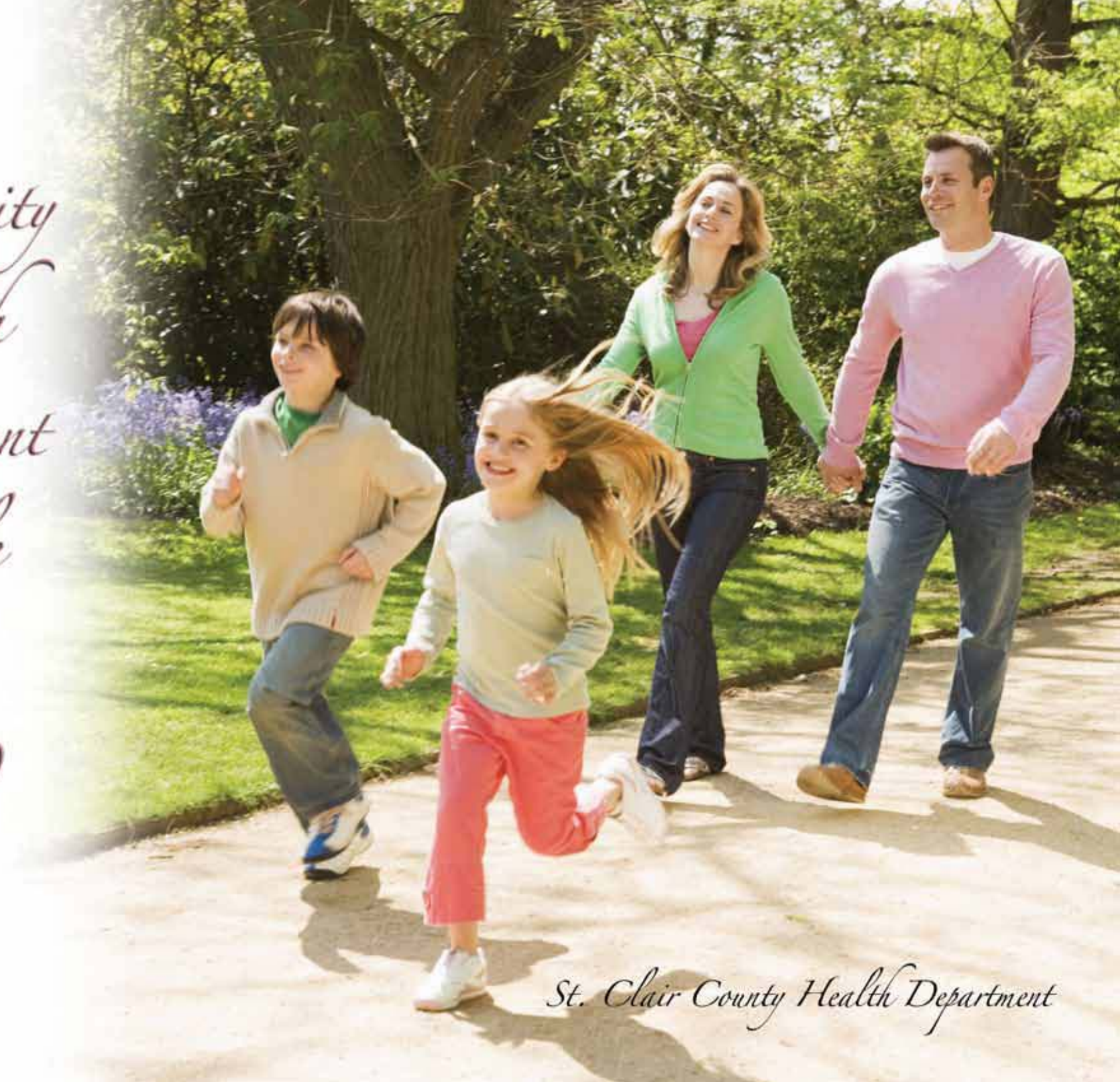


*Community
Health
Assessment
Profile*

2010



St. Clair County Health Department

December 2010

St. Clair County residents:

Measuring and monitoring the community's health is the responsibility of the St. Clair County Health Department. In partnership with local hospitals, we are pleased to present the 2010 St. Clair County Community Health Profile.

The 2010 St. Clair County Behavioral Risk Factor Survey (BRFS), the assessment tool that provided data for this report, was a telephone survey conducted among St. Clair County adult residents during 2009 and 2010. The survey was conducted by the Office for Survey Research at Michigan State University and 573 interviews were completed. By agreement with the Michigan Behavioral Risk Factor Survey (MiBRFS) coordinators at Michigan Department of Community Health, these 573 interviews were combined with an additional 136 interviews from the MiBRFS for a total of 709 completed interviews.

This report is an assessment of the health status and health behaviors of St. Clair County adults. It represents a collective partnership and commitment to improving the health of our residents by collecting and analyzing health related data to drive health improvement activities.

It is our hope that by sharing this information we will contribute to a county-wide effort to make St. Clair County a healthy, more enjoyable place to live!



Annette Mercatante, MD
Medical Director - Health Officer
St. Clair County Health Department



Introduction

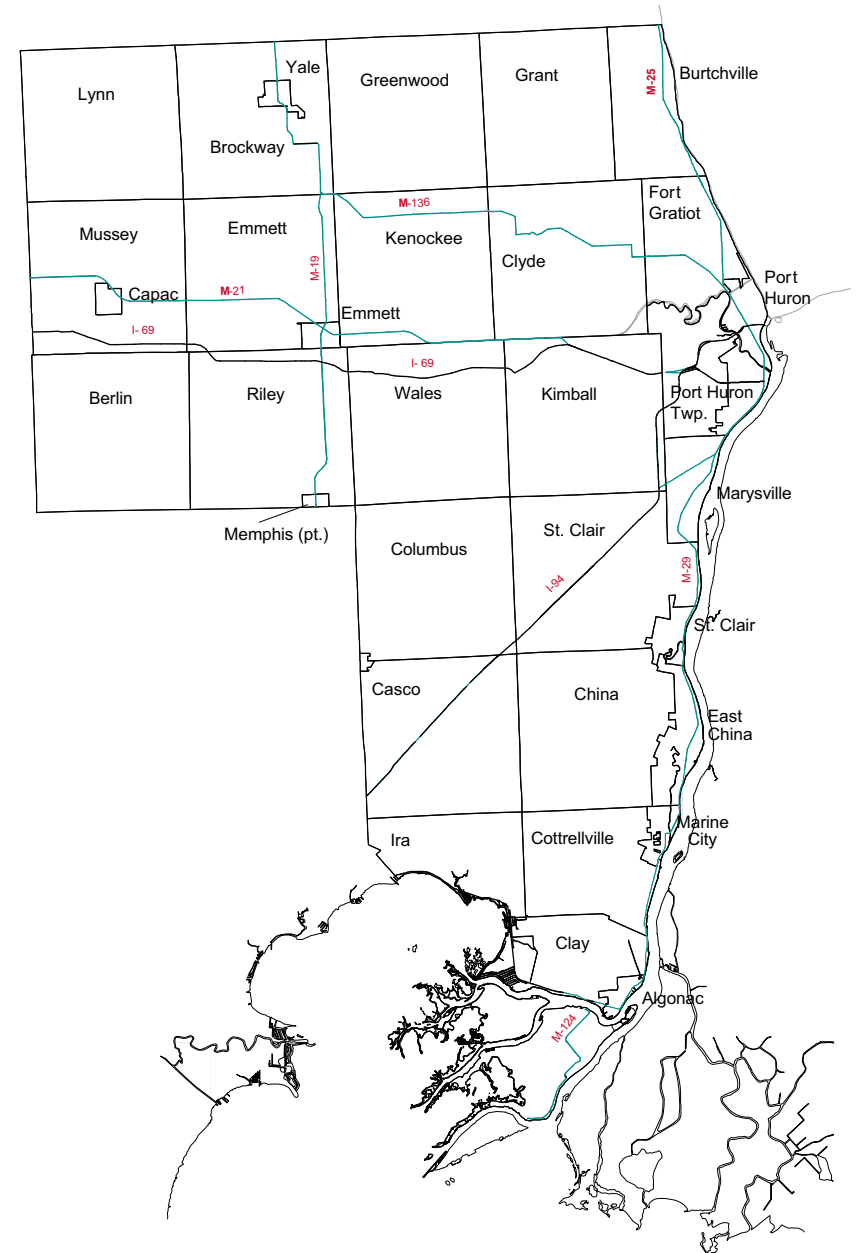
The following report analyzes the 2010 Community Health Survey results by gender, age group, education attainment and household income. Gender differences often exist in health related behaviors such as care seeking, health risk behavior such as smoking and drinking alcohol, nutritional behaviors and exercise. Differences also exist between the diseases that affect both genders and with the utilization of preventative and curative health services.

Age differences exist primarily because as individuals grow older they are increasingly exposed to health risks. Aging increases the likelihood of disease and necessitates the increase in screening, diagnostic and treatment seeking behaviors.

Educational attainment is a significant factor for health and health related behaviors. Education influences health in three ways. First, education is associated with knowledge, literacy and understanding the consequences of behavior, both positive and negative. Second, education dictates the type and place of employment, health benefits associated with employment and the income derived from employment. Third, education provides a sense of control, social standing and the development of a social support network.

Income is associated with health. The old adage that *wealth equals health* still has relevance today. Income can influence your health related circumstances and behaviors. Health disparities are often most significant when analyzed by income and race. The relationship between income and health is complex and ranges from low income areas not having access to fresh fruit and/or vegetables, lack of access to primary health care and safe community based recreational opportunities to high income communities built without sidewalks for exercise.

Lastly, income can also reflect persons who have left the workforce, generally age 65 years and older. Income is lowest among the youngest and oldest adult age groups. Income excludes savings and other assets.



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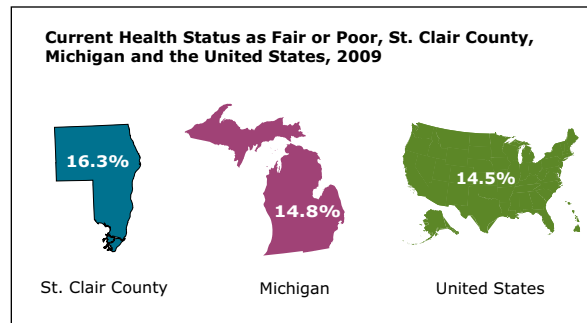
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Current Health Status

How healthy people feel is a significant measure of a community's quality of life. Good health is a product of genetics as well as personal behaviors such as exercising and eating nutritiously and avoidance of risky behaviors. The level of good health in a community is an indicator of many things, such as opportunities for recreation, appropriate nutrition, exercise, access to preventive health care and a clean environment. Lack of good health can often indicate poor environmental conditions.

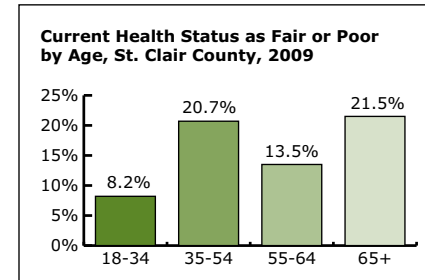
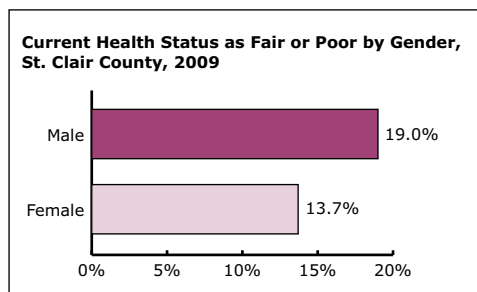
Good health, or lack thereof, is measured by asking people about their current health status, as well as how many days in the last month they have experienced poor physical or mental health.



