 1.1% decrease in population from the 2010 Census.



**Median Gross Rent per Month**  
**\$713**



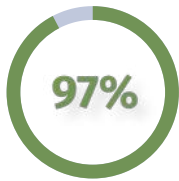
**Median Household Income**  
**\$60,106**



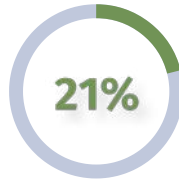
**Mean Travel Time to Work**  
**24.2 minutes**



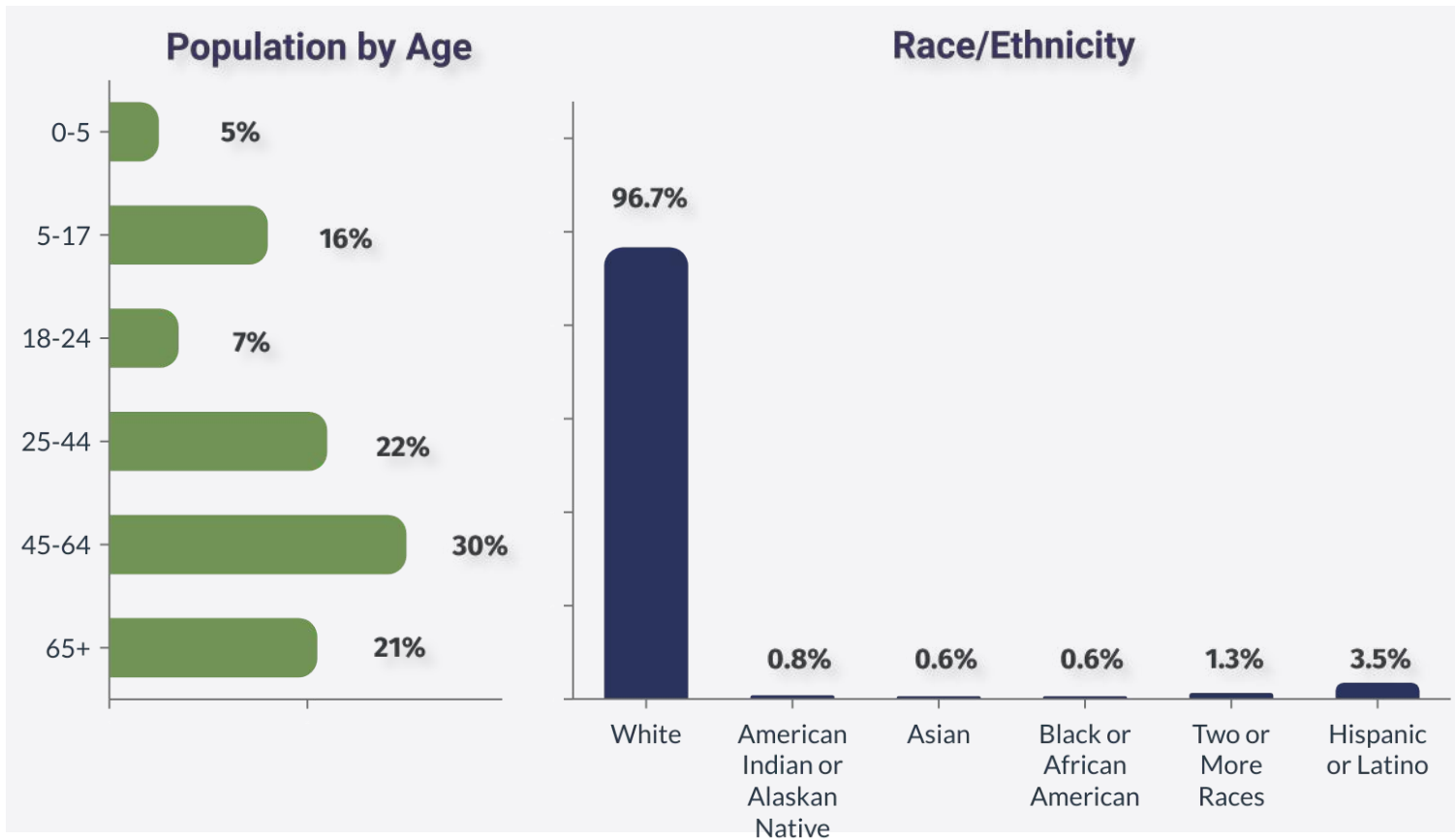
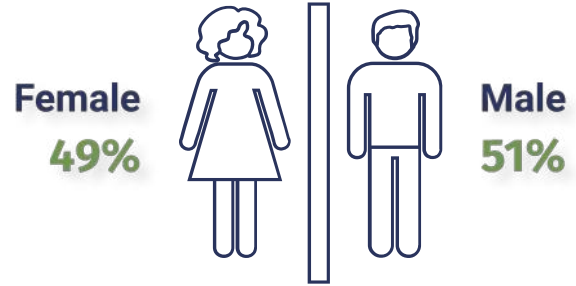
**Persons Living in Poverty**  
**8%**



**High school graduate or higher**

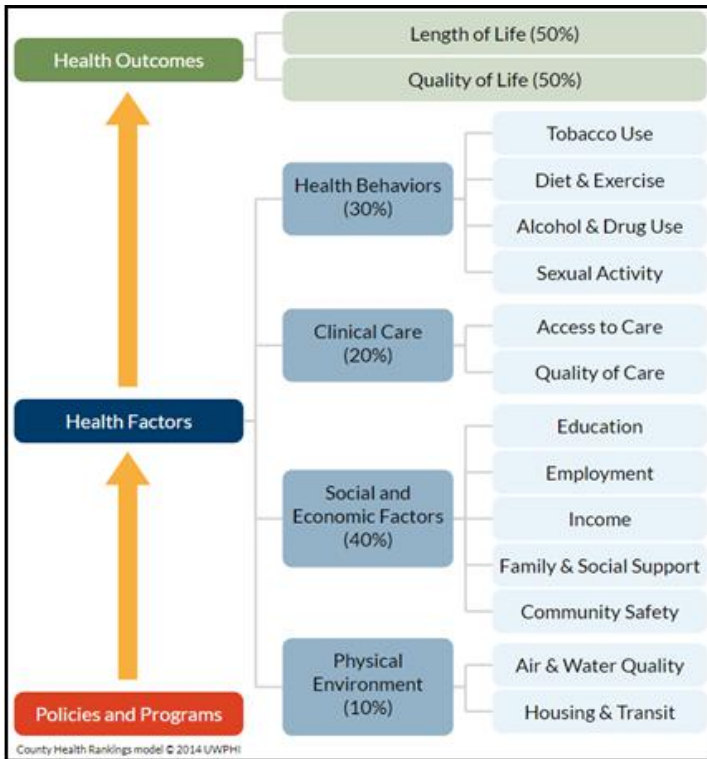


**Bachelor's degree or higher**



# UNDERSTANDING HEALTH

## THE COUNTY HEALTH RANKINGS MODEL

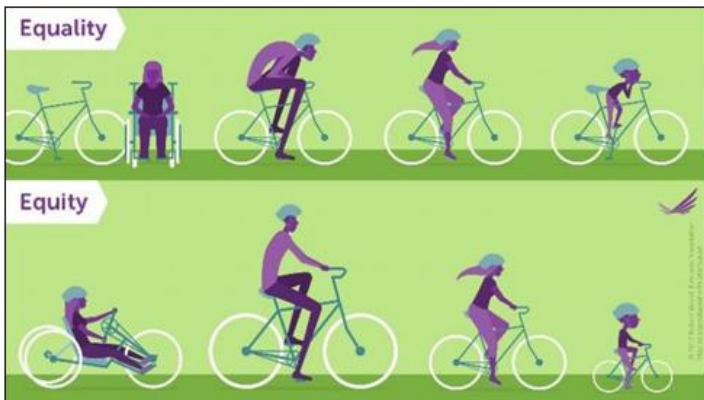


This model visualizes the elements that influence the health of individuals and communities as a whole. Along with policies, procedures, and programs at the local, state, and federal level, Health Outcomes and Health Factors are the two largest contributors to the overall health of a community.

