



Bay County Community Health Needs Assessment

2018

Funding provided by the Bay Area Community Foundation

2018

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Purpose

The purpose of the Bay County Community Health Assessment (CHA) is to measure the health status of the community. The CHA is comprised of data collected from various sources including the Michigan Department of Health and Human Services, U.S. Census Bureau, Kids Count Data Center, Michigan Behavioral Risk Factor Surveillance Survey, Michigan Profile for Healthy Youth, and the County Health Rankings. Data collected will be analyzed to identify gaps and needs of the community, and used to create a Community Health Improvement Plan.

The Community Health Assessment was completed in collaboration with community partners and funding provided by the Bay Area Community Foundation.

Data Limitations

The data represented in this report are from secondary data sources. As such, limitations exist in the interpretation of the data due to small sample sizes and representativeness of the county. Data from such sources may also be collected over a span of time in order to maximize the sample size as is the case with the Michigan Behavioral Risk Factor Survey (MiBRFS).

The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) is composed of annual, state-level telephone surveys of Michigan residents, aged 18 years and older. These annual, state-level surveys, also known as Michigan Behavioral Risk Factor Surveys (MiBRFS) act as the only source of state-specific, population-based estimates of the prevalence of various behaviors, medical conditions, and preventive health care practices among Michigan adults.

The MiBRFS is broken down into multiple reports. The Bay County CHA used the region-specific and local health department-specific prevalence rates of health risk behaviors, preventive health practices, and chronic conditions. This data is computed using a five year combined Michigan BRFSS dataset that maximizes the available sample size

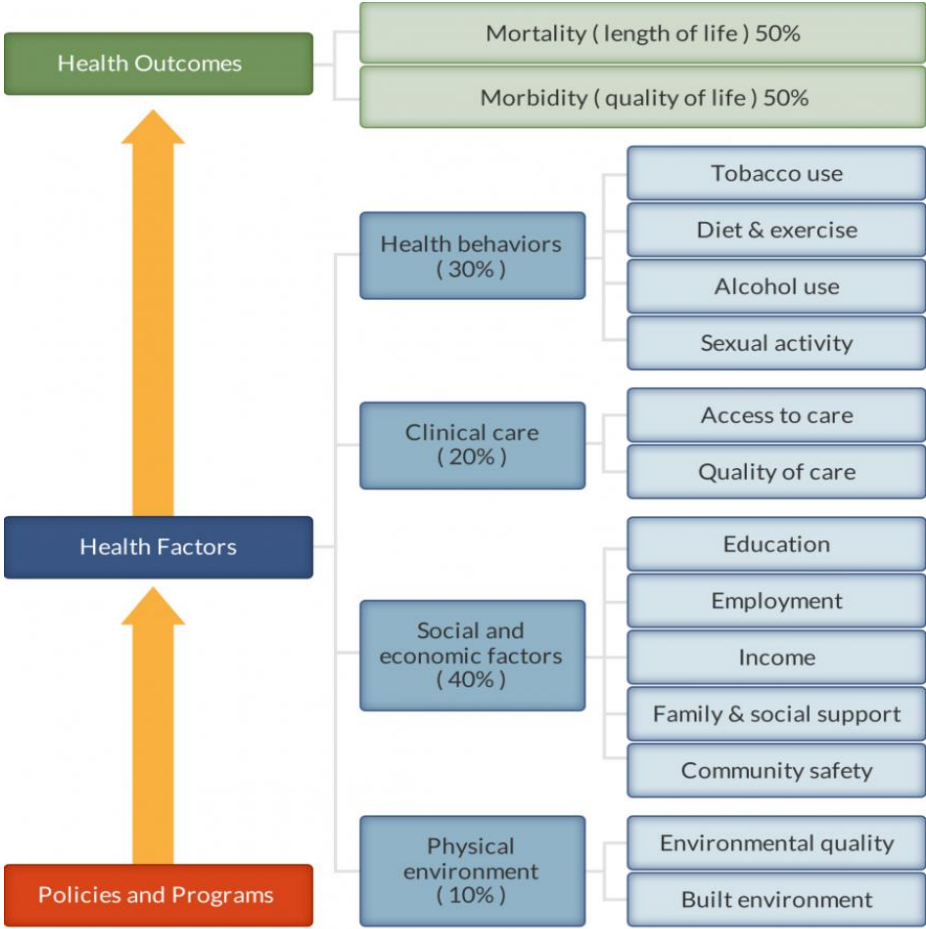
The Michigan Profile for Healthy Youth (MiPHY) is an online student health survey offered by the Michigan Departments of Education and Health and Human Services to support local and regional needs assessment. The MiPHY provides student results on health risk behaviors including substance use, violence, physical activity, nutrition, sexual behavior, and emotional health in grades 7, 9, and 11. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use and violence. MiPHY results, along with other school-reported data, will help schools make data-driven decisions to improve prevention and health promotion programming.

The County Health Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play. Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute has used this model to rank the health of Wisconsin's counties every year since 2003. The rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientific-informed weights.

KIDS COUNT is a project of the Annie E. Casey Foundation to track the well-being of children in the United States. By providing high-quality data and trend analysis through its KIDS COUNT Data Center, the Foundation seeks to enrich local, state and national discussions concerning ways to secure better futures for all children — and to raise the visibility of children's issues through a nonpartisan, evidence-based lens. In addition to including data from the most trusted national resources, the KIDS COUNT Data Center draws from more than 50 KIDS COUNT state organizations that provide state and local data, as well publications providing insights into trends affecting child and family well-being

County Health Rankings

The *County Health Rankings & Roadmaps* program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The *County Health Rankings* show the rank of the health of nearly every county in the nation and illustrate that much of what affects health occurs outside of the doctor’s office. The *Rankings* help counties understand what influences the health of residents and how long they will live (County Health Rankings, <http://www.countyhealthrankings.org/about-project>). The *Rankings* are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work and play.



County Health Rankings model ©2012 UWPHI

Figure 1: Model of Population Health Used by the University of Wisconsin’s Population health Institute. Source: www.countyhealthrankings.org

Overall, Bay County ranked 57 out of 82 counties. The following table illustrates the breakdown in rankings among the different measures that affect health.

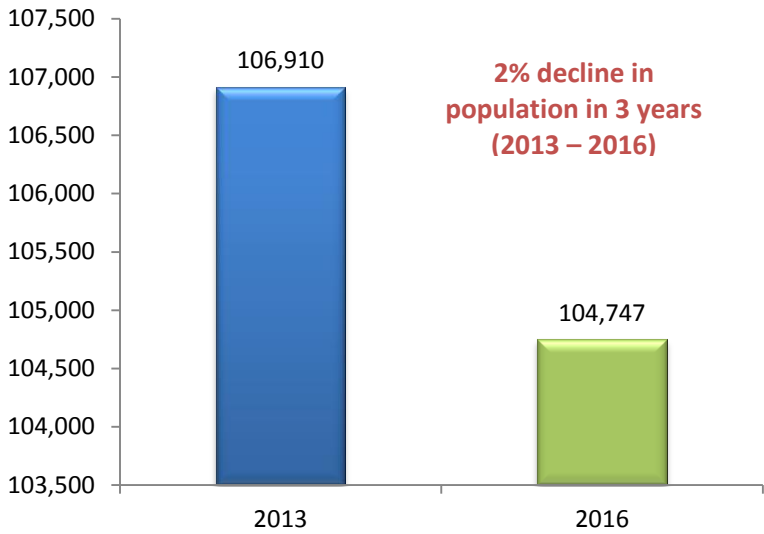
2018 County Health Rankings							
Health Outcomes	Length of Life	Quality of Life	Health Factors	Health Behaviors	Clinical Care	Social/Emotional Factors	Physical Environment
57	51	53	56	74	52	45	43

Key Findings.

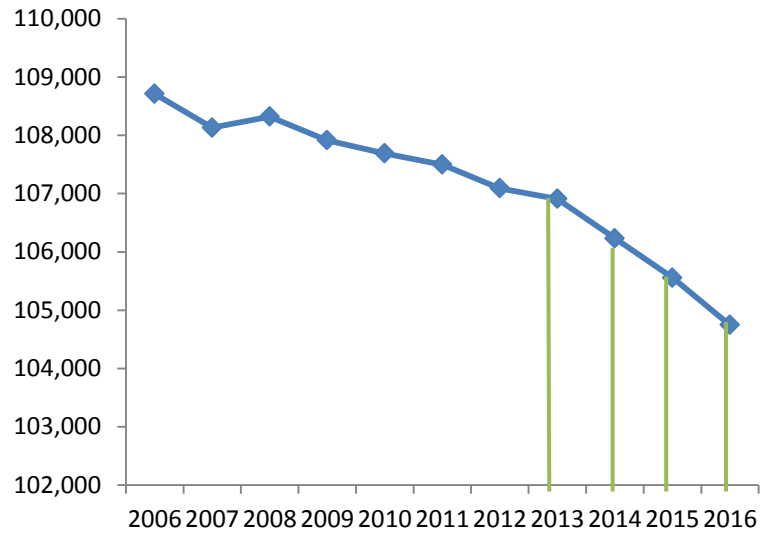
- Bay County continues to see a decline in overall population with an ever growing aging population.
- Bay County continues to see an increase in the minority populations with the largest increase among the Asian population
- The population with the highest percentage of poverty is female householders (35%) most specifically women with children under 5 years of age (61%)
- More than half of pregnant moms are either overweight or obese, just under half of women who gave birth are not married, and nearly a third of pregnant moms smoked while pregnant.
- Infant mortality jumped from 1 death to 6 deaths in ONE year.
- Significant increase in confirmed victims of child abuse and neglect
- We still have children without health or dental insurance
 - We still have children not getting annual well child checkups – even those that have insurance
- Adults reporting poor mental health is continuing to increase
 - Even with adequate provider to patient ratio
- We have a HUGE need for primary care physicians in Bay County
- Chronic Disease continue to be the leading causes of death in Bay County -
 - Heart Disease still holds the number 1 spot.
- Youth reported obesity has dropped significantly
- Could this be due to the reduction in pop consumption as eating 5+ cups of fruits and veggies
- Bullying is an issue especially among middle school students both at school and on line.
- There was a significant drop in youth tobacco use
 - Could this be correlated to e-cigarettes / vaping?
- Alcohol use among youth increased slightly
- Adult reported being overweight has decreased while obesity has slightly increase
 - Adults are not getting adequate amounts of fruit and vegetables
 - Only 12% reported getting more than 5 cups in during the day.
- Adults driving under the influence of alcohol and marijuana continues to increase
- Marijuana and alcohol related traffic fatalities increased by 47% in ONE year.
- The number of car crashes in bay county continues to increase
 - Most crashes are the result of distracted driving and alcohol
- We have a high rate of domestic violence in Bay County

Bay County Demographics

Bay County Total Population



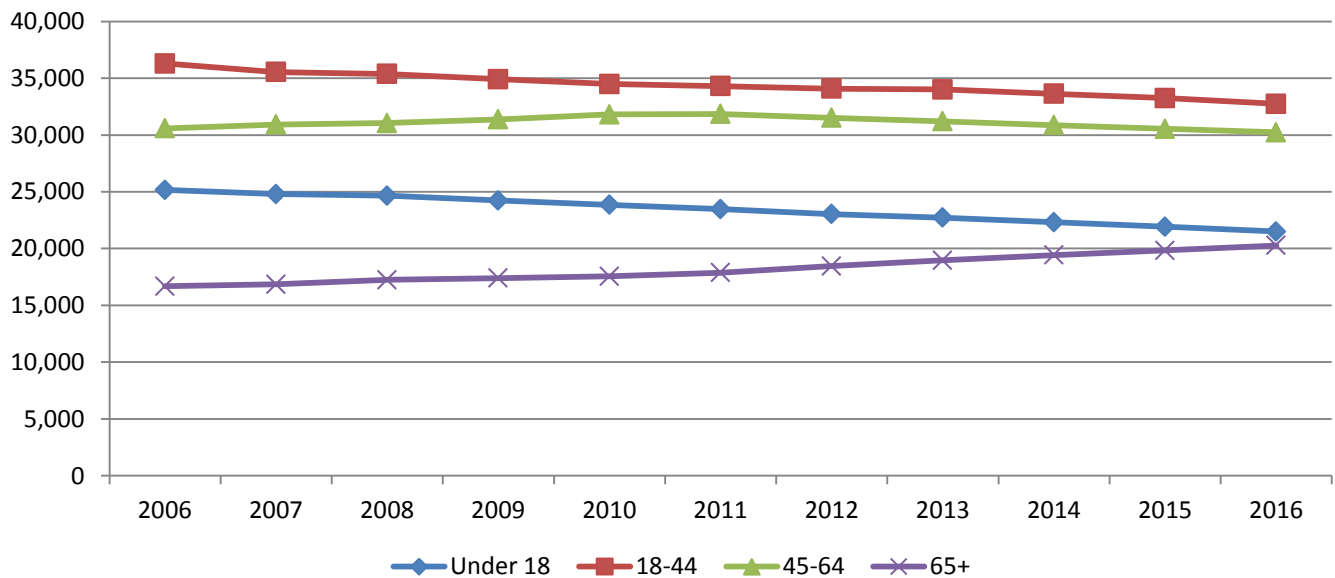
Bay County Total Population Trend 2006-2016



Bay County has seen 3.6% decline in total population over last 10 years. More alarmingly, **2% of that decline has occurred over a 3 year time span (2013-2016)**.

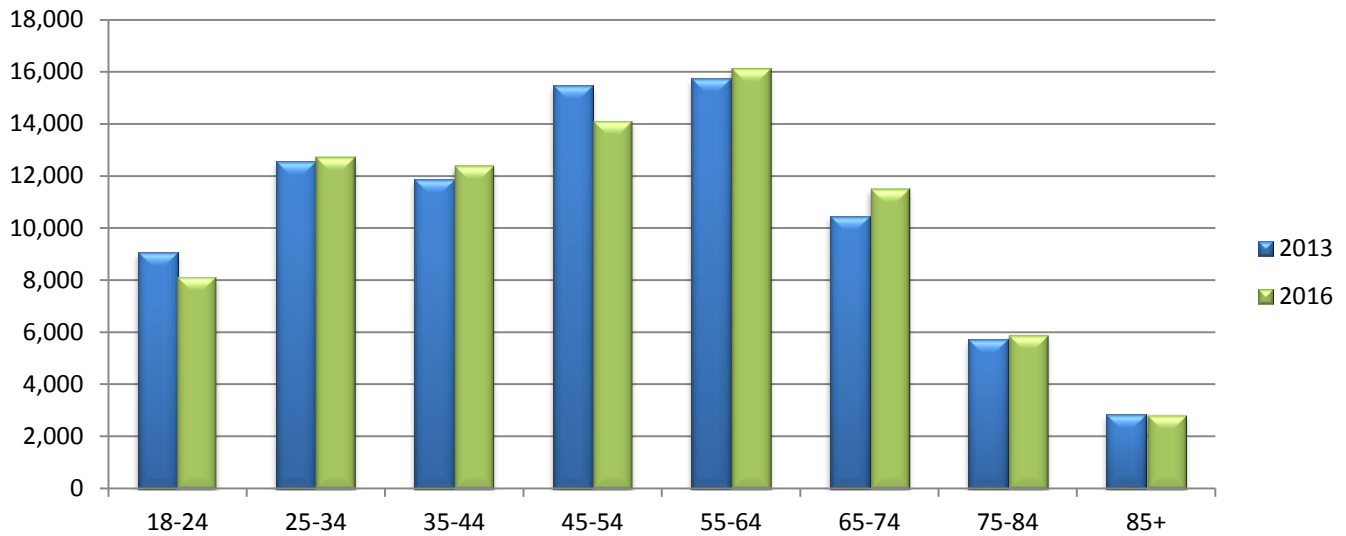
The chart below shows the steady decline in Bay County by age group over the last 10 years. The only age group in Bay County that is experiencing an increase in population is the 65 and older population.

Bay County Population Trends by Age Group



Bay County Demographics

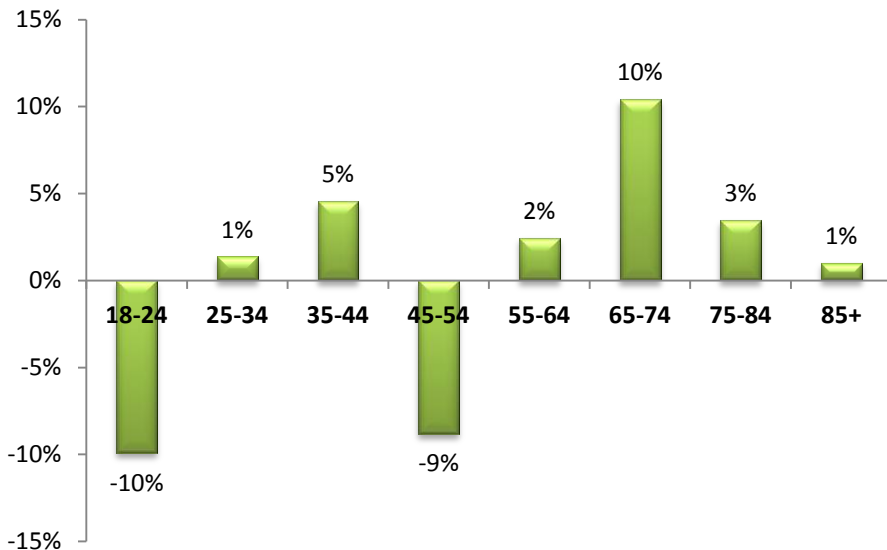
Bay County Population by Age Group



While Bay County's overall population is continuing to decline, the senior population continues to rise. Currently, 19% of the population is over the age of 65. The greatest increase in population (10%) is among 65-74 year olds. This increase occurred from 2013-2016.

Bay County is also experiencing significant declines in population among 18-24 year olds, as well as 45-54 year olds.

Percent Population Change Between 2013-2016 by Age Group



Bay County Demographics

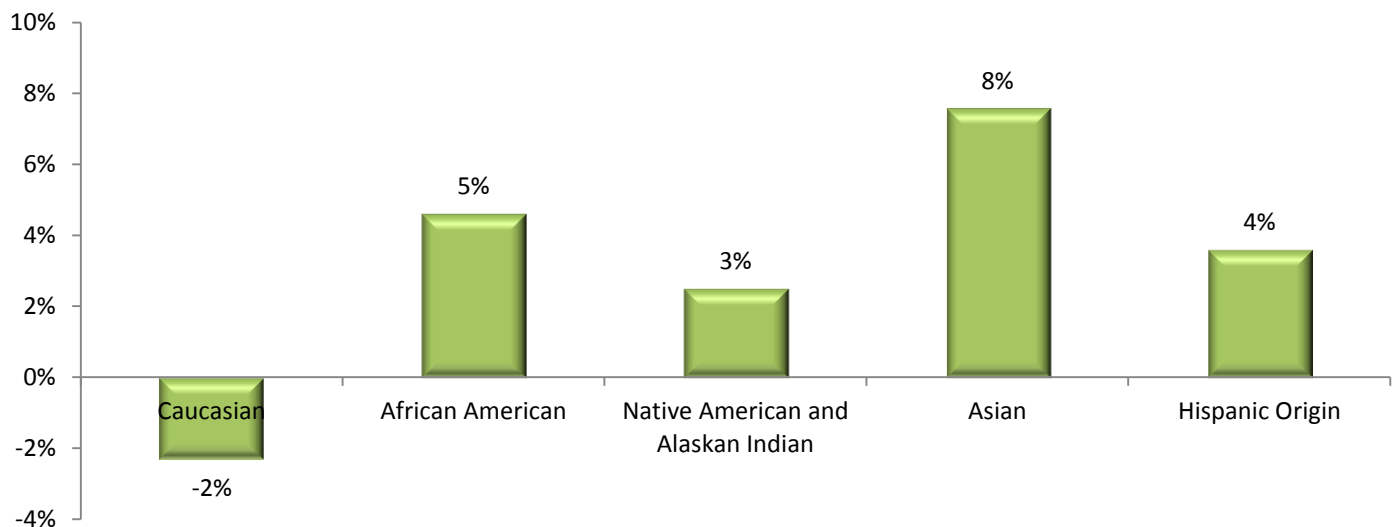
Bay County Percent of Population by Race

	Caucasian	African American	Hispanic Origin	Asian	American Indian and Alaskan Native
2012	96.3%	2.3%	4.9%	0.7%	0.7%
2013	96.2%	2.4%	4.9%	0.7%	0.7%
2014	96.0%	2.4%	5.1%	0.8%	0.8%
2015	96.0%	2.4%	5.1%	0.8%	0.8%
2016	95.9%	2.5%	5.2%	0.8%	0.8%

In the past 4 years, Bay County has seen a very slight decrease in the Caucasian population and an increase in the African American, Hispanic origin, Asian, and American Indian and Alaskan Native populations.

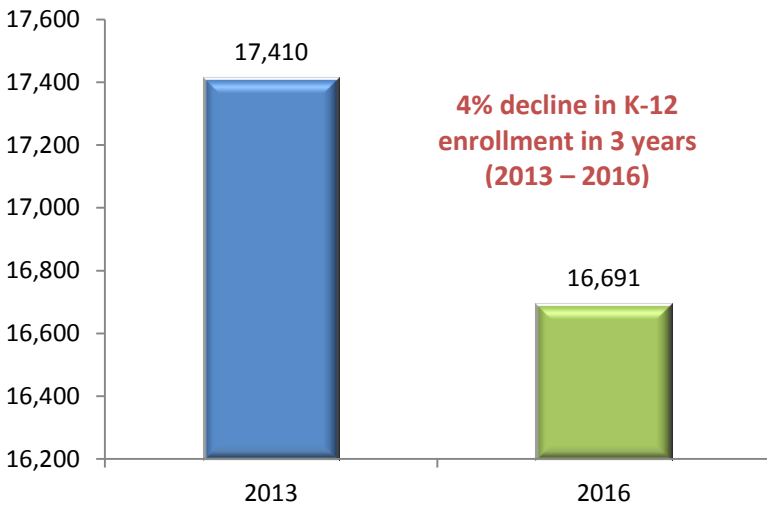
Bay County continues to see a slight change in the demographic makeup of the county. The Asian population in Bay County has seen the biggest increase in population percentage. The Asian population **increased by 8%** between 2013 and 2016. The African American and Hispanic population in Bay County also continues to see a steady increase.