Overall, 83.7% of St. Clair County residents reported their health as excellent, very good, or good. However, 16.3% of St. Clair County residents reported their general health as fair or poor in the

month before the survey. This was slightly higher than the percentage of Michigan residents that reported fair or poor health in 2009, which was 14.8%, and the national average of 14.5%.

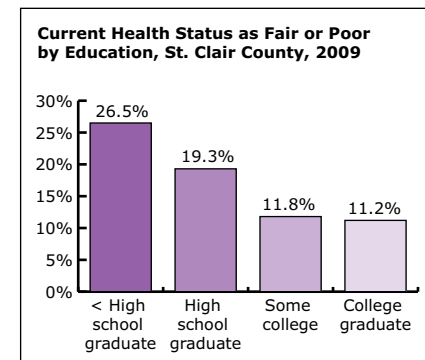
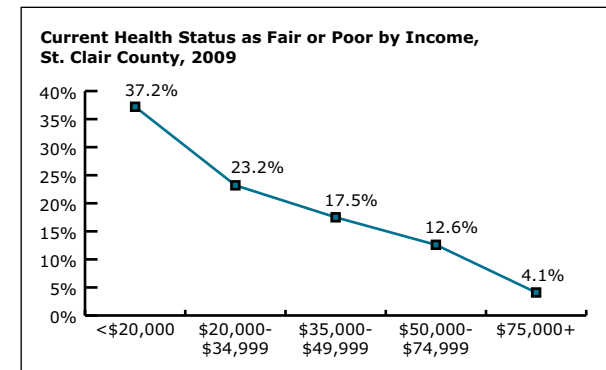
Having fair or poor health was also associated with gender, age, income level, and educational attainment. St. Clair County males were more likely than females to report fair or poor health (19.0% compared to 13.7%).



The percentage of fair or poor general health generally increased with age. St. Clair County residents, ages 65 or older, were more likely to report having fair or poor health than 18-34 year-olds.

Interestingly, residents in the 55-64 year-old age group reported better health than those in the 35-54 year-old age group.

Residents with incomes of less than \$20,000 per year were more than three times as likely to report having fair or poor health than residents making \$50,000 or more per year.

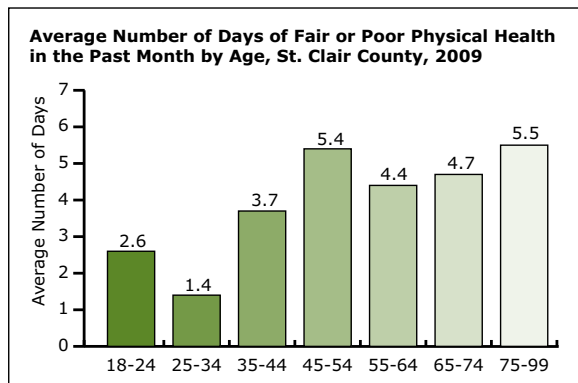


Similarly, residents with less than a high school education were more than twice as likely to report having fair or poor health than those with a college degree.

Days of Fair or Poor Physical Health

Days of fair or poor physical health are a measure of the impact that injury and illness have upon our population. People who are sick with acute or chronic illnesses or people who are injured may need to miss work or otherwise be unable to conduct their usual daily activities.

St. Clair County residents reported an average of 3.9 days of fair or poor physical health in the 30 days prior to the survey. Females reported a higher average number of days of fair or poor physical health than males (4.6 to 3.0).



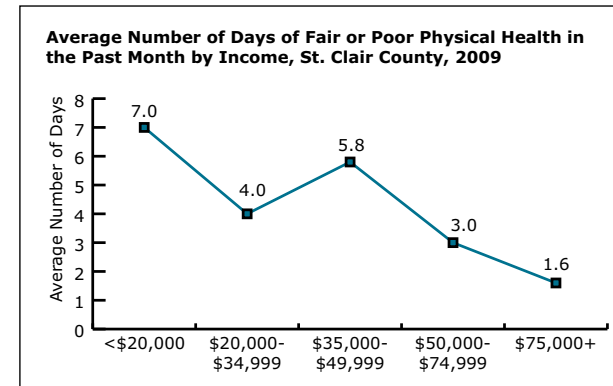
The highest average number of days of fair or poor physical health was reported by residents ages 75 and older (5.5 days), but residents ages 45-54 reported almost as many (5.4 days). This was more than two times the average number of fair or poor physical health days reported by the youngest adults, ages 18-24. The lowest average number of days was reported by the 25-34 age group (1.4 days).

St. Clair County residents who have at least some college education were significantly less likely to report having days when their physical health was not good.

St. Clair County residents with lower incomes reported more days of fair or poor physical health than their counterparts in higher income brackets. People in households with incomes less than \$20,000 annually were more

The highest average number of days of fair or poor physical health was reported by residents ages 75 and older (5.5 days), but residents ages 45-54 reported almost as many (5.4 days). This was more than two times the average number of fair or poor

In 2008, the estimated average number of days per month Michigan adults did not have good physical health was 3.6 days.



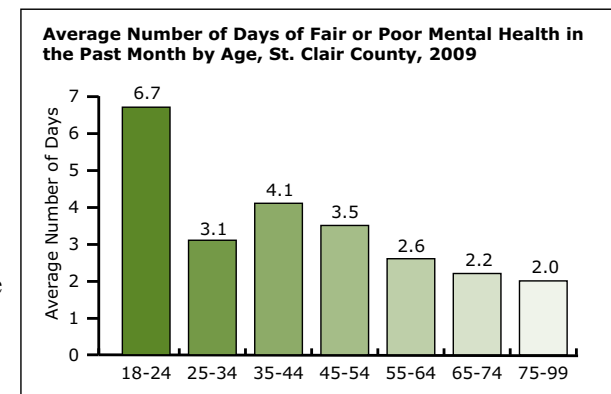
than four times as likely to experience fair or poor physical health days than those in households earning over \$75,000 per year.

Days of Fair or Poor Mental Health

Days of fair or poor mental health can have a significant impact on residents' ability to fully participate in their community. Many St. Clair County residents reported experiencing some degree of stress, anxiety, depression, or emotional problems. On average, residents experienced 3.5 days of fair or poor mental health in the 30 days prior to the survey.

Females reported a higher average number of days when their mental health was fair or poor than males (4.3 compared to 2.6). The number of days of fair or poor mental health decreased with age.

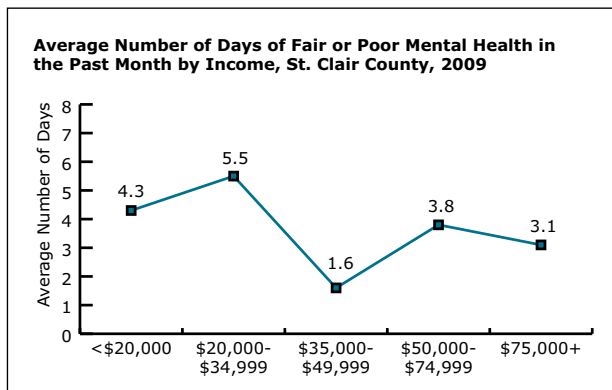
The youngest adults (ages 18-24) reported the highest number of fair or poor mental health days (6.7) followed by those 35-44 years old (4.1).



The number of fair or poor mental health days increased in parallel with increasing levels of education, until reaching the highest education level when it significantly decreased.

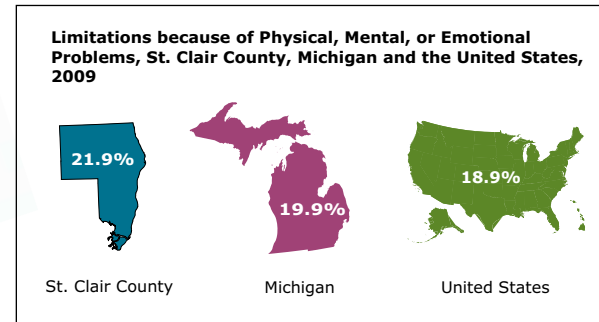
St. Clair County residents with college degrees reported 1.9 fair or poor days of mental health, which was two and a half times less than those with only some college (4.7 days).

In 2008, the estimated average number of days per month Michigan adults did not have good mental health was 3.5 days.



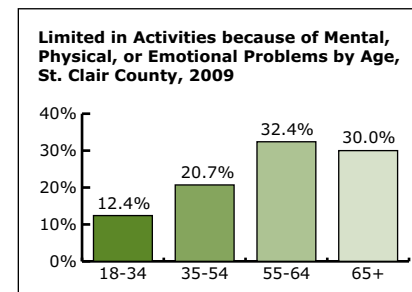
In general, St. Clair County residents with lower incomes reported more days of fair or poor mental health than those residents with higher incomes.

Limitations Because of Physical, Mental or Emotional Problems



Almost 22% of adult residents of St. Clair County reported a higher rate of limitations than the statewide rate of 19.9% and the national rate of 18.9%.

While the rates of limitations by gender were similar, (19.0% male and 24.7% female), there was an expected increase with age.



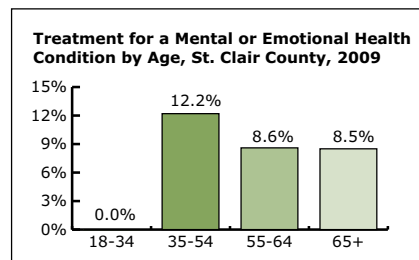
Nearly one-third of residents over 55 years of age reported limitations.

Education and income are also associated with reported limitations.

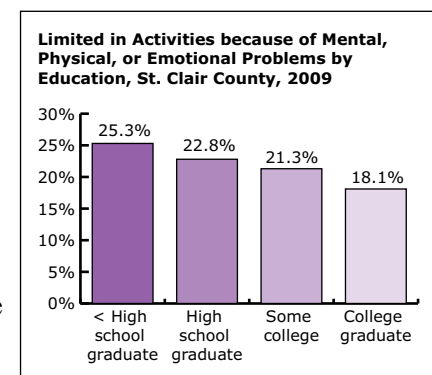
Mental Health Treatment

During 2009, 7.4% of St. Clair County residents reported being treated for a mental or emotional health concern.

St. Clair County residents in the 35-54 year-old age group reported the highest treatment rate at 12.2%.



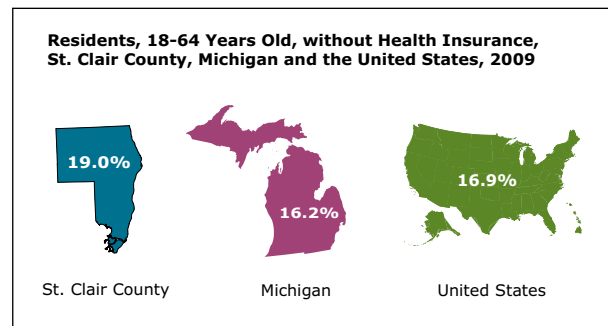
One-quarter of residents with less than a high school education reported limitations with the rate decreasing with educational attainment. Similarly, over 30% of St. Clair County residents with incomes less than \$35,000 reported limitations. Persons with incomes of \$75,000 or more reported half that rate, 14.1%.



