

2020 Greendale Community Health Assessment

Greendale Health Department



Public Health
Prevent. Promote. Protect.

Greendale Health Department

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Message from the Health Officer

August 2020

Greetings Village of Greendale Residents,

I am pleased to present the 2020 Greendale Community Health Assessment. The health of our population is instrumental to the well-being of our community. The Greendale Health Department's mission is to foster a healthy Greendale by preventing disease, promoting wellness, and protecting health for all who live or spend time in our community. Healthy people lead more productive lives, contribute more to society and keep our economy strong. Prevention of chronic disease such as diabetes, heart disease and cancer not only assures a strong quality of life, but also results in a decreased economic burden on our health care system. This report gives a snapshot of the current health status of Greendale citizens.

Findings from this report will inform the next Community Health Improvement Plan (CHIP). Our current Community Health Improvement Project Workgroups of Step Up to Better Health, Food and Nutrition Group, Successful Aging in Greendale for Everyone, and Community Alliance work to increase physical activity, promote nutritious eating, encourage healthy lifestyles for aging individuals, and prevent youth substance misuse, respectively. With the community's support, we will build on the progress of these groups to continue improving health throughout Greendale.

Sincerely,

Sue Sheppard, MSN, RN

Acknowledgements

Keeping Greendale healthy takes a village. The progress in our collective health can be attributed to efforts made by systems, coalitions, and dedicated citizens. The health department relies on a network of other community partners to prevent illness and promote health. These include health systems, assisted living facilities, schools, nonprofits, fire and police, volunteers, and surrounding health departments to name a few.

We would like to thank our board of health members for guiding the work of protecting and promoting health of all Greendale residents; volunteers for dedicating their time to CHIP workgroups and other department programs; the Data Resource Center of WI DHS for providing insight and expertise; Jacob Johnson for analyzing the Youth Risk Behavior Survey data; United Way for conducting focus groups; and Kinsey Mannebach for putting together this report.

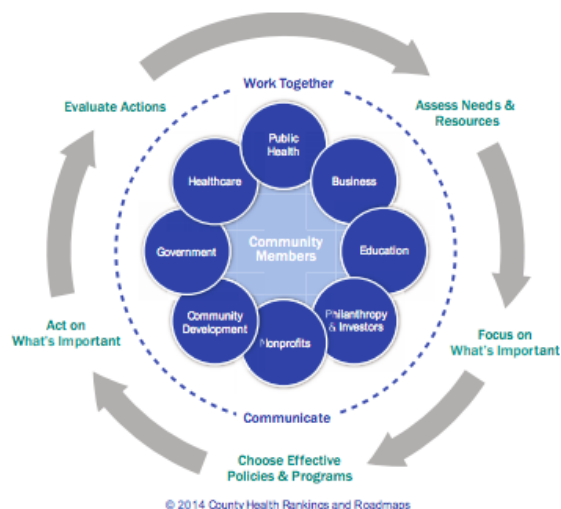
Methods

The Wisconsin Way Framework guided data priorities for this report, and organization was inspired by the Community Health Assessment Template from mySidewalk. Data collection for the topics included here were obtained through public and private sources. Private sources include vital records reports from the Wisconsin Department of Health Services, participation rates from West Allis Special Supplemental Nutrition Program for Women, Infants and Children (WIC), student demographics from the Greendale School District, youth health behaviors from the Youth Risk Behavior Survey, disease occurrences from the Wisconsin Electronic Disease Surveillance System and Wisconsin Immunization Registry, and focus group responses from the United Way. Public sources include the US Census and American Community Survey, Health Compass Milwaukee, Centers for Disease Control and Prevention, Wisconsin Department of Health Services, JKV Research and the Greendale Health Department. The full list of references can be found at the end of this document. Comparisons between local, county, state or national levels are only included when data is from the same source from the same time. Trends are included for data from the same source. Graphs were made using Microsoft Excel. Visuals were created with Canva.

Introduction

All Wisconsin local public health departments must conduct community health assessments and improvement plans every five years (WI Administrative Code, DHS Chapter 140). The purpose is to gain a picture of the health of the community over the past five years and inform a community health improvement plan. The mission of Greendale Health Department includes promoting wellness and protecting health for all who live or spend time in Greendale, and this process is a key piece of that.

This report is guided by The Wisconsin Way, a framework for improving the health of local communities. The purpose is to provide an organized approach based on best practices to improve community health. The framework provides a set of core variables to measure health outcomes and factors that affect those outcomes such as health behaviors and social determinants of health. **Social determinants of health** are the conditions in which people live, work and play. They are shaped by the distribution of money and resources, and they affect health risks and level of health. For example, poor education opportunities increase the chance of experiencing poverty and living in poverty limits access to preventive health services and healthy food (CDC, 2018; WHO, n.d.). By measuring health outcomes and affecting factors, we gain a better picture of the health of the whole community.



EXECUTIVE SUMMARY

DEMOGRAPHICS

- 2019 population: 14,143
- Gender: 58% female
- Veterans: 9%
- Median age: 44
- Age distribution
 - 23% under 18
 - 54% 18-64
 - **23% 65 and older**



- Race/Ethnicity
 - White: 87%
 - Hispanic or Latino: 6%
 - Asian: 4%
 - Black or African American: 2%
 - American Indian or Alaska Native: 2%

Greendale has a higher proportion of veterans and people over 65 than Milwaukee County or the state of Wisconsin

The student population is 13% more diverse than the overall population, and the total population has diversified by 10% from 2000-2019



Greendale has a higher proportion of seniors who live alone, higher median household income, and higher education level than the county and state

SOCIAL FACTORS

- Household makeup:
 - 66% families
 - 18% of people 65 or older live alone
- Unemployment: 4%
- Median household income: \$71,358
- Education level: 96% high school graduates, 42% with a bachelor's degree or higher

Disparities in income and education by race/ethnicity are outlined in the full report, as well as an excerpt about racism and health on page 15

- Poverty
 - From the 2009-2013 US Census American Community Survey to the 2014-2018 survey:
 - Overall poverty decreased 4% (from 9 to 5)
 - Child poverty decreased 9% (from 12 to 3)
 - Senior poverty decreased 9% (from 14 to 5)
 - 20% of people with a disability in Greendale experience poverty
 - This is less than 36% in the county and 26% in the state



- Free and reduced lunch
 - 30% of students in the Greendale school district qualified for free or reduced lunch for the 2019-20 school year
 - This rate has tripled since 2000

While poverty rates have decreased, the proportion of students who have free or reduced lunch based on their family income has increased

HOUSING AND ENVIRONMENT



- Homeownership
 - 67% of homes are owner-occupied
 - This is higher than 45% in the county and 59% in the state
- Renters
 - 49% of renters in Greendale spend more than 30% of their income on rent alone
 - Spending over a third of income on rent is considered a cost burden
 - This is similar to the county (51%) and state (45%)

Lack of affordable housing was identified as an issue in 2017 and 2018 focus groups

- Lead
 - Lead poisoning cases in children decreased and lead testing increased from 2017 to 2019
- Radon
 - Radon levels among homes tested have decreased but remain above a healthy level
- Air Quality
 - Air quality has improved but is still above the threshold to be classified as 'good'
 - Lead, carbon monoxide, and nitrogen dioxide are worse in Greendale than the US average



HEALTHSPAN

Disease

- Communicable (contagious)
 - Influenza and Chlamydia, a sexually transmitted infection, are typically the top 2 communicable diseases
 - Sexually transmitted infections, led by Chlamydia, have been rising since 2015
 - Influenza vaccination increased from 2015 to 2018
 - Animal bites which can spread disease increased from 2017 to 2019
- Chronic
 - Diabetes, high blood pressure, and heart conditions continue to affect health
 - Greendale has more hospitalizations due to heart failure than 75% of WI zip codes

COVID-19 is a novel communicable disease that has spread in Greendale and throughout the world in 2020

Birth

- From 2015 to 2019:
 - Women who smoked during pregnancy decreased 12% (from 17 to 5)
 - Teen births remained low (1-2%)
 - Babies who were low birth weight increased 3% (from 7 to 10)
 - Women who had graduated college increased 14% (from 45 to 59)

Death

- Life expectancy: 79 years
- 2019 Leading causes of death
 1. Heart Disease
 2. Cancer
 3. Dementia
 4. Accidents

Dementia has accounted for an increasing proportion of deaths since 2017

HEALTH BEHAVIOR



Adults

- Nutrition
 - Consumption of 5 or more servings of fruits or vegetables per day increased 5% from 2015 to 2018 (from 36 to 41)
- Physical activity
 - 50% of people in the region reported meeting the recommended physical activity level in 2018
- Tobacco and alcohol
 - Smoking decreased 4% from 2015 to 2018 (13 to 9)
 - Binge drinking increased 7% from 2015 to 2018 (30 to 37)
- Obesity
 - 35% of Greendale residents are considered obese which predisposes them to a variety of health risks

Youth

- Suicide
 - Suicide attempts and serious consideration have increased
- Tobacco and vaping
 - Decrease in cigarette use
 - Large increase in vaping
- Alcohol
 - Overall decrease since 2014 but a recent increase
- Drugs
 - Recent rise in marijuana
 - Decrease in prescription pain drug misuse

The percent of Greendale high school students who had vaped in the past month jumped from 19% in 2018 to 47% in 2019



HEALTH ACCESS AND QUALITY

- Health insurance coverage rose 5% in Greendale from 2009-2013 to 2014-2018, up to 97%
- Health insurance coverage was a health concern among members of the Muslim community and navigating health care was an identified concern among seniors during listening sessions with the United Way in 2017 and 2019
- Cancer screenings increased from 2015 to 2018
- Unmet medical and dental care needs decreased from 2015 to 2018

The purpose of this report is to aggregate data on the health of Greendale and its residents. The contents of this report will be analyzed by community members and the Board of Health to discern which areas should be prioritized in the 2020-2025 Community Health Improvement Plan. The Community Health Improvement Plan will be published following this report outlining action steps to improve the health of all Greendaleans.