Percent Population Change Between 2013-2016 by Race

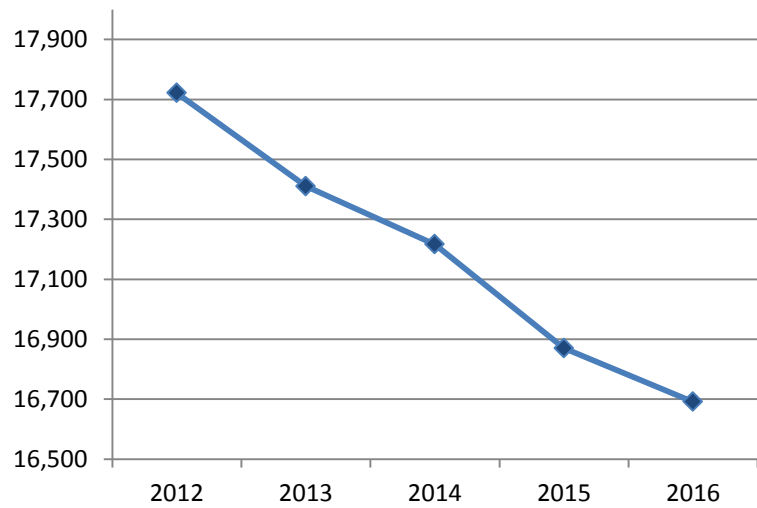


Bay County Educational Enrollment and Attainment

Bay County K-12 Enrollment



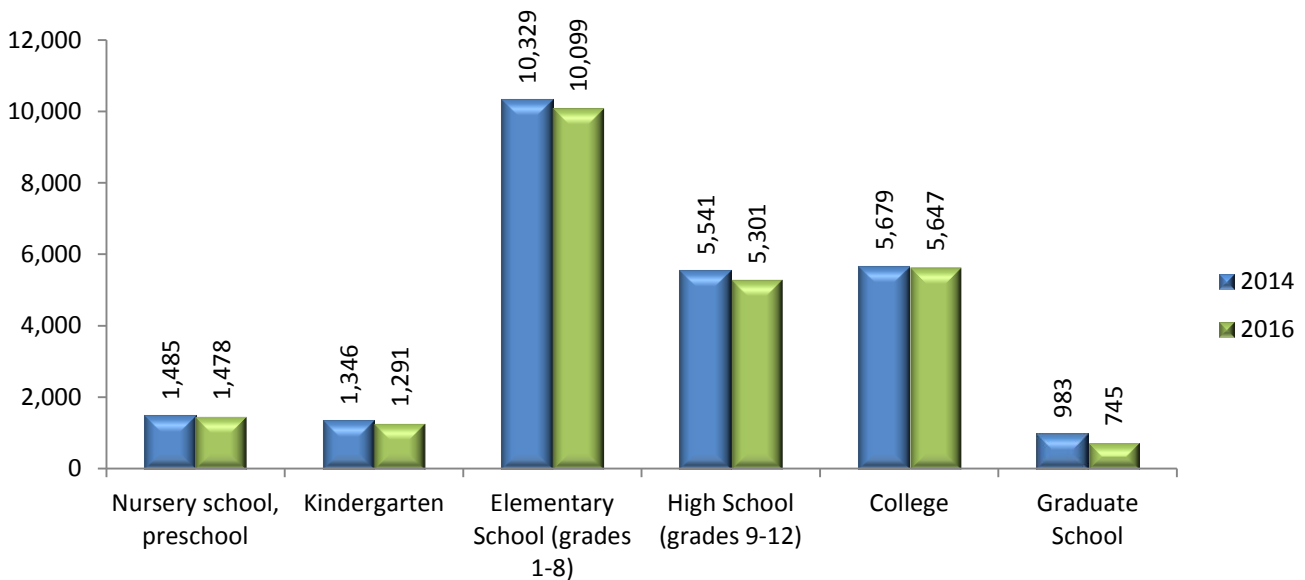
Bay County K-12 School Enrollment Numbers



Bay County is experiencing a vast decline in k-12 enrollment. In the last 4 years, Bay County has experienced a 5.8% decrease in total k-12 enrollment. Even more alarming, 3% of the decline was experienced over a 2 year time span (2014-2016).

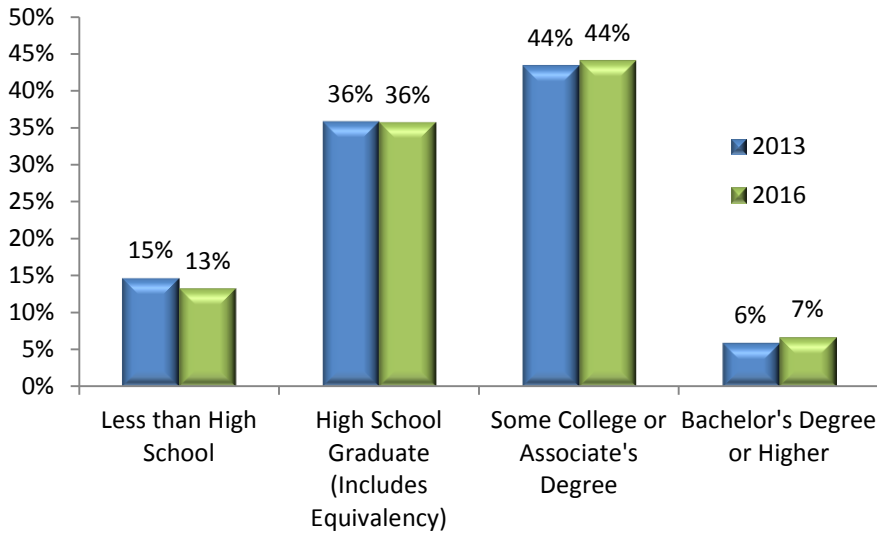
As shown by the chart below, Bay County remains steady in all grade level enrollments, with high school (grades 9-12) and graduate school experiencing the biggest decrease in enrollment numbers.

Bay County School Enrollment Numbers



Bay County Educational Enrollment and Attainment

Educational Attainment - Percent Population Age 18-24 Bay County - 2013-2016



In 2016, Bay County saw an increase in 18-24 year olds who have received a Bachelor's degree or higher.

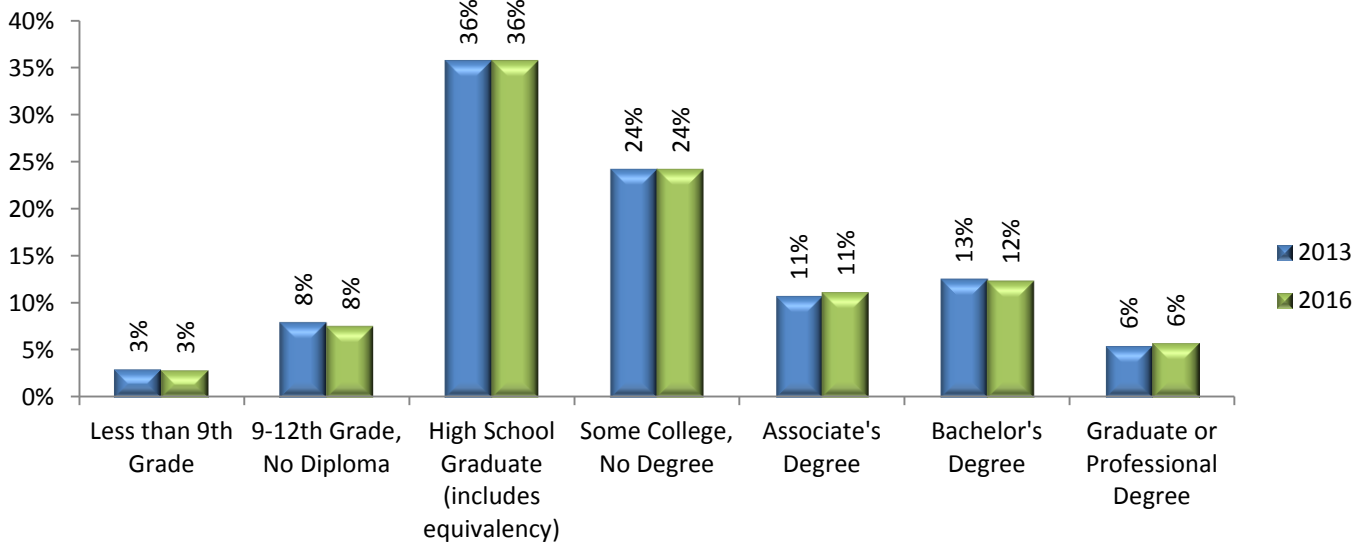
Between 2013-2016, Bay County has remained consistent with the 18-24 age group whom have either graduated high school, attended college, or received their Associate's degree.

In 2016, Bay County also saw a decrease in 18-24 year olds who have less than a high school education.

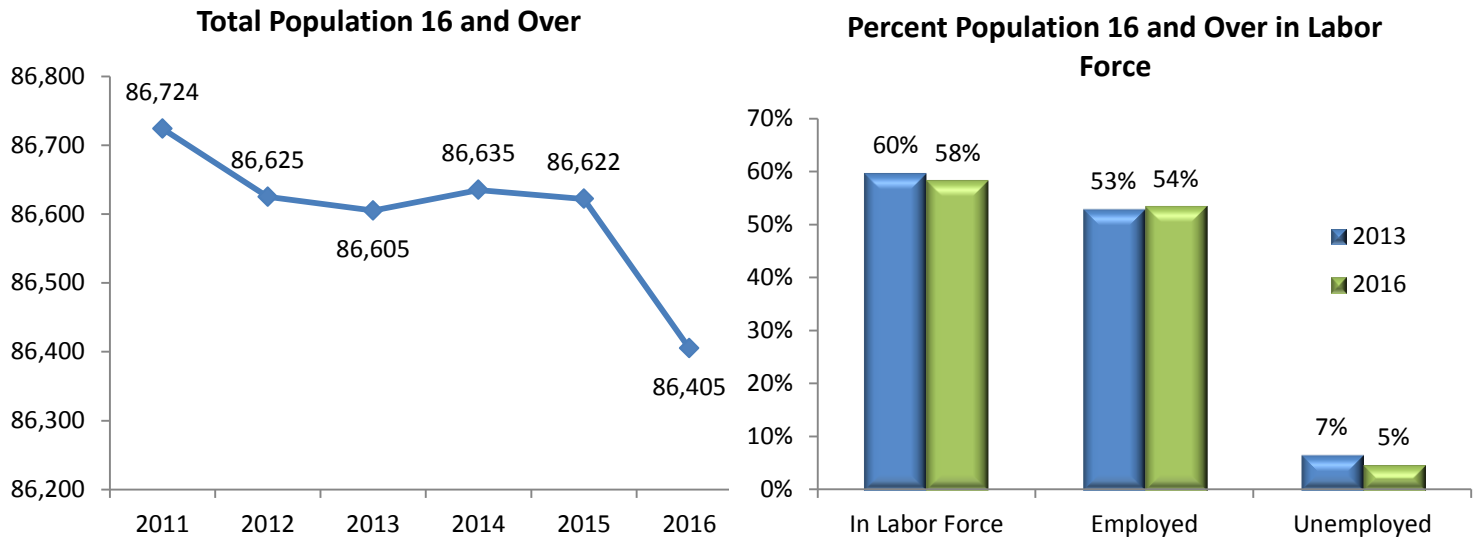
Looking at the chart below, educational attainment for the population aged 25 and older in Bay County has remained consistent over the 3 year time span (2013-2016).

However, in 2016, Bay County saw a slight decrease in the population over 25 who have received a Bachelor's degree.

Educational Attainment - Percent Population Age 25 and Over - Bay County - 2013-2016



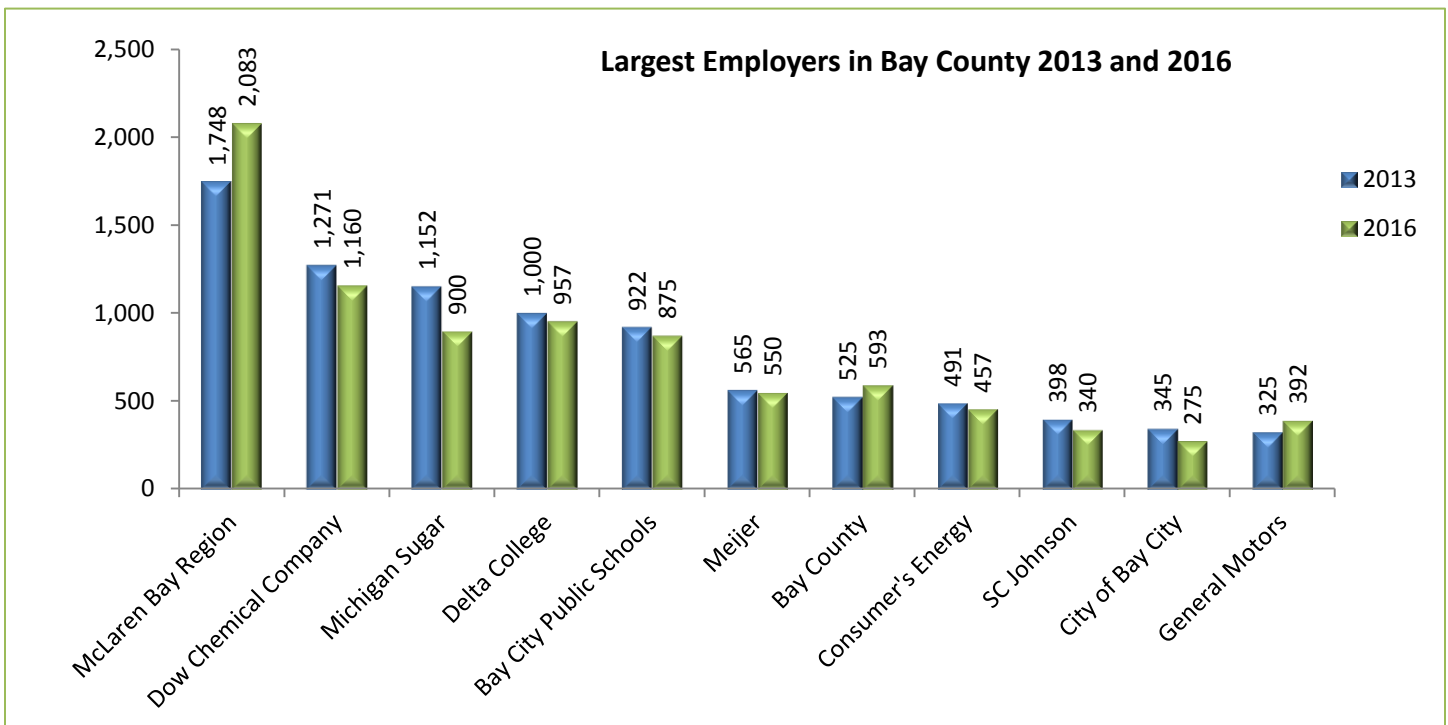
Bay County Employment



Source (Above Two Charts): U.S Census Bureau, American Community Survey, 2012-2016

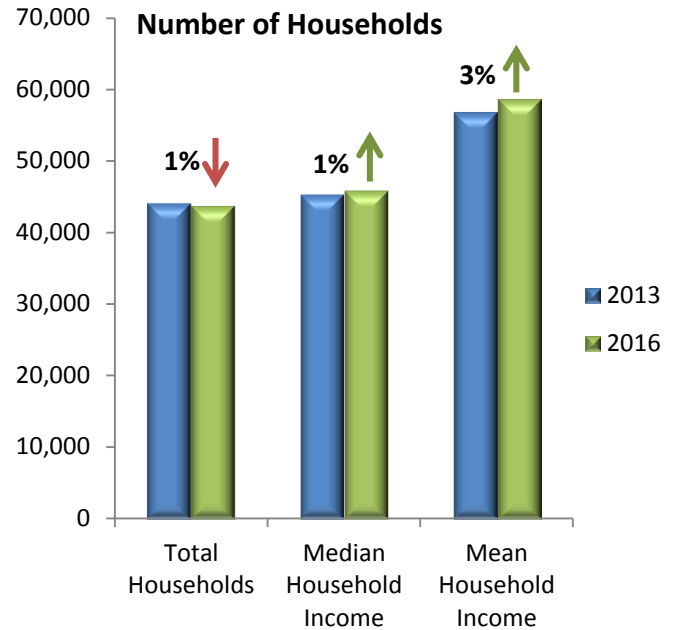
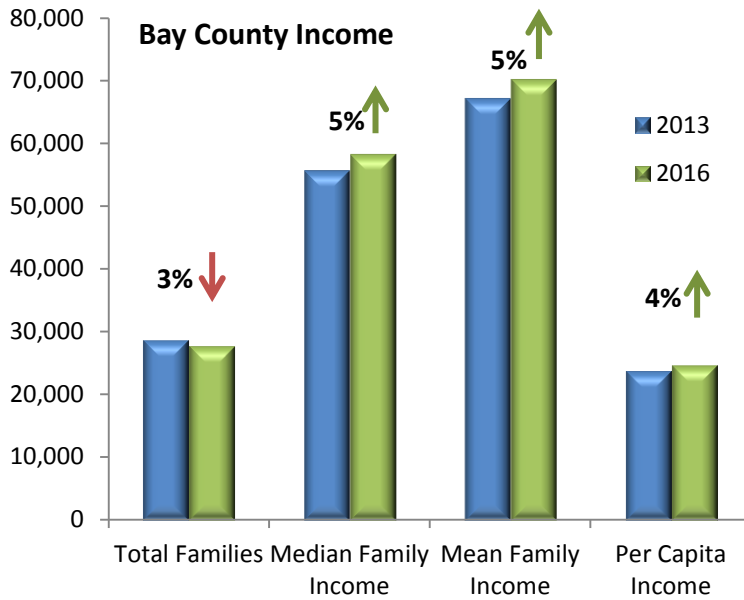
Between 2015 and 2016, Bay County has experienced a slight decline in the total population who are over the age of 16, as a result, there is a lower percent of individuals 16 and over in the work force. However, in 2016, Bay County saw an increase in employment and thus a decrease in unemployment has occurred.

The chart below shows the largest employers for Bay County in 2013 and 2016. In 2016, the largest employers in Bay County were McLaren Bay Region, Dow Chemical Company, and Delta College.



Source: Bay Future

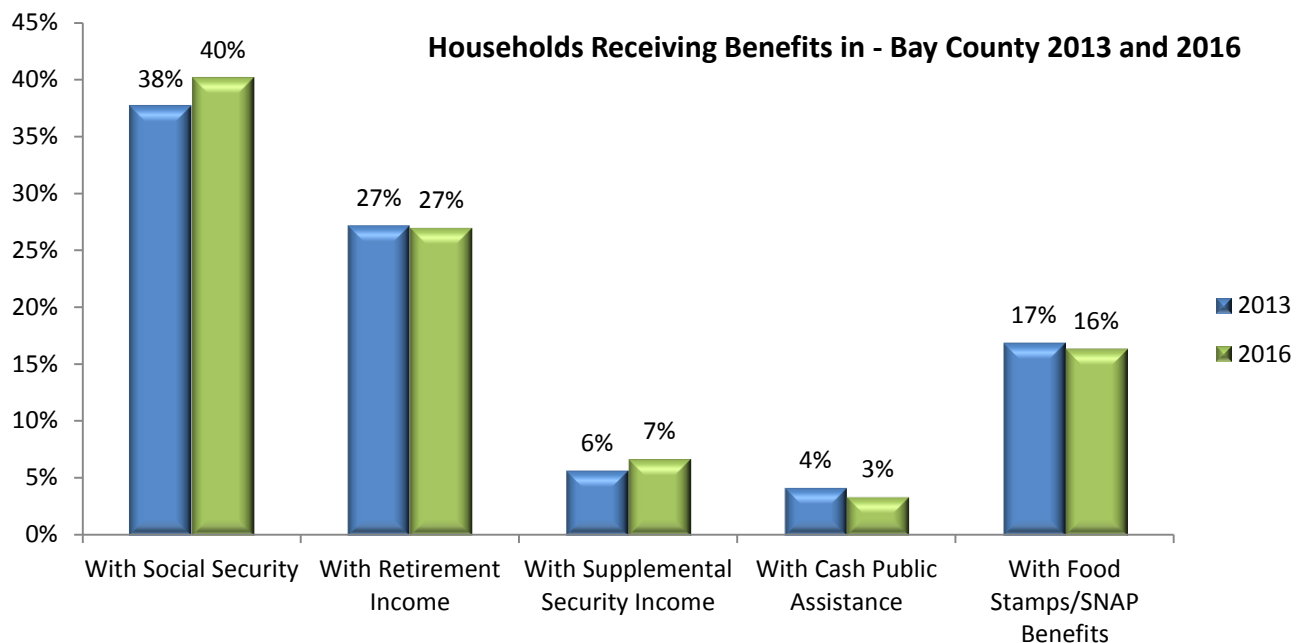
Bay County Income



The total number of families in Bay County experienced a 3% decrease in 2016. However, the mean and median family income both saw a 5% increase. In 2016, per capita income also saw a 4% increase.

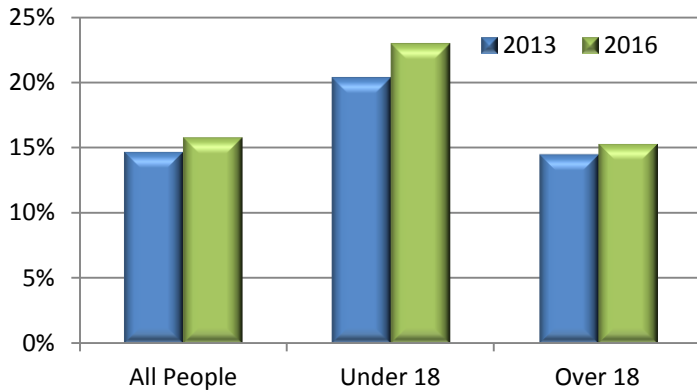
In 2016, the total number of households in Bay County decreased by 1% while mean household income saw a 3% increase.

Since 2013, the percentage of households receiving social security and supplemental social security has increased. However, the percentage of households receiving cash public assistance, food stamps, and SNAP benefits decreased.



Bay County Poverty

Percent of People Below Poverty Level



The graph to the left shows the percent of people living in Bay County who had income below poverty level in the last 12 months.

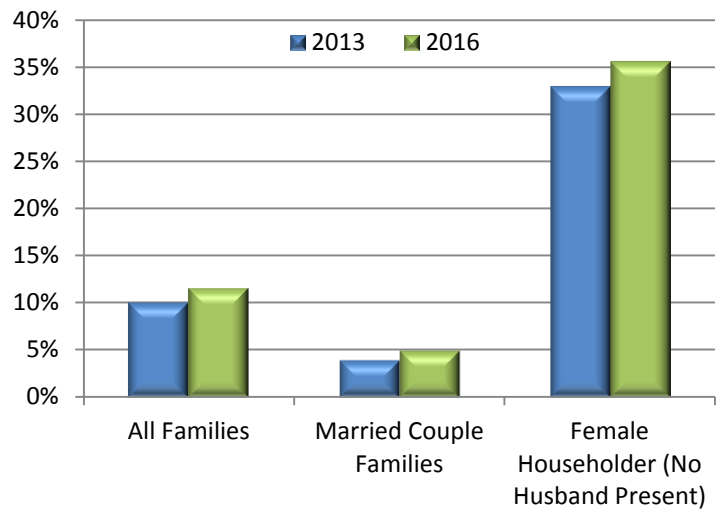
Since 2013, the percent of people who are living with income below poverty level has increased among all individuals.

The graph to the right depicts the percent of all families living in Bay County that received income below poverty level in the last 12 months.