Access to Care

Health Insurance Coverage

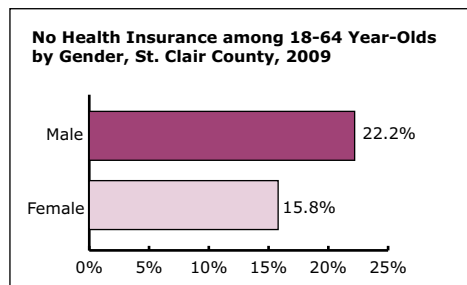
Health insurance coverage is a significant factor in accessing health screening, prevention, and treatment services. Residents without health insurance are more likely to avoid seeking health care services early when experiencing illness or other negative health conditions. This delay leads many residents to seek care only once a condition has worsened to the point where it is more difficult and expensive to successfully treat.



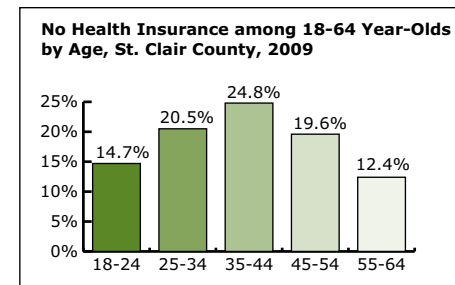
Most adults ages 65 and older have health insurance coverage through Medicare. Among St. Clair County adults ages 18-64, 19% reported not having health care insurance. This is higher than the state (16.2%) and

national (16.9%) percentages of uninsured adults ages 18-64. The number of uninsured adults in St. Clair County has risen substantially since 2005, when the percentage was 11.7%.

Males were more likely than females not to be covered by any type of health insurance (22.2% compared to 15.8%). Low income females with children are often covered through Medicaid.



Health care coverage varied by age. Residents under age 24 or between 55 and 64 years old were less likely to be insured than those ages 25 to 54. This may be due to the fact that health insurance is largely employer-

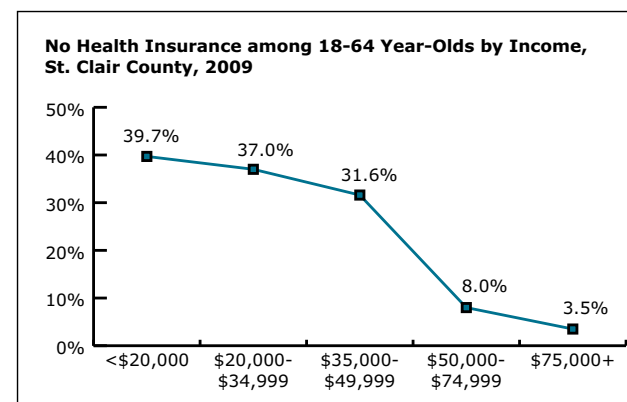
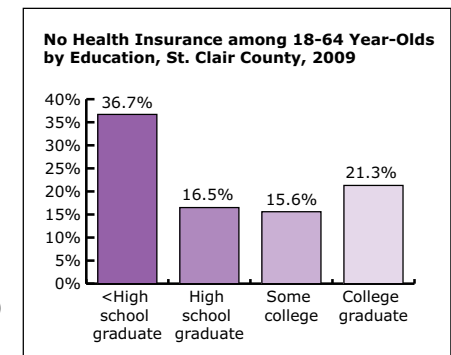


based, and persons in the middle age groups are more likely to be employed in the full-time workforce.

Education levels are a predictor of income and is usually a strong predictor of

health care coverage. However, the current economic challenge faced within the county may explain the high rate of college graduates being without health insurance.

There is a direct correlation between having greater income and being more likely to have health insurance. Residents in households earning \$50,000 or more annually were at least four times more likely than those earning less than \$50,000 to be insured.



Residents with annual household incomes of less than \$20,000 were over 11 times more likely not to have health insurance than those earning \$75,000+.

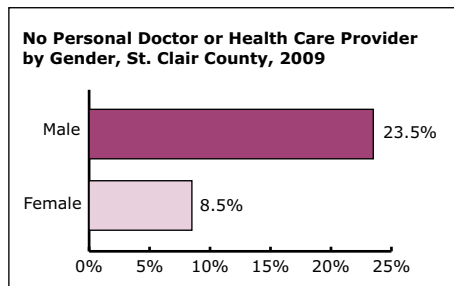
No Personal Doctor or Health Care Provider

Having health insurance can influence whether residents have a personal doctor. Having a medical home, an identified personal doctor or other primary care physician, is associated with residents who are more proactive regarding their health issues and therefore are more likely to participate in routine age-appropriate screenings and check-ups.



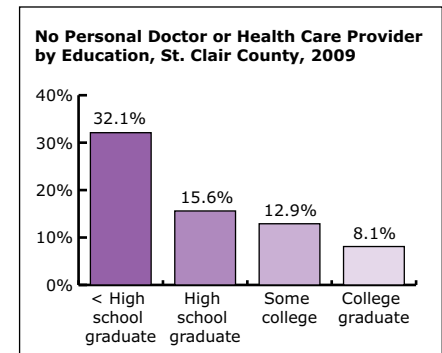
The medical home, also known as the patient-centered medical home (PCMH), is defined as "an approach to providing comprehensive primary care... that facilitates partnerships between individual patients, and their personal providers, and when appropriate, the patient's family"

<http://mipcc.org>

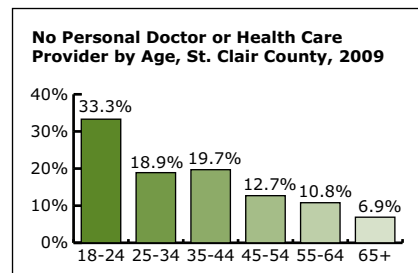


Nearly one quarter of male residents (23.5%) did not have a personal doctor, three times the percentage of females.

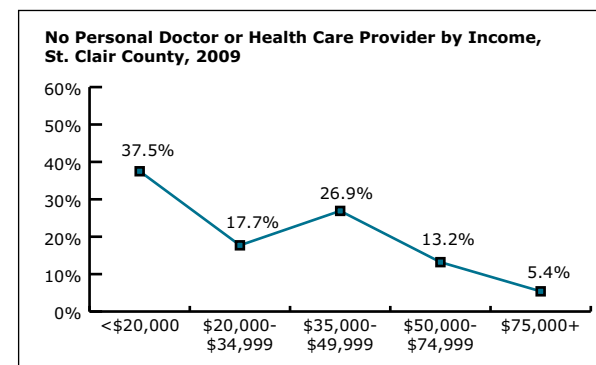
Higher education and income levels also correlated with having a personal doctor. College graduates at 8.1% were four times more likely to have a personal doctor than residents that were less than high school graduates at 32.1%.



Identification of a personal doctor increased with age up to age 65 years and older with only 6.9% reporting not having a personal doctor.



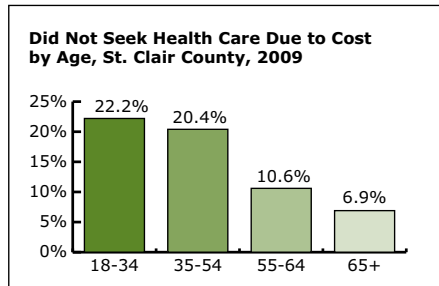
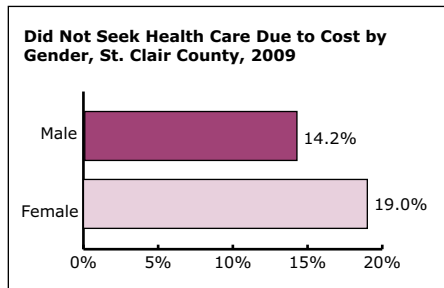
Residents in households with incomes less than \$20,000 were seven times more likely at 37.5%, to not have a medical home than persons with incomes greater than \$75,000 (5.4%).



Foregoing Medical Care because of Cost

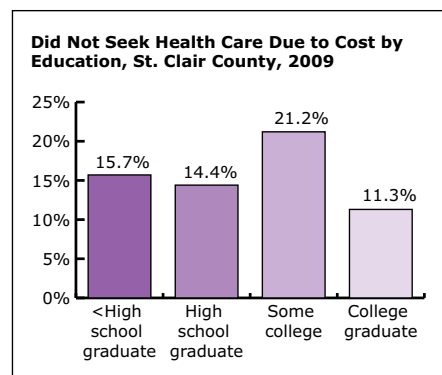
Cost is a barrier to health care. Overall, 16.7% of St. Clair County residents reported there was at least one time in the past year when they did not seek needed medical care because of cost. This was higher than the 12.3% statewide who reported not being able to afford needed care. Among those under age 65 in St. Clair County, the percentage increased to 19.1%.

Female residents at 19.0% reported a higher rate than males at 14.2% of not seeking health care due to cost.

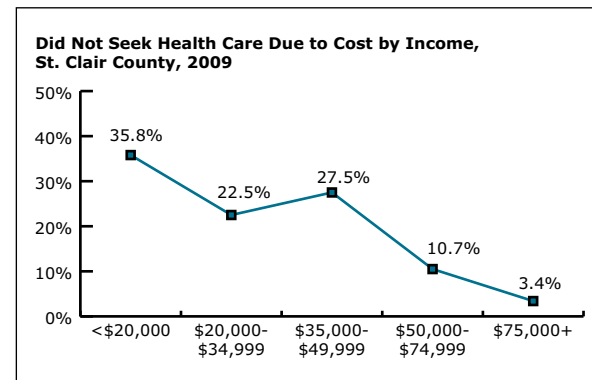


Young adults 18-34 years old were more likely to have not received care due to cost than older adults.

Those with some college (21.2%) reported a higher rate of not seeking care because of cost than the other educational categories.



Over half of all residents with health insurance (52.1%) reported they did not get the care they needed at least once due to the cost of care.



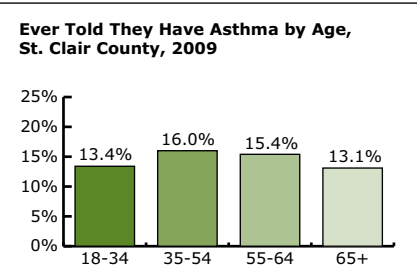
Similarly, St. Clair County residents with lower incomes sought care less frequently than those with higher incomes due to the cost of care.

Having health insurance does not necessarily mean that residents feel protected. High deductibles, co-pays, and other out-of-pocket medical costs can cause residents with health insurance to exhibit the same delayed response to seeking care shown by uninsured individuals. This delay in care-seeking contributes to high health care costs overall, as it prohibits conditions to be treated early, when care is often simpler and less expensive.