Demographics

Population: 14,143 (US Census Bureau, 2019)

- Population has been slightly declining since 2014 (World Population Review, 2020)

Median Age: 44 years old (US Census Bureau, 2018)

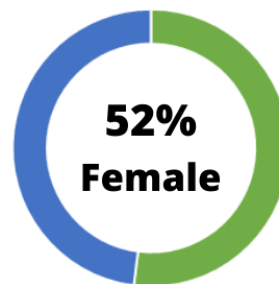
- Higher than the Milwaukee County median age of 34.7 and Wisconsin median age of 39

Gender (entire population) & Marital Status (among people 15 and older):



■ Married ■ Unmarried

(US Census, 2018)



■ Female ■ Male

(US Census, 2018)

Age Distribution:

	Greendale	Milwaukee County	Wisconsin
Under 18	23%	24%	22%
18-64	54%	63%	62%
65 and older	23%	13%	16%

(US Census, 2019)

- The percent of the population that is over 65 rose slightly in Greendale, the county and the state
- In 2017, Greendale was recognized by AARP as the second age-friendly community in Wisconsin

Data Highlight

23% of Greendale's population is over 65, a much higher proportion than the county and state

Veterans

9% of Greendale's population are veterans

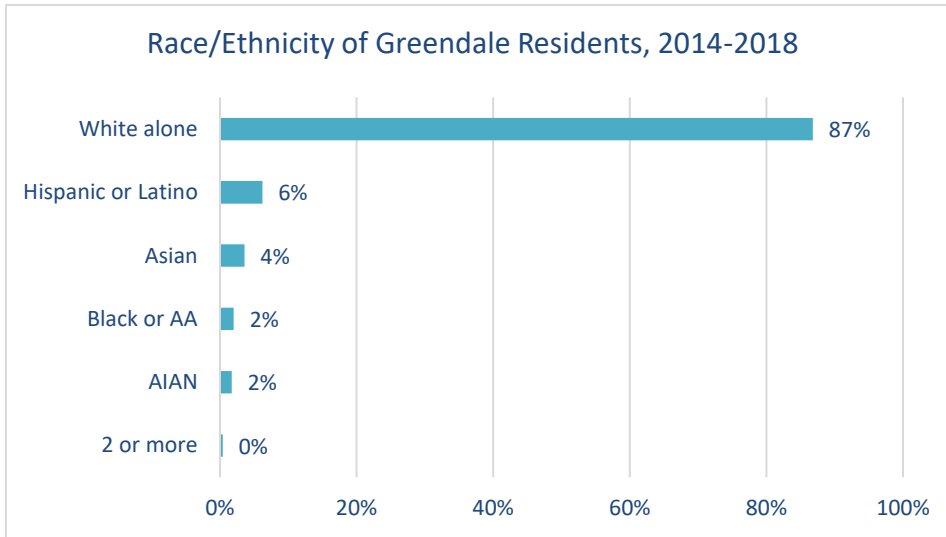
- This is higher than the 6% in the county and 7% in the state
 - 86.7% of veterans are male
 - The largest proportion served in Korea followed by Vietnam
- (Census Reporter, 2018; US Census, 2018)

Pictured: Veterans Memorial on Southway and Broad



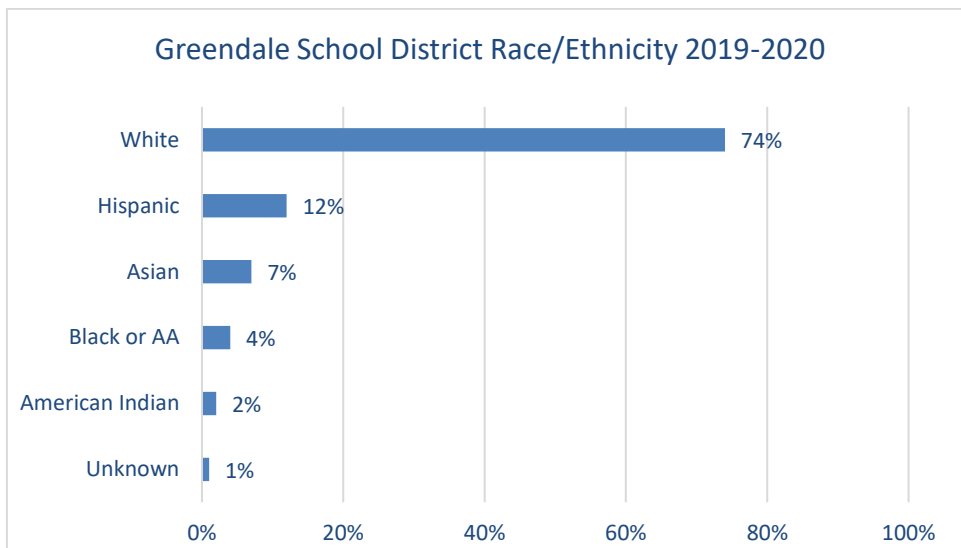
Race/Ethnicity

Race is a classification based on physical characteristics. Ethnicity is classification according to national, tribal, or cultural background (National Geographic, 2019). For race, the census sorts respondents as White; Black or African American; Asian; American Indian and Alaska Native; Native Hawaiian and Other Pacific Islander; or some other race. For ethnicity, the Census Bureau sorts people as Hispanic or Latino and Not Hispanic or Latino. People of Hispanic or Latino ethnicity can be any race. In the following tables, Hispanic or Latino refers to any race that is Hispanic or Latino, and the race categories such as 'Asian' 'Black or African American' and 'White alone' are Not Hispanic or Latino.



(US Census, 2018)

AA: African American
 AIAN: American Indian or
 Alaska Native
 Multiple: 2 or more races



(Greendale School District, 2020)

Data Highlight

From 2000 to 2019, Greendale's population diversified by almost **10%** (US Census)

- The student population is more diverse than the total population
- Increasing diversity is an asset to the community

Nationality/Language

	Greendale	Milwaukee County	Wisconsin	U.S.
Proportion of population that was born outside of the United States	6%	9%	5%	14%
Proportion of population 5 years and older who speak a non-English language at home	7%	17%	9%	22%

(US Census, 2018)

- There was a slight increase at the local, county, state and national level in the proportion of people born outside the US since 2013 (US Census, 2013; US Census, 2018)
- An increase in non-English language spoken at home occurred at the county, state and national level but decreased locally (US Census, 2013; US Census 2018)
- Health information presented in multiple languages such as Arabic and Urdu was a suggestion from a focus group in June 2019
- **6%** of Greendale School District students were enrolled in English Language Support Services for the 2019-2020 school year (Greendale School District, 2020)
- Languages besides English spoken by students in the Greendale School District (bigger font=more common):



(Greendale School District, 2020; Library of Congress, 2017)

Social Factors

Household Makeup

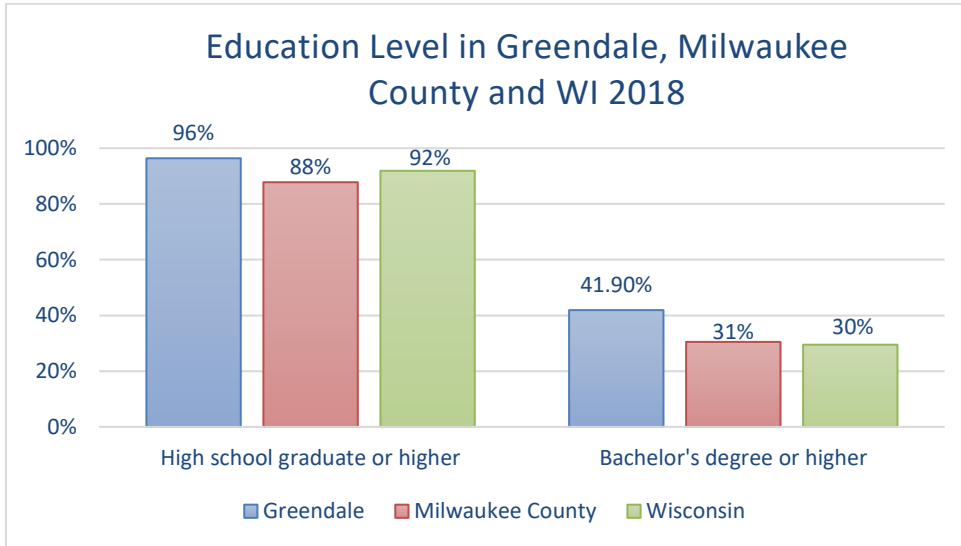
	Greendale	Milwaukee County	Wisconsin
Families	66%	56%	63%
Nonfamilies	34%	44%	37%
65 and older living alone	18%	11%	11%
One or more person younger than 18	29%	30%	29%
One or more person 65 or older	39%	24%	28%

(US Census, 2018)

- Family is defined as a group of two or more people related by birth, marriage or adoption and residing together (US Census, 2019)
- A nonfamily household includes anyone living alone or residing with unrelated people (US Census, 2019)
- Household makeup is similar to the state except for a higher proportion of seniors in households and seniors living alone in Greendale

Education

Education contributes to health through providing basic knowledge, emotional regulation, reasoning, problem solving, and social skills. Education is associated with less risky behavior, higher wages, more resources to enhance health, longer life expectancy, and lower rates of diseases such as diabetes and liver cancer (Hahn & Truman, 2015).