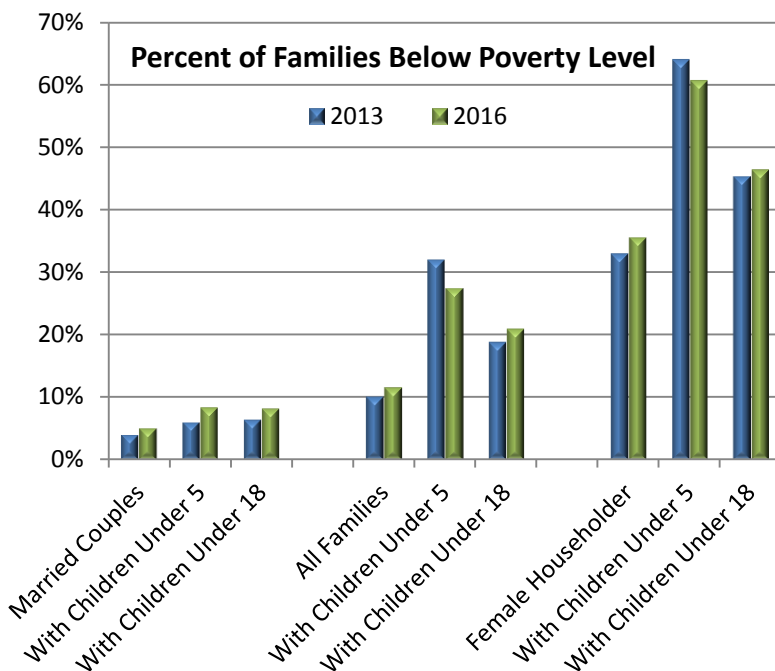
Since 2013, the percent of families who are living with income below poverty level has increased for all family types.

Female householders experience the greatest incident of poverty compared to the other family types.

Percent of Families Below Poverty Level



Percent of Families Below Poverty Level



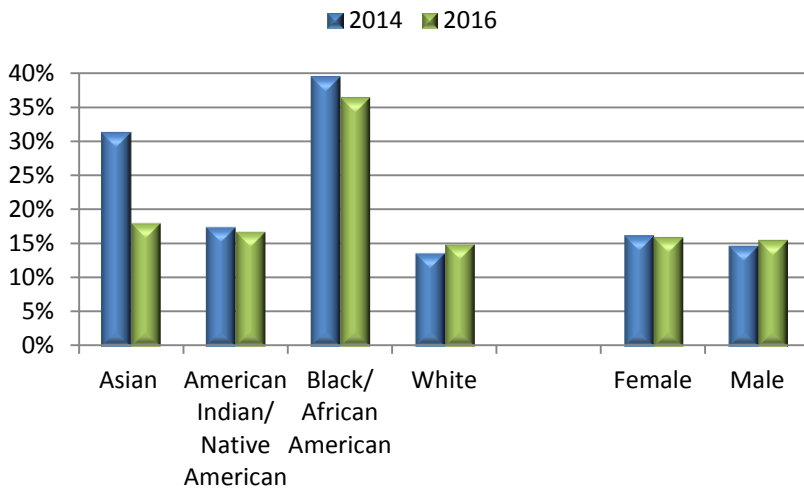
Female householders with children under the age of 5 experience the highest incidence of poverty in Bay County.

In 2016, all family types experienced an increase in having income that falls below the poverty level in the last 12 months.

However, in 2016, all families with children under 5 and female householders with children under 5 experienced a decrease in poverty.

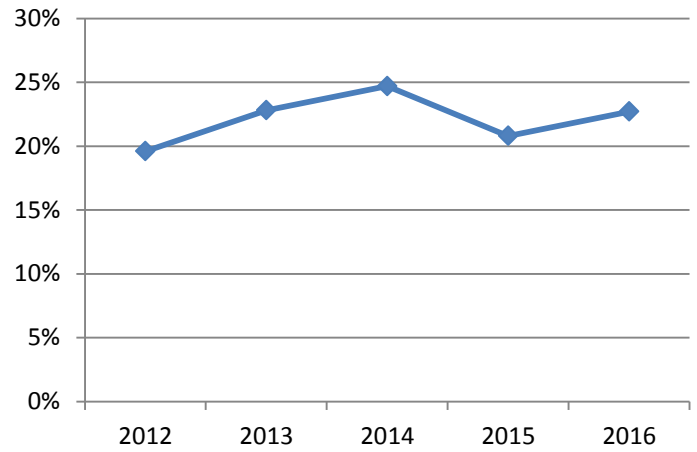
Bay County Poverty

Percent Below Poverty



Source: U.S Census Bureau, American Community Survey, 2012-2016

Percent of Children (0-17) in Bay County Living in Poverty - 2012-2016



Source: Kids Count Data, 2012-2016

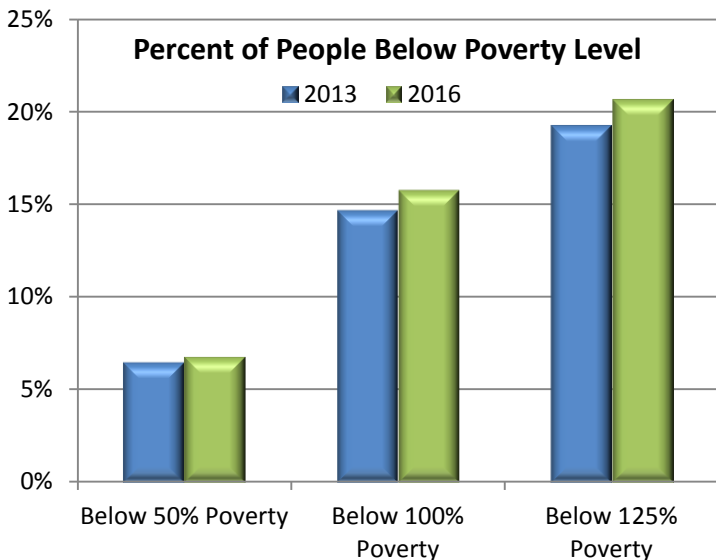
Since 2014, in Bay County, poverty has decreased for African Americans, American Indians/Native Americans, and Asians. However, both Caucasians and males experienced an increase in poverty in 2016.

The percentage of children living in poverty has remained relatively steady over the past few years. Between 2012 and 2016, there was a 3% increase in the percentage of Bay County children living in poverty.

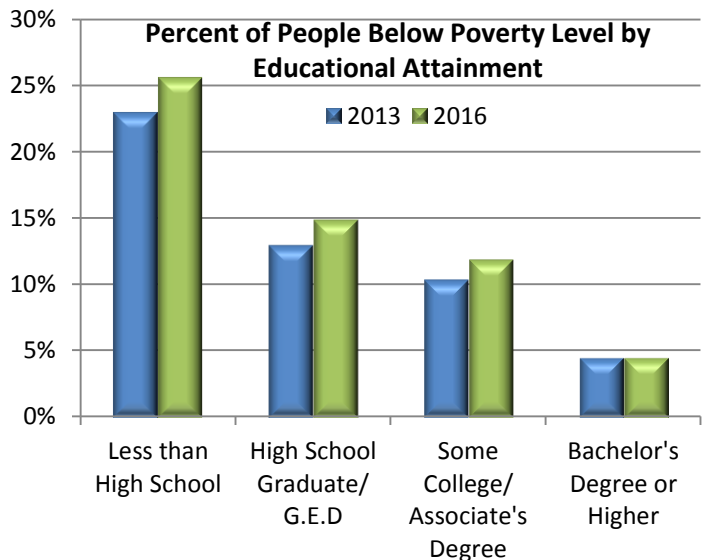
The majority of poverty in Bay County falls 125% below the poverty level.

Poverty amongst all education levels also experienced an increase in 2016. Individuals living in Bay County that did not graduate high school have the highest prevalence of poverty compared to the other educational attainment levels.

Percent of People Below Poverty Level

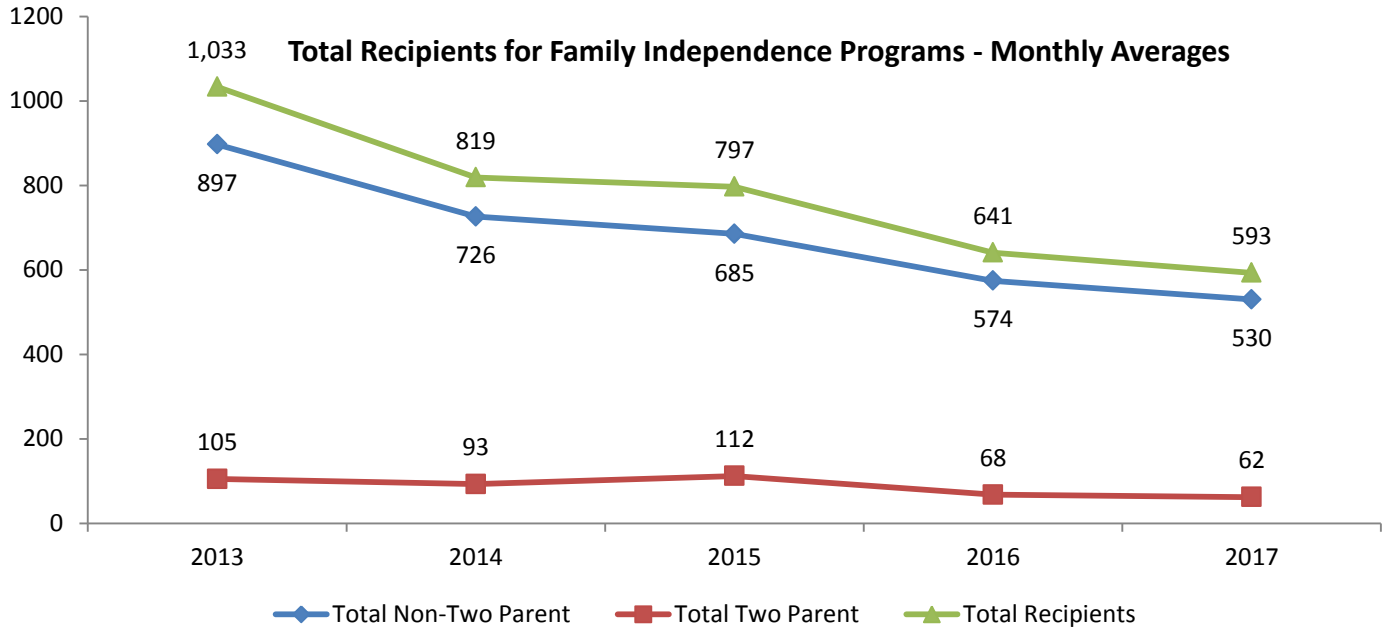


Percent of People Below Poverty Level by Educational Attainment



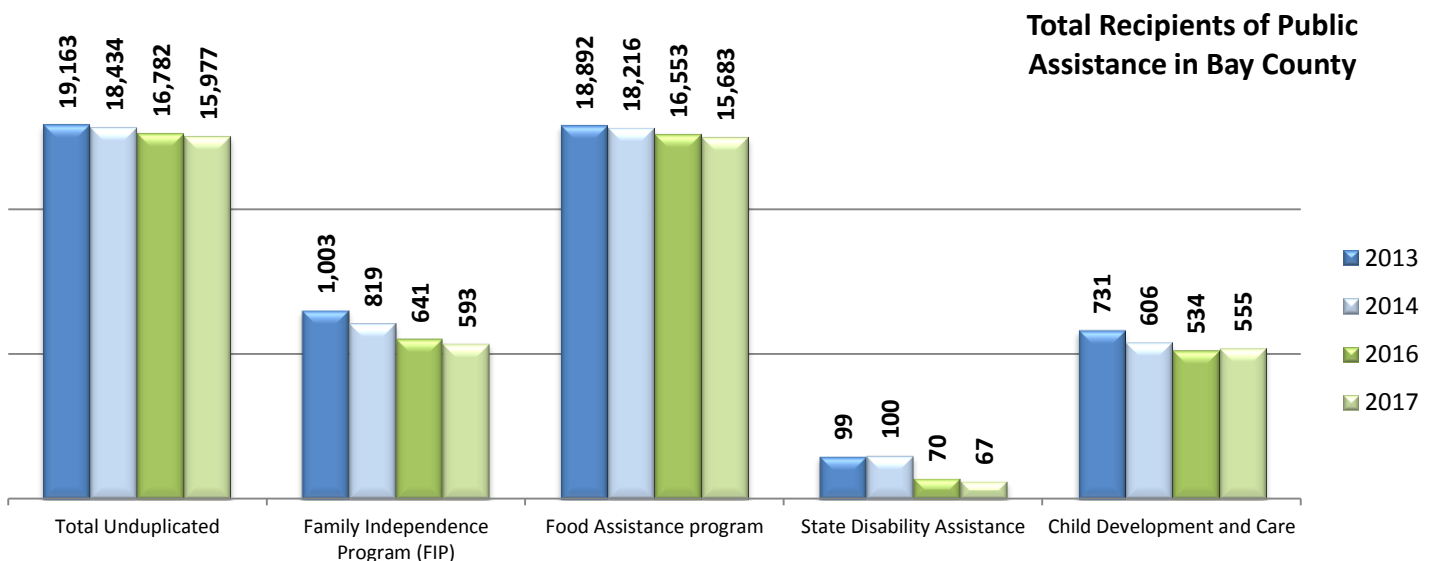
Source: U.S Census Bureau, American Community Survey, 2012-2016

Bay County Poverty



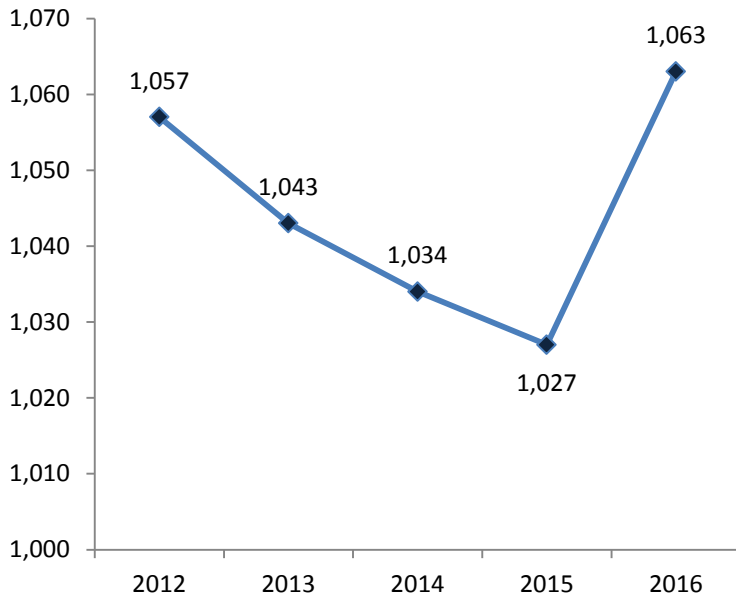
Between 2013 and 2017, Bay County has experienced a slight decline in the total recipients and total non-two parent recipients receiving family independence programs. However, total two parent recipients' receiving family independence programs has remained consistent.

The total recipients receiving public assistance in Bay County has also been steadily declining over the last five years.

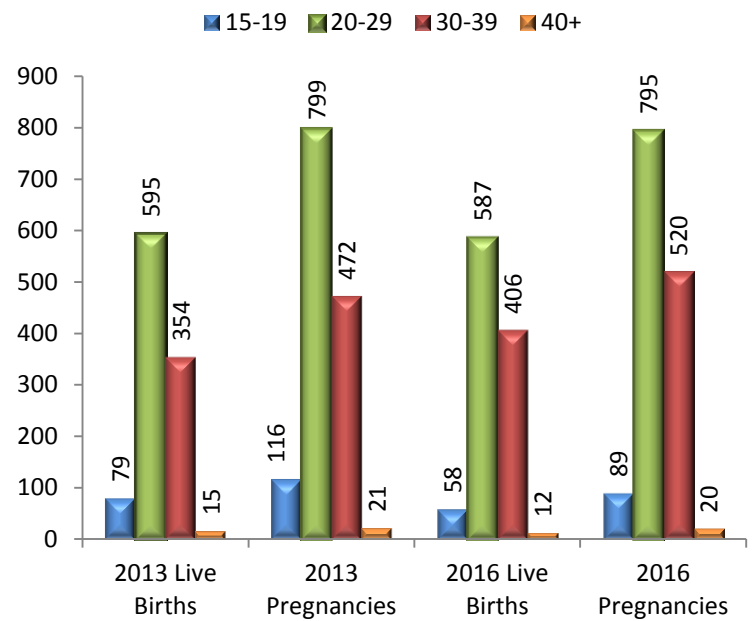


Bay County Maternal and Child Health

Live Births - Bay County 2012-2016



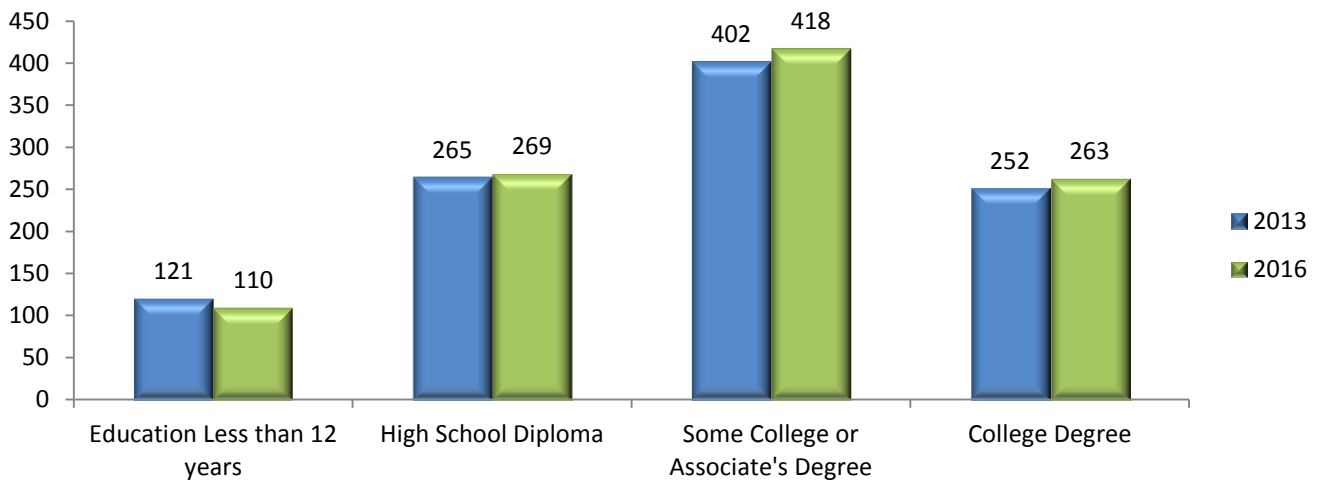
Number of Pregnancies and Live Births - 2013 and 2016



Bay County saw a decline in births between the years 2012-2015. However, Bay County experienced a 3.5% increase in live births between 2015 and 2016. The number of pregnancies and live births for all age groups has decreased except for the 30-39 year olds.

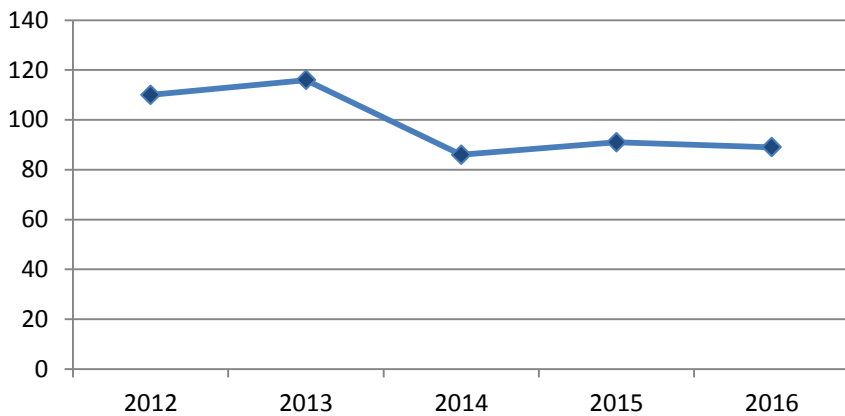
In 2016, Bay County saw an increase in the number of live births in all education levels of the mother, except for, mothers who did not graduate high school. The number of live births for mothers who did not graduate high school has decreased by 9%.

Number of Live Births by Educational Level of Mother - 2013 and 2016



Bay County Maternal and Child Health

Teen Pregnancy (15-19) Trends - Bay County - 2012-2016



Bay County experienced a slight increase in the number of teen pregnancies in 2013 but has since seen a 23.3% decrease.

Between 2014 and 2016, teen pregnancies have remained consistent.

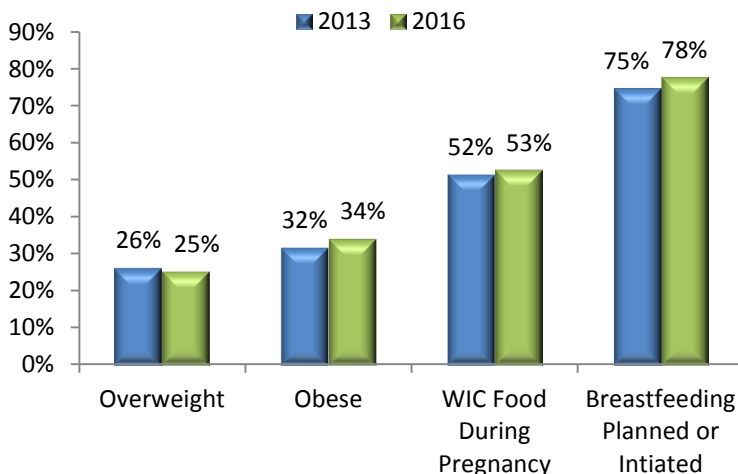
The graphs below represent the maternal characteristics of mothers in Bay County during 2013 and 2016. In 2016, there was an increase in the amount of mothers who received WIC food during their pregnancy.

In 2016, the percentage of mothers who smoked while pregnant decreased, along with a decrease in the percentage of pregnant women living in a smoking household.

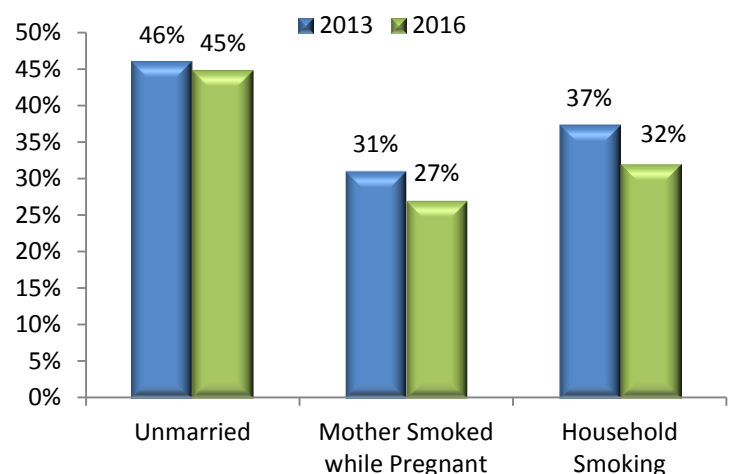
The percentage of Bay County women who planned to breastfeed or had breastfeeding initiated also increased during 2016 in comparison to 2013.

The percentage of pregnant mothers who were overweight decreased in 2016. However, the percentage of pregnant women in Bay County who were obese increased.