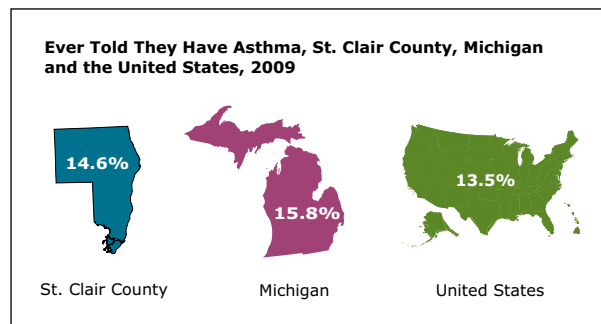
Health Conditions

Asthma

Asthma is a chronic lung disease characterized by difficulty breathing, wheezing, chest tightness, and coughing. Asthma is one of the most common chronic diseases, and has many triggers, including environmental or household irritants, allergens, or viral infections.

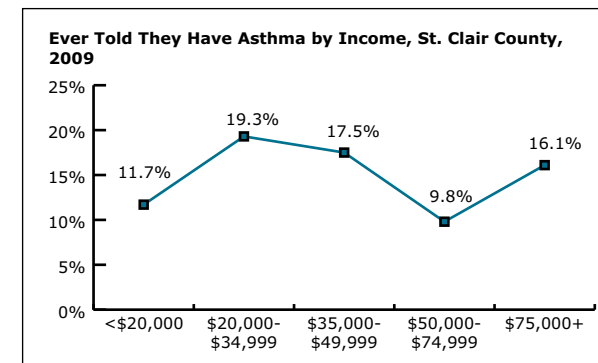


Ever told rates of asthma increased slightly with age through age 54, then declined for the 55 years and older population.

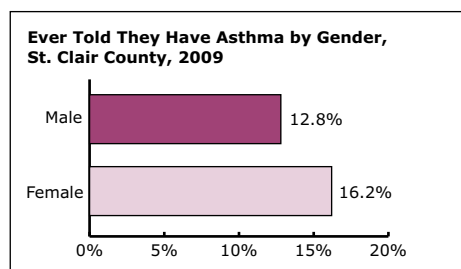


St. Clair County's overall ever told asthma rate among adults was 14.6% in 2009, which was lower than the statewide rate of 15.8%, but higher than the national rate of 13.5%.

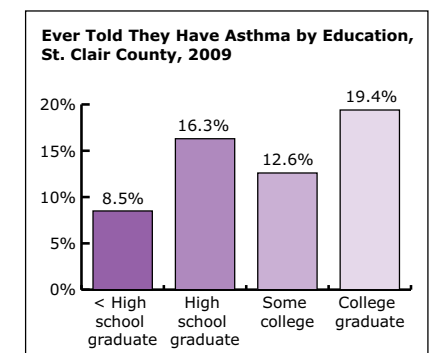
The percentage of residents with ever told asthma was greatest among those with incomes between \$20,000 and \$34,999, but there were no significant differences in the relationships between income levels and asthma diagnosis.



There was a significant difference in ever told asthma rates between male and female St. Clair County residents. The rate of asthma among females of 16.2% more closely resembled the overall asthma rate among residents of Michigan, 15.8%. The overall rate for St. Clair County males was significantly lower at 12.8%.

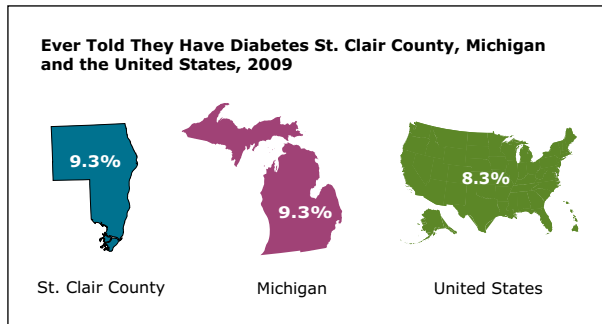


Education level was correlated to ever told asthma. Though the percentage of ever told asthma varied with education level, college graduates reported the highest levels. This may reflect better access to diagnosis and treatment.



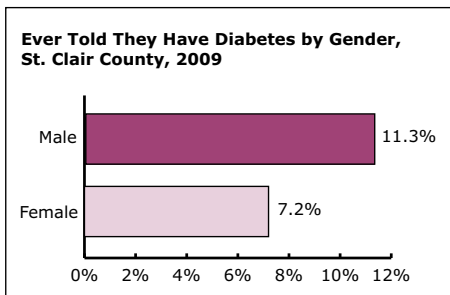
Diabetes

Type II diabetes, formerly known as “adult-onset diabetes,” is a chronic disease associated with obesity, poor diet, and lack of physical activity. As such, it is the most preventable chronic disease, and controllable with proper medical care and attention to lifestyle.



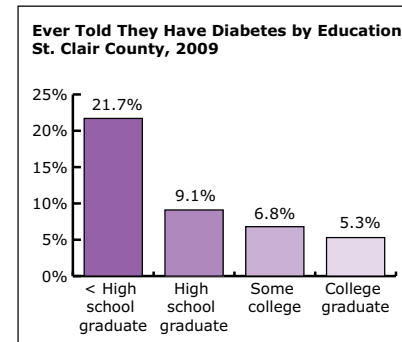
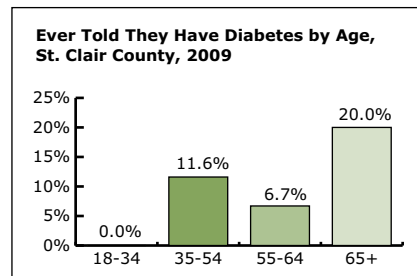
In 2009, the percentage of St. Clair County residents with diabetes was 9.3%, up from 6.2% in 2005. This is the same as the percentage of Michigan residents

living with diabetes, and slightly higher than the national rate of 8.3%. In addition, diabetes researchers suggest that up to 25% of diabetes is undiagnosed.

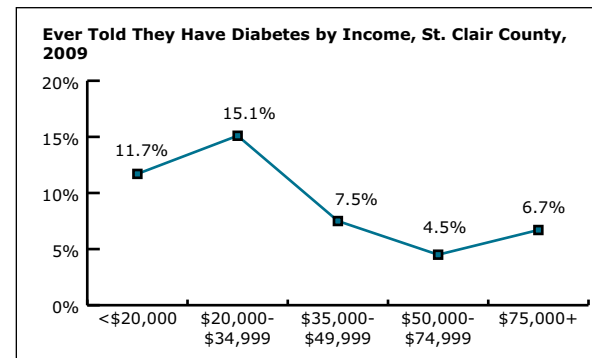


Over 11% of male residents reported being told they have diabetes compared to female residents at 7.2%. The risk of developing Type II diabetes increased with age.

Residents ages 65 years or older were significantly more likely to have been told they have diabetes than younger adults. In St. Clair County, the average age of first being diagnosed with diabetes was 44 years old.

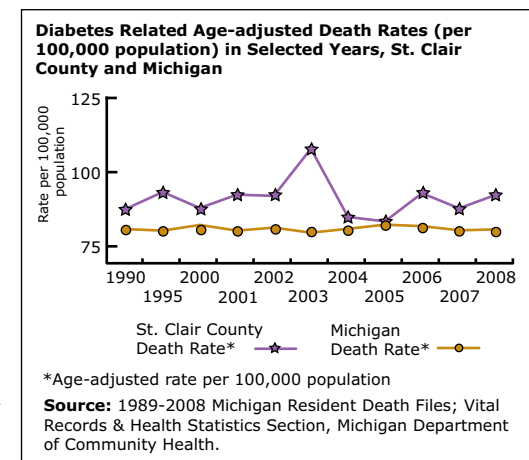


Residents with lower levels of education were more likely to be diagnosed with diabetes. In St. Clair County, those with less than a high school education were four times more likely to have diabetes than a college graduate. A rise in income was associated with lower diabetes rates.



Residents in households earning \$35,000 or more were less likely than those earning less than \$35,000 to be diagnosed with diabetes.

Diabetes related deaths have ranged from 114 in 1990 to 169 in 2008 with a peak in 2003 of 182 deaths. The diabetes age-adjusted death rates in St. Clair County are higher than Michigan during this period, but have remained stable except for the rise in 2003. Single year variation is more common with small numbers of death by specific cancers.



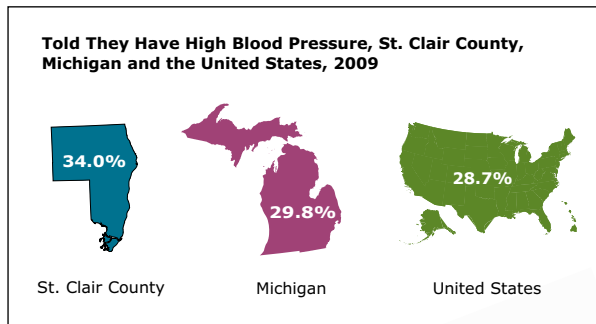
High Blood Pressure (Hypertension)



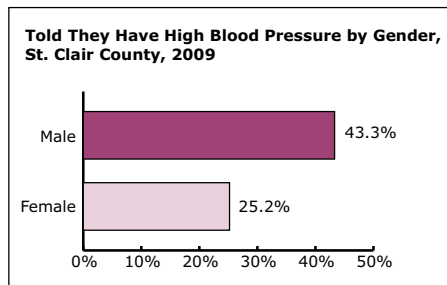
High blood pressure, or hypertension, is a chronic condition where the heart has to work too hard to get blood through the body.

Persons with high blood pressure are at greater risk for stroke, heart attack, heart failure and chronic kidney failure.

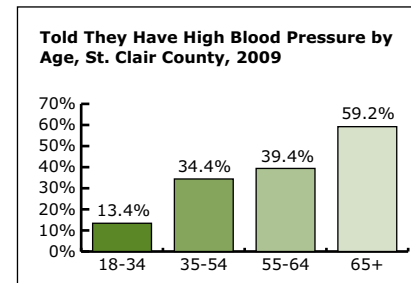
Over one-third of the residents of St. Clair County reported being diagnosed with high blood pressure, which was higher than the Michigan rate of 29.8% and the national rate of 28.7%.



Males reported significantly higher hypertension at 43.3% than females at 25.2%.

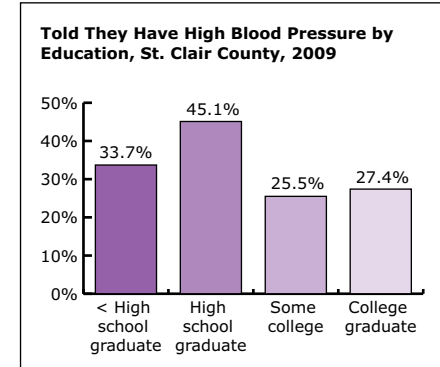


Blood pressure is measured in millimeters of mercury, written like this 120/80. The top number is the systolic pressure - the maximum pressure in the arteries when the heart contracts. The bottom is the diastolic pressure - the maximum pressure in the arteries when the heart is at rest.

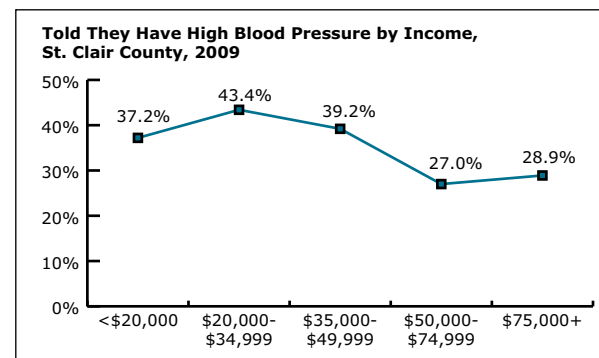


Diagnosed high blood pressure increased with age from 13.4% of 18-34 years old to 59.2% of those age 65 years and older.