**Health Outcomes** looks at how healthy an overall county is *right now* by measuring how long people live and how healthy people are while they are alive (quality of life). When looking at all 72 counties in the state of Wisconsin, **Waupaca County ranked 40<sup>th</sup> for Health Outcomes.**

**Health Factors** are what influence the overall health of a county, specifically: health behaviors, clinical care, social and economic factors, and the physical environment. When these factors are changed, they have the ability to improve quality and length of life, or health in the *future*. When looking at all 72 counties in the state of Wisconsin, **Waupaca County ranked 32<sup>nd</sup> for Health Factors.**

## THE HEALTH EQUITY MODEL



**Health equity** means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty and racial discrimination, and their consequences, including lack of power and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care. Equity differs from equality, which is giving everyone the same resources or opportunities, regardless of individual differences. These concepts are depicted in the image on the left.

**Health disparities**, as defined by the Centers for Disease Control and Prevention, are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. These factors largely influence health outcomes and are important to consider when looking at advancing the health equity of Waupaca County.

# Secondary Data

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## Health Outcomes, Health Factors

Secondary Data sources refer to information collected in the past from trusted sources and made readily available to the public. Some data sets are not collected every year and the most up-to-date information may be several years old. Some data sets may not be available if the information collected could potentially identify an individual person or a small group of people. Secondary Data sources in this report are included at the bottom of each page. The full source information is listed on the References page at the end of this report.

# HEALTH OUTCOMES

## LENGTH OF LIFE (MORTALITY)

**77.1**

average life expectancy (years)

(2018-2020)

**6,900**

years of potential life lost (YPPL)

(2018-2020)

**1,586.4**

death rate (per 100,000 people)

(2021)

Health outcomes refer to how healthy a community is right now by examining length of life and quality of life. County Health Rankings & Roadmaps ranks Waupaca County 40<sup>th</sup> in the state of Wisconsin for health outcomes. Specific data measures related to health outcomes in Waupaca County are examined in the following pages.

Leading Causes of Death for all Ages	Number of Deaths
Other Causes*	262
<b>Heart Disease</b>	<b>142</b>
Cancer	120
COVID-19	116
Chronic Lower Respiratory Diseases	46

\*Other causes includes vaguely defined "other," "not elsewhere classified," and "unspecified" causes of death. (2021)

Understanding what the leading causes of death are across the entire population of Waupaca County can help us determine where additional efforts and programming can be focused to help prevent deaths in these areas. It helps to tell us if people are living long, healthy lives, and identify if people in Waupaca County are dying earlier and/or from different causes when compared to surrounding communities or the state as a whole. **Heart disease was the leading single cause of death for Waupaca County residents.**

Leading Causes of Death Under Age 75	Number of Deaths
<b>Cancer</b>	<b>192</b>
Heart Disease	118
Accidents	64
Chronic Lower Respiratory Diseases	45
COVID-19	35

(2018-2020)

When someone dies before the age of 75, the number of years they died prematurely are considered *years of potential life lost*, or YPPL. YPPL helps us understand the number of deaths that could have been prevented and the lower the YPPL number, the healthier the community. Waupaca County had 6,900 YPPL in 2021, which is higher than the state's YPPL of 6,600, meaning more people are dying a premature death in Waupaca County than statewide. **Cancer was the leading cause of death for Waupaca County residents who died before age 75.**

**In 2020, Waupaca County experienced the 5<sup>th</sup> highest COVID-19 death rate in the state of Wisconsin at 136 deaths per 100,000 people.**

**What does this data mean? Waupaca County residents are expected to live shorter lives and die at higher rates when compared to the state of Wisconsin as a whole.**



# HEALTH OUTCOMES

## LENGTH OF LIFE (MORTALITY)

6.9%

low birth weight  
(less than 5lb, 8oz)

(2020)

2.1

infant mortality rate  
(per 1,000 live births)

(2020)

50

child mortality rate  
(per 100,000 people)

(2017-2020)

### Low Birth Weight (2020)

6.9% 7.7%

■ Waupaca County

■ Wisconsin

**Low birth weight**, or a baby born weighing less than 5 pounds 8 ounces, can be caused by premature birth (before 37 weeks) and other lifestyle factors of the mother such as alcohol, drug, or tobacco use during pregnancy. A baby born with low birth weight may have difficulties staying warm, gaining weight, breathing properly, and may experience problems with their nervous system and digestive system. Long-term complications such as blindness, deafness, and developmental delays can also occur. Waupaca County has a lower rate of infants born with low birth weight when compared to the state of Wisconsin.

### Infant Mortality Rate (2020)

2.1 6.0

■ Waupaca County

■ Wisconsin

The **infant mortality rate** for Waupaca County is 2.1, which is measured as children who die before 1 year of age per 1,000 live births. Infant mortality can be caused by birth defects, preterm birth, low birth weight, sudden infant death syndrome, injuries, and pregnancy complications with the mother prior to birth. Similar to babies born with low birth weight, infant mortality can occur soon after birth due to health decisions a woman makes during pregnancy. Waupaca County has a lower infant mortality rate than the state of Wisconsin.

### Child Mortality Rate (2017-2020)

50 50

■ Waupaca County

■ Wisconsin

The **child mortality rate** for Waupaca County was 50, which is measured as children under 18 who die per 100,000 people. Child mortality significantly impacts the YPPL for Waupaca County, and provides invaluable information on prevention measures that can be used to keep kids safe. Causes of death for children vary widely, but accidental death from things like motor vehicle accidents and firearms remain the leading cause of death for this age group. Waupaca County is consistent with the state of Wisconsin and the nation as a whole in this measure.

**What does this data mean?** Proper prenatal care is essential to ensure mothers are following a proper diet, receiving education on the dangers of consuming alcohol, drugs or tobacco while pregnant, and receiving proper examinations and check-ups to ensure the health of both baby and mother.

# HEALTH OUTCOMES

## LENGTH OF LIFE (MORTALITY)

45

deaths due to injury or violence

8

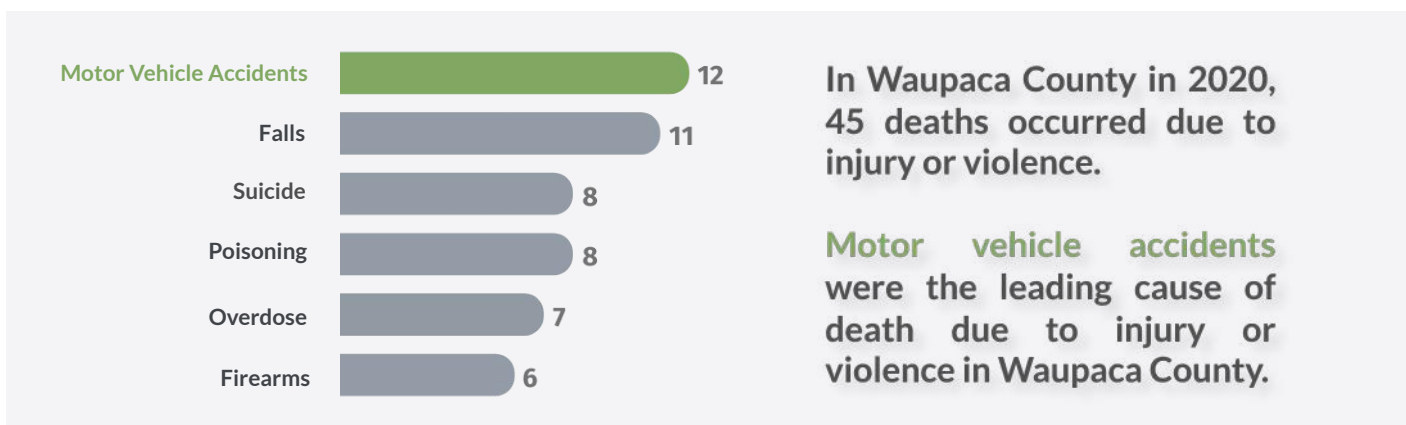
deaths due to suicide

7

deaths due to overdose

(all data reported from 2020)

Deaths from injury or violence, both unintentional and violence-related, are the leading cause of death before age 45 across the nation. These deaths contribute significantly to premature death and YPPL within a community and occur from things like falls, motor vehicle accidents, drownings, overdoses, firearms, poisonings, suicides, and homicides.