Maternal Characteristics as a Percentage of Live Births - Bay County

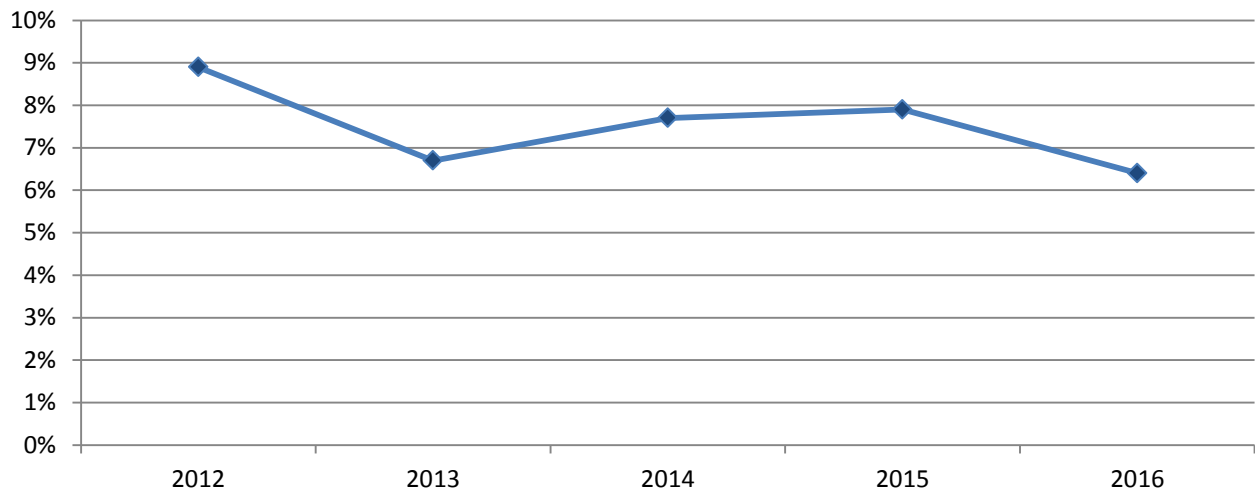


Maternal Characteristics as a Percentage of Live Births - Bay County



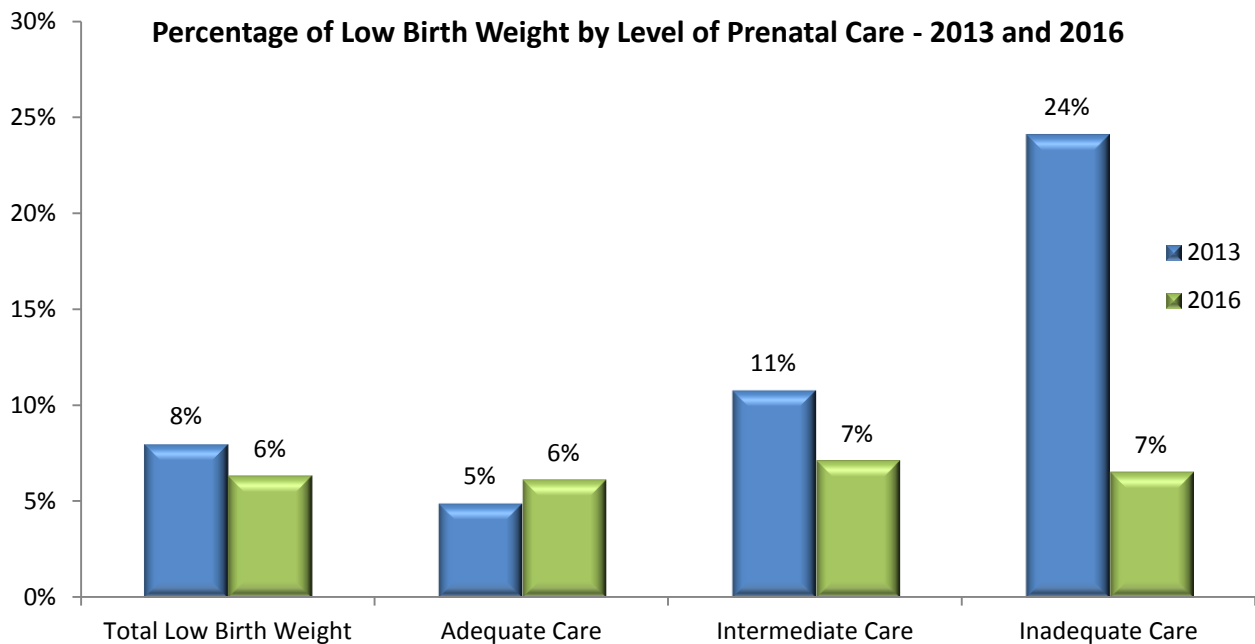
Bay County Maternal and Child Health

Trends in Low Birth Weight Babies in Bay County



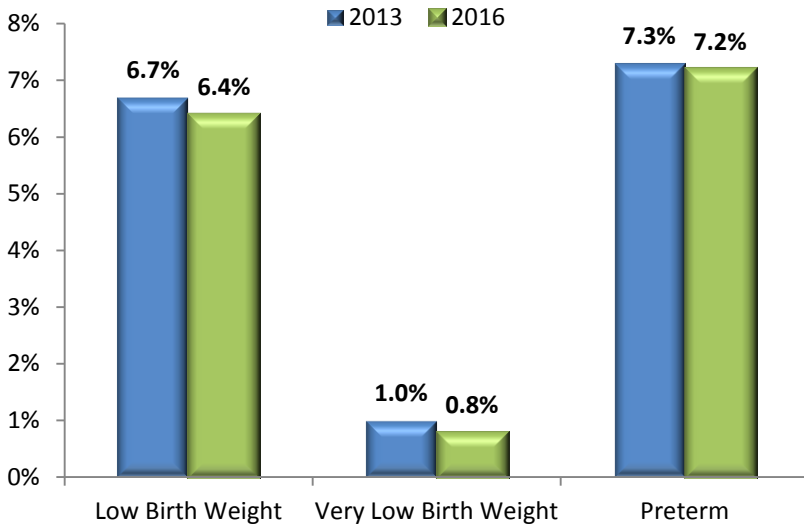
The graph above shows the trends of low birth weight babies born in Bay County had steadily increased in 2013-2015. However, since 2015, Bay County has experienced a decrease in the percentage of babies born with a low birth weight.

The percent of low birth weight babies being born has decreased for all levels of care except for adequate prenatal care. Inadequate prenatal care saw a 17% decrease in low birth weight babies in 2016.



Bay County Maternal and Child Health

Infant Characteristics as a Percentage of Live Births



The infant characteristics of live births have remained consistent over the past 3 years in Bay County.

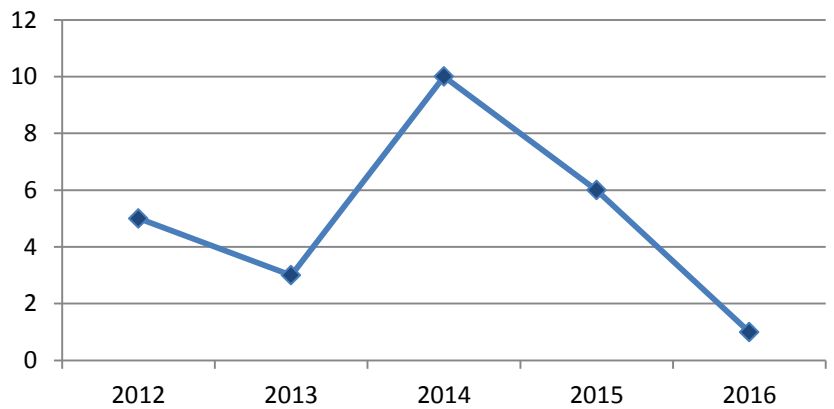
The majority of births (97%) in Bay County are single births.

There was a 7% increase in 2016 in the percentage of babies born with a very low birth weight.

Source: Michigan Department of Health and Human Services, Pregnancy and Natality, 2013-2016

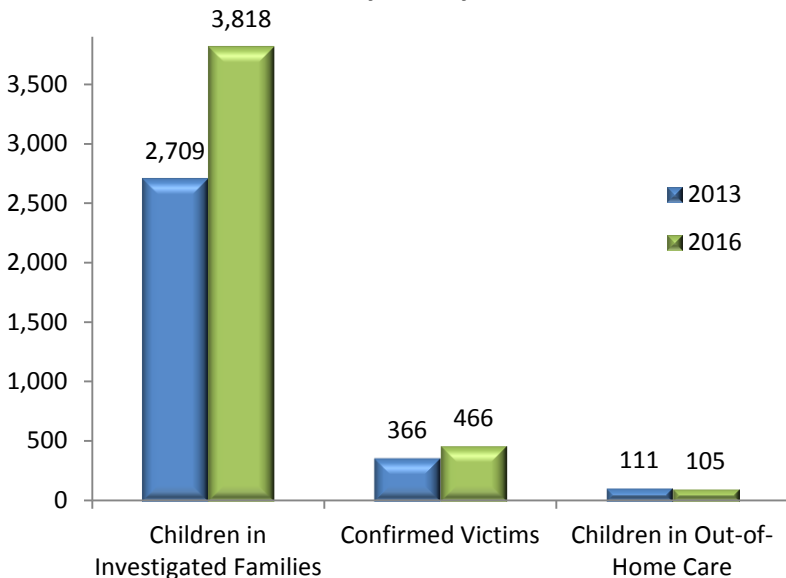
The number of infant deaths dropped from 10 to 1 between 2014 and 2016. Infant mortality has been rapidly decreasing in Bay County since 2014.

Infant Mortality Trends in Bay County



Source: Michigan Department of Health and Human Services, Pregnancy and Natality, 2013-2016

Number of Child Abuse and Neglect Cases (0-17) in Bay County



The number of child abuse and neglect cases in Bay County continues to rise.

There was a 41% increase in the number of children in investigated families.

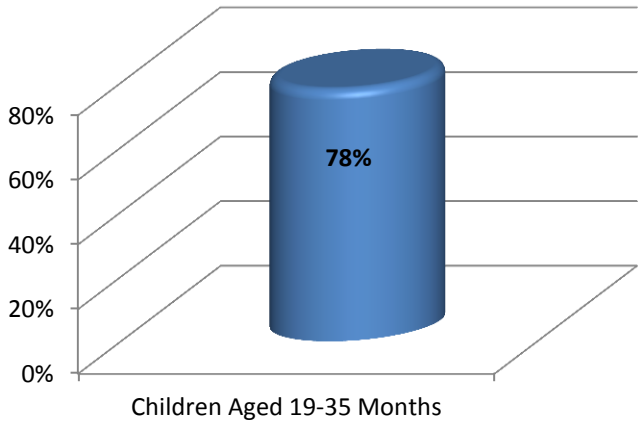
There was a 27.3% increase in the number of confirmed victims of child abuse and neglect.

Children in out-of-home care abuse and neglect cases decreased by 5.4%.

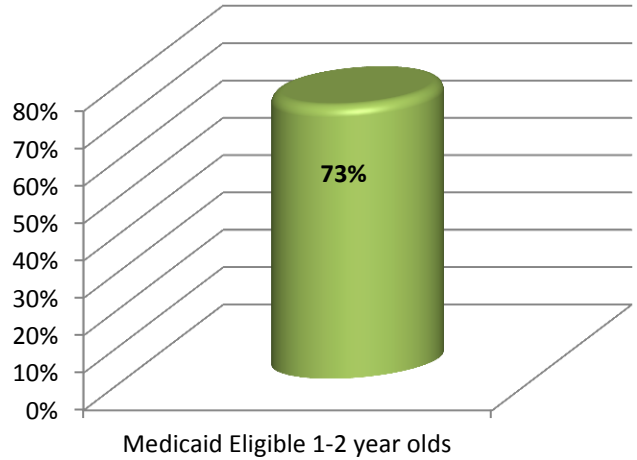
Source: Kids Count Data, 2012-2016

Bay County Maternal and Child Health

Completed the Series of Recommended Vaccines



Children in Bay County Tested for Lead

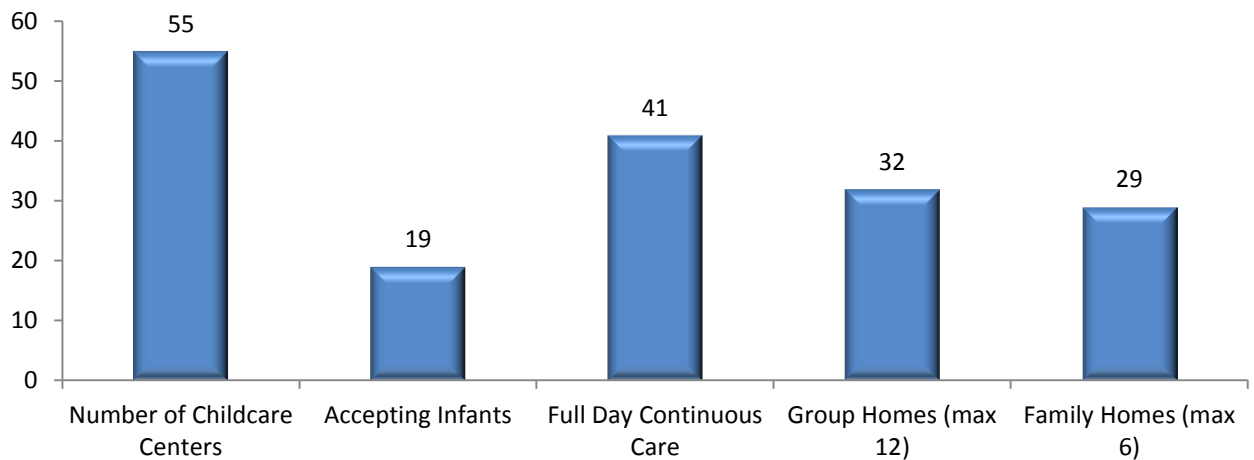


Source (Top Two Tables): Michigan Childhood Immunization Registry

78% of children age 19-35 months completed the series of recommended vaccinations and 73% of Medicaid eligible 1-2 year olds were tested for lead.

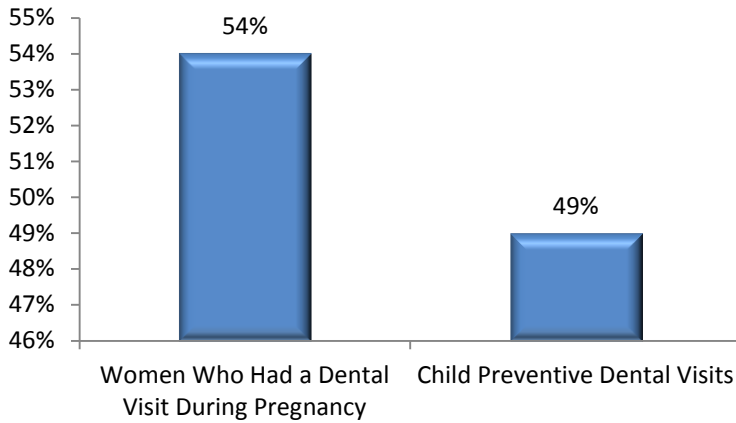
There are 55 childcare centers in Bay County. 41 offer full day continuous daycare while only 19 are currently accepting infants.

ChildCare Centers in Bay County



Source: CDC Licensing (Taken from the Great Start Collaborative Assessment, 2016)

Bay County Maternal and Child Health



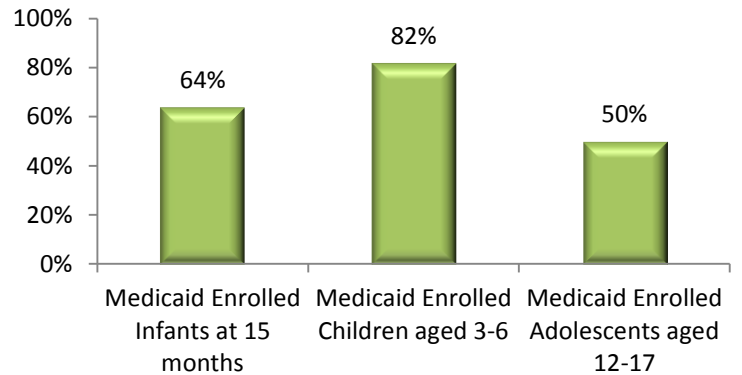
54% of pregnant women in Bay County visited a dentist during their pregnancy.

Only 49% of children had received a preventative dental visit.

82% of Medicaid enrolled children aged 3-6 years received each of their recommended well child/preventative medical visits.

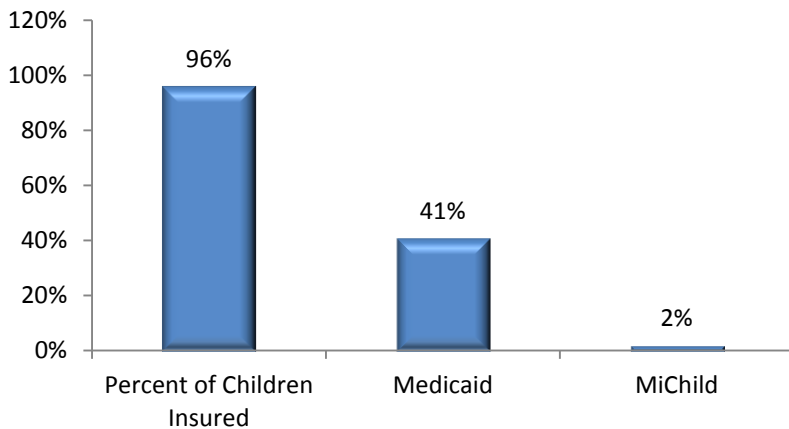
Only 50% of Medicaid enrolled adolescents aged 12-17 received their recommended well child/preventative medical visits.

Received Each of their Recommended Well Child/Preventive Medical Visits



Source: Michigan Medicaid, 2015

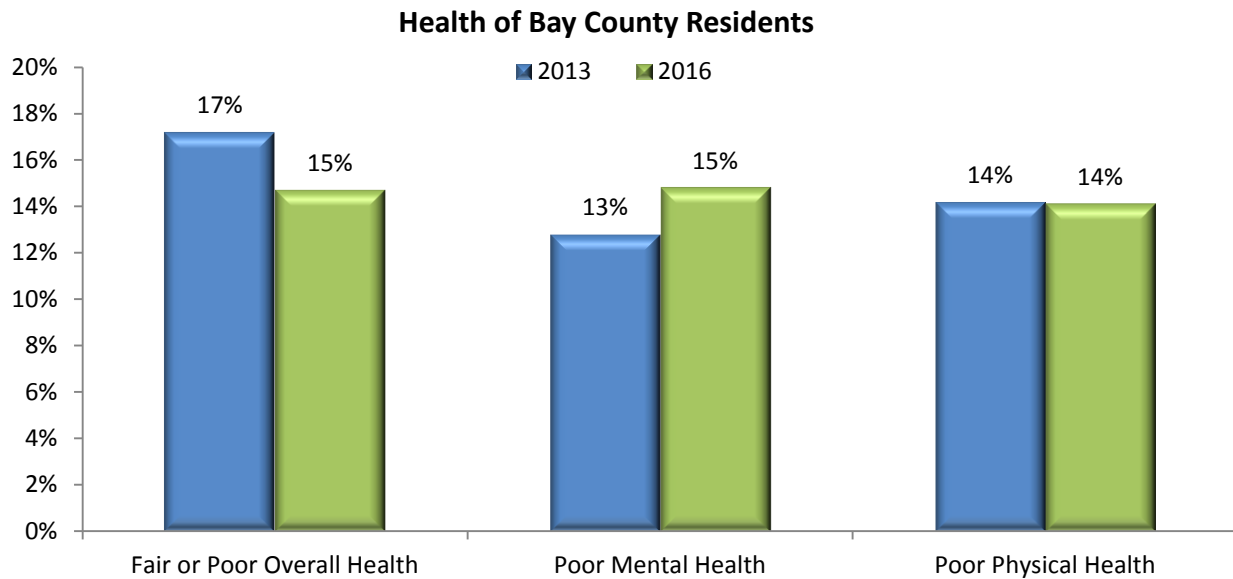
Insured Children in Bay County



The majority of children living in Bay County are insured (96%) and 41% of those children receive Medicaid.

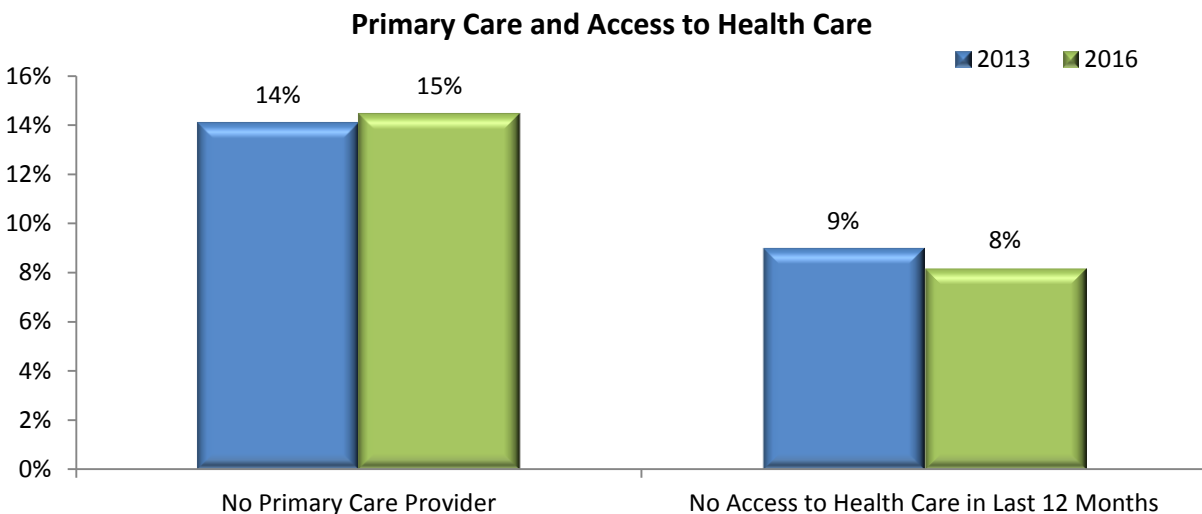
Source: Michigan Medicaid, 2015

Bay County General Health



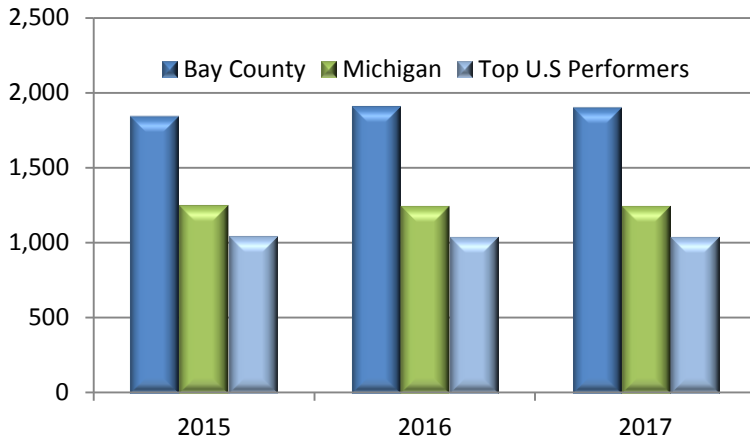
Bay County saw an increase in the percentage of adults who have poor mental health, while the percentage of adults who have fair or poor overall health decreased.