Data Highlight

Greendale's proportion of residents with a bachelor's degree has increased and is over **10%** higher than the state (US Census)

(US Census, 2018)

- Rates of high school diplomas and bachelor's degrees have increased for all three geographies since 2015

Education Level by Race/Ethnicity

Race/Ethnicity		High School Graduates	Bachelor's Degrees
White alone, not Hispanic	Greendale	96%	41%
	WI	94%	31%
Black alone	Greendale	100%	34%**
	WI	83%	14%
American Indian or Alaska Native	Greendale	100%**	71%**
	WI	87%	15%
Asian alone	Greendale	97%	62%**
	WI	84%	47%
Hispanic or Latino	Greendale	93%	46%
	WI	68%	14%

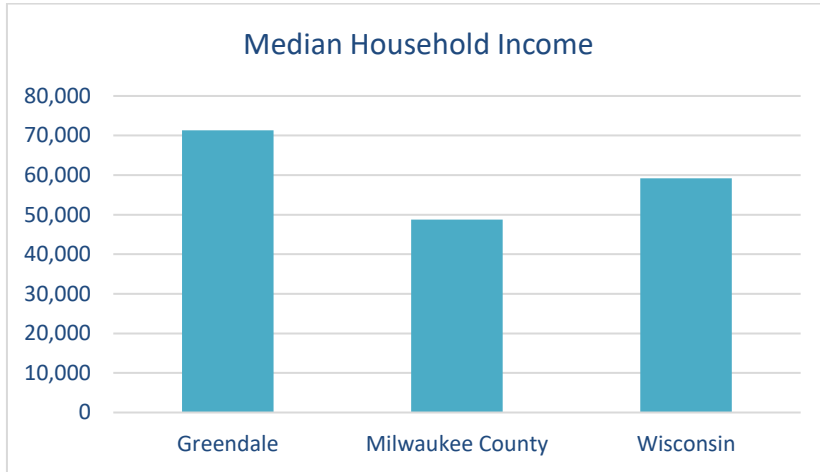
(US Census, 2018)

Data note: Measures with ** mean the margin of error is very high (over 20%). Because the data in this chart is from the US Census's American Community Survey, it is drawn from a sample or portion of the population. When there is a small population of a certain group, and then an even smaller portion of that group is counted in the survey, it decreases the accuracy of the measure. Since Greendale has relatively small populations of non-white groups, the margins of error can be large. This means that because of the small sample, the number reported for that group could actually be between 20% below the reported number or 20% above it.

Income

Median Household Income

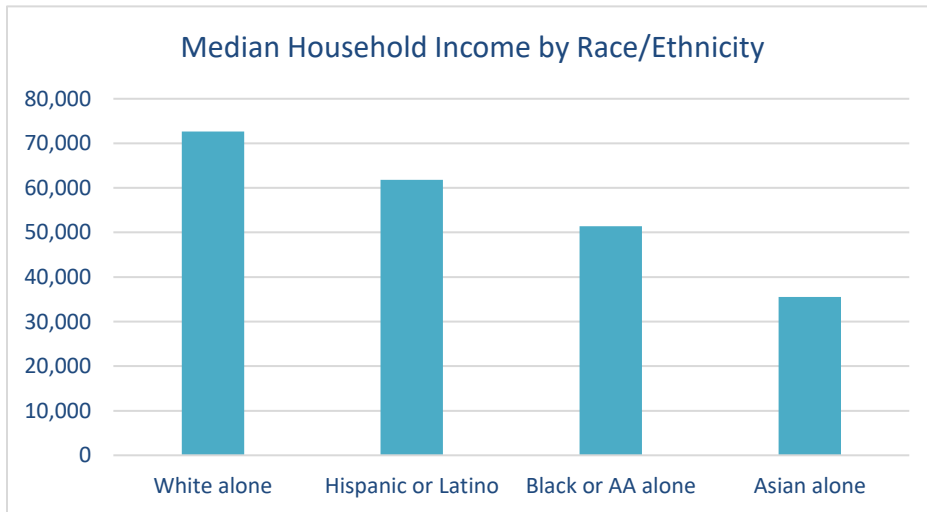
Greendale: \$71,358, Milwaukee County: \$48,742, WI: \$59,209 (US Census, 2018)



- Median income in Greendale, the county and the state have increased since 2013 (US Census, 2013)

While median income is higher and poverty lower in Greendale than the state, there are disparities by race and education level.

Income and Median Age by Race/Ethnicity 2014-2018 (Greendale only)



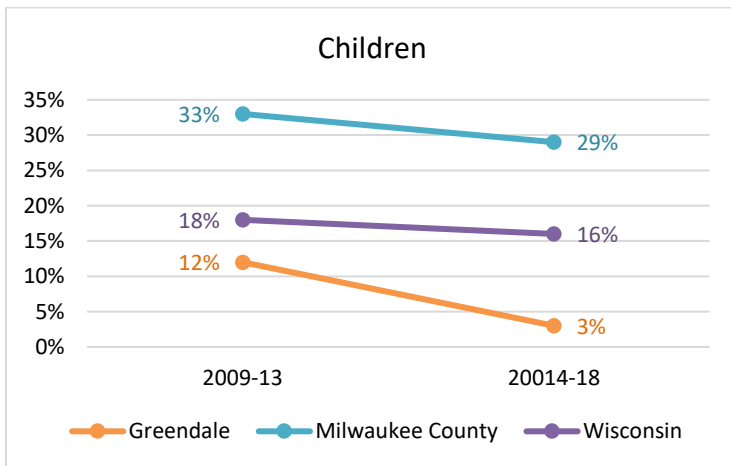
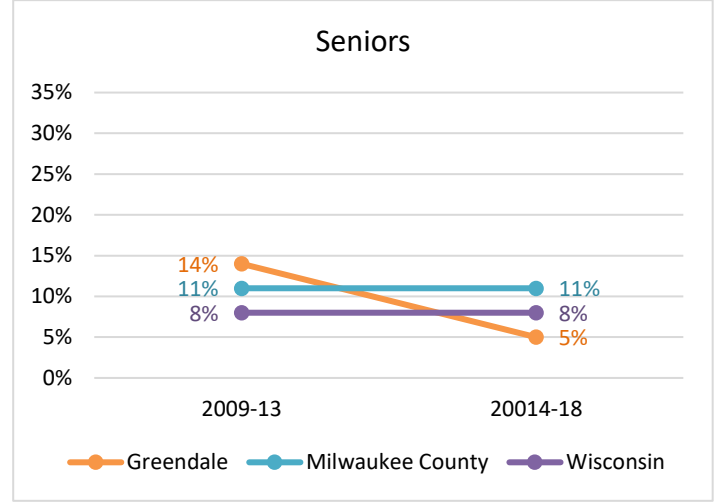
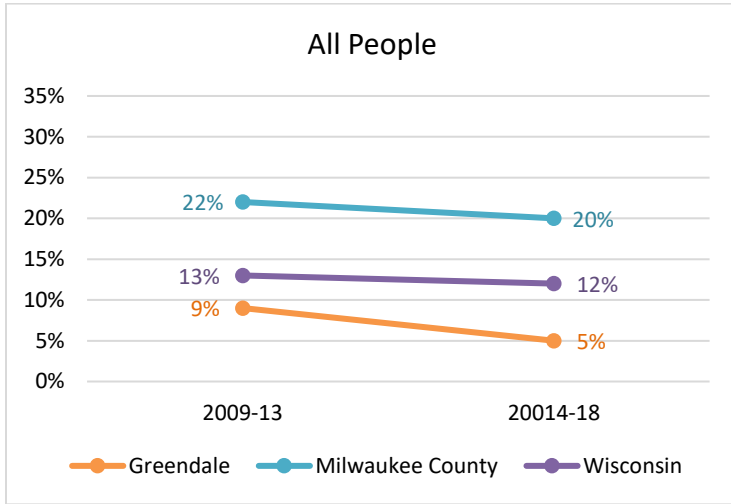
Race/Ethnicity	Median Age
White alone	47
Hispanic or Latino, any race	27
Black or AA alone	40
Asian alone	39

Data unavailable for AIAN, Native Hawaiian & Pacific Islander, and 2 or more races (US Census, 2018)

- Asian and Black or African American residents earn less income than white residents even though the median ages of the groups are similar
- Hispanic residents are much younger on average, but have a higher median income than Black or African American and Asian groups
- Data was not available on workforce details by race/ethnicity to further explore these income inequalities

Poverty

% of Total Population, Seniors and Children whose Household Income was Below the Poverty Level in Greendale, Milwaukee County, and Wisconsin



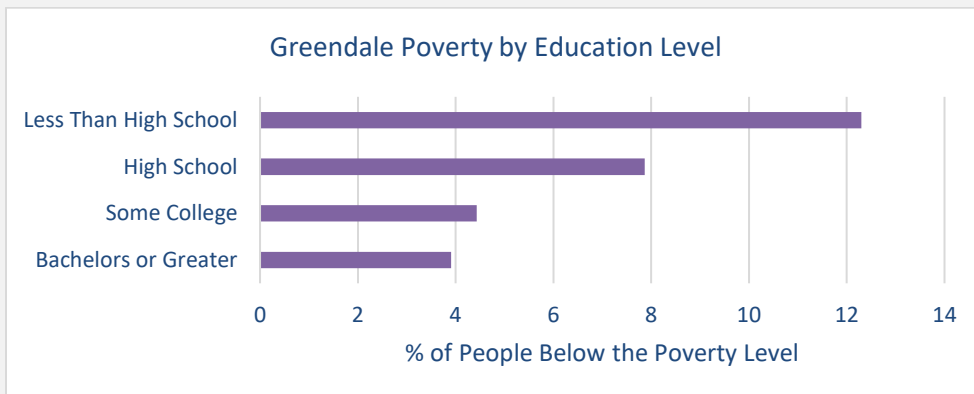
Data Highlight

- ❖ Child poverty decreased 9%
- ❖ Senior poverty decreased 9% (from the 2009-2013 American Community Survey to the 2014-2018 survey, US Census)