There was a significant difference in reported high blood pressure by education attainment with 45.1% of high school graduates reporting hypertension compared to 27.4% of college graduates.



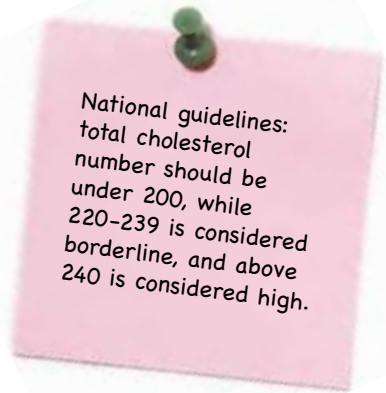
Approximately four out of 10 residents reported high blood pressure in households with incomes less than \$50,000. In households with income greater than \$50,000 it drops to less than three in 10.



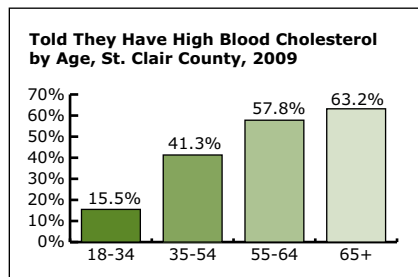
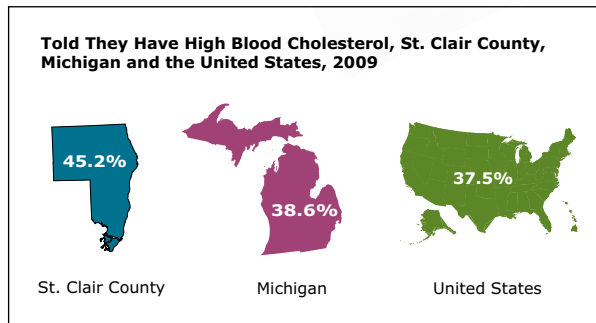
High Blood Cholesterol



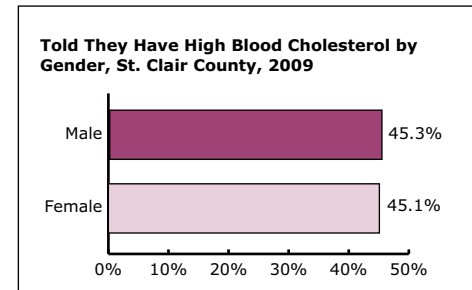
Hypercholesterolemia, or high blood cholesterol, refers to having too much cholesterol in one's blood, which can lodge in or build up on artery walls, causing narrowing or clotting. Blocked arteries can cause chest pain, heart attack, or stroke.



The percentage of St. Clair County adults reporting high blood cholesterol has risen dramatically since 2005, when it was 31.4%. In 2009, nearly half (45.2%) of all St. Clair County adults reported having high blood cholesterol. This was greater than the percentage of adults with high blood cholesterol in Michigan (38.6%) or in the country as a whole (37.5%).

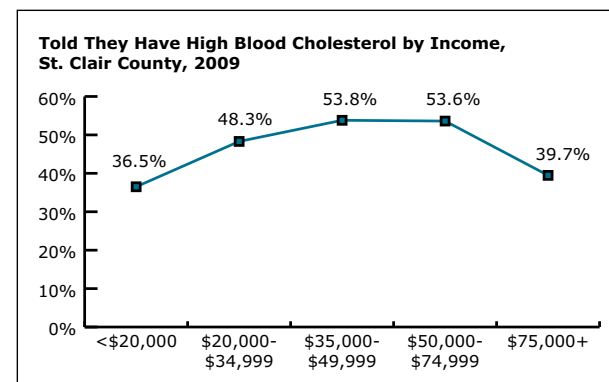
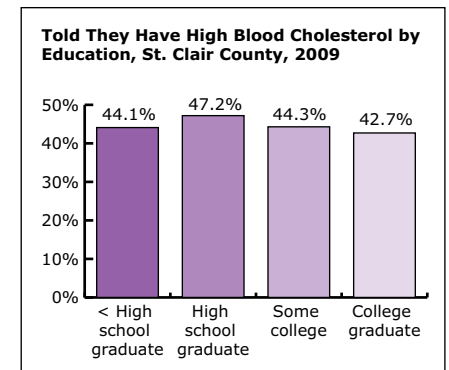


The prevalence of high blood cholesterol increased with age. Over 63% of St. Clair County adults ages 65 or older reported high blood cholesterol, while only 15.5% of residents under 35 years of age did.



Having high blood cholesterol was not significantly affected by gender, or income level. Males and females had almost the same rates of high blood cholesterol, roughly 45%.

High school graduates at 47.2% reported the highest level of high blood cholesterol though all rates were similar, from 44.1% for those with less than a high school education to 42.7% for college graduates.

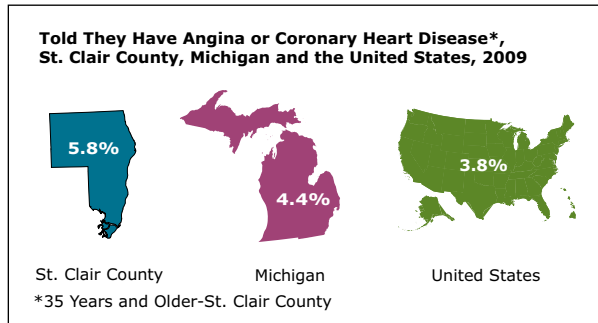


Residents with high blood cholesterol were slightly more likely to be in middle income brackets, earning from \$20,000 to \$75,000. Those residents at

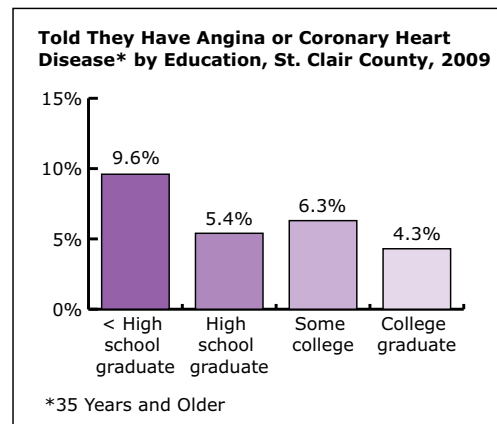
the two extremes of income level, earning under \$20,000 or over \$75,000, had slightly lower rates of high blood cholesterol.

Angina or Coronary Heart Disease

Angina is chest pain which is a symptom of coronary heart disease or coronary artery disease as it is also called. It is the accumulation of plaque in the arteries that feed the heart muscle. The percentage of St. Clair County residents, age 35 and older, who have been told they have angina or coronary heart disease, was significantly higher at 5.8% than the state at 4.4% and the nation at 3.8%.



Since heart disease is the leading cause of death for both men and women it was not surprising that the rate for St. Clair County males, 6.1% and females, 5.5% were nearly equal.

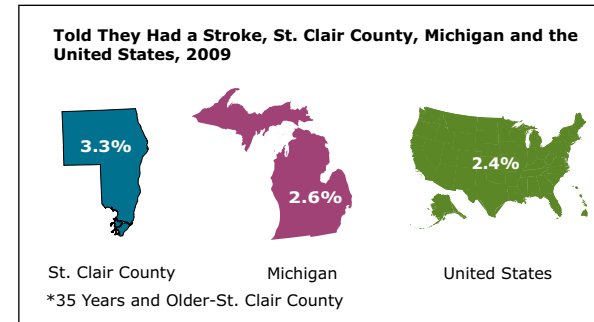


Angina or coronary heart disease increase with age due to the accumulation of plaque in the heart's arteries. Therefore the residents reporting angina or coronary heart disease also increased with age.

Income and education did not appear to be a predictor in St. Clair County during the survey period.

Stroke

A stroke is caused by blockage of arteries to and in the brain caused by the build up of plaque. Strokes are often referred to as "brain attacks."

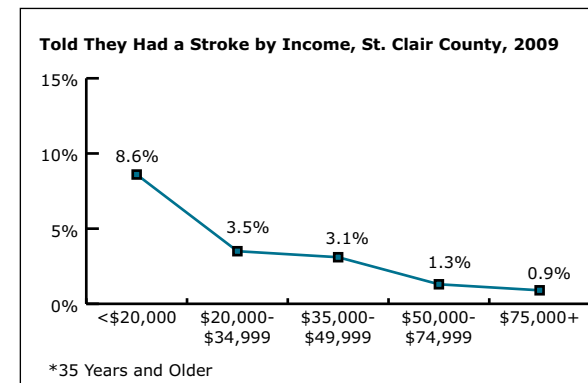
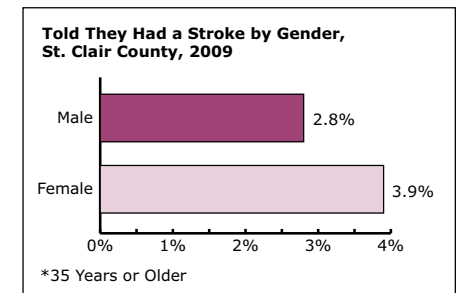


The 3.3% of residents, age 35 and older, who have been told they suffered a stroke was greater than the state, 2.6%, and the nation, 2.4%.

Females at 3.9% reported a higher rate than males at 2.8%.

The chance of experiencing a stroke increased with age, 12.5% of those age 75 years and older reported having had a stroke.

Education and income both seem related to stroke. College graduates and higher income levels reported the lowest stroke rates.



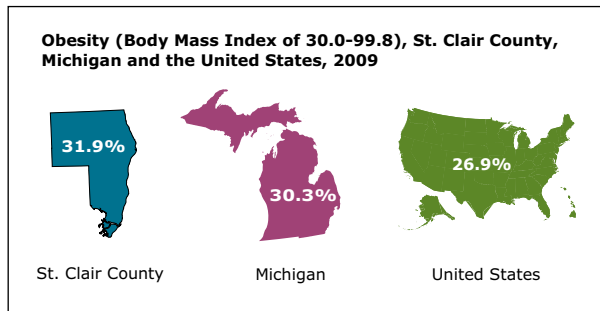
This may be because higher income and education provide greater access to awareness, screening and treatment.

Obesity and Overweight

Nearly two-thirds of St. Clair County adult residents are above the “normal” healthy body weight. Only 35.9% of St. Clair County residents are of normal weight.

Obesity is a risk factor for many health conditions, including hypertension, high blood cholesterol, diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea, and some cancers. Obesity rates can be reduced by changes in diet and physical activity level, and helping people to address their weight concerns. Some health risks exist for those who are overweight, but significant health risks exist for residents who are obese.

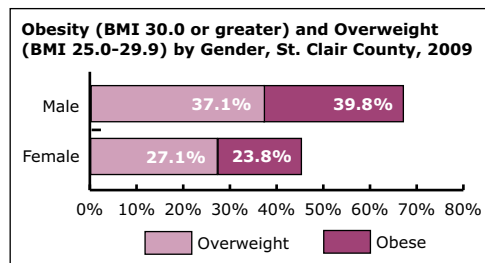
The measure used to evaluate weight is called the Body Mass Index, or BMI, which calculates a score for an individual based on a comparison between that individual's height and weight.