The chart below shows, Bay County experienced a slight increase in individuals who do not have a primary care provider. However, the percentage of individuals that have had no access to health care in the last 12 months decreased.



Bay County General Health

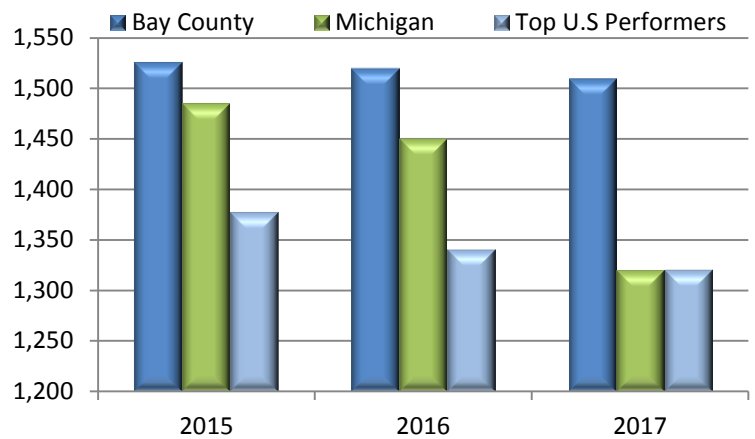
Patient to Primary Care Physician Ratios



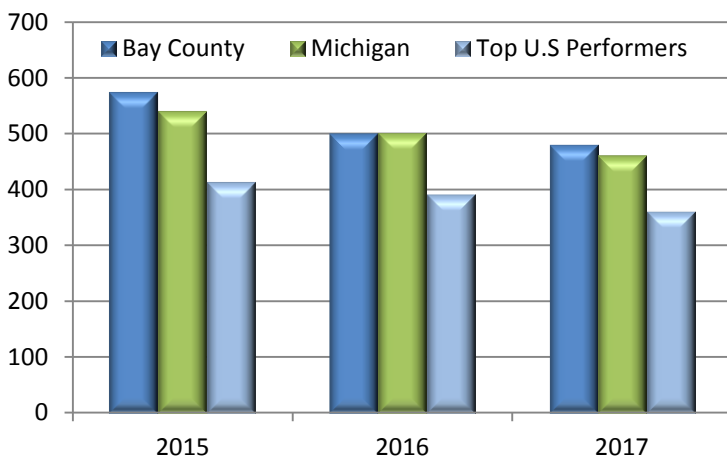
In 2017, Bay County had 1,900 patients to every 1 primary care provider. Over the past few years, Bay County has consistently performed below the Top U.S. performers and the state of Michigan. Bay County continues to see a need for more primary care providers.

In 2017, Bay County had 1,510 patients to every 1 dentist in Bay County. Bay County consistently continues to fall behind Michigan and the Top U.S. performers on patient to dentist ratio. Bay County needs to see an increase in the number of dentists in the area.

Patient to Dentist Ratio

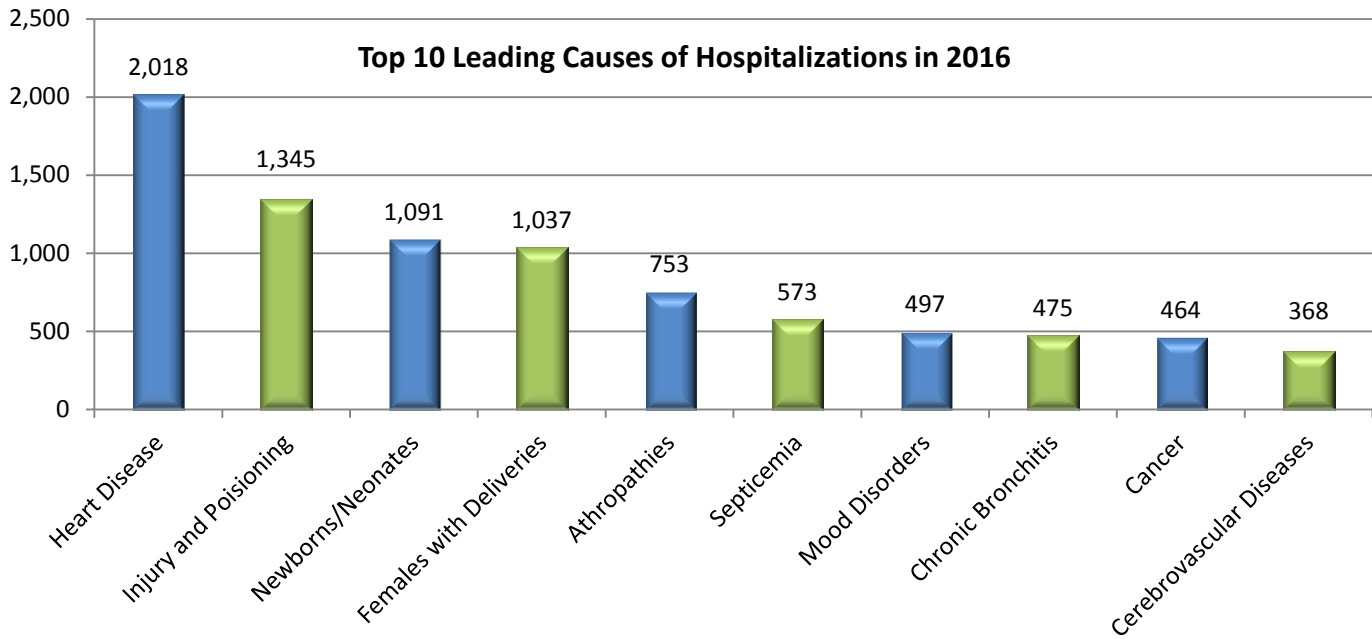


Patient to Mental Health Care Provider Ratio



In 2017, Bay County had 480 patients to every 1 mental health care provider. While Bay County needs more mental health care providers, Bay County is performing close to the level of the rest of the state of Michigan.

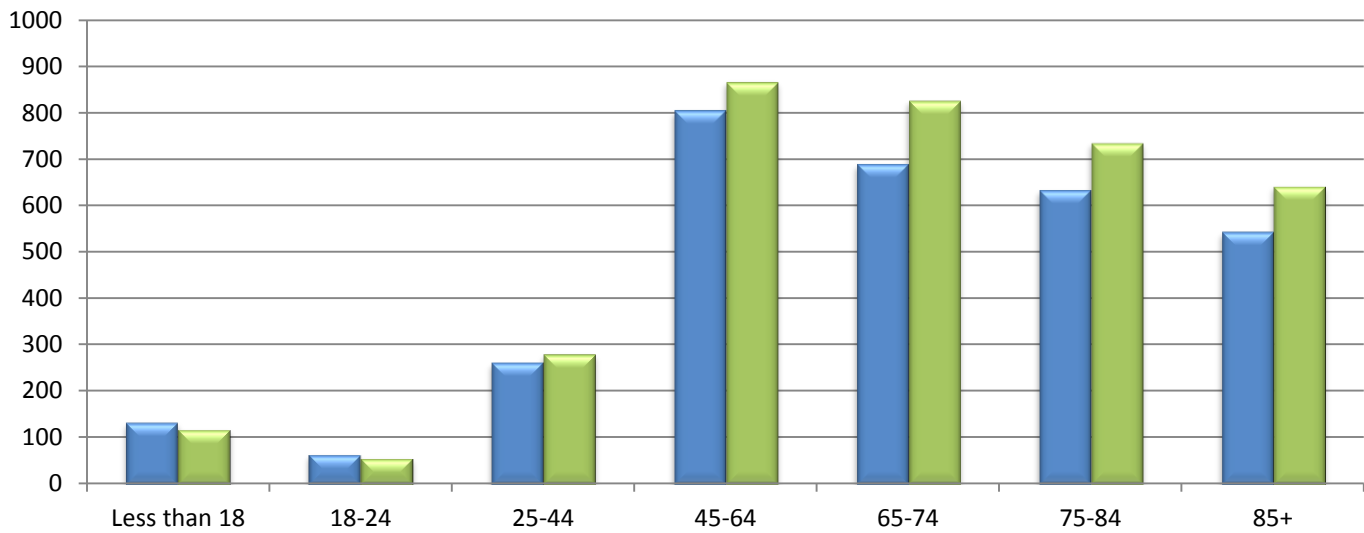
Bay County Morbidity and Mortality



Heart Disease is the number one cause of hospitalizations in Bay county, followed by injury and poisoning and newborns.

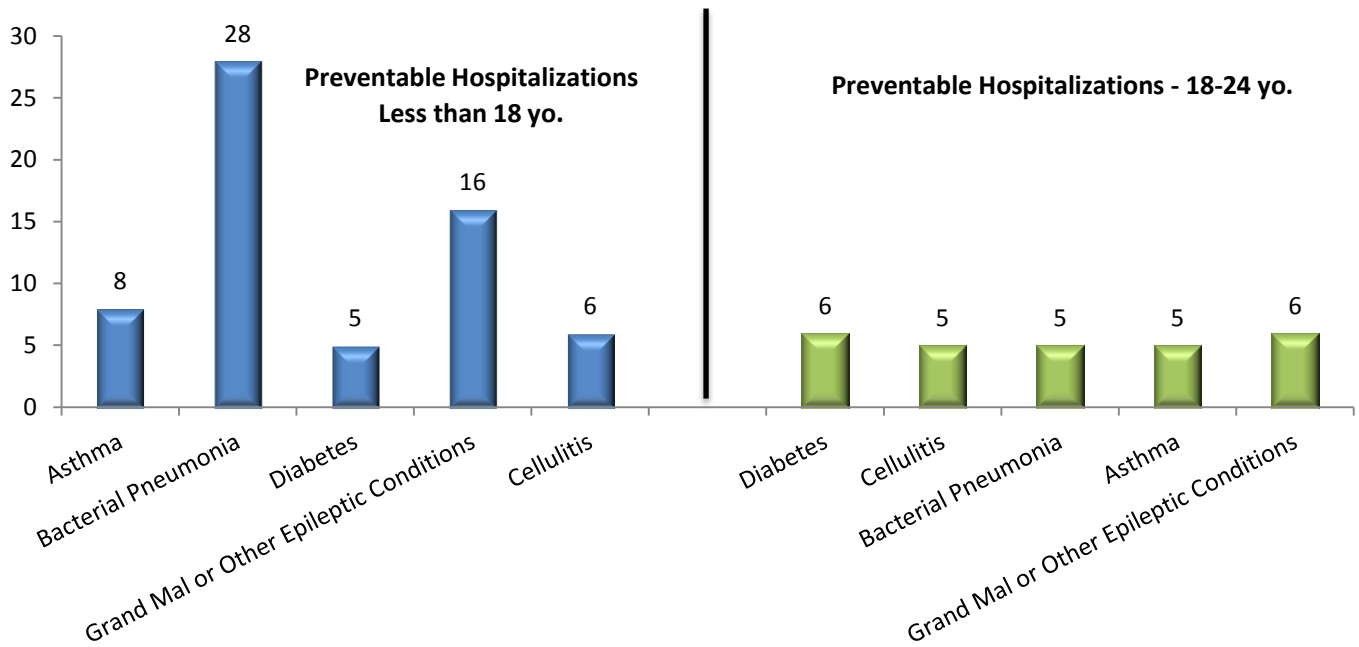
The table below shows an increase in preventable hospitalizations among the older population with the largest increase among the 65-74 age group at 20%.

Preventable Hospitalizations by Age Group – 2014 and 2016



Source (All Tables): Michigan Department of Health & Human Services, 2016

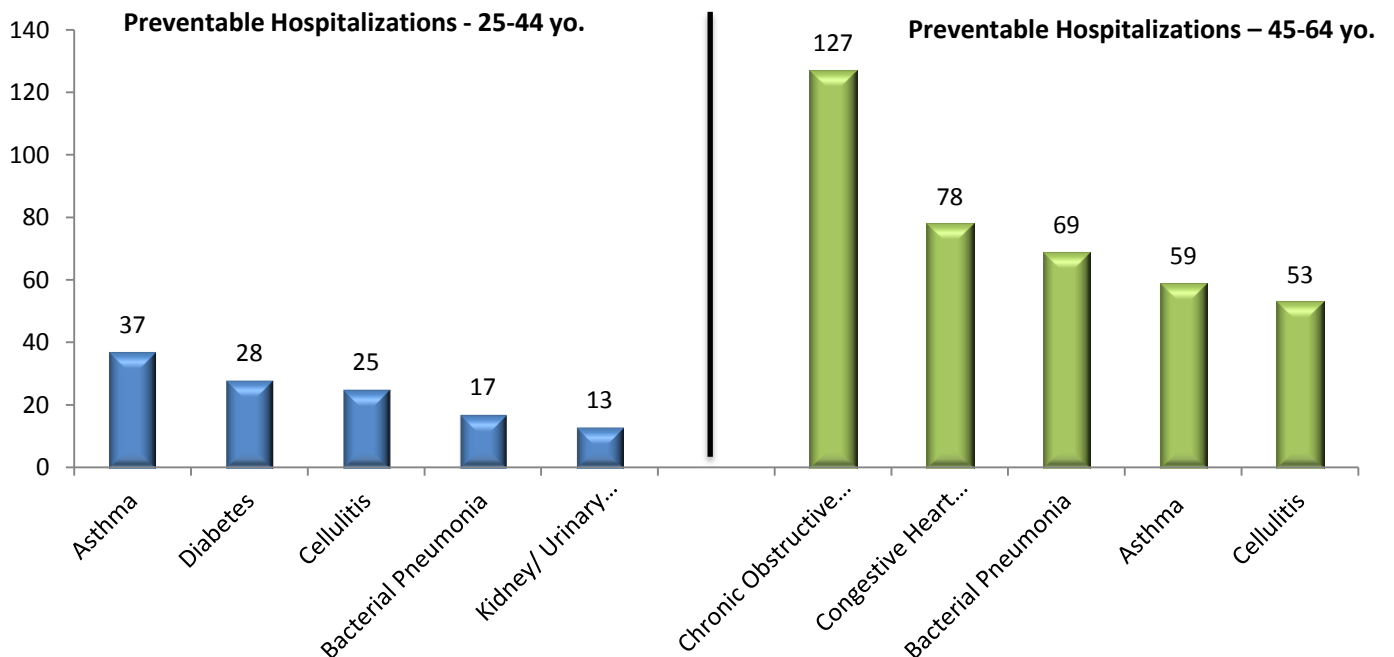
Bay County Morbidity and Mortality



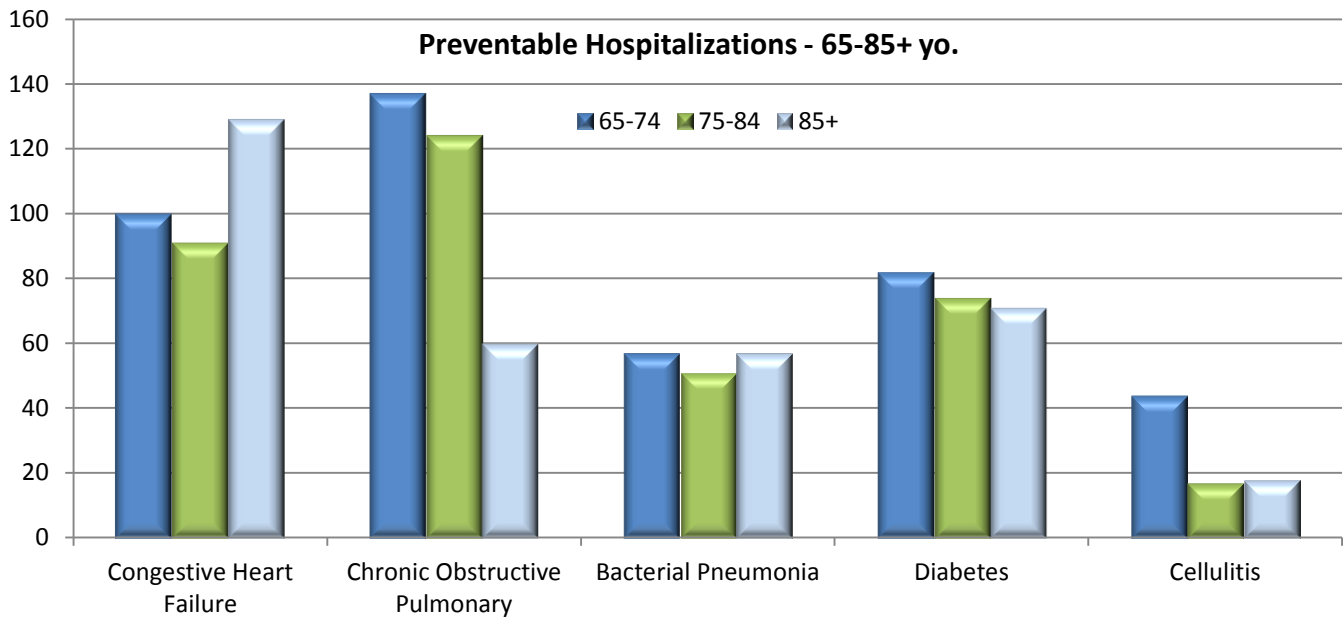
These graphs show the top 5 causes of hospitalizations that are preventable among individuals up to 66 years of age.

Bacterial Pneumonia was the leading preventable hospitalization for children under the age of 18 in Bay County; with diabetes being the leading preventable cause of hospitalization for individuals aged 18-24.

Among 25-44 year olds, asthma was the number one cause of hospitalizations followed closely by diabetes, with Chronic Obstructive Pulmonary Disease being the leading preventable hospitalization among 45-64 year olds.



Bay County Morbidity and Mortality

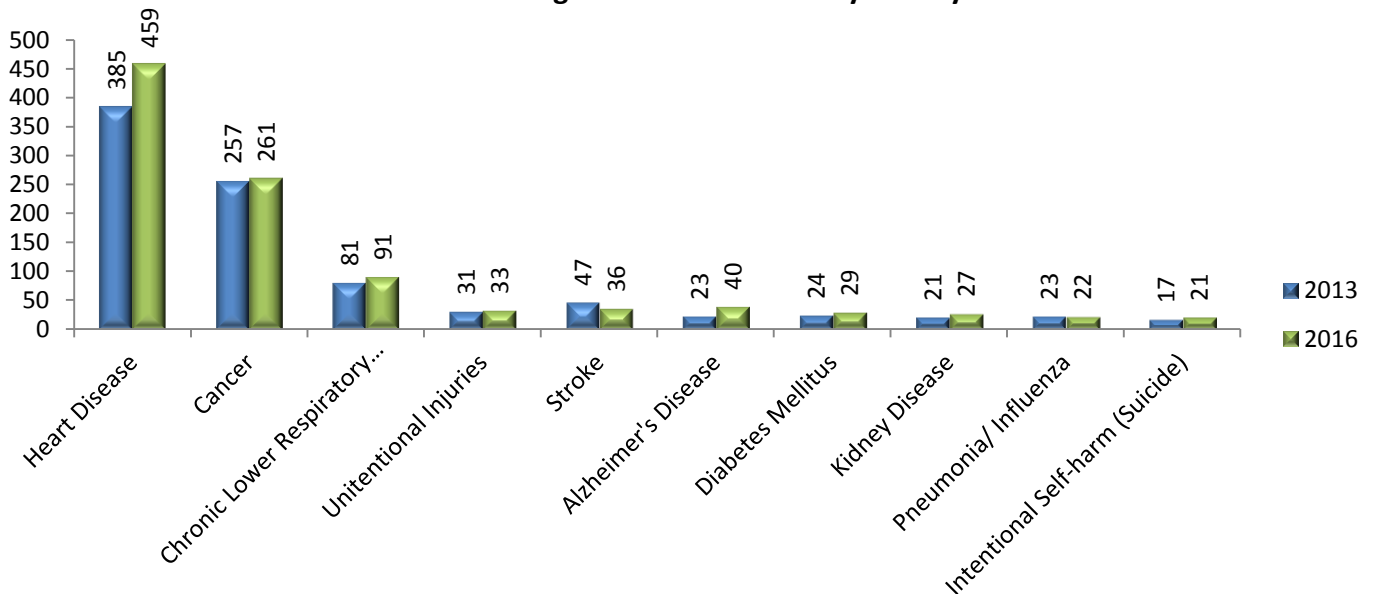


As shown previously, the leading cause of preventable hospitalizations in Bay county is Heart Disease. The graph below indicates that the leading cause of death for Bay County is Heart Disease.

Heart Disease begins to show up in preventable hospitalizations in the 45-64 year old age group.