(US Census, 2014; US Census, 2018)

- 2009-2013 was affected by the recession of 2008 which led to higher rates of poverty

Poverty by Education Level in 2014-2018

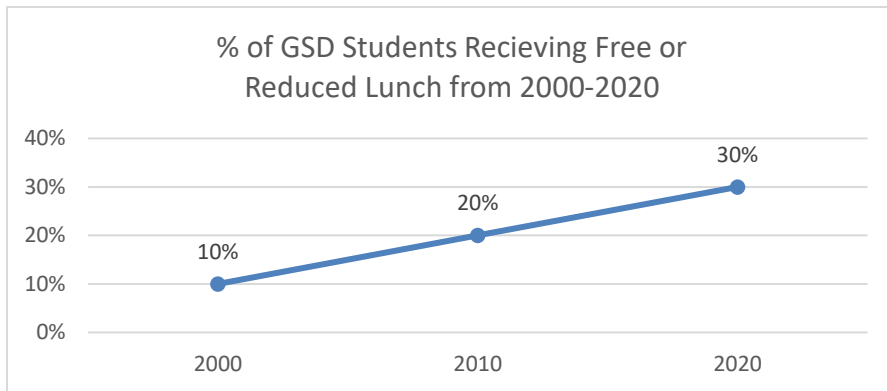


(US Census, 2018)

Poverty decreases and income increases with education level. On average, those with graduate degrees make more than those with bachelor's degrees and bachelor's degrees make more than high school graduates (World Population Review, 2020; US Census 2018)

Free and Reduced Lunch

- Students whose family's income is 185% of the federal poverty level or below qualify for reduced price lunch, and students whose family's income is 130% or below qualify for free lunch
 - In the 2019-2020 school year, annual household income guidelines would be as follows for a family of 4:
 - At the poverty line: \$25,750
 - At 130% of the poverty line: \$33,475
 - At 185% of the poverty line: \$47,638
- (USDA, 2019)



Data Highlight

The rate of students in the district who qualify for free or reduced lunch has **tripled** since 2000, despite decreasing poverty rates

(Greendale School District, 2020)

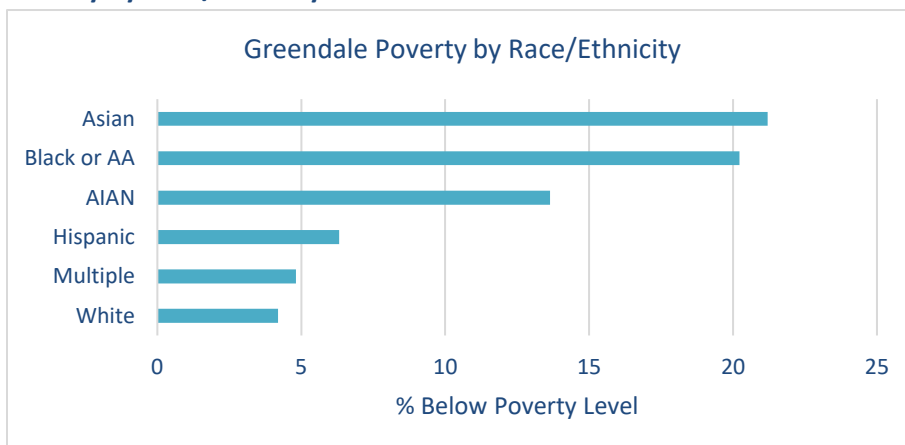
Disability and Poverty 2014-2018

	Greendale	County	WI
Persons with a disability	11%	13%	12%
Proportion of those with a disability experiencing poverty	20%	36%	26%

(Health Compass Milwaukee, 2018)

- Disability is a risk factor for poverty
- Risk of disability increases with age which can make seniors more susceptible to poverty
- Despite Greendale's older population, the disability rate is near the county and state and poverty rate for those with a disability is lower

Poverty by Race/Ethnicity 2014-2018



Data Highlight

While Asian residents have high education levels, their income is **lower** and poverty rate **higher** than other races

(US Census, 2018)

Racism and Health

The ultimate goal of public health work is to ensure each and every person has the opportunity and resources to achieve their highest level of health. Social determinants of health influence opportunities and available resources. Racism is a critical social determinant of health that has led to a public health crisis. It also affects other social determinant such as stress, housing, employment, and education (APHA, n.d.). Systems meant to protect and promote the health of all in this country have unevenly distributed resources that have created opportunity gaps. This is unacceptable and must be attacked at all levels. Communities coming together to diligently address the problem in their backyards is how meaningful change begins.

“To reach a Culture of Health, we must both address the socioeconomic factors that affect health and lift the barriers of racism to ensure everyone has the opportunity to be as healthy as possible” (Robert Wood Johnson Foundation, n.d.)

In Greendale, we have seen a commitment to fostering diversity and eliminating racism, but the work is far from over. As the data presented in this report shows, there are inequities in education, income and poverty. Education and income are well-documented factors that affect health and to address health we need to start with the social determinants that affect people’s opportunities to be healthy. Groups such as Greendale Welcomes Diversity, The Voice, and Parents Advocating for Greendale Equity (PAGE) are a great start to this work. The education system was repeatedly mentioned as a strength in Greendale and a focus group highlighted the school district’s effort to be culturally competent and inviting for all students. However, racism from other students was identified as a problem. This emphasizes the need for grassroots antiracism advocacy alongside intentional programming to make Greendale a welcoming community to all who live, work and play here. The Health Department is committed to ensuring equity, and we envision an inclusive community and nation where everyone has access to what they need to be healthy and well.

Employment

Greendale unemployment rate: **4%** (US Census, 2018)

- Lower than the county rate of 6% and state rate of 4%
- Rates have decreased by about 1% since 2009-2013 for the local, county, and state level ↓
- Unemployment refers to people who currently do not have a job, are available for work, and are actively looking for work. Those who are not looking for work are considered not in the labor force and therefore not included in this statistic (US Bureau of Labor Statistics, 2015)

Employment industries:

1. Education, health care and social assistance (32% of Greendale workforce, 27% county, 23% state)
2. Finance, insurance, real estate, rental and leasing (12% Greendale, 7% county, 6% state)
3. Manufacturing (12% Greendale, 15% county, 18% state)

(US Census, 2017)



(DataUSA, 2017)

Transportation

Proportion of Greendale workers that get to work by driving alone: **85%**

- Higher than 77% in the county and 81% in the state

Average travel time to work (one-way):



- Very similar to the county and state commute averages (US Census, 2018)

Data Highlight

Transportation has consistently been listed as a concern in the community, and it was identified as a top concern during a 2017 focus group with seniors

Housing

Housing is one of the most well-known social determinants of health. Housing stability, conditions inside the home, affordability, and neighborhood environment are some of the ways housing affects health. Being in a stable home decreases health care costs and improves mental health outcomes; having safe and clean conditions decreases asthma events and prevents lead poisoning; spending 30% or more on housing is considered a cost burden because it inhibits spending in other areas that could enhance health such as nutritious food or healthcare; and neighborhood conditions such as safe areas to exercise, access to healthy food options, and green space enhance the health status of those who live there (Health Affairs, 2018).

Homeownership/Renters

Greendale homeownership: **67%**

- The Greendale homeownership rate has hovered around 65% since 2011
- Higher than the county homeownership rate of 45% and state rate of 59%
- Homeownership is the largest contributor to family wealth and economic security in the US (Rostad, et al., 2019)

Almost half (49%) of Greendale renters spent more than 30% of their income on rent alone from 2014-2018 (Health Compass Milwaukee, 2018)



- Near the county proportion of 51% and state proportion of 45% (Health Compass Milwaukee, 2018)
- Lack of affordable housing was identified as an issue during focus groups in 2017 and 2018

Environment

Lead

Childhood exposure to lead is a health concern because it can cause decreased IQ, behavioral problems, organ damage, and respiratory issues (Tarragó & Brown, 2017). No lead in the body is safe but 5 micrograms per deciliter ($\mu\text{g}/\text{dl}$) is considered elevated and unsafe (CDC, 2019).