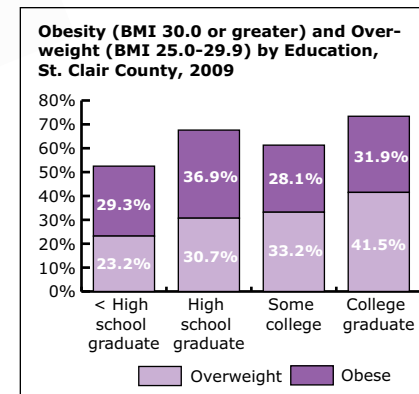
The percentage of obese St. Clair County residents (31.9%) was similar to that of residents across Michigan (30.3%), but higher than that of the nation as a

whole (26.9%). The percentage of St. Clair County residents that were overweight (but not obese) at 32.3% was slightly lower than the state at 35.3% and nation at 36.2%.

A significantly higher percentage of males reported being obese (39.8% to 23.8% for females) and overweight, (37.1% to 27.1% for females), in St. Clair County. Obesity among St. Clair County residents was more prevalent in the middle age groups than among the youngest or oldest adults. In part,

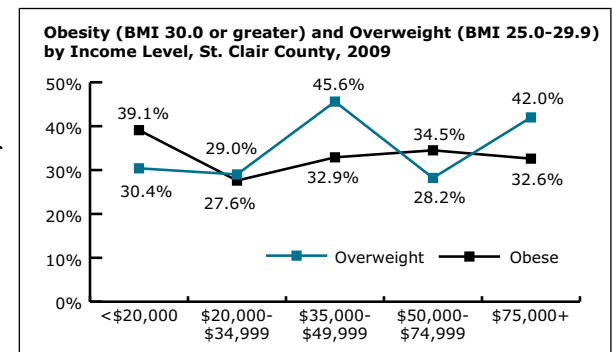


this reflects the higher mortality rates among older, obese individuals compared to older individuals of normal weight. Unlike obesity, being overweight was fairly consistent for residents ages 35 and older, ranging from 33.3% for those 55-64 years old to 39.5% for those 65 years and older.



Residents with at least some college education had lower rates of obesity than their counterparts without any education past high school. Unlike obesity, overweight increased with education ranging from 23.2%, for less than high school graduate to 41.5% for college graduates. The latter may be employed in less rigorous, sedentary office based occupations, thereby missing an opportunity to receive physical exercise as part of their occupation.

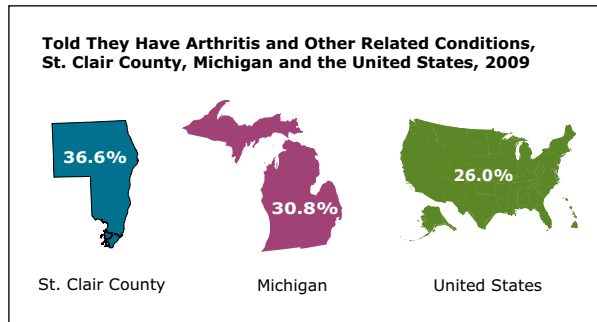
St. Clair County residents earning less than \$20,000 were more likely to be obese than those earning higher incomes. Among higher-income households, the highest level of obesity existed among those earning between \$50,000 and \$75,000 annually. Overweight also varied by income with the lowest rate of 28.2% reported by those with annual incomes of \$50,000-\$74,999, and the highest at 45.6% by those with incomes of \$35,000-\$49,999.



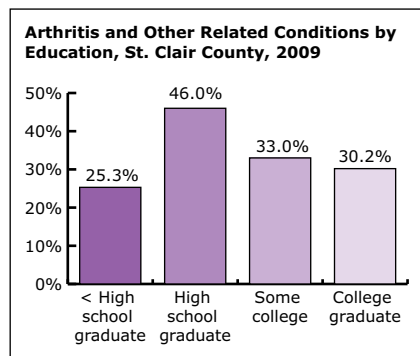
Arthritis and Other Related Conditions

Arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia are the leading causes of disability in the United States. There are over 100 types of arthritis and related conditions. People who are overweight, and people who have low levels of physical activity are more likely to report experiencing arthritis or one of the other related conditions.

Overall, 36.6% of St. Clair County residents have been told they have arthritis, or a related condition, which was somewhat higher than the state (30.8%) and national (26.0%) percentages.



There was no significant difference between males at 37.3% versus females at 36.2% who reported having arthritis, or a related condition. The likelihood of having arthritis, or a related condition, increased with age. Almost eight times as many residents ages 65 or older reported they had arthritis, or a related condition, than those younger than 35 years old.



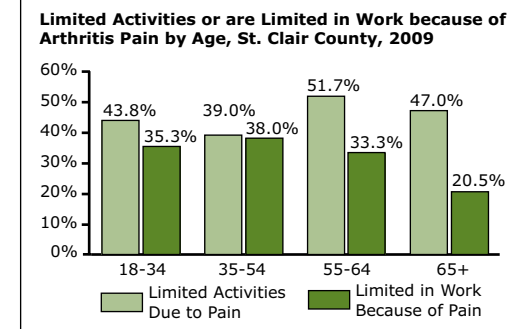
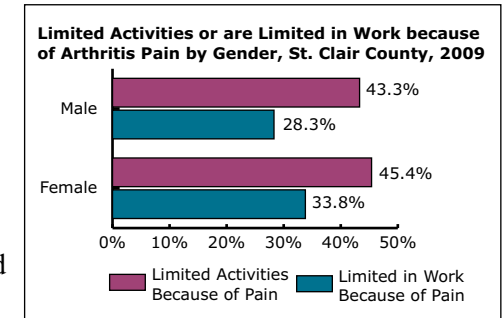
Arthritis, or a related condition, had a greater impact among residents with lower levels of education or income. There was a significant difference between those residents who had some college education or a college degree and those who just finished high school.

The percentage of residents with arthritis, or a related condition, decreased with income. Those living in households that earn \$50,000 or more annually had lower rates than those earning lower incomes.

Limitations in Activities and Work Due to Pain

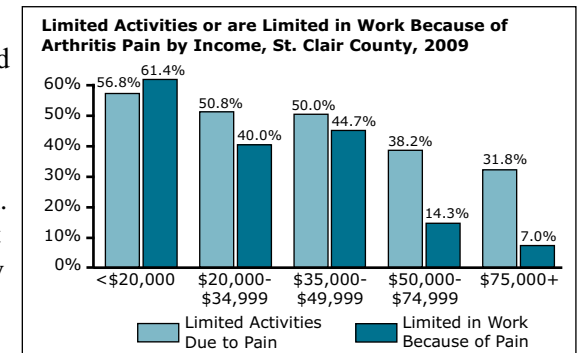
Of the St. Clair County residents told they had some form of arthritis or related condition (gout, lupus, fibromyalgia), 44.5% reported they were limited in activities and 31.4% were limited in work due to pain.

For those told they have arthritis, or a related condition, males at 43.3% and females at 45.4% alike, reported limitations in activities because of pain. Females experienced a higher percentage of limited in work than males, 33.8% compared to 28.3%.



Residents 55-64 years of age reported the highest level of limited activities due to pain at 51.7%, while 38.0% of those 35-54 years old record the highest for limited in work because of pain.

The highest limited activities at 57.1% and work at 47.6% due to pain were reported by those with less than a high school education. Similarly, the highest rates were reported by those with incomes less than \$20,000.



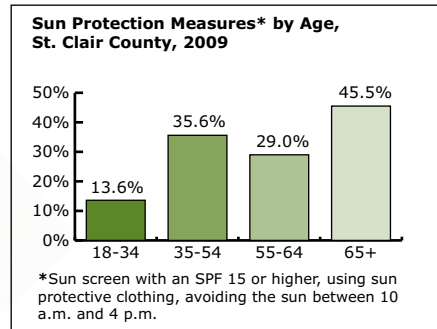
Skin Cancer Risk

Prolonged exposure to the sun's ultraviolet rays is the greatest risk factor for skin cancer. During 2009, 45.7% of St. Clair County residents reported that they rarely (17.3%) or never (28.4%) use sun protection measures.



Only 30.2% reported always or usually using protective measures of a sun screen of SPF 15 or higher, wearing sun protective clothing, and/or avoiding sun exposure between 10 a.m. and 4 p.m. if outdoor exposure would be greater than an hour.

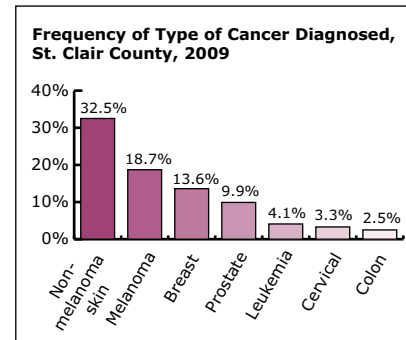
Over 90% of St. Clair County adult residents indicate they have never used a sun lamp or tanning bed.



The highest levels of skin protection use, at 45.5%, was reported by those age 65 years and older, followed by those age 35-54 at 35.6%. Younger residents as well as those less educated were more likely to not use sun protection.

Cancer Incidence

During 2008, the second leading cause of death in St. Clair County was cancer, representing 24.5% of all deaths. During 2009, 11.8% of St. Clair County residents reported being diagnosed with a cancer, males slightly more often than females. Of those diagnosed, 90% reported one type of cancer and 10% indicated two or more types of cancer.



Of those St. Clair County residents diagnosed with cancer, over one-half were skin cancers – 32.5% non-melanoma and another 18.7% melanoma skin cancers. Cancer of the breast and prostate followed at 13.6% and 9.9% respectively. Leukemia ranked fifth at 4.1%.

About one-third of female survey respondents were asked if a biological family member had ever been diagnosed with either breast or ovarian cancer. Under 75% reported no to either, 19.5% indicated a breast cancer diagnosis, 3.0% indicated ovarian cancer, 2.3% responded both breast and ovarian cancers, and 2.9% were unsure because of adoption. About a third (35.5%) indicated that they were not questioned by their health care provider regarding family history of breast or ovarian cancer, while 48.7% indicated they had been asked about both.

Genetic counseling regarding their risk for breast or ovarian cancer was received by 23.9% of female respondents who had a biological family member diagnosed with either cancers.

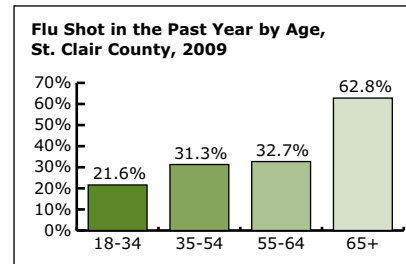
Overall three-quarters of this group did not know, or answered incorrectly, what factors increased a woman's risk of getting cervical cancer.

All survey respondents were asked if they knew about genetic testing and about one in seven reported they were aware of it. However, only 4.6% reported having genetic testing for health risks. All were women, in their mid-30s or 40s, with some college education, and incomes of \$75,000 or more.