Drug overdose deaths are increasing across the nation and are a leading cause of death before age 45. Non-prescription opioids continue to be involved in the majority of drug overdose deaths and the increase of fentanyl use, whether intentional or unintentional, is an increasing concern. Drug overdose deaths contribute to premature death and YPPL, and can be prevented. **When compared to the entire state of Wisconsin, Waupaca County is seeing fewer deaths from drug overdoses.**

Across the nation, suicide deaths are increasing, and are a leading cause of death among people before age 18 and people before age 45. Suicide deaths are an important indicator of the overall mental health of the community, and carry a huge emotional and mental toll on surviving family members and friends. Suicide deaths contribute to premature death and YPPL, and can be prevented. **When compared to the entire state of Wisconsin, Waupaca County is seeing more deaths by suicide.**

**In Waupaca County:**

**2016-2020:**

- 46 residents died by suicide
- 5 residents who died by suicide were under age 17

**2019:**

- 19% of adults and 21% of children were estimated to have a mental illness
- 5% of adults and 11% of children were estimated to have a serious mental illness

# HEALTH OUTCOMES

## QUALITY OF LIFE (MORBIDITY)

3.7

poor physical health days per month

4.5

poor mental health days per month

15%

adults with self-reported poor or fair health

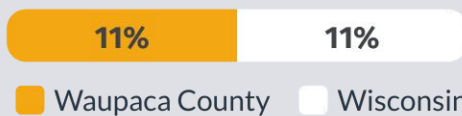
(all data reported from 2019)

**Morbidity** can also be explained as quality of life and factors that improve or diminish how healthy a person lives throughout their lifespan. Days of missed work, chronic and communicable diseases, and mental health conditions all contribute to someone's overall quality of life. We dive deeper into these concepts over the next few pages.

When you feel ill, you may not have the energy for health promoting behaviors such as preparing a nutritious meal, exercising, practicing meditation or other mental health activities, or playing with your children. Poor physical and mental health are also associated with days missed from work, or not being as productive at work.

### Frequent Physical Distress (2019)

Percentage of adults reporting 14 or more days of poor physical health per month (age-adjusted)

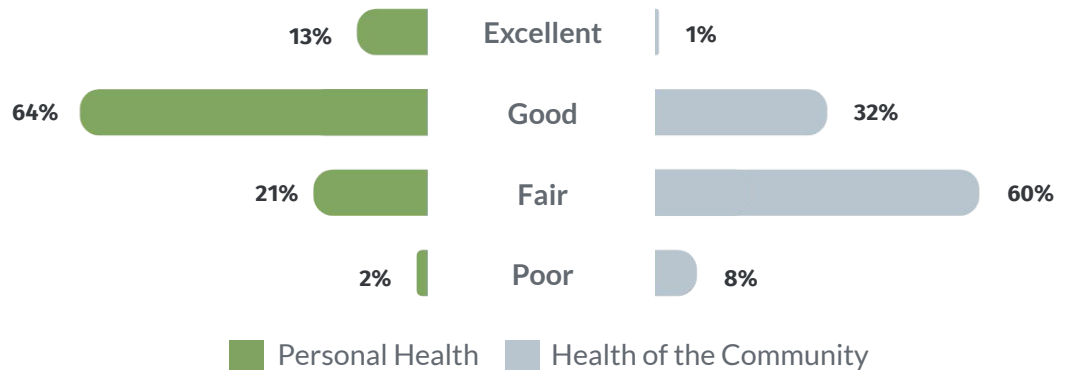


### Frequent Mental Distress (2019)

Percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted)



In the 2022 CHA, Waupaca County survey respondents rated their personal health (left) higher than how they rated the health of their community (right).



**What does this data mean? Waupaca County residents self-reported worse personal health in 2022 when compared to past surveys, among residents who were surveyed.**

# HEALTH OUTCOMES

## QUALITY OF LIFE (MORBIDITY)

49.8%

adults 65+ diagnosed with hypertension

(2018)

10.5%

of adults under 65 with a disability

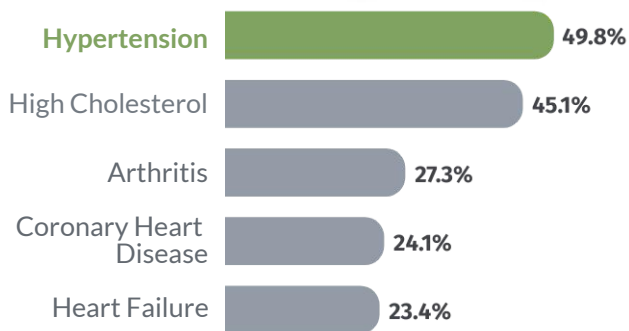
(2017-2021)

6,022

confirmed cases of COVID-19

(2021)

### Hypertension was the most prevalent chronic disease in Waupaca County

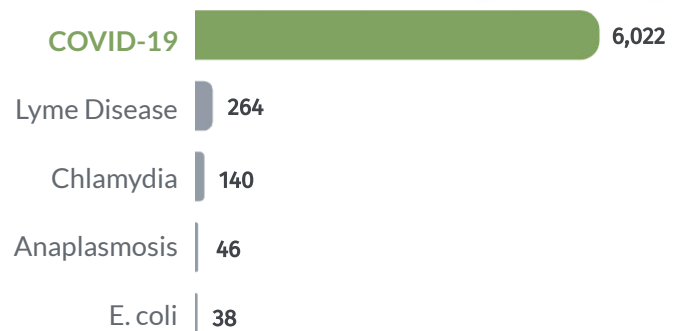


Percent of adults 65+ enrolled in Medicare (2018)

Chronic diseases are illnesses that are generally defined as lasting longer than one year, limit daily activities, do not go away on their own, and require consistent medical care. Treatment is focused on symptom management since the diseases rarely improve on their own, and typically worsen or cause disability later in life. Chronic diseases can be genetic and passed down from generation to generation, or they can be caused and worsened by lifestyle choices such as tobacco use, poor nutrition, lack of physical activity, and alcohol consumption.

Hypertension was the leading chronic disease in Waupaca County in 2018, with 49.8% of adults 65+ enrolled in Medicare diagnosed with the condition.

### COVID-19 was the most prevalent communicable disease in Waupaca County



Total cases of reportable communicable diseases (2021)

Communicable diseases are infectious diseases that are spread from the infected individual (animal or human) and passed to a vulnerable individual (animal or human). Transmission most commonly occurs through direct physical contact with infectious material. Routine vaccinations and staying home when sick are the two best defense mechanisms against contracting and spreading communicable diseases throughout the community.

COVID-19 was the leading communicable disease in Waupaca County in 2021, with 6,022 confirmed cases. This global event is one of the deadliest pandemics in history and caused very high rates of cases, hospitalizations, and deaths in Waupaca County.

**Vulnerable populations** are groups of people in our community who are at high risk for both chronic and communicable disease. They include, but are not limited to, the following groups: children under age two, adults over the age of 65, people with certain medical conditions, people who are immunocompromised, and people living with health and social inequities such as people with low-income and people identifying with certain racial and ethnic minority groups.