Greendale Childhood Lead Testing

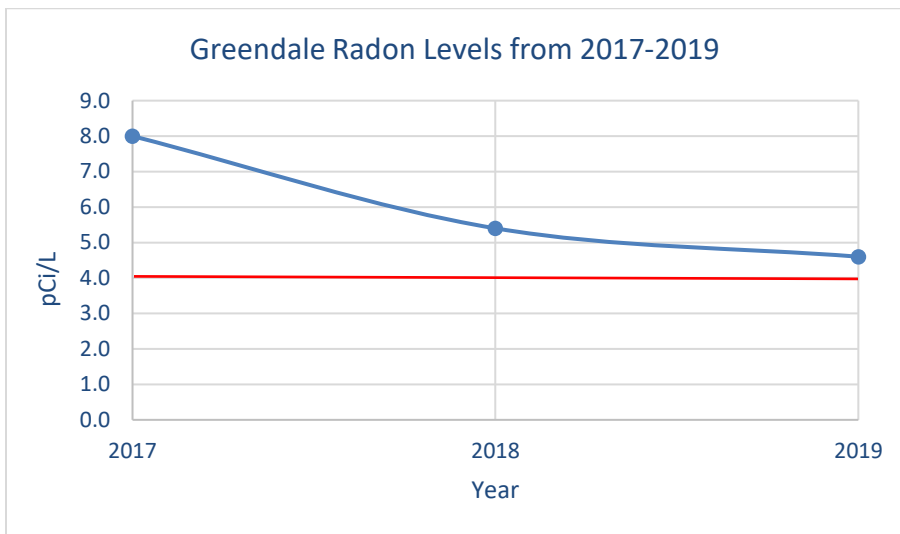
2017: 5 of 176 documented blood lead tests were elevated
2018: 1 of 179 documented blood lead tests were elevated
2019: 4 of 216 documented blood lead tests were elevated
(Greendale Health Department)

- As of 2018, 13% of homes had been built prior to 1950, putting them at a high risk for deteriorating lead paint (Health Compass Milwaukee, 2018)
 - This is lower than 41% in the county and 25% in the state



Radon

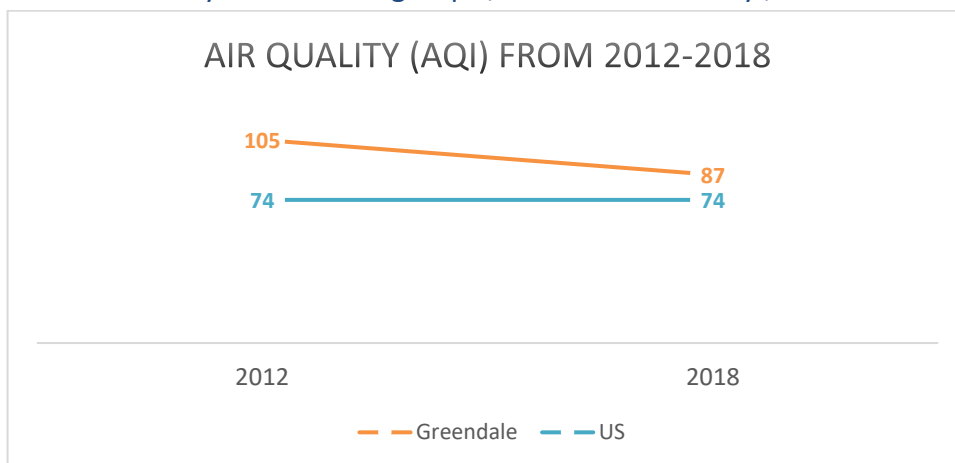
Radon is an invisible, tasteless, odorless gas that occurs naturally when elements break down in rocks, water and soil. People can breathe in radon through cracks in their homes and experience negative health effects. The most notable health effect of radon exposure is lung cancer, as radon is the second leading cause following smoking (CDC, 2020). The only way to find out if you are exposed to radon is through testing your home. From 2017-2019, through the radon kits completed through the health department, radon levels have dropped but still remain above the level considered elevated (4 pCi/L).



2017: 51 kits submitted, average level: 7.99
2018: 40 kits submitted, average level: 5.4
2019: 42 kits submitted, average level: 4.6
(Southeastern Wisconsin Radon Information Center, 2017-19)

Air Quality

Air Quality Index (AQI) is a measure of air quality that accounts for the presence of five top pollutants: ground-level ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and particulate matter. The scale ranges from 0 to 500. Higher AQI means worse air quality and greater health concern. 0-50 is considered 'good', 51-100 'moderate', 101-150 'unhealthy for sensitive groups', 151-200 'unhealthy', 301+ 'hazardous' (Air Now, n.d.).



(City Data, 2018)

- Positive decrease in Greendale but still above the national average and 'moderate' instead of 'good' ↓
- Lead, Carbon Monoxide and Nitrogen Dioxide are worse than average

Healthspan (health across the lifespan)

Birth


Greendale Maternal and Child Health Measures

Characteristics of women who gave birth in the year	2015	2019	Trend
Smokers	17%	5%	↓
Married	77%	77%	=
Teenagers	1%	2%	=
Over 35	20%	23%	↑
High School Diploma	97%	98%	=
College Graduate	45%	59%	↑
Received prenatal care in the first trimester	78%	80%	↑
Had babies of low birth weight	7%	10%	↑



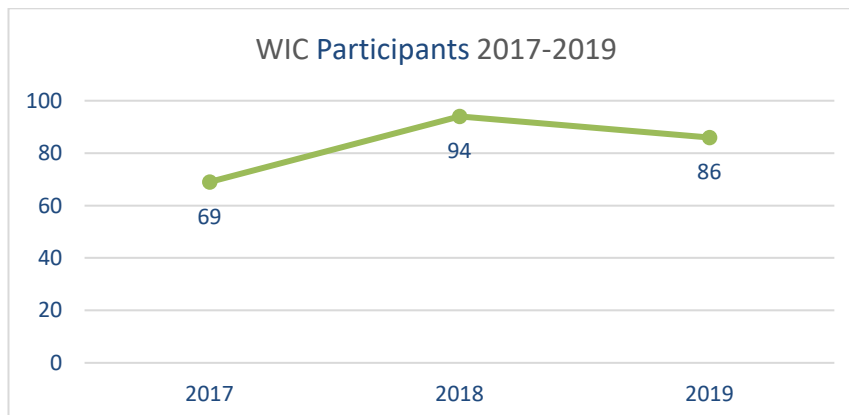
(DHS, 2017; DHS, 2019)

- There were 136 births in 2015 and 133 in 2019
- No infant deaths (less than 1 year of age) in 2015 or 2019
- Women who smoked during pregnancy drastically dropped
- Education level of mothers rose, which improves child health outcomes (Mensch, 2019)
- Teen pregnancies remained low, and below the state rate which was 5% in 2015 and 4% in 2018 (DHS, 2019)
- 7% of babies were low birthweight in the state in 2015 and 8% in 2018, lower than Greendale rates (DHS, 2020)
 - Low birthweight (less than 5 pounds, 8 ounces) and preterm birth (born before 37 weeks) increase the risk for infant death (WHO, 2018)

Data Highlight 
 Among women who gave birth in the year, the proportion who smoked dropped **12%** and the proportion who were college graduates increased **14%** from 2015 to 2019

Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

Greendale residents are eligible to receive services from Women Infants and Children (WIC) from the West Allis Health Department. In 2019, 86 participants (women and children) received breastfeeding support, nutrition information, and other health services to ensure pregnant women, breastfeeding women, and children under five had support to stay healthy.



(West Allis WIC, 2020)

Death

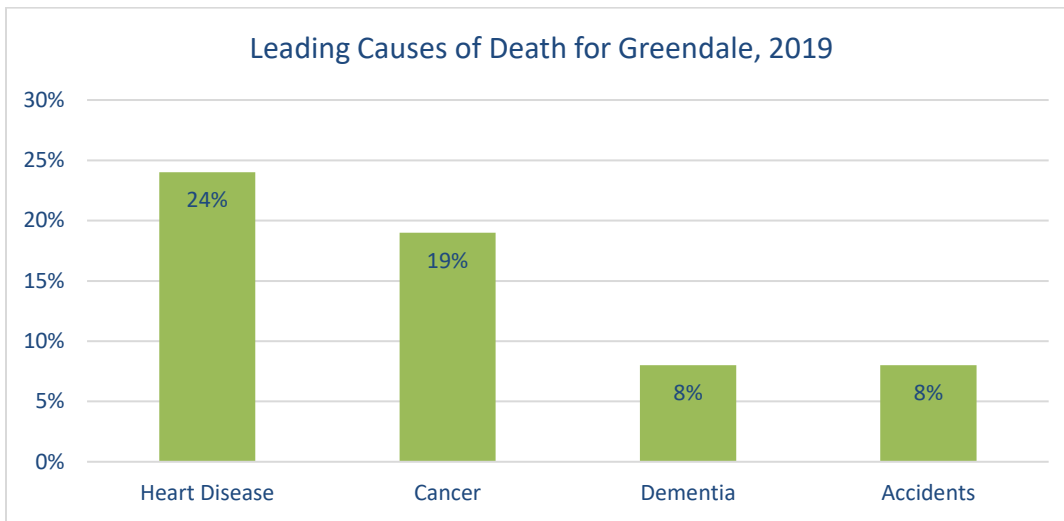
Life expectancy 2010-2015

Greendale	Wisconsin
79	79

(CDC, 2020)

Leading Causes of Death for Greendale in 2019

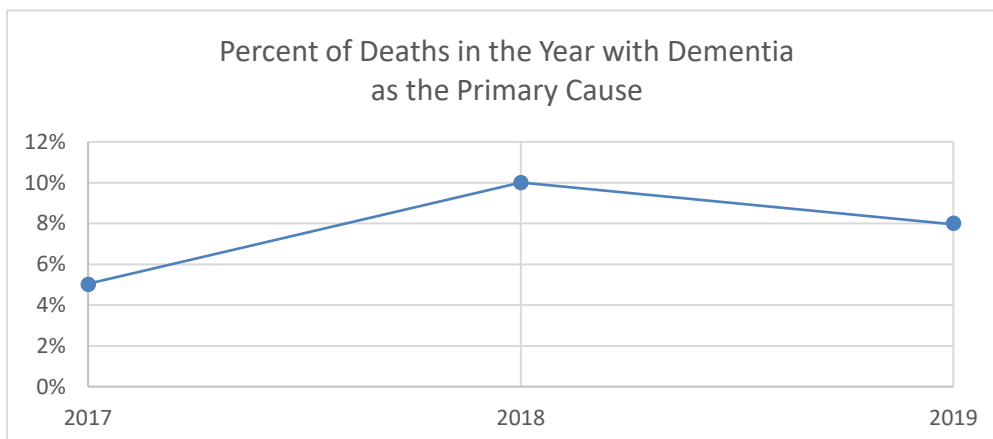
1. Heart Disease
2. Cancer
3. Dementia/Alzheimer's
 - a. Dementia-related deaths may be underreported. If there is another disease that contributed to death, that disease will be listed as the cause of death.
4. Accidents and unintentional injury