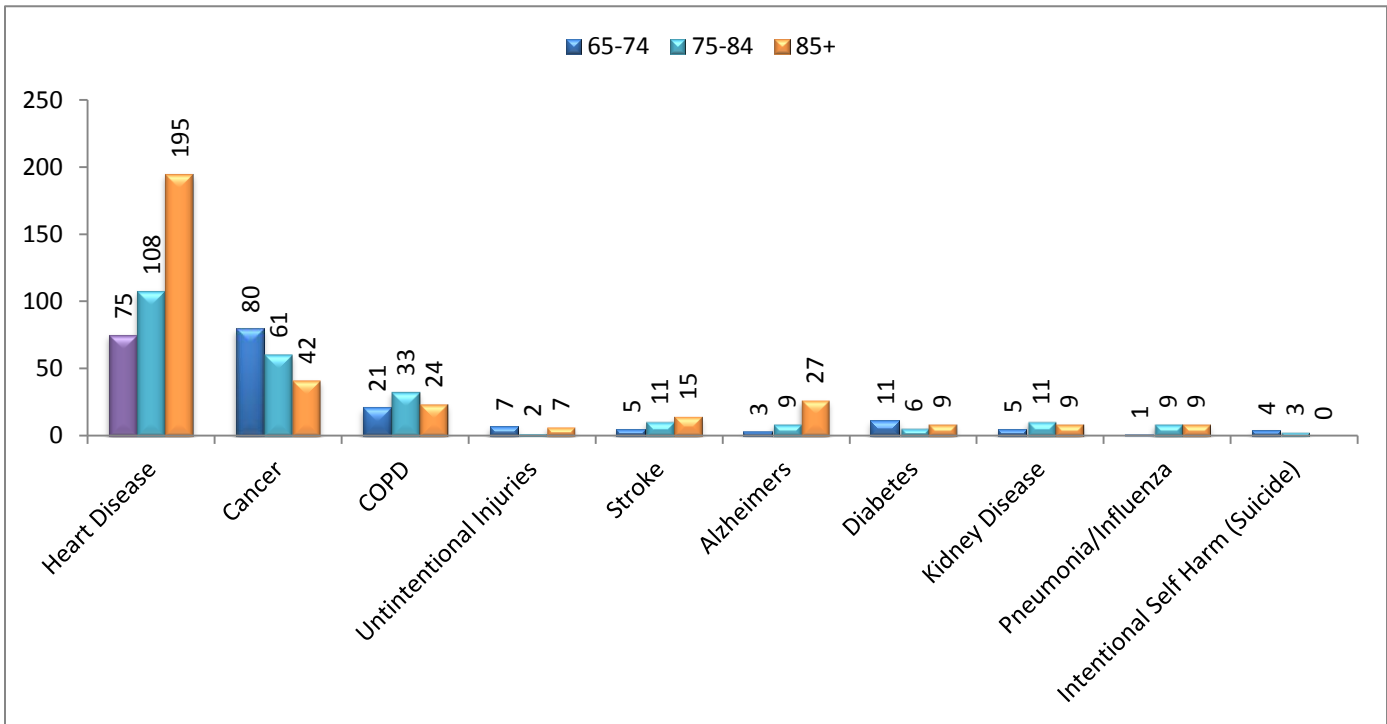
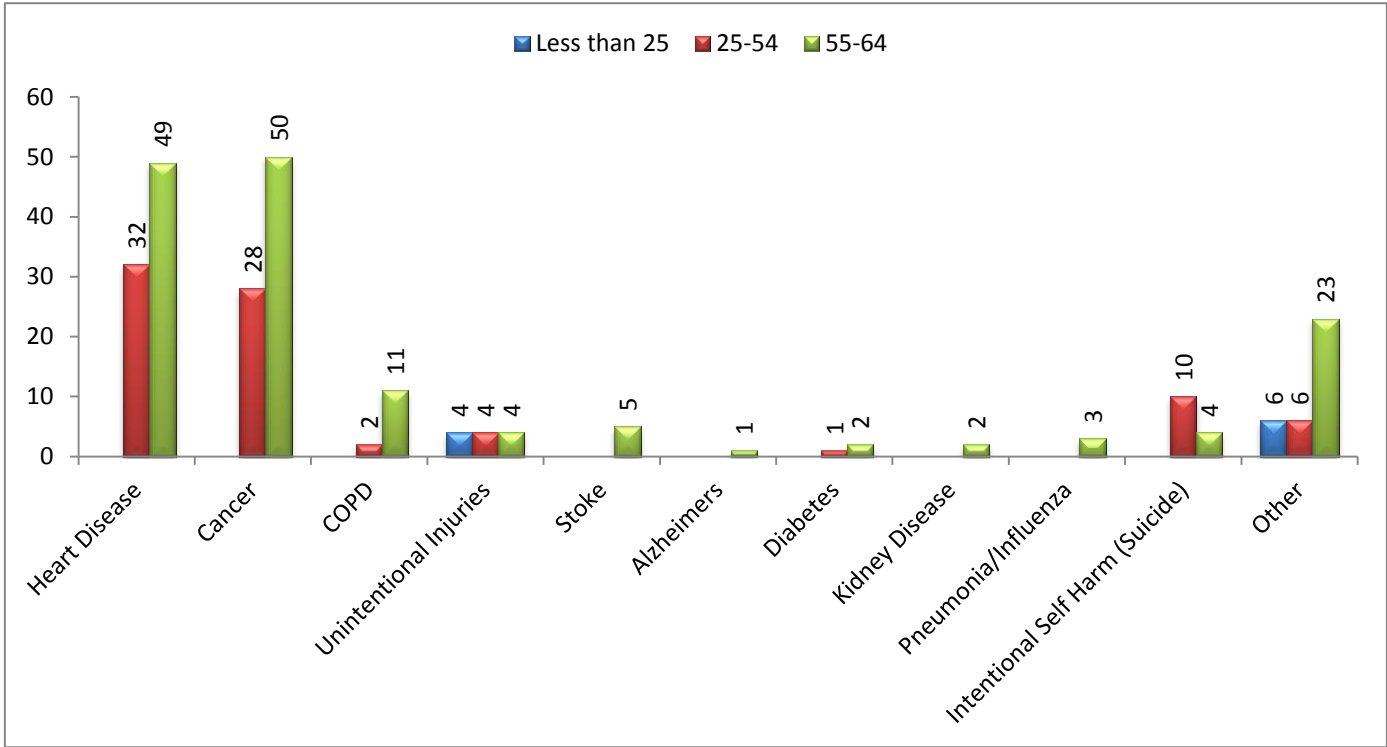
Interestingly, Chronic Obstructive Pulmonary Disease is a major cause of preventable hospitalizations for people aged 45 and older but is the only 3rd leading cause of death in Bay County.

Ten Leading Causes of Death - Bay County



Bay County Morbidity and Mortality

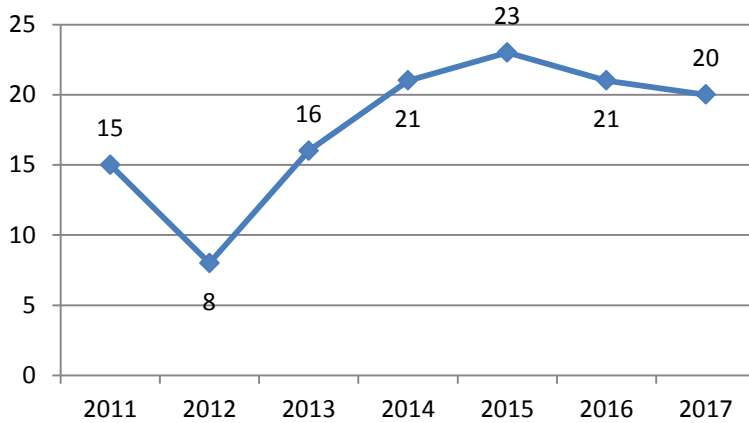
Leading Causes of Death by Age Group



Source (All Tables): Michigan Department of Health & Human Services, 2016

Bay County Morbidity and Mortality

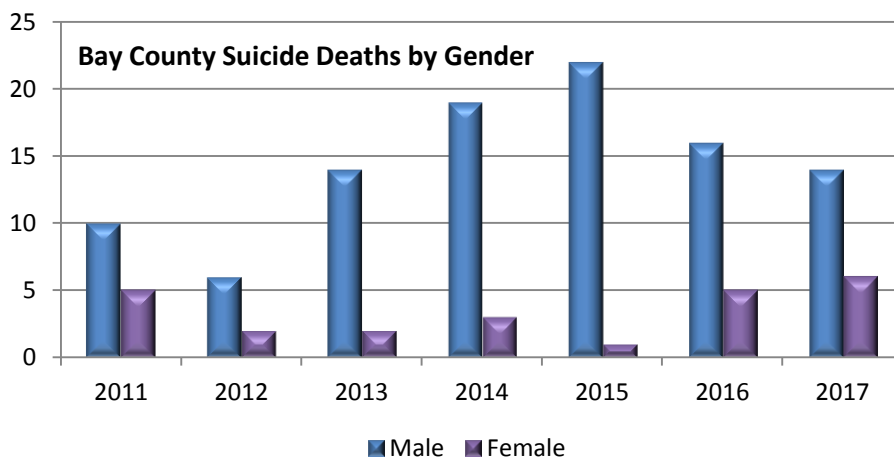
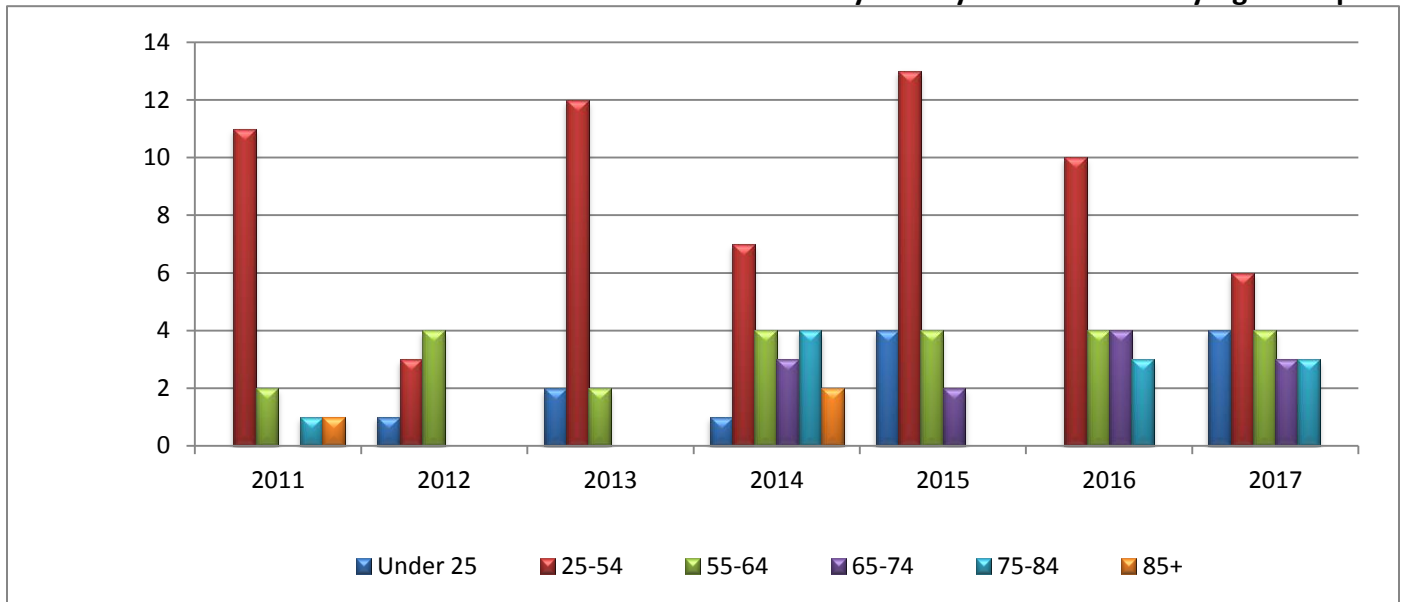
All Suicides - Bay County



Bay County is starting to see a continual decline in the number of deaths by suicide.

The majority of deaths by suicide continues to be among the 25-55 age group

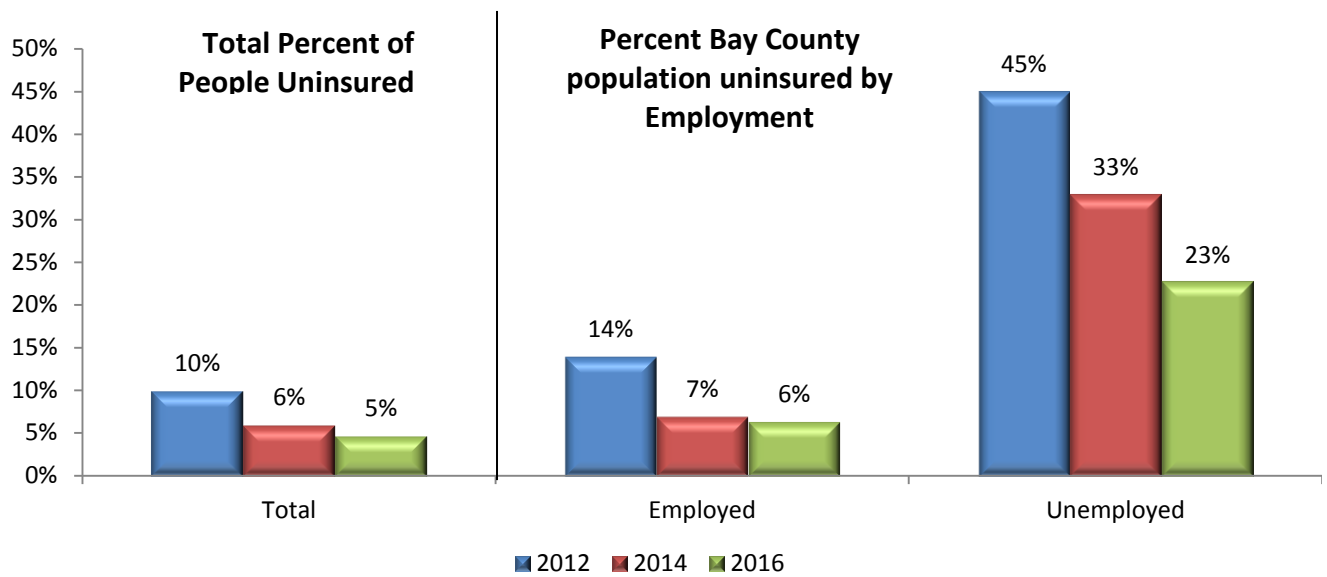
Bay County Suicide Trends by Age Group



Deaths by suicide seem to be more common among men than women.

However, in the last couple of years Bay County has seen an increase in the number of women dying by suicide

Bay County Health Insurance Coverage

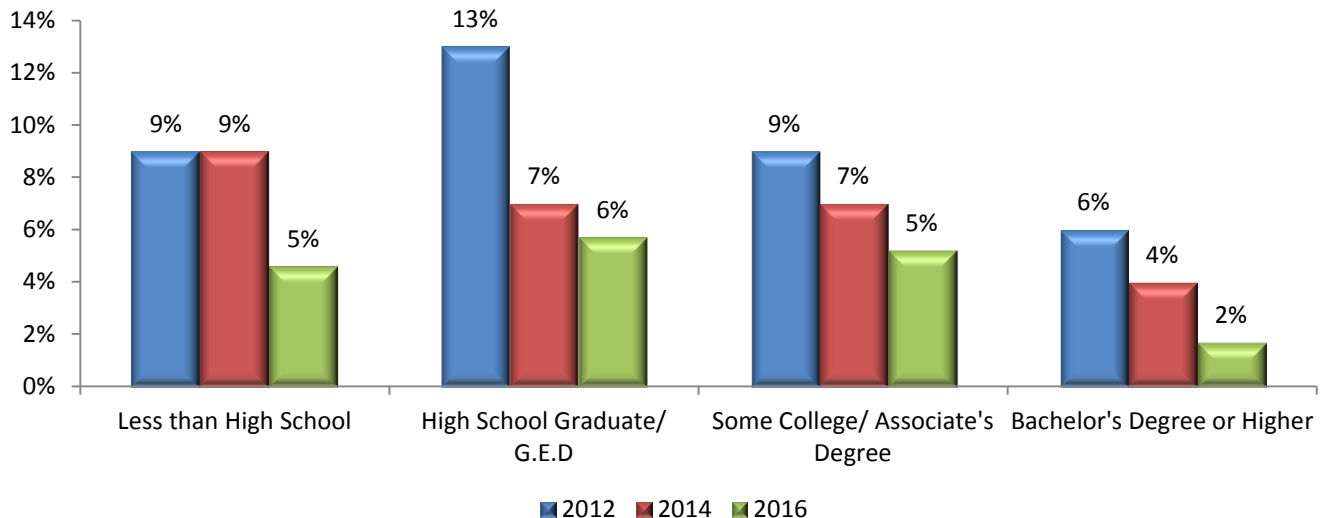


Since 2010, the total percentage of uninsured individuals in Bay County has decreased.

Being uninsured is significantly higher among those who are unemployed in Bay County.

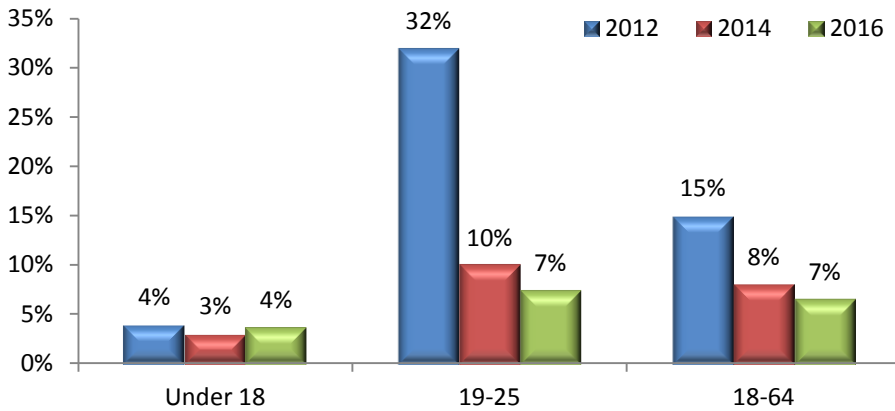
The chart below shows the lower an individual's education level; the more likely they are to be uninsured. However, in the last three years all education levels saw a decrease in the percentage of individuals who are uninsured.

Percent Bay County Population Uninsured by Education Level



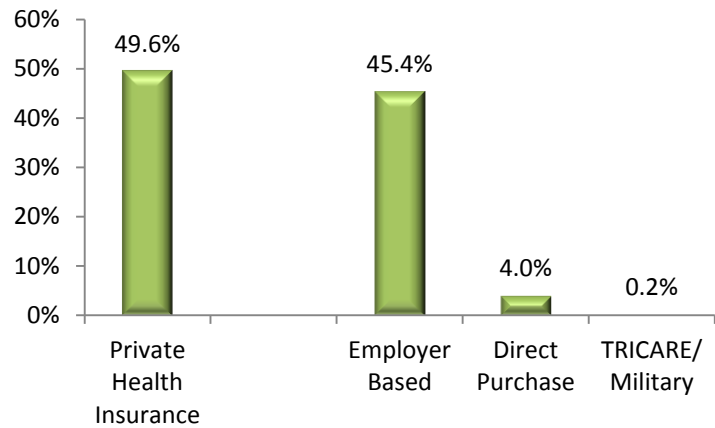
Bay County Health Insurance Coverage

Percent Bay County Population Uninsured by Age



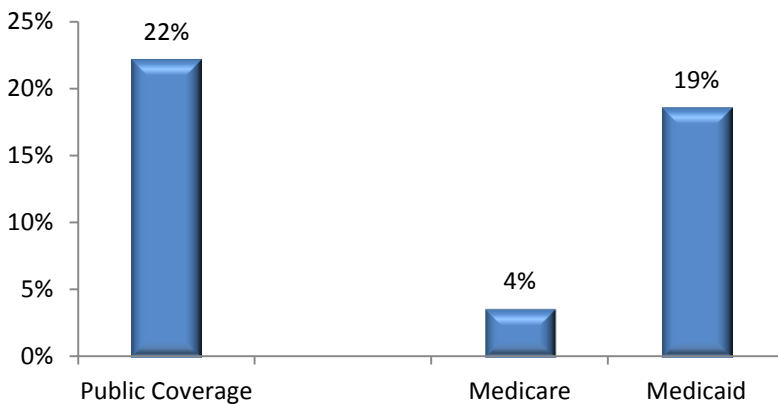
The percent of Bay County residents that are uninsured continues to decrease.

Type of Private Health Insurance Coverage



The majority of insurance coverage in Bay County is private insurance (49.6%). 45.4% of the private health insurance is employer based.

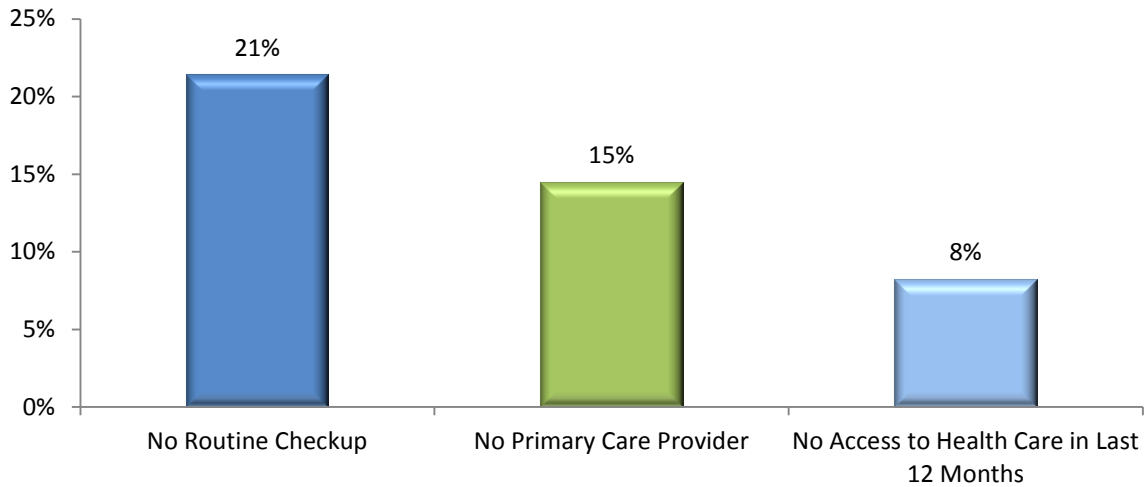
Type of Public Insurance Coverage



Of those in Bay County that have public health insurance, the majority (19%) receives Medicaid.

Source (All Tables): U.S Census Bureau, American Community Survey 2016 (1 year estimates)

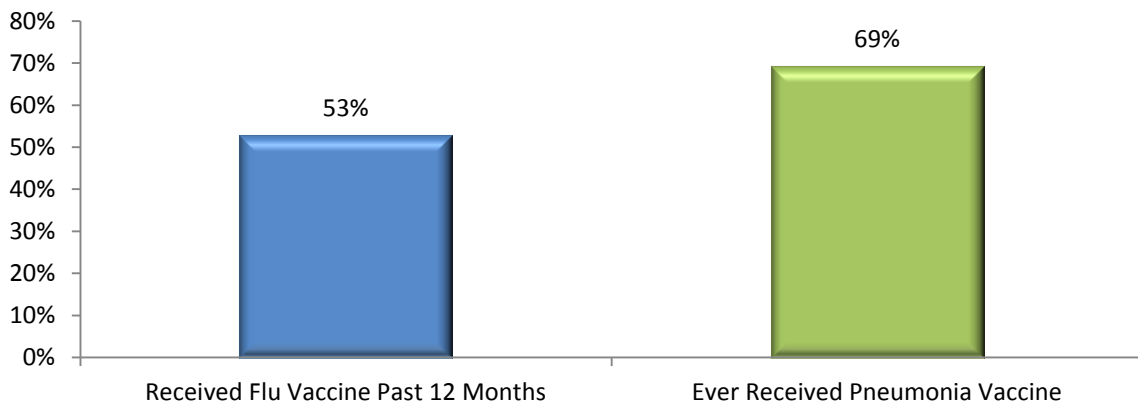
Health Behaviors - Bay County



15% of people living in Bay County report not having a primary care provider and 8% report having had no access to health care in the last 12 months. 21% of Bay County residents reported not having a routine checkup.

53% of Bay County residents reported having received a flu shot and 69% of residents reported that they have received a pneumonia vaccination before.