# HEALTH OUTCOMES

## QUALITY OF LIFE (MORBIDITY)

8%

adults 20 and older with diagnosed diabetes

(2019)

34

people 13 and older with HIV (per 100,000 people)

(2019)

467

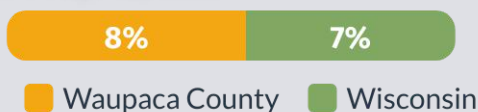
new cancer cases (per 100,000 people)

(2014-2018)

Chronic conditions, if left untreated, can cause severe disease, leading to other or worsened chronic conditions, premature death, and strain on the healthcare system. People living with chronic disease also have poorer quality of life and have a difficult time feeling healthy.

### Diabetes Prevalence (2019)

Percentage of adults aged 20 and above with diagnosed diabetes (age-adjusted)



Type 2 Diabetes is caused when the body doesn't produce enough insulin or resists insulin, which causes high blood sugar in the body. Risk factors for diabetes include physical inactivity, poor nutrition, and being overweight. Diabetes is a chronic condition that, over time, can cause heart disease, kidney disease, and vision loss.

### HIV Prevalence (2019)

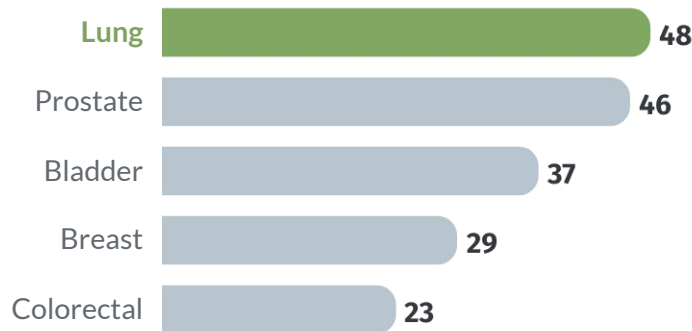
Number of people aged 13 years and older living with a diagnosis of HIV infection per 100,000 population



HIV (human immunodeficiency virus) is an infection transmitted through sexual contact or drug injection materials and can act as an indicator of a community's level of unsafe sex practices and unsafe intravenous drug use. Lack of prevention measures and treatment availability can lead to chronic disease for someone infected with HIV.

### Lung cancer was the most diagnosed cancer in Waupaca County

Cancer, and the side effects people experience while fighting cancer, significantly reduce quality of life and oftentimes lead to premature death. While some cancers are genetic, many are caused by repeated risky behaviors over time such as poor nutrition, lack of physical activity, excessive drinking, tobacco use, and workplace exposure to harmful substances.



Diagnosed cancer cases per 100,000 people (2014-2018)

# HEALTH FACTORS

## HEALTH BEHAVIORS

25%

of adults are not physically active outside of work

3%

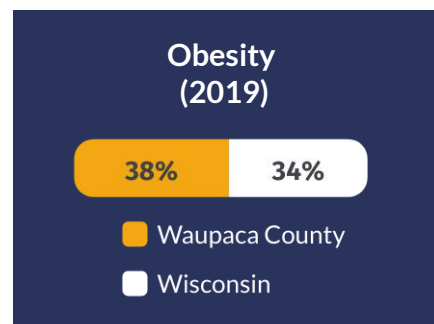
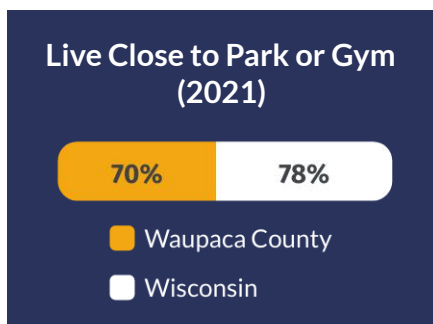
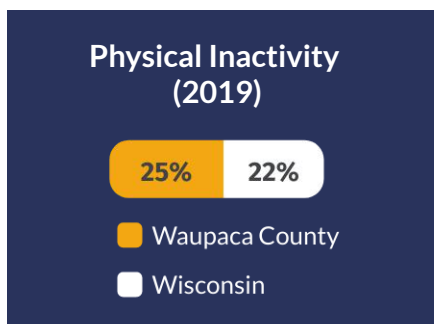
of people live in a food desert

38%

of adults are obese (BMI of 30 and above)

(all data reported from 2019)

Health factors are conditions that can be changed to better the health of individuals and the whole community. They are broken down into four categories: health behaviors, clinical care, social and economic factors, and the physical environment. County Health Rankings & Roadmaps ranks Waupaca County 32<sup>nd</sup> in the state of Wisconsin for health factors. Specific data measures related to health factors in Waupaca County are examined in the following pages.



### Why does physical activity matter?

More physical activity leads to a reduced risk of health concerns such as type 2 diabetes, hypertension, stroke, heart disease, cancer, and premature death. Movement also improves mood and mental health, quality of sleep, and our ability to learn and regulate our emotions. **Waupaca County residents have fewer exercise opportunities, do less physical activity, and have a higher obesity rate when compared to the state of Wisconsin.** Rural communities commonly struggle with having a variety of options for individuals and families to exercise such as different types of gyms, spaces for kids to play, and having opportunities close to home that do not require large amounts of travel time to access.

### Why does access to healthy food matter?

Living in a food desert, or a geographic area with limited access to fresh, healthy food, significantly increases the likelihood that someone will be overweight or obese, or die prematurely. Unlike supermarkets, convenience stores or small grocery stores, which are common in rural communities across Waupaca County, often do not carry a variety of affordable, fresh produce. **Three percent of Waupaca County residents are low-income and currently living in a food desert, and ten percent did not have access to enough food.** Lack of access to fresh fruits and vegetables, whole grains, and lean meats also increases the risk of obesity, type 2 diabetes, high blood pressure, stroke, heart disease, cancer, and other conditions associated with poor health status.

**What does this data mean? Parts of Waupaca County's infrastructure lack essential options that encourage a healthy lifestyle such as supermarkets with affordable produce, free and low-cost exercise opportunities, and transportation opportunities to access these resources.**

# HEALTH FACTORS

## HEALTH BEHAVIORS

**19.9%**

of adults currently smoke

(2015-2019)

**26%**

of adults are binge or heavy drinkers

(2019)

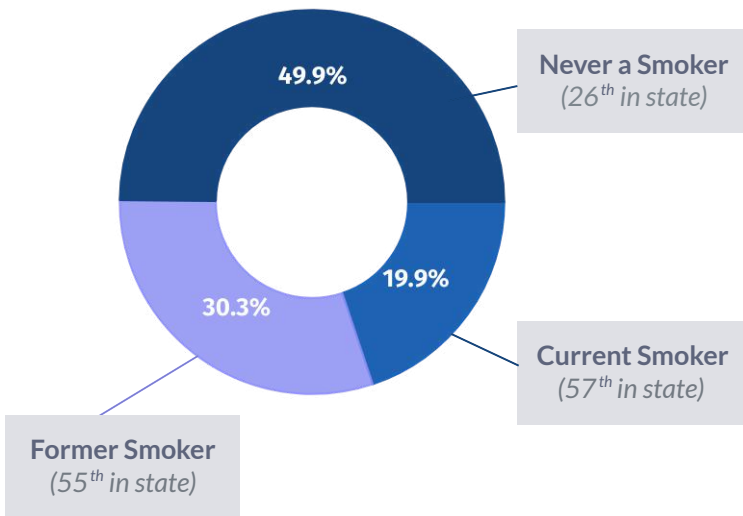
**31%**

of car crash deaths involved alcohol

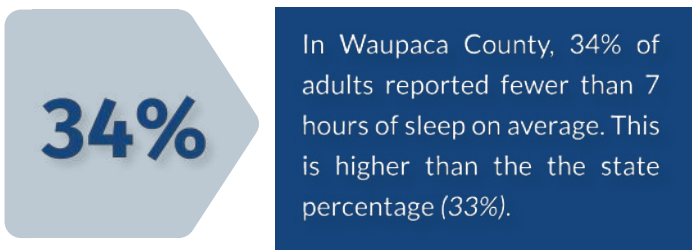
(2016-2020)

The choices we make for our health immediately impact us as individuals, and some health choices have a direct impact on those around us. Small decisions we make every day can lead us toward or away from a healthy lifestyle, and a lifetime of these decisions will impact a person's likelihood of chronic disease and premature death.