Data Highlight 
 Dementia was the 3rd leading cause of death in 2019 among Greendale residents

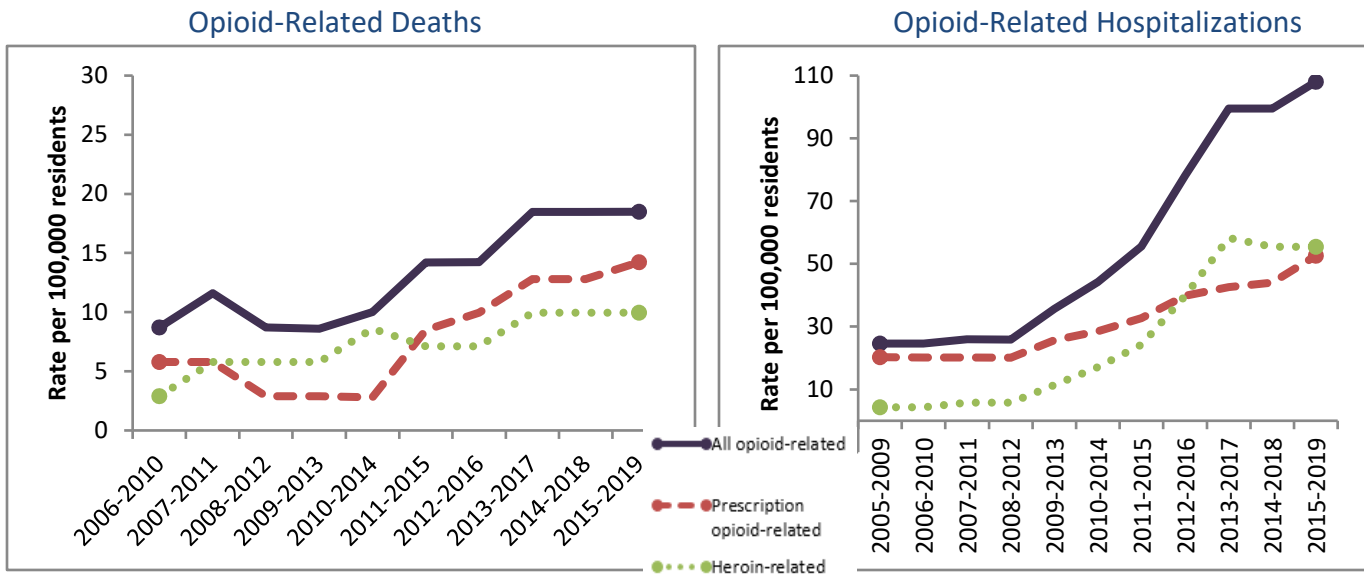
(DHS, 2020)

- Other causes of death include diabetes, Parkinson's disease, pneumonia, intentional injury, liver disease, stroke, sepsis, and overdose
- The top three causes of death in 2017 for the state were heart disease followed by cancer then unintentional injury. Alzheimer's was 6th (DHS, 2019)



(DHS, 2017-2019)

Opioid-Related Deaths and Hospitalizations in Greendale (5-year rolling averages)



(DHS, 2021)

- Opioid-related deaths and hospitalizations have been rising in Greendale, shown in the above graph
- Rates in the graph are per 100,000 people which is different than the raw numbers
 - There were 20 deaths and 107 hospitalizations involving opioids from 2010 to 2019

Communicable Disease (contagious)

While this health assessment includes data through 2019, we are experiencing a public health crisis at the local, national and international level as this report is being written. The COVID-19 (Coronavirus Disease of 2019) pandemic has interrupted life for all of us and will have lasting effects. We have experienced a 5-fold growth in cases from May through July and the numbers are growing. While the next Community Health Assessment will be able to analyze the response and longer-term effects, below is a summary of the current response.

To fulfill its goal of protecting and promoting health, the health department had to shift its operations to include:

- Isolating and monitoring people in the Village who became sick from COVID-19
- Helping control the spread of disease by quarantining those at high risk of getting COVID-19
- Sharing accurate information over the phone and on social media with community members
- Providing masks for citizens to protect themselves and others
- Collaborating with surrounding health departments
- Communicating with health care systems and the local Board of Health
- Advising local businesses and schools on safety measures
- Conducting a community testing site with the Wisconsin National Guard

Community Resilience

Resilience measures the ability of people in a community to absorb, endure, and recover from disaster. The COVID-19 pandemic is a disaster by any measure, and how well our community is able to get through it depends on a number of factors. The more vulnerable a community and its citizens are, the less resilient it is to disaster. Data from the American Community Survey, Population Estimates Program through the US Census, and National Health Interview Survey have been compiled to assess resilience and vulnerability of communities across the US. 11 risk factors are taken into account, including lack of health insurance, unemployment, poverty, disability and health conditions such as asthma. Having 3 or more risk factors means a person is more vulnerable to the impacts of a disaster (CDC, 2020).

% of individuals who have 3 or more risk factors, 2018

Greendale	Milwaukee County	Wisconsin
21%	33%	23%

(CDC, 2020)



Other communicable diseases

Influenza and Pneumonia

- Age-adjusted emergency room rate due to immunization-preventable pneumonia and influenza (2016-2018): 8.0 per 10,000 adults
 - Lower than the County rate of 21.2 (Health Compass Milwaukee, 2018).
- Influenza is usually one of the most common communicable disease in Greendale (Greendale Health Department)

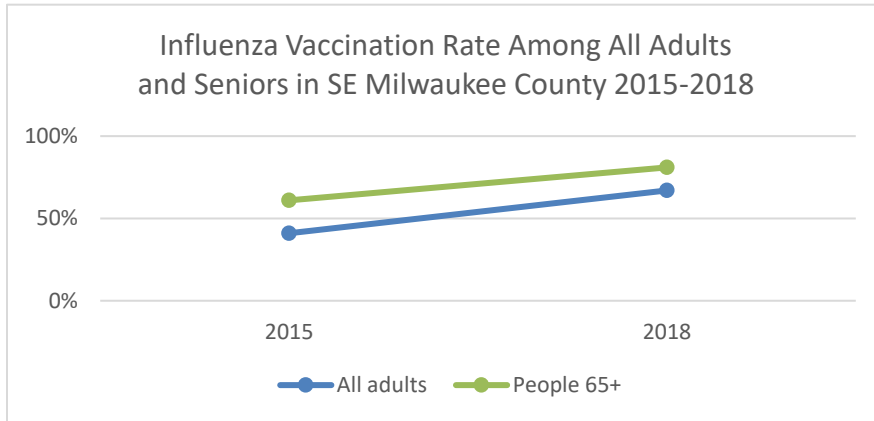
Data note: Measures reported as X per 100,000 population are a way to compare rates across populations of varying sizes. This is done by taking the number of people who went to the ER for influenza divided by the total population of their jurisdiction, then multiplied by 100,000.

Immunization

- Immunization compliance of students in the Greendale School District has decreased from 99% in 2011-12 and 2012-13 to 92% in 2019-2020 (Greendale Health Department 2012-2019). 
 - Wisconsin law requires students to be vaccinated against certain preventable contagious diseases such as diphtheria, tetanus and pertussis, or have a signed waiver exempting vaccine requirements (DHS, 2018). Noncompliance refers to students who do not meet the vaccine requirements nor have a signed waiver.
- Flu immunization rates have risen in the Southwest region of Wisconsin from 2015-2018 
 - (graph on next page)

Data Highlight

The proportion of students in Greendale School District who are immunization compliant decreased **7%**

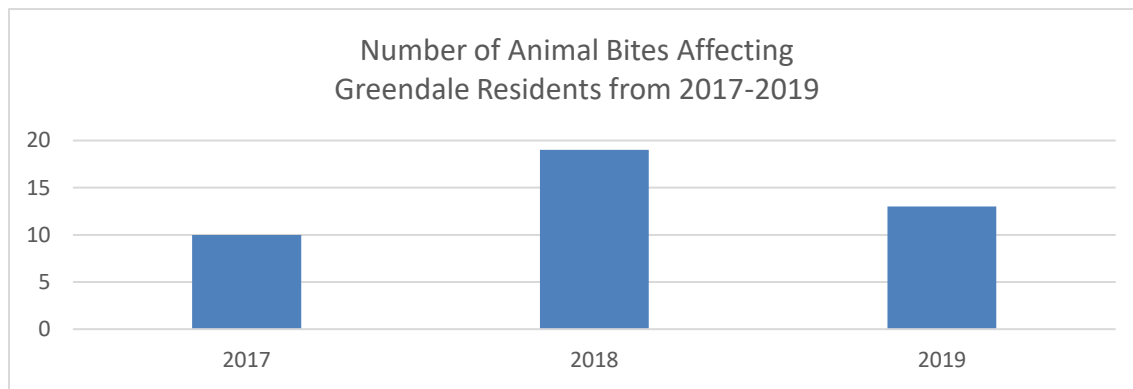


Data Highlight ✍️
 The proportion of seniors over 65 who had a flu shot rose **14%** from 2015 to 2018

(JKV Research, 2018)

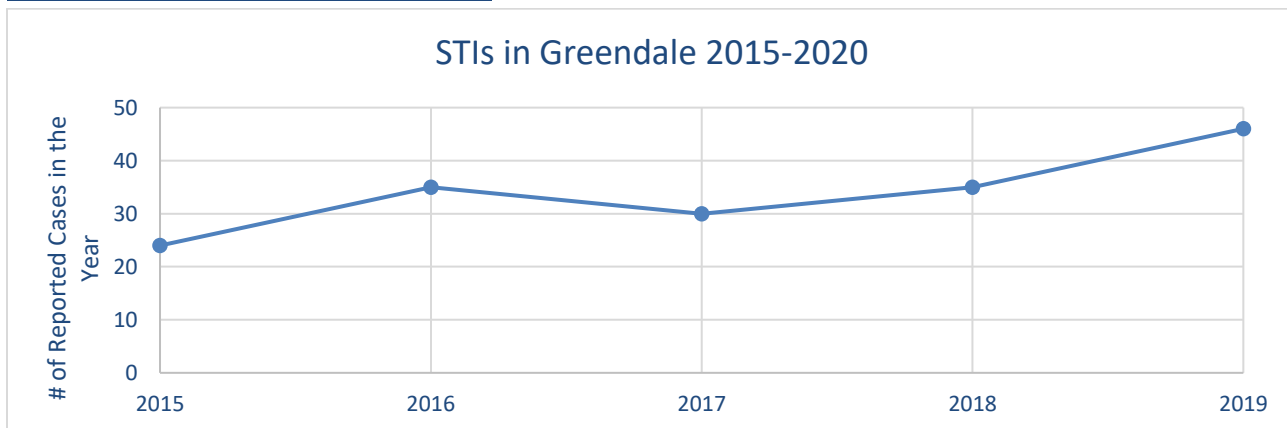
Animal Bites

Animal bites are a health hazard because diseases such as rabies can be transmitted via dogs, cats, or bats to other animals or humans.