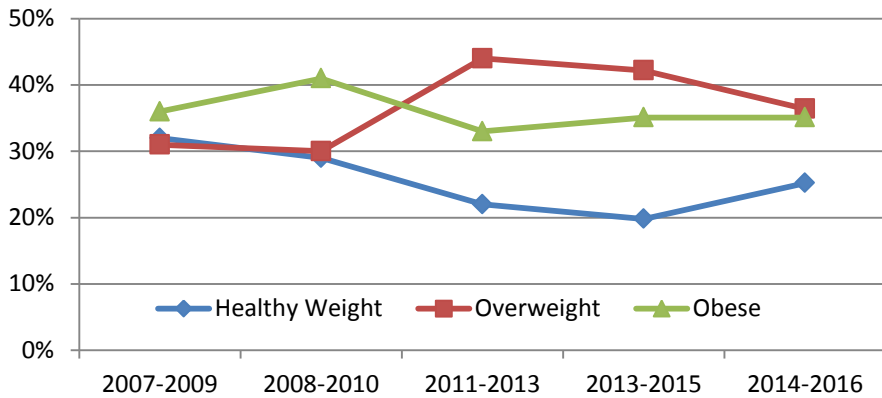
Vaccinations - Bay County



Source (All Tables): MiBRFSS 2014-2016, 95% Confidence Interval

Bay County Health Behaviors

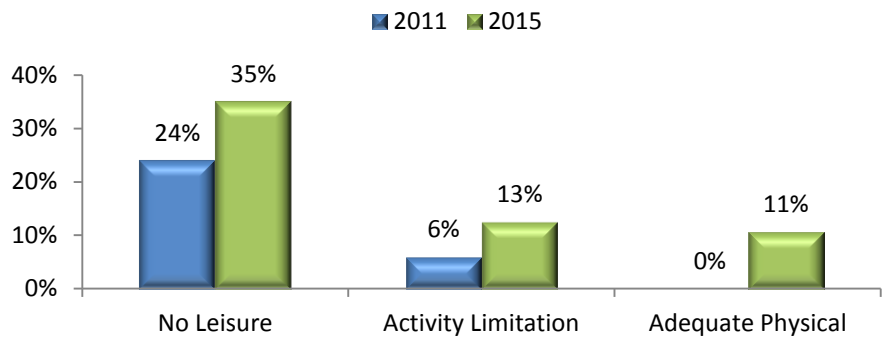
Weight Trends Among Adults - Bay County



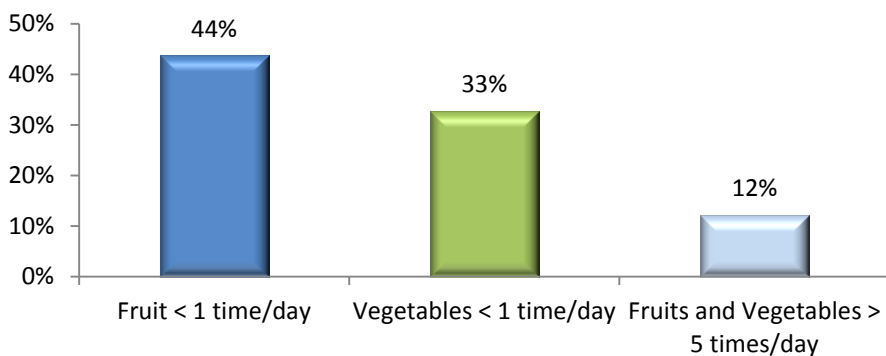
The obese rates of adults in Bay County have remained consistent over the past few years. The percentage of overweight adults in Bay County has started to decline while the percentage for healthy weight adults has started to rise.

Physical Activity Behaviors Among Adults - Bay County

Adults' reporting no leisure time physical activity has increased drastically while those with activity limitations have slightly increased.



Adult Fruit and Vegetable Consumption - Bay County 2015

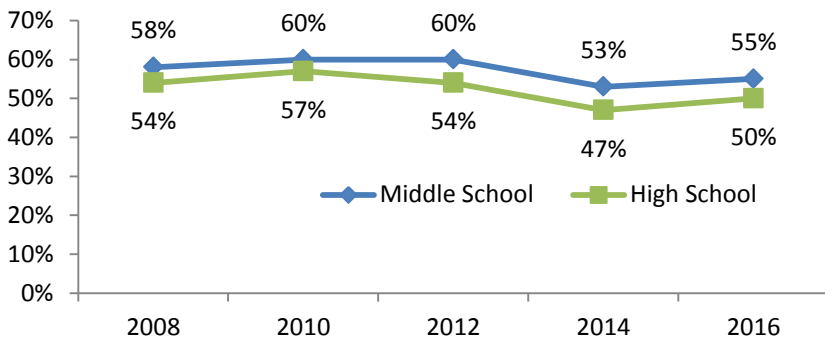


Only 12% of adults reported that they are consuming the recommended amounts of fruits and vegetables per day.

Source (All Tables): MiBRFSS - 95% Confidence Interval

Bay County Health Behaviors

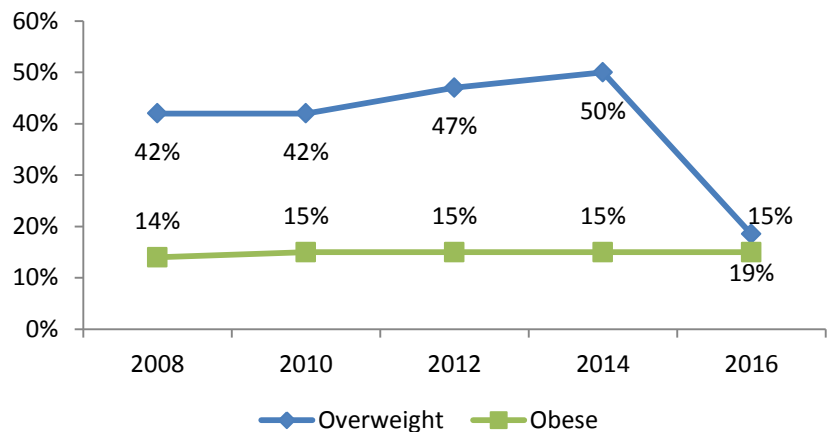
Students Physically Active for at least 60 Minutes or More of the Past 7 Days



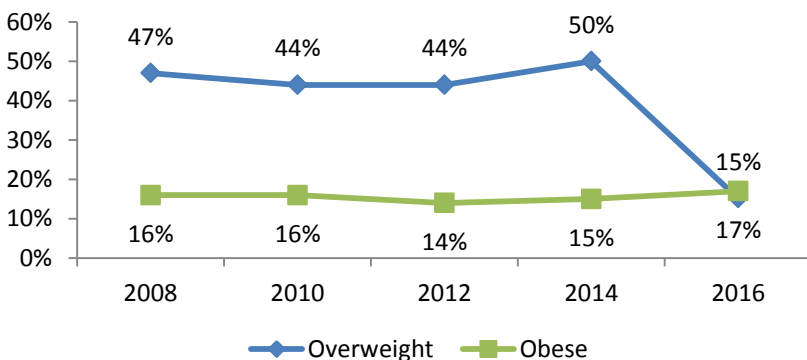
55% OF Bay County middle schoolers and 50% of Bay County high schoolers are getting the recommended amount of physical activity.

The percentage of overweight middle school students dropped from 50% to 19% in 2016. The percentage of obese middle school students in Bay County has stayed consistent.

Middle School Students Obese or Overweight

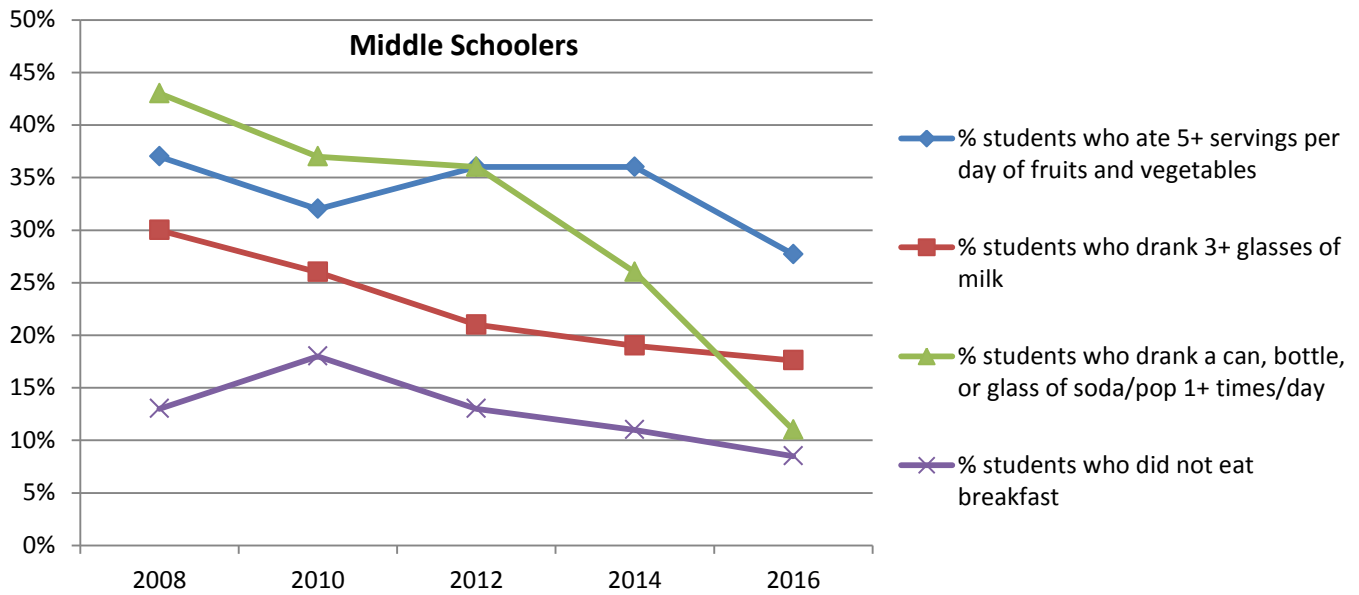


High School Students Obese or Overweight



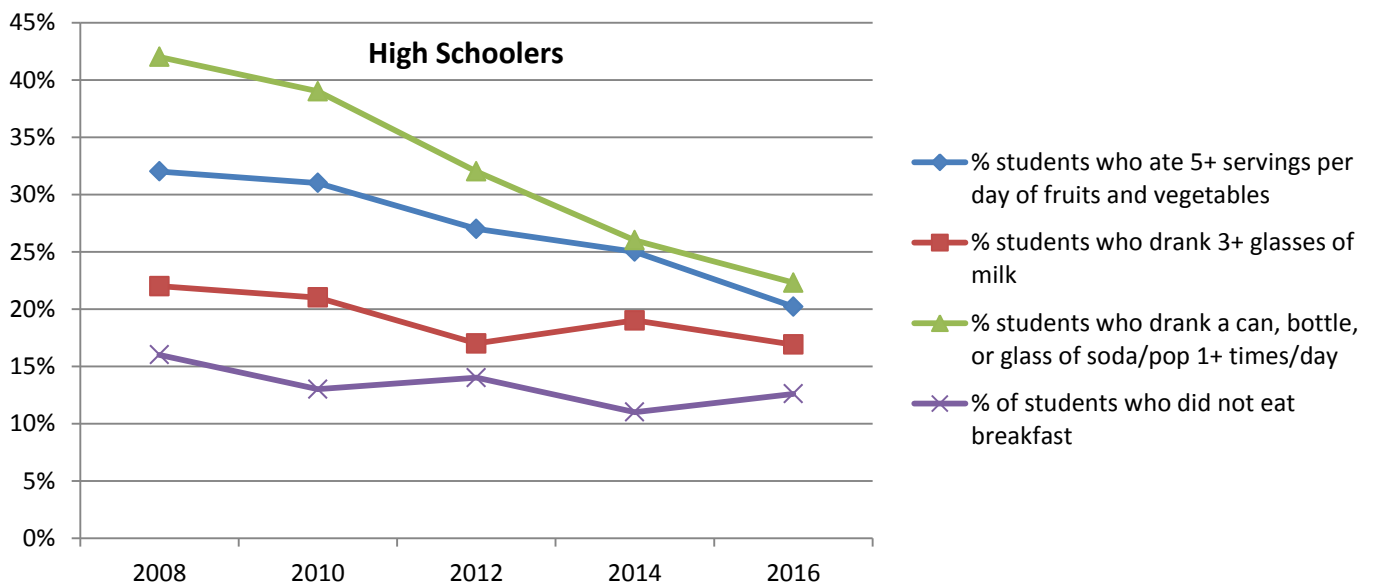
The percentage of obesity in high school students has remained consistent over the past few years. The percentage of overweight high schoolers also dropped drastically between 2014 and 2016.

Bay County Health Behaviors



The percentage of students who drank 3+ glasses of milk and the percentage of students who did not eat breakfast has remained relatively consistent for both age groups over the past few years.

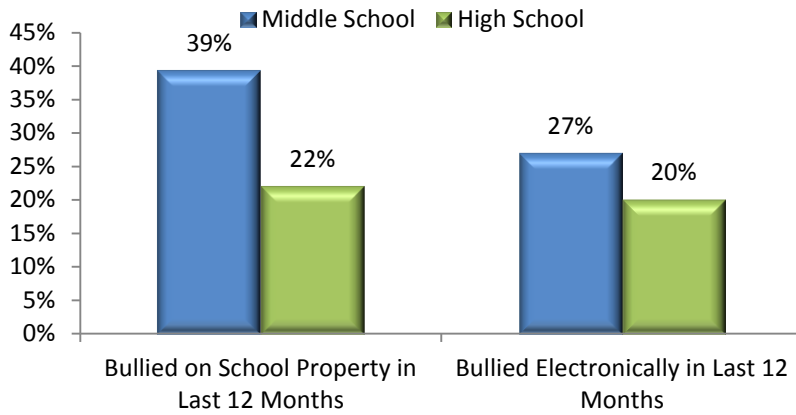
The percentage of students who ate 5+ serving per day of fruits and vegetables and the percentage of students who drank a can, bottle, or glass of soda/pop 1+ times/day has been steadily decreasing for both age groups over the past 9 years.



Source (All Tables): Michigan Profile for Healthy Youth

Bay County Health Behaviors

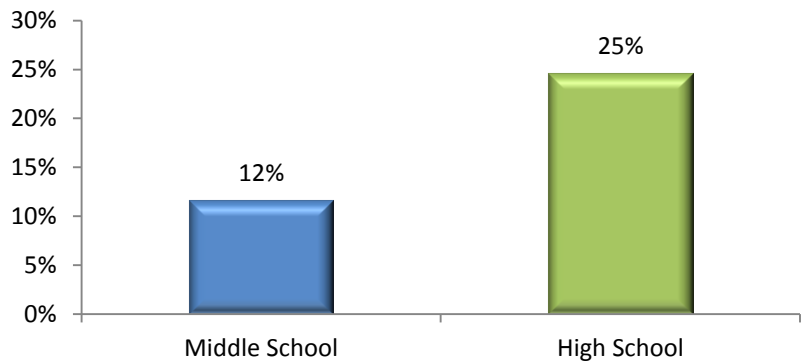
Percent of Students Who Were Bullied in the Last 12 Months



Bullying occurs more frequently amongst middle schoolers than high schoolers in Bay County.

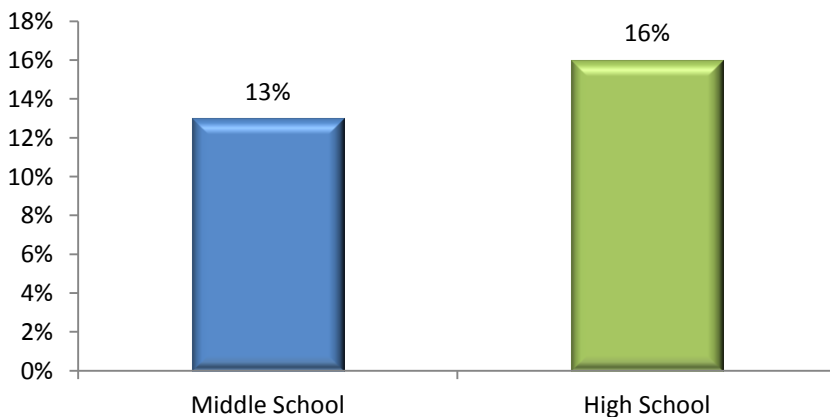
Majority of bullying occurs on school property for both middle and high school students.

Percent of Students whose Parents Ask Whether Their Homework is Done



It is more common for high school students to have their parents ask them if they have completed their homework.

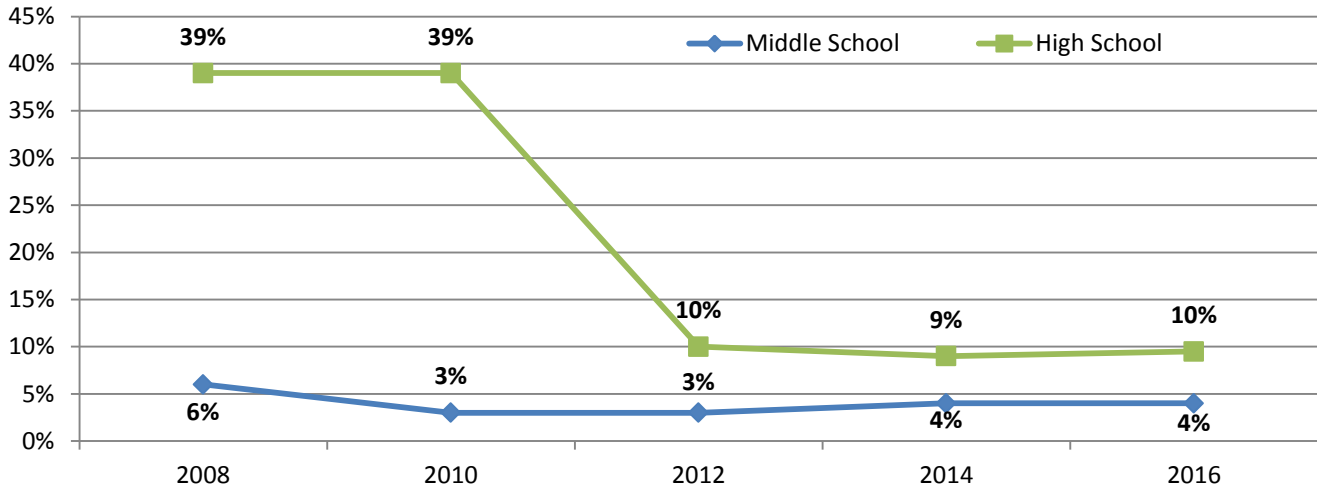
Percentage of Students Whose Parents Would Not Know If They Did Not Come Home On Time



More high schoolers reported that their parents would not know if they did not come home on time.

Bay County Health Behaviors

Percent of Youth Who Have Smoked Cigarettes in the Past 30 Days

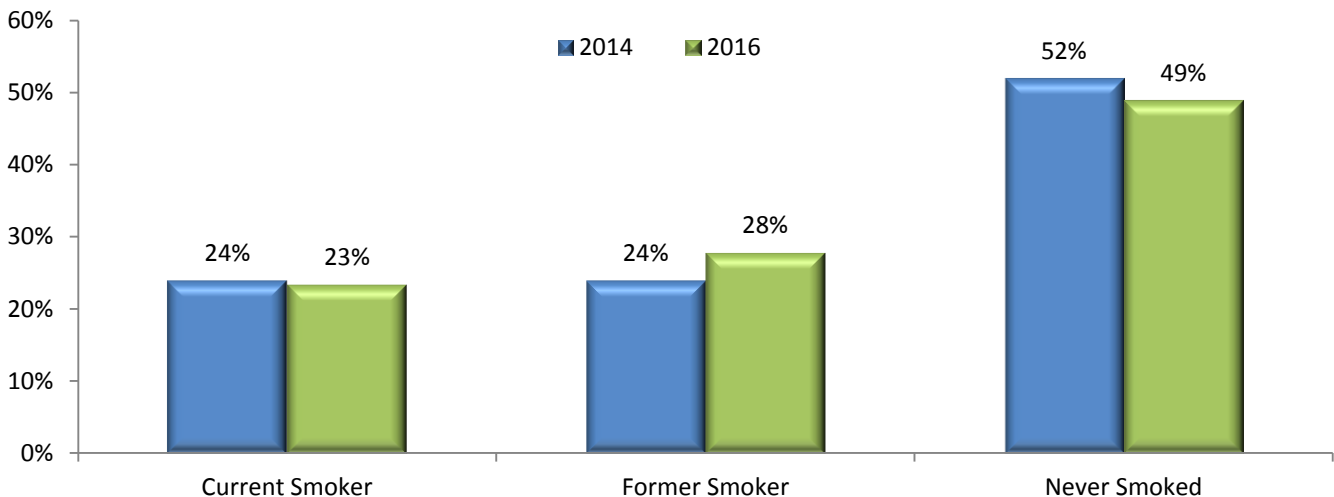


Source: Michigan Profile for Healthy Youth

The percent of middle schoolers in Bay County that have smoked cigarettes continues to remain low. The percentage of high school students that smoke also continues to remain low after the drastic drop in 2012.

Current smokers in Bay County have slightly decreased but not significantly since the previous two years. The percentage of former smokers in Bay County has increased since 2014.

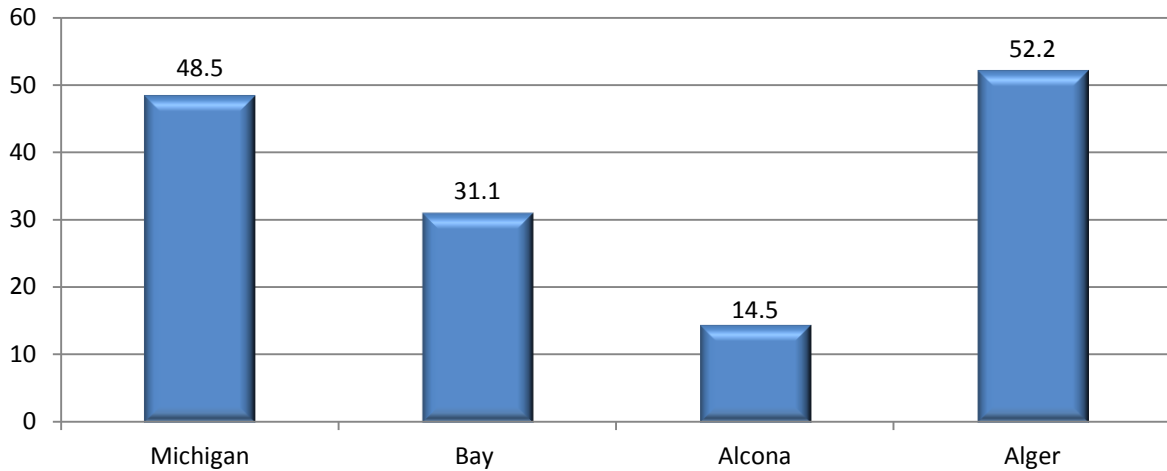
Smoking Behavior Among Adults



Source: MiBRFSS 2014-2016, 95% Confidence Interval

Bay County Health Behaviors

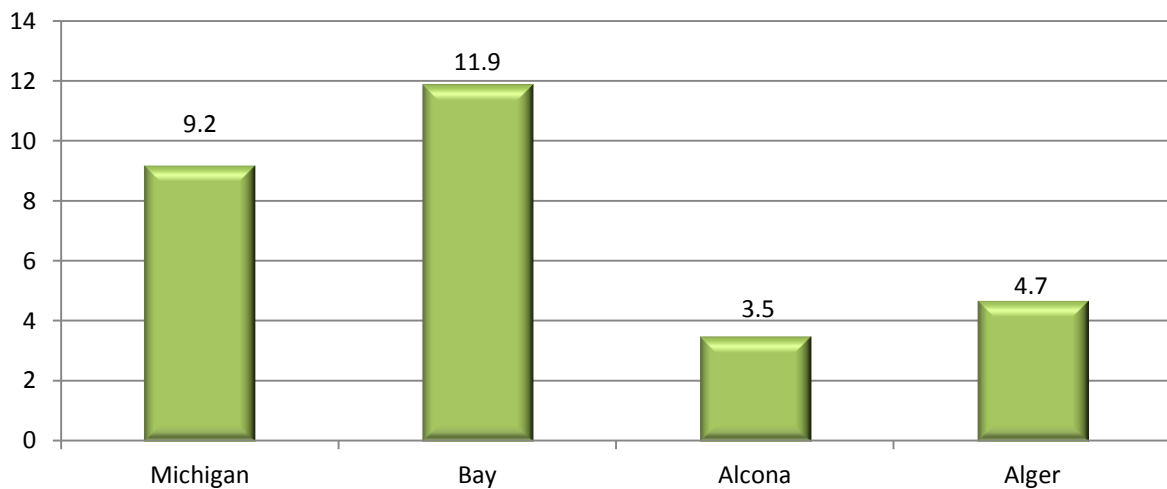
Number of Reported Violent Crime (Group A) Offenses Per 1,000 Population



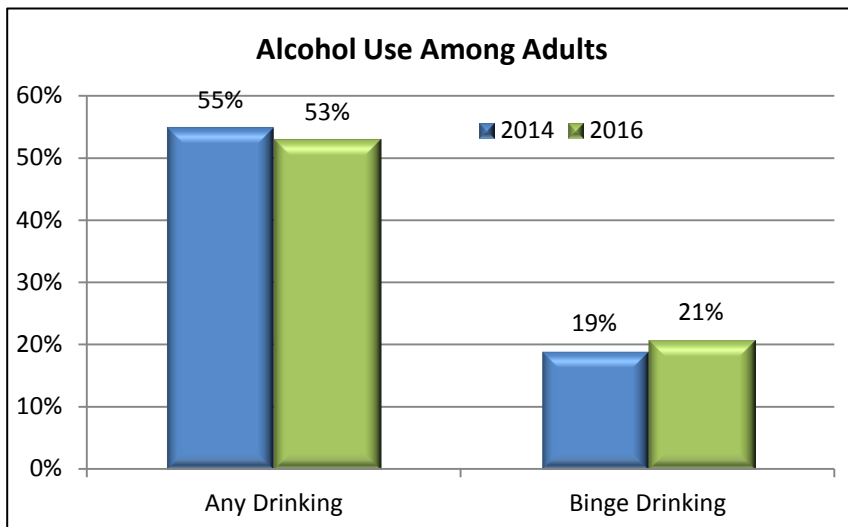
Bay County has less reported violent crime offenses per 1,000 population compared to Michigan and Alger County.