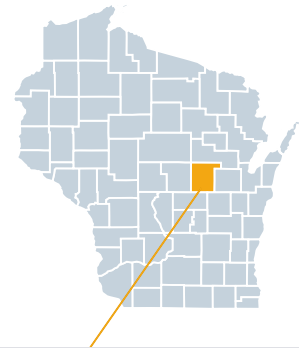
### Tobacco Use in Waupaca County (2015-2019)



### Adults with Insufficient Sleep (2018)



### Alcohol-Related Information (2019-2021)



- Total alcohol licenses: **212**
- People per license: **241.12**
- Licensure per 500 people: **2.07**
- Hospitalizations related to alcohol (2021): **411** (47<sup>th</sup> in state)
- Percentage of car crash deaths involving alcohol (2016-2020): **31%**

### Excessive Drinking (2019)

Percentage of adults who report binge or heavy drinking



■ Waupaca County ■ Wisconsin

Binge drinking is 4+ drinks for women and 5+ drinks for men in a single occasion. Heavy drinking is 8+ drinks for women and 15+ drinks for men in one week.

# HEALTH FACTORS

## HEALTH BEHAVIORS

15

teen births (per 1,000 females age 15-19)

(2014-2020)

262.8

chlamydia cases (per 100,000 people)

(2020)

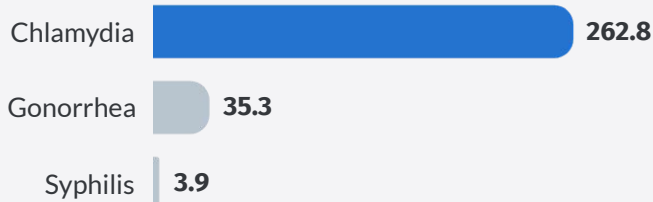
35.3

gonorrhea cases (per 100,000 people)

(2020)

Reproductive and sexual health are large indicators of the overall health and quality of life of the community. Higher rates of sexually transmitted infections (STIs), also called sexually transmitted diseases (STDs), and teen pregnancy indicate higher risky sexual behavior in a community.

### Chlamydia was the highest diagnosed STI in Waupaca County



Diagnosed cases per 100,000 people (2020)

### Chlamydia Cases (2020)



Waupaca County

Wisconsin

Chlamydia is the most common STI across the entire United States, so we specifically look at the rate of chlamydia infections to determine overall risky sexual behavior. If left untreated, chlamydia and other STIs such as gonorrhea, syphilis, and HIV can increase a person's risk of pelvic conditions, ectopic pregnancy, cancer, infertility, and premature death. Higher rates of STIs, the complications that come with treating STIs, and the associated medical conditions that accompany untreated STIs also increase the economic burden on the healthcare system in the community. **Chlamydia continues to be the highest diagnosed STI in Waupaca County, and cases are on the rise.**

Teen birth rate, or the number of live births per 1,000 females ages 15-19, is also an indicator of risky sexual behavior in a given community. Early childbirth is associated with negative health outcomes for both mother and child, largely due to the social implications the new mother faces. Teen mothers also face difficulties in maintaining their education, social connections, and both physical and mental health. Childcare, employment, and transportation also tend to be barriers for teen mothers.

15

### Teen Births (2014-2020)

The number of teen births per 1,000 females age 15-19 in Waupaca County (15) was higher than the state (14).



# HEALTH FACTORS

## CLINICAL CARE

7%

uninsured residents  
under age 65

7%

uninsured adults  
age 18-65

5%

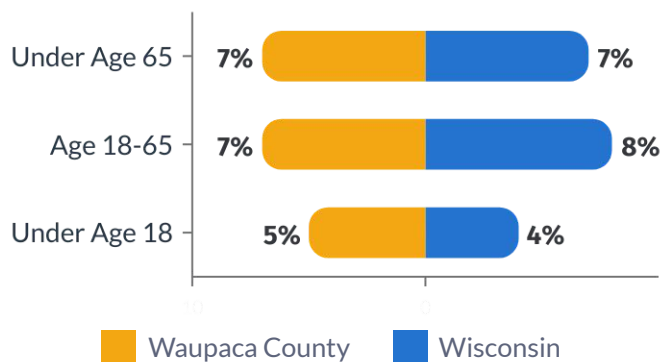
uninsured children  
under age 18

(all data reported from 2019)

Clinical care is broadly defined as direct medical treatment provided to patients. This includes preventive care and routine examinations, as well as specialty care necessary for advanced medical conditions. Ideally, a robust healthcare system should be accessible, available, affordable, quality, and timely to all patients who need medical attention. The next few pages of this report examine factors that contribute to affordability, accessibility, and quality of care.

### Percentages of Uninsured People

(2019)



" There need to be more services available. Especially for those with no or low income. People should not feel they cannot even seek assistance because it will cost beyond what they can afford. "

Survey Respondent

People can be uninsured, or lack health insurance, for a variety of reasons: the costs of coverage or health insurance plans are too high, workplaces do not offer full or even partial coverage as a benefit of employment, or they narrowly miss qualification for programs such as Medicare and Medicaid. Those who are uninsured are less likely to have a primary care provider and a dental provider, resulting in fewer preventive health visits. Access to mental health providers, therapists who provide behavioral counseling, and psychiatrists are also limited or nonexistent to people without health insurance. Health insurance is also necessary to access specialty care and emergency care. Later diagnoses, lower quality of life, worse health outcomes, and higher morbidity and mortality rates are all negative, serious, and common among people who do not have adequate health insurance. People who are uninsured are also more likely to experience higher medical bills, making it more difficult to pay for medical expenses, likely resulting in medical debt.

**What does this data mean? Waupaca County residents who are uninsured have a harder time accessing medical care, which has a significant impact on their ability to stay healthy.**

# HEALTH FACTORS

## CLINICAL CARE

52%

adults 65+ who got their flu shot

53%

women 64-75 who got a mammogram

2,674

preventable hospital stays (per 100,000)

*(all data refers to Medicare enrollees 65 + in 2019)*

Quality of care can broadly be defined as medical services that improve health status and health outcomes. Factors such as access to care and how far away you live from necessary medical care impact your quality of care. Studies have shown people of minority status, those who are low income, and those who are uninsured or under-insured often receive lower quality of care when seeking medical care. Receiving quality medical care in a timely manner allows us to live longer and healthier lives, and reduces the risk of poor quality of life and premature death.

### Flu Vaccine



### Mammogram Rates



### Preventable Hospital Stays\*



\*Ambulatory Care Sensitive Conditions (ACSCs), which are diagnoses usually treatable in outpatient settings

■ Waupaca County
 ■ Wisconsin

*" Clinic access and transportations are barriers to obtaining preventative and ongoing healthcare resulting in heavy usage of emergency services... "*

Survey Respondent

*" The rural areas in the County are not linked to adequate resources to improve health, mentally, physically and socially. "*

Survey Respondent

# HEALTH FACTORS

## CLINICAL CARE

**1,760:1**

residents per primary care provider

(2019)

**2,670:1**

residents per dentist

(2020)

**1,060:1**

residents per mental health provider

(2021)

Access and utilization of routine, preventive medical care is essential to maintain health and reduce the risk of disease, disability, and premature death. Referrals from primary care providers are also often necessary to receive specialty care. A higher patient to provider ratio means longer wait times and travel time to access care, along with potentially reduced time spent with a provider due to high patient volume. These barriers result in patients not seeking preventive care as often and waiting until their health status becomes a severe health crisis, leading to higher healthcare costs for the individual and a higher likelihood of disability, chronic disease, and premature death.