(Greendale Health Department, 2017-2019)

Sexually Transmitted Infections (STIs)



(Greendale Health Department)

- STIs are rising in Greendale and Milwaukee County, Chlamydia being the most common (DHS, 2018) ↑

Chronic Disease (long term conditions, not contagious)

Diabetes

- Age-adjusted Emergency Room rate due to Uncontrolled Diabetes: 7.3 per 10,000 adults from 2016-2018 (Health Compass Milwaukee, 2018)
 - Lower than the county rate of 29.3 per 10,000 adults
- 6% of people in Greendale's zip code, 53129 are estimated to have diabetes (NHPP, 2021), and 10% of people in the southeast region of the state reported diabetes within 2015-2018 (JKV Research, 2018)
- A report from the University of Wisconsin's Neighborhood Health Partnership Program (NHPP) found that of 143 Greendale residents with diabetes, 83% had their blood sugar tested, 98% had their kidney function screened, 88% were tobacco-free, 79% had their blood sugar under control, and 57% had optimal control of their diabetes as of December 2018 (NHPP, 2021)

High Blood Pressure/Hypertension

- Age-adjusted Emergency Room rate due to hypertension: 15.7 per 10,000 adults from 2016-2018 (Health Compass Milwaukee, 2018)
 - Lower than the county rate of 34.2 per 10,000 adults
- 24% of people in Greendale's zip code, 53129 were estimated to have high blood pressure in 2018 (NHPP, 2021), and 34% of people in the southeast region self-reported high blood pressure between 2015-2018 (JKV Research, 2018)
- A report from the University of Wisconsin's Neighborhood Health Partnership Program (NHPP) found that of 1,114 Greendale residents with high blood pressure, 81% had their blood pressure under control as of December 2018 (NHPP, 2021)
 - This is important because uncontrolled high blood pressure increases the risk for heart disease, stroke, and heart failure (NHPP, 2021)

Heart Failure

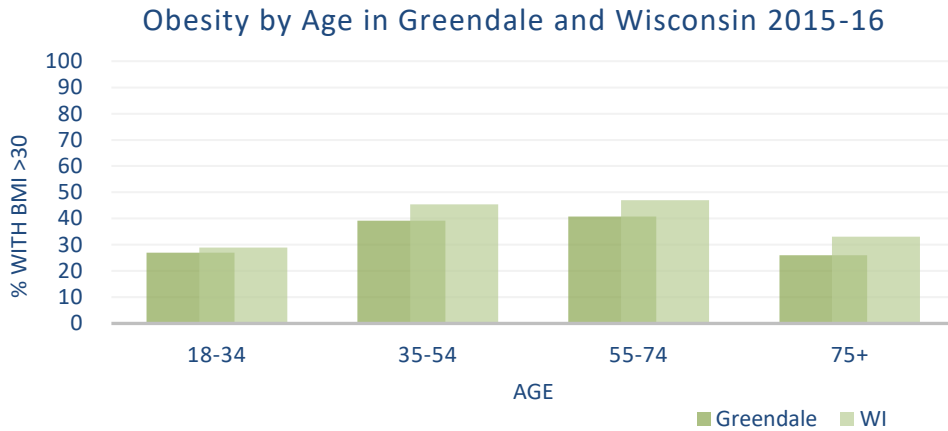
- Age-adjusted Hospitalization rate due to heart failure 36.2 per 10,000 adults from 2016-2018 (Health Compass Milwaukee, 2018)
 - Lower than County rate of 51.2 per 10,000 adults
 - Greendale's zip code, 53129, is among the worst 25% of zip codes in the state
- 9% of people in the southeast region reported a heart condition between 2015-2018 (JKV Research, 2018)

Health Behavior

Obesity

Obesity and physical activity are one piece of the puzzle that makes up an individual's level of health. Obesity is determined based on body mass index, which is found through an equation using height and weight. Obesity is a well known risk factor for a number of adverse health conditions such as high blood pressure, stroke, coronary heart disease, and type 2 diabetes. Physical activity and proper nutrition can help prevent obesity as well as the previously mentioned conditions (CDC, 2020).

- 35% of Greendale adults met the definition of obese (body mass index of 30 or higher) from 2015-16
 - The state average was 41%
- Greendale data was unavailable for ages 5-17 and previous years
- All adult age groups in Greendale were lower than the state averages



(Wisconsin Health Atlas, 2018)

Data note: The Community survey by JKV Research that has been used in previous years for data was modified from local to regional in the most recent 2018 survey. Data collected through this survey includes preventive health screenings, mental health and health needs. While it is not at the local level, the region is more dialed in to Greendale than the whole county or state. When (JKV Research, 2018) follows a metric, it is drawn from the survey that included Franklin, Greendale, Greenfield, and Hales Corners residents.

Nutrition

41% of survey respondents ate at least 5 servings of fruit/vegetables per day in 2018 (JKV Research, 2018)

- Increased from 36% in 2015 ↑

Physical Activity

50% of survey respondents got the recommended amount of physical activity (180 minutes of moderate or 60 minutes of vigorous activity per week)

- Slight increase from 48% in 2015 (JKV Research, 2015) ↑

Data Highlight

Greendale has a neighborhood score of **73** out of 100, which includes access to parks, markets, and libraries (AARP, 2018)

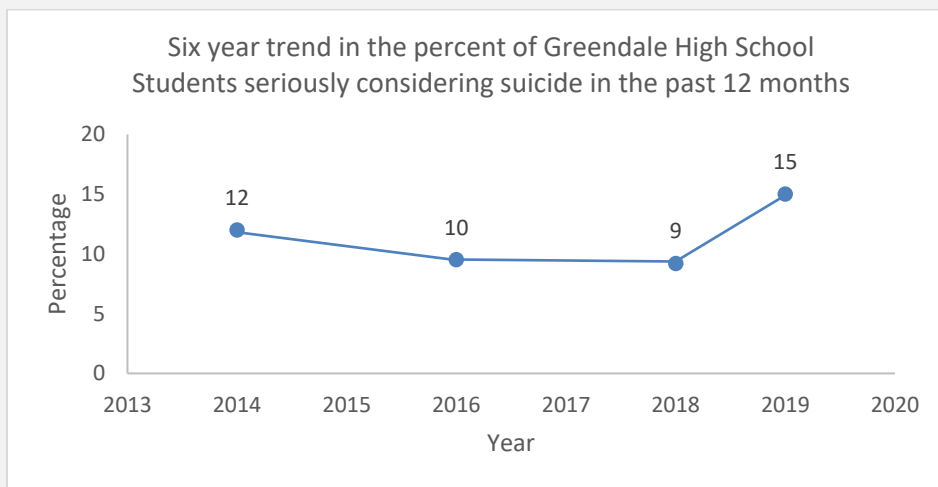
Tobacco/Alcohol

- Cigarette smoking decreased from 13% in 2015 to 9% in 2018 (JKV Research, 2018) ↓
- Survey respondents who had binge drank within a month from taking the survey increased from 30% in 2015 to 37% in 2018 (JKV Research, 2018) ↑
 - Higher than the state rate of 25% and national rate of 17%
 - Binge drinking is classified as men consuming 5 or more drinks and women consuming 4 or more drinks in about 2 hours (CDC, 2019)

Youth health behavior

All data in this section is from the Youth Risk Behavioral Survey (YRBS) for students at Greendale High School. It is a self-administered, anonymous questionnaire given to students during the school day. It is usually given every other year, but Greendale was one of the schools in the state chosen to do it again in 2019.