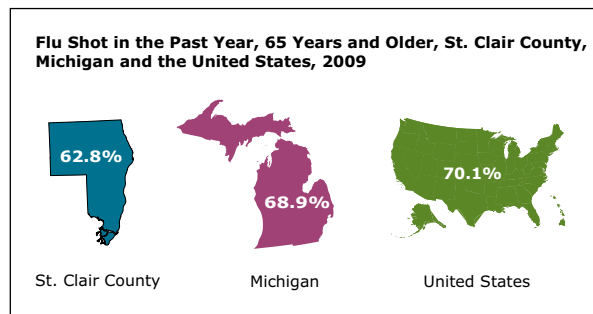
Preventive Care

Immunization

Adults ages 65 and older are at greater risk of contracting influenza (commonly known as “the flu”) than their younger counterparts. Influenza can be significantly debilitating, and carry a notable risk of hospitalization and even death for older people. Getting vaccinated against flu can protect people from getting sick, and minimizes the spread of the disease throughout the community.

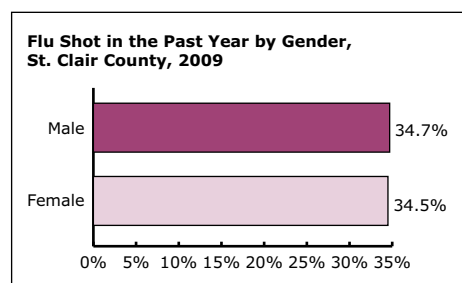


Age is a strong predictor of the likelihood of being vaccinated against the flu. St. Clair County residents ages 65 and older were more likely to have received the flu vaccine than residents ages 18-64.

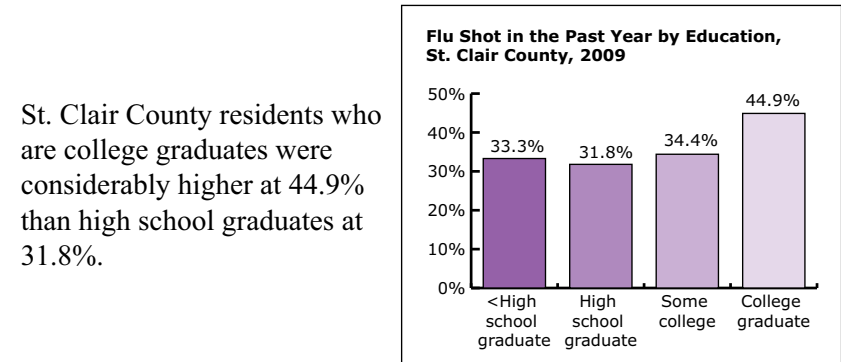


The percentage of St. Clair County residents ages 65 and over who receive flu shots annually has increased. In 2005, 56% of older residents reported receiving a flu shot,

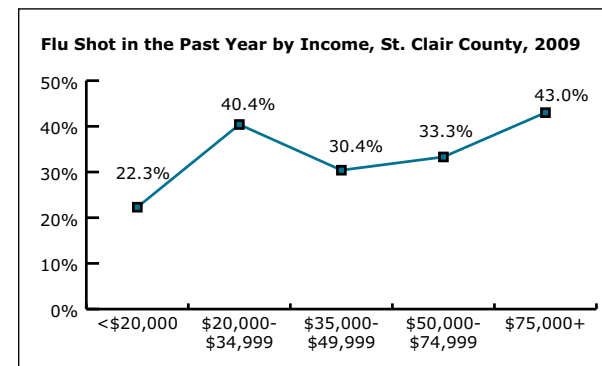
but in 2009, 62.8% of older residents were vaccinated against the flu. This was less than the percentage of adults ages 65 and older receiving flu shots in Michigan (68.9%) and the nation (70.1%).



There was virtually no difference in immunization rates by gender, both males and females reported just under 35%.



St. Clair County residents who are college graduates were considerably higher at 44.9% than high school graduates at 31.8%.



As is the case with education, residents with annual incomes of \$75,000 or greater reported the highest level of flu vaccination at 43.0%.

HIV Screening

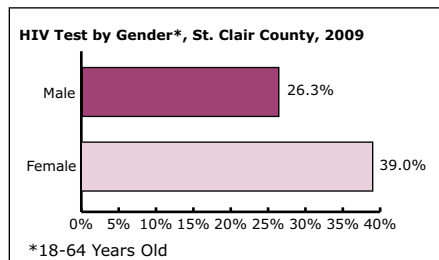
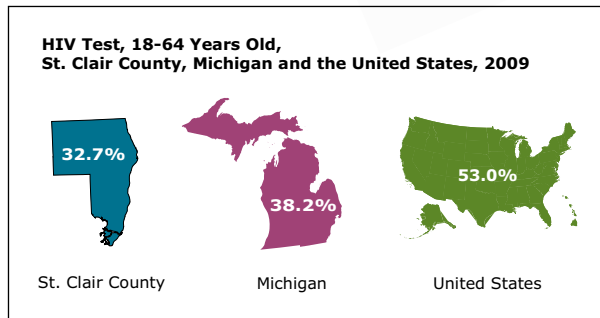


The Human Immunodeficiency Virus (HIV) kills the cells in the body that fight disease. HIV can be passed from person to person through shared contact with blood or sexual fluids. HIV can also be passed from mother to child through pregnancy, delivery, or breastfeeding. The most common ways to spread HIV are through unprotected sexual activity or needle-sharing.

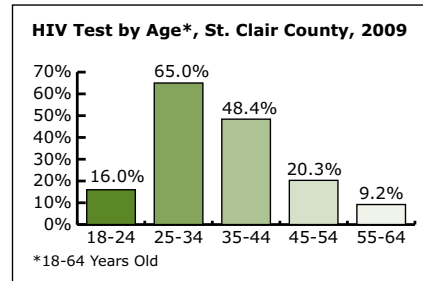
Certain behaviors significantly increase a person's risk of contracting or spreading HIV. These include: having a sexually transmitted disease, using intravenous drugs, engaging in sex with paid partners or anal sex without a condom in the past year. The percentage of St. Clair County residents who reported engaging in one or more of these behaviors has decreased significantly since 2005, from 6.4% to 1.8% in 2009.

During July 2010, there were 91 St. Clair County residents reported with AIDS. They represent about 1% of the 9,553 cases in the Detroit Metro area.
from July 2010 Quarterly HIV/AIDS Analysis, MDCH.

The percentage of residents who have ever been tested for HIV was 32.7%, which was lower than the state (38.2%) and significantly lower than the nation at 53.0%.

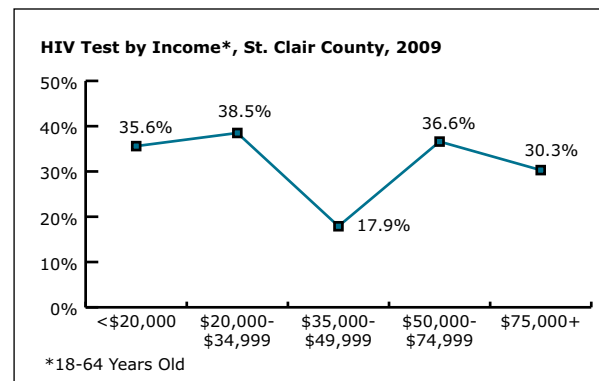
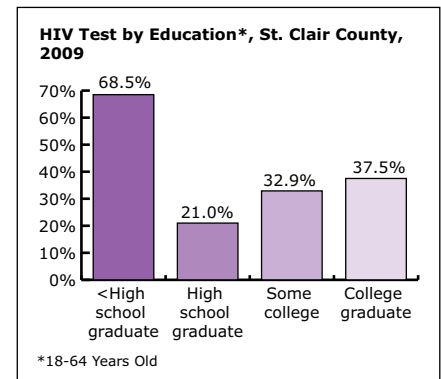


Among St. Clair County residents, females were more likely to have been tested than males (39.0% compared to 26.3%).



Age is also a strong predictor of HIV testing behavior. St. Clair County residents ages 25 to 44 were more than twice as likely to have been tested for HIV than any age group younger or older than them.

In both St. Clair County and across Michigan, residents with less than a high school diploma were more likely to have been tested for HIV than those with higher levels of education. In St. Clair County, residents without a high school diploma were almost twice as likely to have been tested for HIV than residents with a college degree.



The lowest level of HIV testing was reported by residents in the \$35,000-\$49,999 income category (17.9%), half the rate reported by almost all other categories.

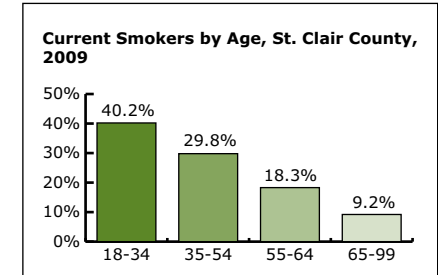
Health Risk Behaviors

Tobacco Use

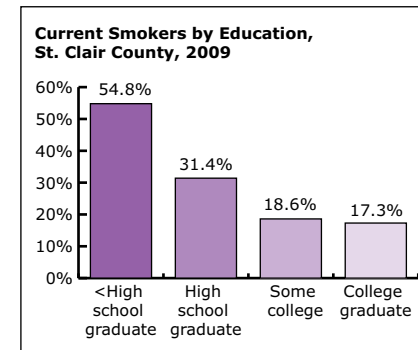
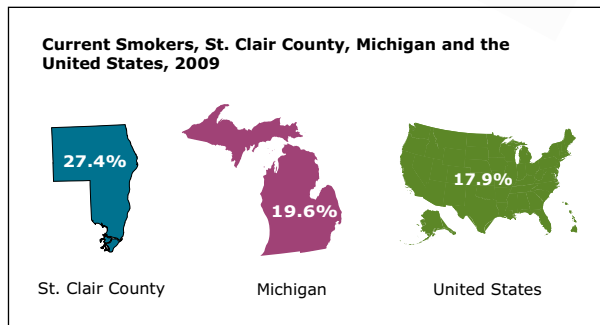
Smoking still remains the leading preventable cause of death in our communities. The CDC estimates that 440,000 deaths each year in the United States are smoking associated including 14,500 adults in Michigan. Smoking contributes to the development of many chronic diseases including cancers, heart disease and cardiovascular disease.



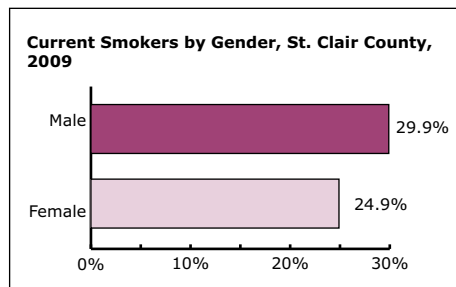
The rate of current smokers was highest in the 18-34 year age group at 40.2%. The percentage of current smokers decreased through the other age groups to less than 10% among those 65-99 years old.



Over 27% of St. Clair County adults were current smokers, consistent with the 2005 percentage. This was significantly higher than the percentage of adult smokers in the state at 19.6% and the nation at 17.9%. In St. Clair County, 46.5% of residents indicated that they never smoked compared to 54.9% statewide and 55.3% in the nation.



Lower levels of educational achievement and income were correlated with higher smoking rates. Those with less than a high school education were almost three times more likely to smoke than residents who were college graduates. College graduates as well as those with some college at 56.1%, were most likely to never have smoked.