The Healthcare Professional Shortage Area (HPSA) is another method we can use to examine the amount of healthcare providers within a given geographical area. The federal government provides this measure and specifically evaluates for primary care providers, dental providers, and mental health providers.

Parts of Waupaca County are a designated HPSA for primary care providers and dental providers, and all of Waupaca County is a designated HPSA for mental health providers. **All Waupaca County residents experience some healthcare provider shortage. More importantly, all Waupaca County residents have difficulty accessing mental health providers where they live.**

"The rural communities don't have as much access to health care..."  
Survey Respondent

### Primary Care Providers

residents per provider in 2019



### \*Other Providers

residents per provider in 2021



\*nurse practitioners, physician assistants, clinical nurse specialists

### Mental Health Providers

residents per provider in 2021



### Dentists

residents per provider in 2020



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# HEALTH FACTORS

## SOCIAL AND ECONOMIC FACTORS

Where we live, work, learn, and play have a significant impact on the health, wellbeing, and prosperity of both individuals and the whole community. Social and economic factors including income and poverty level, the cost and availability of childcare, educational opportunities, and level of social connections affect our ability to have choices, afford medical care, and make healthy decisions. The next few pages examine social and economic factors in Waupaca County that strongly influence health.

### Children in Poverty (2020)

Percentage of children under age 18 living in poverty



■ Waupaca County ■ Wisconsin

### Unemployment (2020)

Percentage of unemployed people age 16 and older seeking work



■ Waupaca County ■ Wisconsin

3.7

### Income Inequality (2016-2020)

The ratio of household income at the 80<sup>th</sup> percentile to income at the 20<sup>th</sup> percentile in Waupaca County is 3.7. The state ratio is 4.2.

73¢

### Gender Pay Gap (2016-2020)

In Waupaca County, the ratio of women's median earnings to men's median earnings for all full-time, year-round workers was 73¢ on the dollar. The state ratio was 80¢.

# HEALTH FACTORS

## SOCIAL AND ECONOMIC FACTORS

19%

children who live in single-parent households

(2016-2020)

20%

child care cost burden on household income

(2020-2021)

5

childcare centers per 1,000 kids under 5

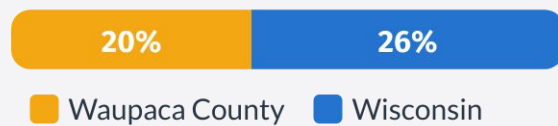
(2021)

Child care has immense benefits for both children and adults within a family unit. Children are able to form social relationships, learn from peers, and build stronger immune systems while in child care around other children. Adults then have the ability to pursue additional education, full-time employment with benefits such as health insurance, and work toward financial security later in life. When the cost of child care places too much burden on a household's overall income, this means other expenses such as nutritious food, medical bills, utility costs, rent/mortgage payments, and transportation may not be affordable, and could even cause a family to have debt. Affording and accessing high-quality child care is a problem across all income levels, but increased burden is placed on low-income families.

The U.S. Department of Health and Human Services suggests child care is affordable when a household spends 7% or less of their household income on child care. **In Waupaca County, the average household spent 20% of its income on child care for two children.**

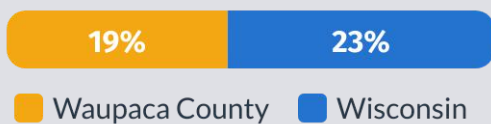
### Childcare Cost Burden (2016-2020)

Child care costs for a household with two children as a percent of median household income



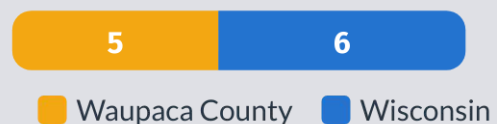
### Children in Single Parent Homes (2016-2020)

The percentage of children that live in a household headed by a single parent.



### Child Care Centers (2021)

The number of child care centers per 1,000 population under 5 years old.



# HEALTH FACTORS

## SOCIAL AND ECONOMIC FACTORS

91%

of high schoolers graduate in 4 years

(2018-2019)

8%

people age 16-19 who are not in school or working

(2016-2020)

31%

of high school students experienced depression

(2021)

Data shows a strong connection between education, social connections, and our overall health. People with a high school degree or higher are more likely to have better health habits such as an exercise routine and abstain from smoking. They are also more likely to be employed, have higher incomes, and live longer and healthier lives. Similarly, people with strong social support networks are more likely to have better overall mental health, make healthy lifestyle choices, and live longer and healthier lives.

### Education (2016-2020)

■ Waupaca County ■ Wisconsin

#### High School Graduation

Percentage of a ninth-grade cohort that graduates high school in 4 years



#### High School Completion

Percentage of adults ages 25 and older with a high school diploma or equivalent such as a GED



#### Some College

Percentage of adults ages 25-44 with some post-secondary education



### Social Connections

#### Social Associations (2019)

The number of membership associations per 10,000 population



#### Disconnected Youth (2016-2020)

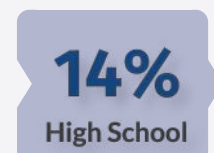
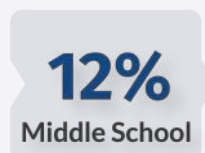
The percentage of teens and young adults ages 16-19 who are neither working nor in school



■ Waupaca County ■ Wisconsin

### Mental Health in Waupaca County (2021)

- 49% of high school students report experiencing significant problems with anxiety in the past 12 months.
- 31% of high school students report experiencing prolonged, disruptive sadness in the past 12 months.



Percentage of Waupaca County students who have made a plan about how they would attempt suicide, according to the 2021 Youth Risk Behavioral Survey.

# HEALTH FACTORS

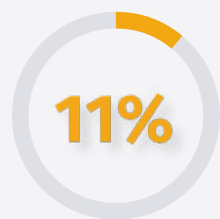
## THE PHYSICAL ENVIRONMENT

Our surrounding environment and all of its components – the air we breathe, water we drink, homes we live in, roads we travel, and more – all influence our individual and community health and wellbeing. A healthy physical and built environment can lead to a longer lifespan and a healthier life overall, and when these factors are lacking, people have a harder time making healthy decisions. Other socioeconomic factors, such as race and income level, may also influence where someone lives, which can limit access to healthier living environments and safe housing opportunities. This can lead to negative health outcomes and can increase the likelihood of poorer quality of life and premature death. The next few pages examine factors of Waupaca County’s environment that impact our health.

### Severe Housing Problems (2014-2018)



The percentage of households with at least 1 of 4 housing problems: overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing facilities.



Waupaca County



Wisconsin

### Transportation (2016-2020)



#### Driving Alone to Work

The percentage of workers who drive alone to work.



■ Waupaca County ■ Wisconsin



#### Long Commute

Among workers who commute alone, the percentage who commute more than 30 minutes.



■ Waupaca County ■ Wisconsin

### Extreme Precipitation



The projected number of days in 2080 with greater or equal to 1" of precipitation.



Waupaca County



Wisconsin

### Extreme Heat



The projected number of days in 2080 >90 degrees F.