Suicide

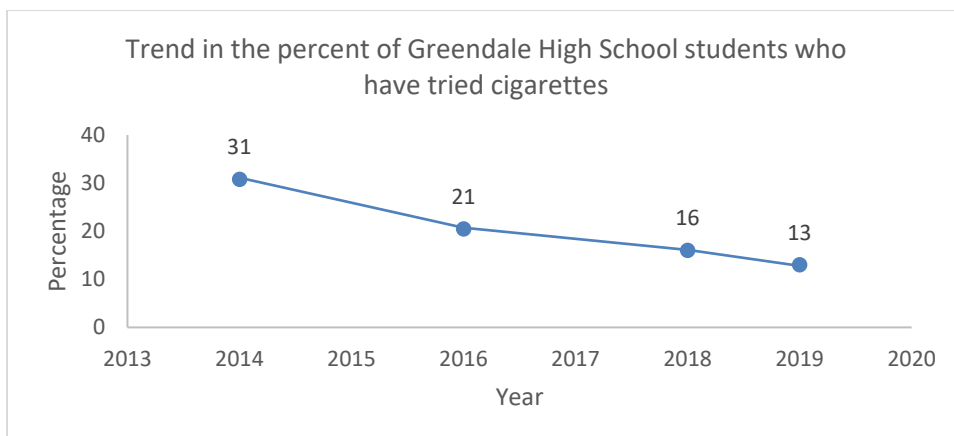


Trend



- Near the state 2019 average of 15.7%
- Suicide attempts have also risen drastically, up to 4% in 2019
- Suicide ideation and attempts are more common among females than males

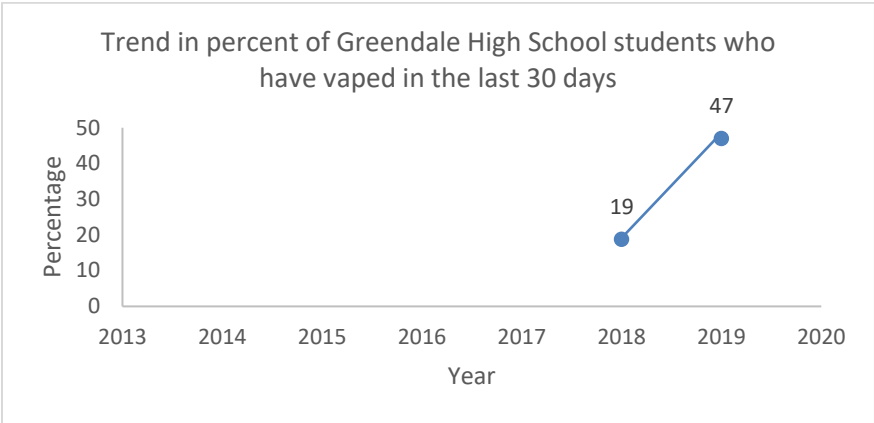
Tobacco



Trend



- Decreasing trend and lower than the state average of 24.4% in 2017

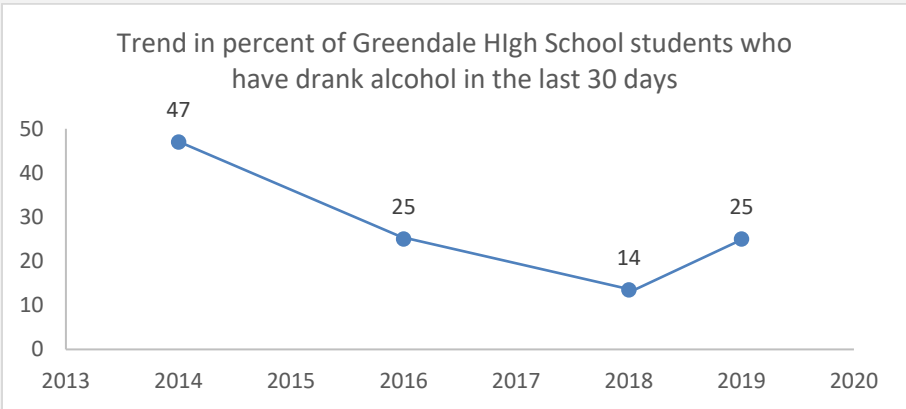


Trend



- Large increase in vaping which could be part of why cigarette use has fallen
- Higher than the state average of 21% in 2019

Alcohol



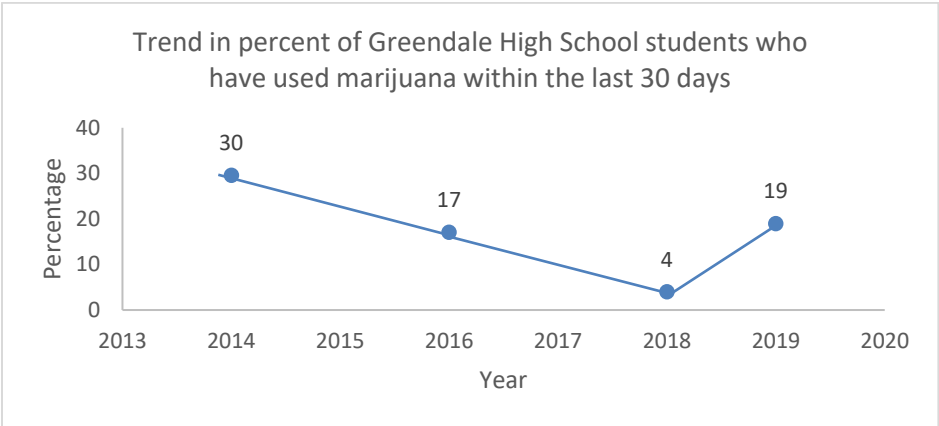
Trend



(5 year trend still shows positive decrease)

- Was decreasing but back on the rise
- Below the state average of 30% in 2019

Drugs

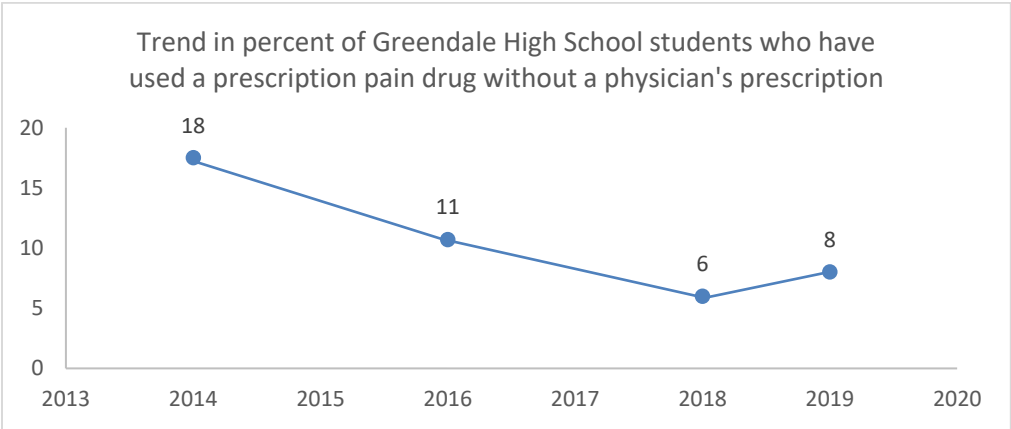


Trend



(5 year trend still shows positive decrease)

- Recent rise in use
- Similar to state average of 20% in 2019



Trend



- Overall decline but recent uptick
- Lower than state average of 11% in 2019

Mental Health

- A report from the University of Wisconsin’s Neighborhood Health Partnership Program (NHPP) found that of 2,286 Greendale residents, 63% had a depression screening as of December 2018 (NHPP, 2021)
 - Depression screening is an important part of primary care to detect and treat mental health issues quickly
- Age-adjusted ER rate due to adult mental health: 41.1 per 10,000 adults from 2017-2019 (Health Compass Milwaukee, 2020)
 - Lower than County rate of 132.9 per 10,000 adults
- Age-adjusted ER rate due to pediatric mental health: 49.9 per 10,000 children from 2017-2019 (Health Compass Milwaukee, 2020)
 - Lower than County rate of 72.1 per 10,000 children
- Reported always or nearly always feeling sad, blue or depressed in 2018: 8% (JKV Research, 2018)
 - Rose from 6% in 2015

Public Safety

Trends in Crime from 2018 to 2019 (Greendale Police Department, 2019)

Increases

- Operating while intoxicated by 14%
- Traffic accidents by 11%
- Missing persons by 31%
- Juvenile Trouble by 82%
- Animal complaints by 12%
- Welfare Checks by 41%

Decreases

- Burglary by 50%
- Theft by 25%
- Car theft by 22%
- Fraud by 47%

- In 2018, violent crimes were most commonly committed by a male offender to a female victim with whom they were in a relationship with (Crime Data Explorer, 2019)

Health Access & Quality

Health Insurance:

% of civilian noninstitutionalized population with health insurance coverage 2014-2018

Greendale	Milwaukee County	Wisconsin
97%	92%	94%

Trend



(US Census, 2018)

- Health insurance coverage rose over 5% in Greendale and the county and 3% statewide since 2009-2013
- Health insurance and lack of a free clinic was a top health concern in a 2019 listening session with the Muslim Community
- Navigating healthcare, especially for pre-existing conditions, was a top health concern in a 2017 listening session with seniors
- While the overall insurance rate is high, coverage by race and age was unavailable to further look into the challenges mentioned by listening session participants

Cancer Screening

Women 50+ who have had a mammogram within the last 2 years, 2018: 84% (JKV Research, 2018)

- Up from 78% in 2015

Colorectal screening within the recommended time frame, 2018: 78% (JKV Research, 2018)

- Up from 70% in 2015

Oral Health

Unmet dental care need in 2018 among Franklin/Greendale/Greenfield/Hales Corners Community Health Survey respondents: 7% (JKV Research, 2018)

- Down from 11% in 2015, showing a positive improvement

Unmet medical care need in 2018: 3% (Franklin/Greendale/Greenfield/Hales Corners Community Health Survey, 2018)

- Down from 10% in 2015, showing a positive improvement

Conclusion

The purpose of this report is to aggregate data on the health of Greendale and its residents. The contents of this report will be analyzed by community members and the Board of Health to discern which areas should be prioritized in the 2020-2025 Community Health Improvement Plan. The Community Health Improvement Plan will be published following this report outlining action steps to improve the health of all Greendaleans.

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***Certain sources of data such as the school district, vital records, and WIC are not publicly available therefore citations are not included in this reference list.**