However, Bay County has a higher domestic violence rate than Michigan and other Michigan counties.

Domestic Violence Rate per 1,000 Population



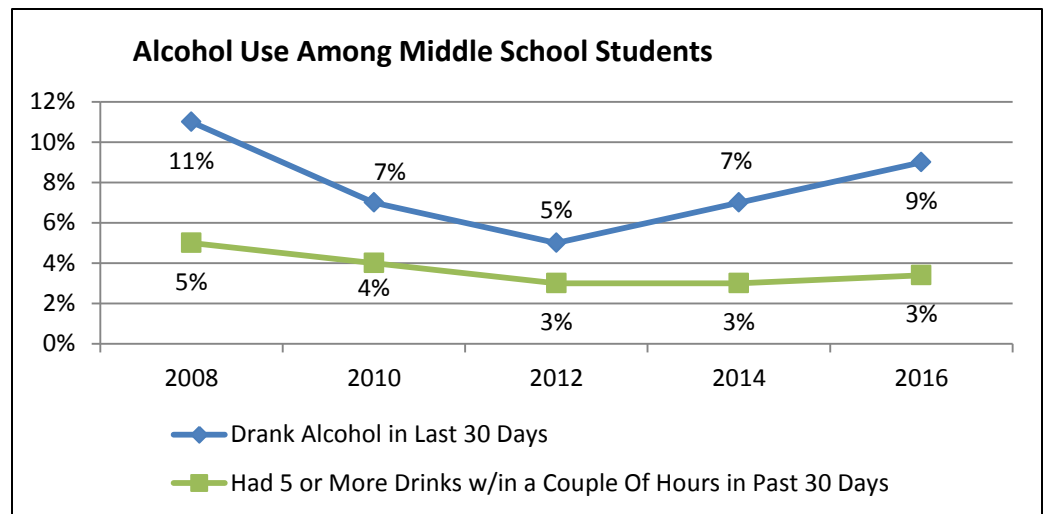
Bay County Health Behaviors



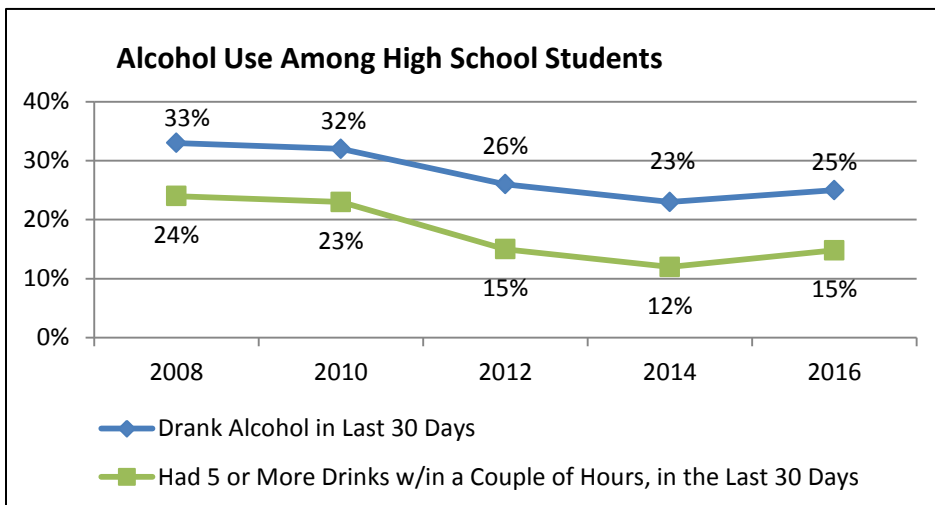
There was not a significant change in any drinking between 2014 and 2016. However, binge drinking in Bay City increased.

Source: MiBRFSS 2014-2016, 95% Confidence Interval

9% of middle schoolers in Bay County have reported that they have used alcohol which is a slight increase from 2014-2016.



Source: Michigan Profile for Healthy Youth

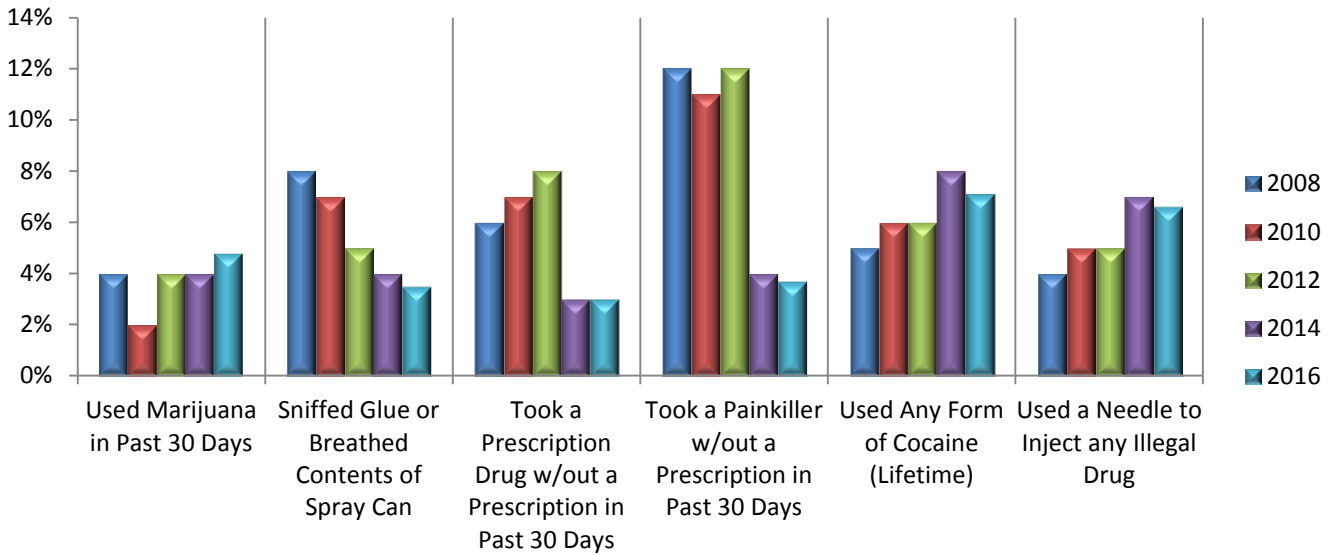


The percentage of high school students in Bay County that have used alcohol has increased slightly from 2014-2016.

Source: Michigan Profile for Healthy Youth

Bay County Health Behaviors

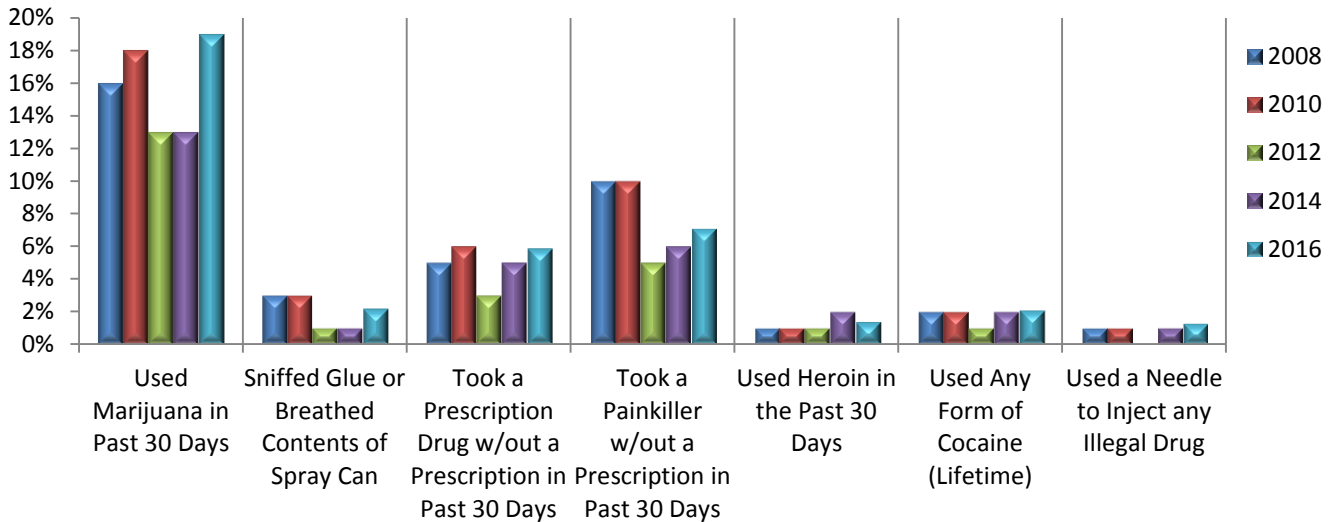
Other Drug Use Among Middle School Students



Looking at other drug use among middle schoolers, the most commonly used drug in 2016 was any form of cocaine followed closely by using a needle to inject any illegal drug.

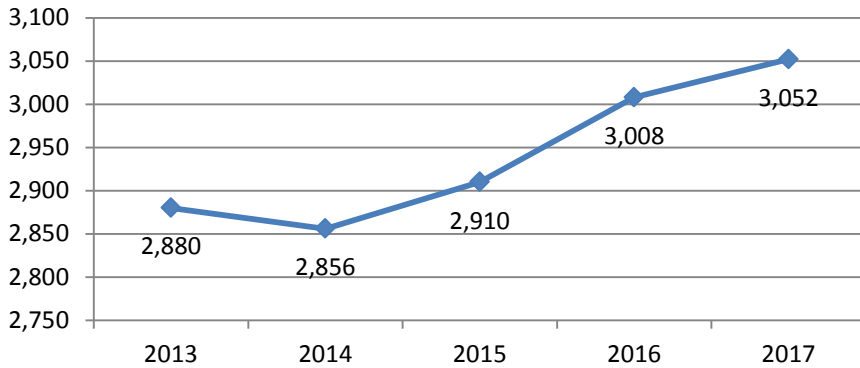
Among high school students in Bay County, the most frequently used drug in 2016 was marijuana.

Other Drug Use Among High School Students



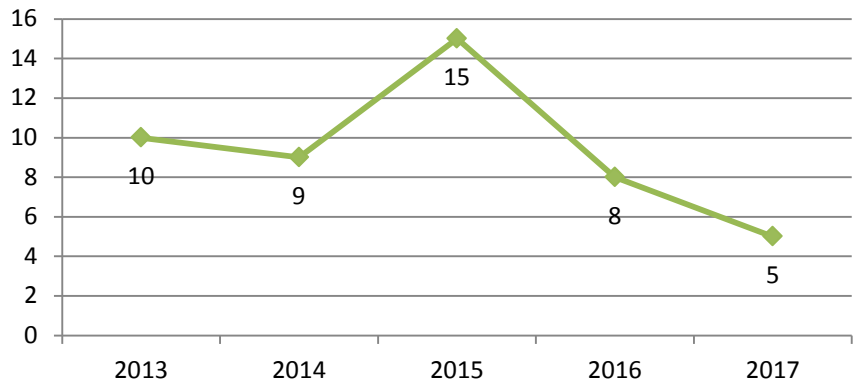
Bay County Health Behaviors

Total Crashes in Bay County



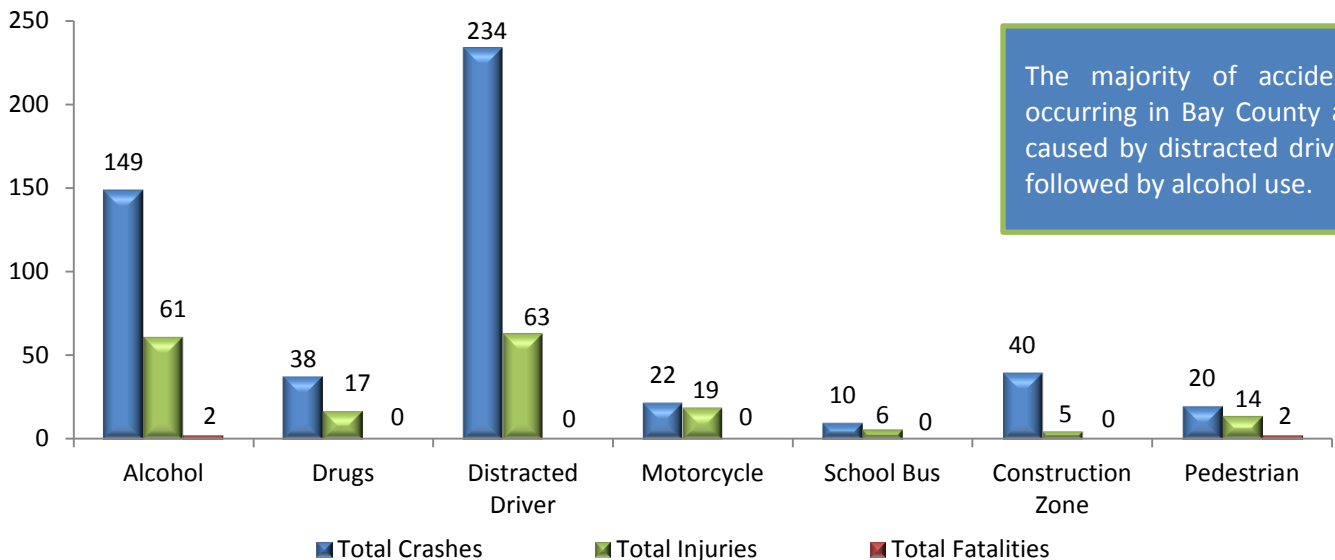
The number of total crashes in Bay County has been steadily increasing since 2014.

Fatal Crash Trend in Bay County



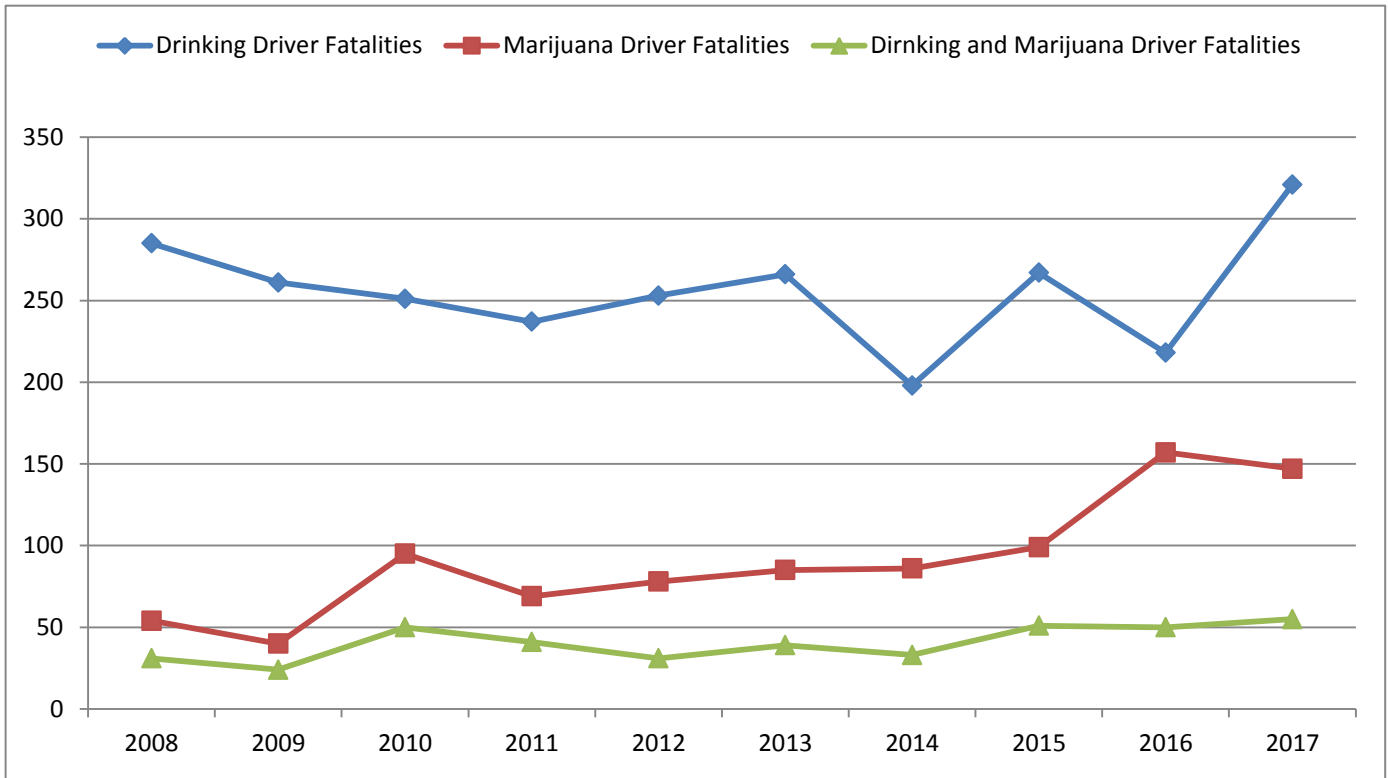
Even with a steady increase in the total number of crashes in Bay County, the number of fatal crashes occurring in Bay County has steadily been decreasing since 2015.

Type of Crashes in Bay County - 2017

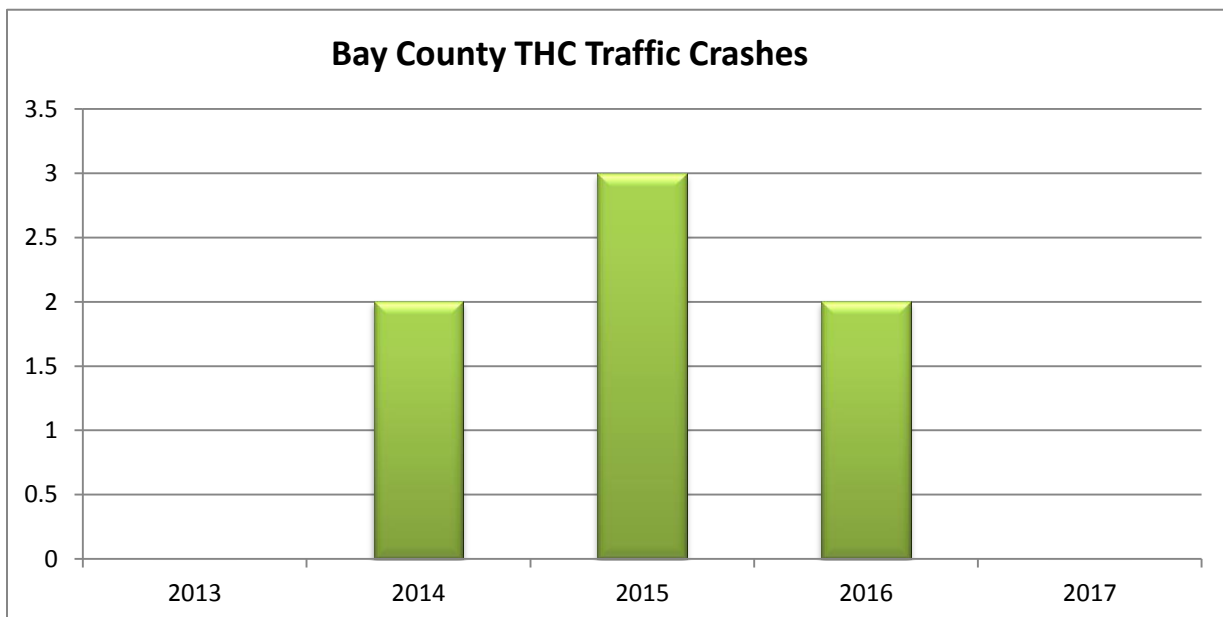


The majority of accidents occurring in Bay County are caused by distracted drivers followed by alcohol use.

Bay County Health Behaviors



Over the ten years, traffic fatalities due to alcohol and/or marijuana use have increased continued to increase. In just one year Bay County saw at 47% increase in fatalities due to drinking and driving crashes.



Source (All Tables): Michigan State Police Traffic Crash Statistics

Next Steps

The Bay County Health Department will work with partnering organizations to determine health priority areas based on the findings of the health assessment. Once the priorities are identified, the group will develop a work plan to address each priority area.

Data Sources

1. County Health Rankings (2016 and 2018)
(<http://www.countyhealthrankings.org/app/michigan/2016/overview>)
2. Kids Count Data Center
(<http://datacenter.kidscount.org/>)
3. Michigan Behavioral Risk Factors Surveillance Survey
(http://www.michigan.gov/mdhhs/0,5885,7-339-71550_5104_5279_39424-134707--,00.html)
4. Michigan Department of Health and Human Services – Health Statistics and Reports
(http://www.michigan.gov/mdhhs/0,5885,7-339-73970_2944---,00.html)
5. Michigan Incident Crime Reporting
(https://www.michigan.gov/msp/0,4643,7-123-3493_72391---,00.html)
6. Michigan Profile for Healthy Youth
(<https://mdoe.state.mi.us/schoolhealthsurveys/ExternalReports/CountyReportGeneration.aspx>)
7. Michigan State Police Traffic Crash Statistics
(https://www.michigan.gov/msp/0,4643,7-123-1586_3501_4626---,00.html)
8. U.S. Census Bureau, American Community Survey
(http://factfinder.census.gov/faces/nav/jsf/pages/guided_search.xhtml)