■ Waupaca County ■ Wisconsin

# HEALTH FACTORS

## THE PHYSICAL ENVIRONMENT

7.1

average daily density of fine particulate matter ( $\mu\text{g}/\text{m}^3$ )

(2018)

8%

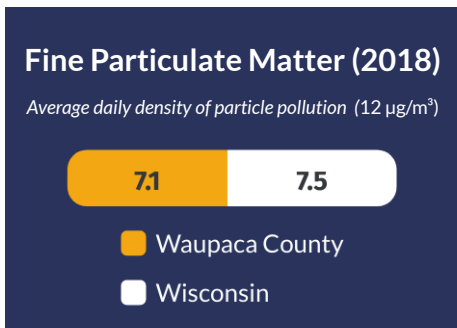
private wells with high arsenic (10  $\mu\text{g}/\text{L}$  or more)

(1988-2019)

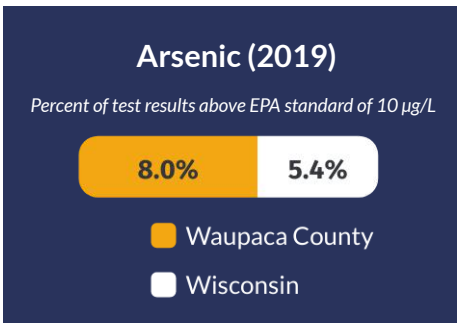
8.8%

private wells with high nitrate (10  $\text{mg}/\text{L}$  or more)

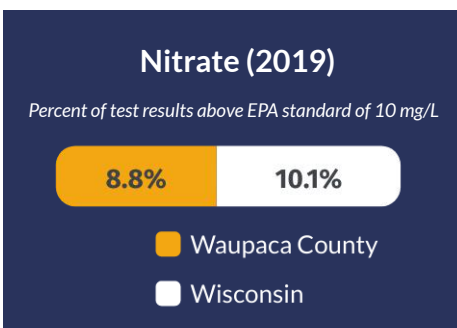
(1988-2019)



**Air pollution** is made of solid particles, gases, and aerosols in the air that can harm the health of living things. People cause most air pollution through things such as emissions from factories and cars. Some types of air pollution come from natural sources like wildfires. Higher levels of air pollutants lead to increased risk of respiratory diseases such as asthma, COPD, and lung cancer. Prolonged exposure can lead to chronic and severe cases of these diseases, and even death. When the average daily density of particle pollution exceeds 12  $\mu\text{g}/\text{m}^3$  air quality is considered unhealthy, a standard set in place by the U. S. Environmental Protection Agency.



**Arsenic** is a compound that naturally occurs in the air, water, and earth (specifically rock formations and soil) and also has many human-made sources such as pesticides, treated lumber, and certain foods. Arsenic contamination of drinking water can cause skin rashes and stomach problems, increase your risk for certain types of cancer, and cause learning delays when infants and children are exposed at high levels. High levels of arsenic are most common in the northeast part of Wisconsin.



**Nitrate** is the most common groundwater contaminant and can be found in plants, animal or human waste, and fertilizers. Pregnant women who consume high levels of nitrates can cause health problems for the fetus including premature birth, fetal growth issues, birth defects, and certain kinds of cancer. High levels of nitrate have the most negative impacts when consumed by infants, which can cause certain birth defects and increase the risk of blue baby syndrome where the blood has limited ability to carry oxygen throughout the body. Consuming water with high levels of nitrate may also increase the risk for certain kinds of cancer for people of any age.

**Private wells supply drinking water to approximately 60% of people in Waupaca County.** Comparatively, about 30% of all Wisconsin residents get their drinking water from a private well. Safe drinking water sources are crucial for individual and community health. Drinking water supplied from public systems are required to be monitored with routine testing, while private well owners are encouraged to test their drinking water regularly. Testing drinking water routinely, and testing right away if you notice a change in the color, taste, or smell of your water, is best practice and helps detect contaminants sooner.



# HEALTH FACTORS

## THE PHYSICAL ENVIRONMENT

39.2%

of high radon tests

(2020)

3.1%

of tested children with high blood lead levels

(2018)

11.1

ER visits for carbon monoxide poisoning

(2015-2019)

### High Radon Tests (2020)

Percent of tests with results  $\geq 4$  pCi/L

39.2%

35.2%

- Waupaca County
- Wisconsin

**Radon** is a radioactive gas that is naturally occurring and can cause lung cancer. Exposure occurs when this gas leaks into homes and other buildings through cracks in the foundation. Radon can be present in old and new buildings. People can't tell when radon is present because it does not have an smell or a color. The only way to know if radon is present is by testing your home. Levels of 4 pCi/L or higher are considered hazardous.

### Childhood Lead Poisoning (2018)

Percent of tested children with blood lead  $\geq 5$   $\mu$ g/dL

3.1%

3.7%

- Waupaca County
- Wisconsin

**Childhood Lead Poisoning** occurs by touching, swallowing, or ingesting lead or lead dust through environmental exposures. Lead can be present in paint in homes or toys, water pipes, jewelry, workplace exposure spread to children at home, and living near airports due to lead emissions from airplane fuel. Lead poisoning can cause growth and developmental delays in children, and if untreated, can cause poor academic outcomes and reduced potential in adulthood.

### Carbon Monoxide Poisoning (2019)

Rate of ER visits per 100,000 people

11.1

8.1

- Waupaca County
- Wisconsin

**Carbon Monoxide** is a toxic gas that can cause carbon monoxide poisoning in people, where tissue damage and even death can occur due to poor oxygen circulation in the body. This gas also does not have a smell or a color, and the best way to detect high levels of carbon monoxide is with continuous monitoring through a Carbon Monoxide Detector in your home, which is similar to a smoke detector.

We spend a lot of time in our homes, so the air we breathe, water we drink, and conditions we live in all impact our health. How much of our income we are able to spend on where we live and the types of housing available to us can also make it easier or more difficult to be healthy. Unhealthier living conditions tend to be more common in lower income housing and housing where you rent instead of own.

# Primary Data

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## Important Factors, Risky Behaviors, Important Issues

Primary Data sources refer to information collected directly from Waupaca County Public Health. Key informant interviews and a countywide survey were the two methods used to collect information over the summer and fall of 2022. The countywide survey was widely available online and in paper copies at municipal libraries and the Waupaca County Courthouse. This primary data collection focused on information not readily available through secondary data sources. No individual residents or groups of people will be identifiable by this data set.

# IMPORTANT FACTORS FOR A HEALTHY COMMUNITY

" Attracting and retaining quality health care providers is essential to our community."

Survey Respondent

" This area does not have affordable housing. "

Survey Respondent

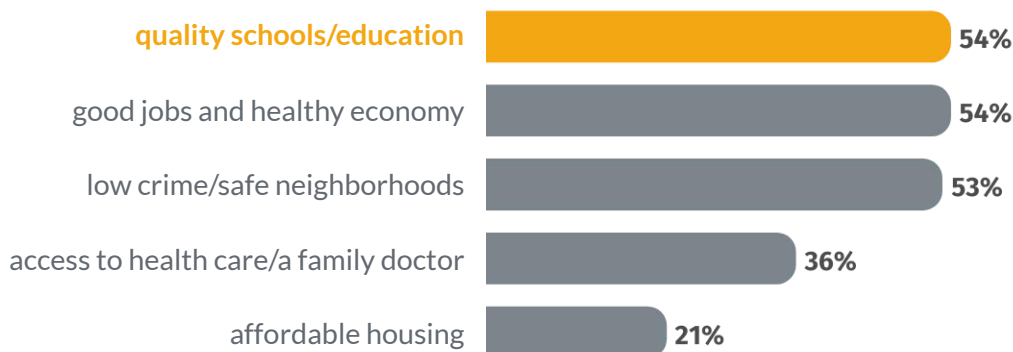
" ...most of the issues I see start with income and poverty. This issue causes people stress and other mental issues."

Survey Respondent

**Social and economic factors** such as income, education, employment, community safety, and social supports can have a huge impact, positively or negatively, on how well and how long we live. These factors also affect our ability to make healthy choices, afford medical care and housing, manage stress, and more. Having a well-paying job that allows you to afford groceries, housing, and utilities each month; earning a higher education level and sending your children to a good school district; being able to access high-quality, affordable healthcare; and living in an affordable home in a safe neighborhood all enable us to make healthier decisions for ourselves. As we can see in the chart below, these values are of high importance among Waupaca County residents, as reported in the 2022 CHA.

**Protective factors** help to reduce the amount or degree of negative impact that various factors or conditions may have on someone's life. They can exist at the individual and community levels, as well as within groups of people and environments such as school/work, family/household, and extracurricular groups. Examples of protective factors include: high self-esteem, strong social supports, success at school/work, adult role models, laws that restrict access to alcohol, and safe neighborhoods. All of the factors shown in the chart below are considered protective factors when they are accessible, affordable, available, and of high quality.

**Quality schools/education** was identified by survey respondents as the most important factor for a healthy community in Waupaca County.

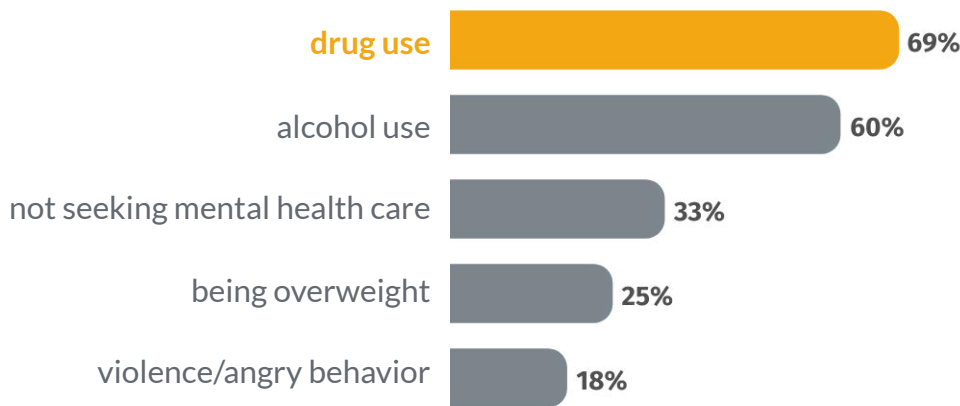


10%

of households in Waupaca County spend 50% or more of their income on housing

# RISKY BEHAVIORS INFLUENCING HEALTH IN WAUPACA COUNTY

**Drug use** was identified by survey respondents as the most risky behavior influencing health in Waupaca County.



*"Drug and alcohol abuse is a very big problem!"*  
 Survey Respondent

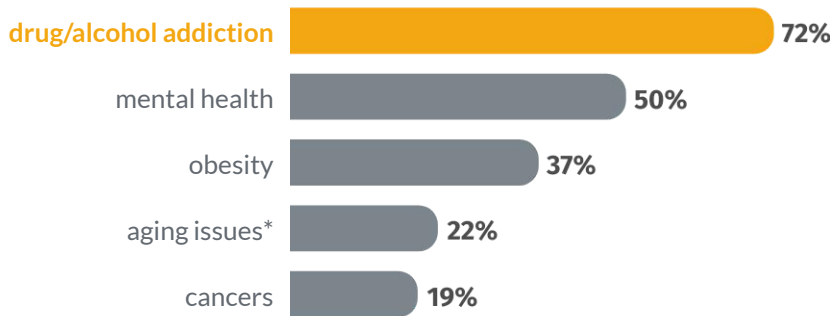
**Risk factors**, also categorized as risky behaviors, are characteristics that increase someone's likelihood of developing a negative health condition or outcome, and ultimately lower someone's overall quality of life. They exist at the individual and community levels, as well as within groups of people and environments such as school/work, family/household, and extracurricular groups. Examples of risk factors include low self-esteem, genetic predisposition to conditions like heart disease or addiction, mental health conditions, child abuse, homelessness, and lack of connection at work/school.

The top five risky behaviors shown in the graph above, as selected in the 2022 CHA, have a negative impact on the health of both the individual and the community. People have the ability and freedom to make their own decisions, but the environments they are in can also determine how easy or difficult it can be to make a healthy choice over a risky choice. For example, if there are no sober environments to socialize in the evening, it will be difficult for people to feel socially connected unless they go to a bar where alcohol is served. If someone doesn't live close to a grocery store and doesn't have a reliable vehicle, they may be forced to choose foods from a local convenience store, which may not have fresh, nutrient-dense food choices. Someone who wants to seek counseling for mental health struggles, but also has barriers such as a long commute to access services or health insurance that doesn't cover counseling services, can lead them to not seek help, which will likely lead to their mental health condition worsening.

Risky behaviors and risk factors often seem completely up to the individual, but socioeconomic factors such as education level, community safety, income level, access to and quality of healthcare, race, and sense of belonging in their community can influence individual behavior much more than we realize.

# IMPORTANT ISSUES INFLUENCING HEALTH IN WAUPACA COUNTY

**Drug/alcohol addiction** was identified by residents as the most important issue influencing health in Waupaca County.



\*such as arthritis, hearing/vision loss, and dementia

"Mental health and drug cessation programs are stigmatized and wait times are far too long."  
Survey Respondent

Drug and alcohol use was identified as the leading major influence over health in Waupaca County, as identified by survey respondents in the 2022 CHA. Repeating risky behaviors such as drug and alcohol use, tobacco use, and physical inactivity on a daily or weekly basis is proven to lower quality of life and increase the likelihood of chronic disease, cancers, and even premature death. When someone engages in risky behaviors, it tends to negatively impact those around them at home, school/work, and in social settings, and can even lead the people in their lives to participate in these risky behaviors as well. Access to positive role models and environments where people can make healthy decisions for themselves and their communities is vital for the health of Waupaca County. When someone is seeking professional help to stop risky behaviors and build healthy habits, our society and environment needs to have resources that are ready and available to help, as well as a community ready to support people seeking to improve their individual health and in turn, bettering the health of the community.

Among other health areas, **alcohol and other drug use** was identified by survey respondents as being a major problem influencing health in Waupaca County.



# WHAT COMES NEXT?

After the completion of the 2022 CHA, Waupaca County Public Health will analyze primary and secondary data and create a vision for the 2023 Community Health Improvement Plan (CHIP). Identifying priority areas revealed through data collection, building an action plan, and selecting evaluation measures are all a part of the CHIP. These priority areas are not all-encompassing; Waupaca County Public Health remains committed to improving health outcomes across a broad spectrum of areas and services. These three priority areas represent areas of opportunity for community health improvement *and* areas where the community, Waupaca County Public Health, and other partners have an opportunity to create positive change.

## POTENTIAL PRIORITY AREAS FOR THE 2023 CHIP



Substance Use



Chronic Disease



Mental Health

## NEXT STEPS FOR THE 2023 CHIP

Waupaca County Public Health will create an action plan and evaluation measures for each priority area. Substance Use, Chronic Disease, and Mental Health will each have their own plan, specific action steps, and evaluation components.

**Each action plan will:**

- use evidence-based and/or best practices, when available
- consist of goals and objectives that try to improve overall community health through each priority area
- follow a work plan and timeline to ensure activities stay on track
- be fluid, allowing activities to be added or adjusted based on current events and needs of the community

**Each evaluation plan will:**

- objectively analyze if each action plan goal was met
- allow for the action plan to be adjusted based on evaluation measure results
- incorporate a tracking component to track progress
- monitor outcomes of of each work plan

*" There is always room for progress and improvement, however, Waupaca is a great place to live! "*

Survey Respondent

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# Waupaca County Public Health

## 2022 COMMUNITY HEALTH ASSESSMENT

Published January 2023

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Prevent. Promote. Protect.

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