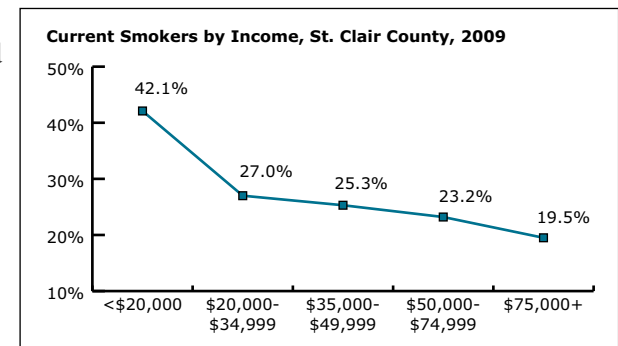


Slightly more male residents were current smokers in St. Clair County (29.9%), than female (24.9%), which was consistent with past survey results.

More female residents in St. Clair County reported never smoking (51.0%) compared to

male residents (41.9%). Just over 26% of adult residents indicated that they were former smokers.

Residents with annual household incomes of less than \$20,000 were more likely to be smokers than those with incomes of \$75,000+ (42.1% compared to 19.5%).



Smokeless Tobacco

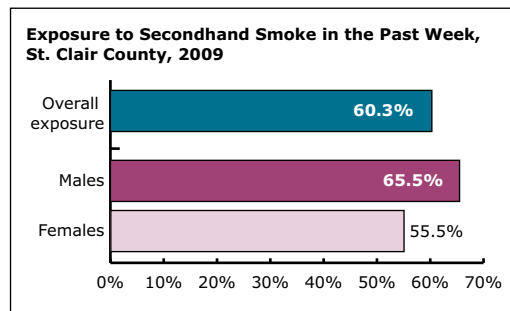
One in twenty surveyed indicated that they used other tobacco products, such as chewing tobacco, snuff or SNUS in the previous month. Of these users, 8.6% (0.2% of all respondents) reported using SNUS, 51.8% reported using smokeless tobacco, and 2.9% reported smoking a pipe at least once.

Of those that indicated they used smokeless tobacco, about a third used it 14 or more days in the prior month and almost all were male. Few residents indicated they had ever smoked tobacco using a water pipe, hookah or narghile (5.5%), and only 20% of those (0.7% of all respondents) had done so in the past month. Over 11% of current cigarette smokers indicated that they use smokeless tobacco in places where smoking was prohibited.



Secondhand Smoke

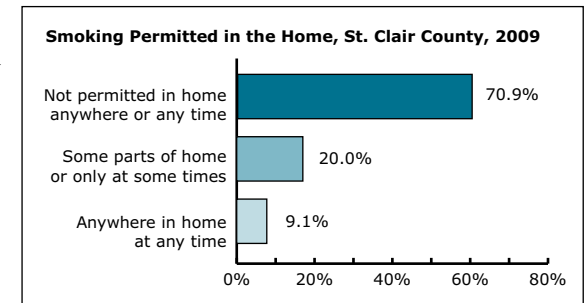
The extent to which exposure to secondhand smoke was believed to be very harmful by St. Clair County residents varied. Roughly 54% thought secondhand smoke very harmful to one's health, 38.8% thought it somewhat harmful, 3.7% thought it not very harmful and, 3.7% thought it was not harmful at all. Current or former smokers were less likely to believe exposure to secondhand smoke to be as harmful as those residents who never smoked.



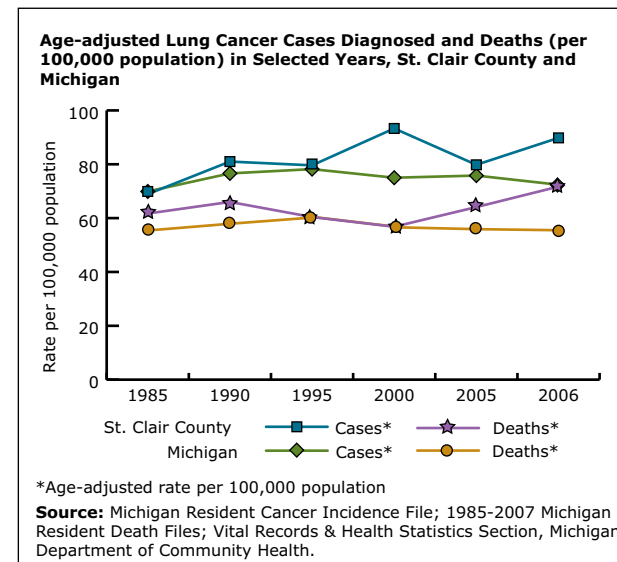
Over 17% of respondents indicated that during the past week someone other than themselves had smoked a tobacco product in their home, almost 30% indicated someone had smoked in the car they were riding in, and slightly over 18% reported someone smoking in the same room at work.

Homeowners were less likely to permit smoking in their homes compared to St.

Clair County residents who rented (75.6% compared to 58.1%). However, only 19.4% of homeowners were current smokers compared to almost half of the renters.



Smoking has been identified as the leading cause of lung cancer. There were 128 cases of lung cancer diagnosed in St. Clair County in 2007 compared to 92 in 1985, with a high of 167 cases in 2004.



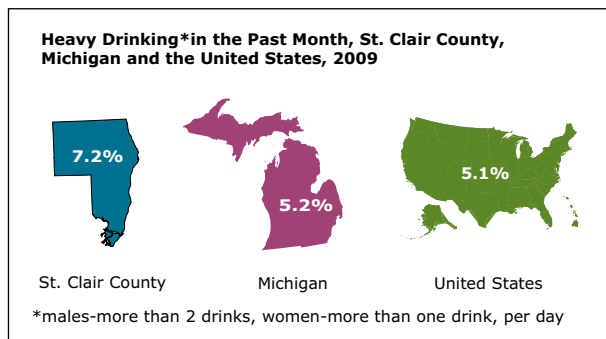
The age-adjusted rate of diagnosed lung cancer cases as well as the age-adjusted death rate in St. Clair County has been generally higher than the rates for the state of Michigan.

Alcohol Consumption

Excessive alcohol consumption is associated with a range of chronic diseases such as cirrhosis of the liver, hypertension, stroke, and some types of cancers. Alcohol is also frequently implicated in motor vehicle crashes, suicide, and violent crime. In St. Clair County, alcohol was involved in 6.1% of the total number of crashes in 2009 (195 out of 3,800). It was involved in one-quarter of the fatal crashes.

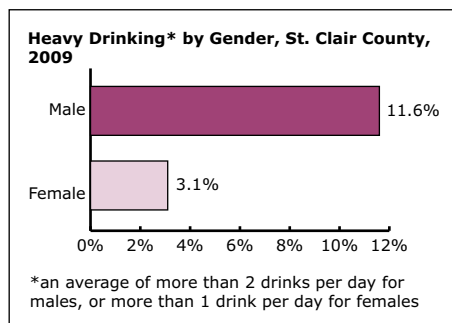
Studying the frequency of alcohol consumption, combined with the amount consumed, can be used to determine the drinking status of residents. In St. Clair County, 36.8% of residents are abstainers, meaning they consume no alcohol at all, and 7.2% of residents are heavy drinkers, meaning that they consume more than two drinks per day if they are males, or more than one drink a day if they are females.

Heavy Drinking

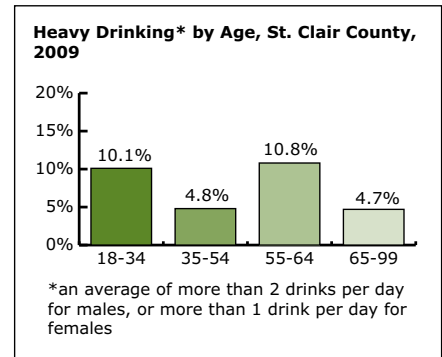


Overall, Michigan and the nation as a whole both had a higher percentage of abstainers (around 45%), and a lower percentage of heavy drinkers (around 5%) than St. Clair County.

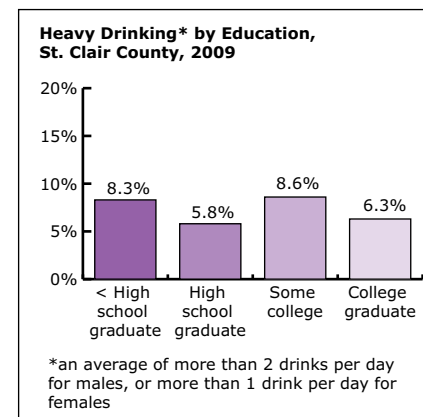
The proportion of male heavy drinkers to female heavy drinkers in St. Clair County was almost four to one. Males were more likely than females to be heavy drinkers throughout Michigan and the country as well.



There was some fluctuation in heavy drinking reported by age category. Residents in the 18-34 and 55-64 year-old age groups were more than twice as likely to report heavy drinking.

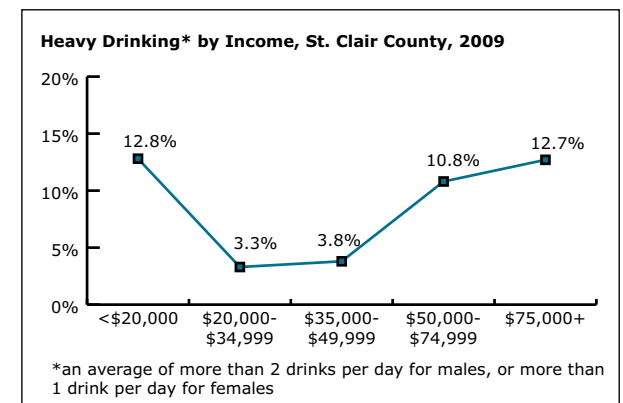


High school graduates at 5.8% and college graduates at 6.3% reported the lowest percentages of heavy drinking.



During 2009, 645 St. Clair County residents were arrested for Drunk Driving Offenses; 495 were male (70%) and 150 female. Over 98% were arrested for operating under the influence of intoxicating liquor.

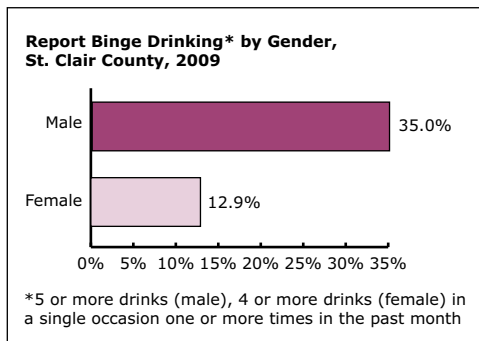
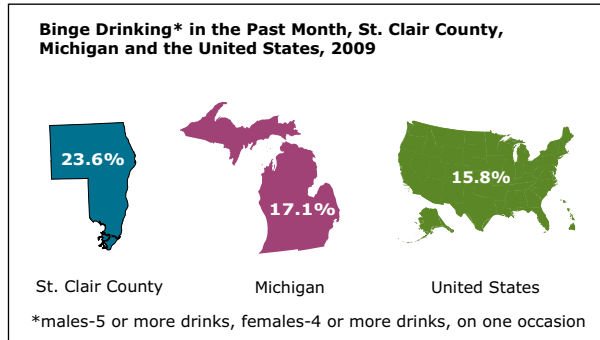
St. Clair County residents with annual incomes between \$20,000 and \$49,999 reported the lowest percentages, under 4%.



Binge Drinking

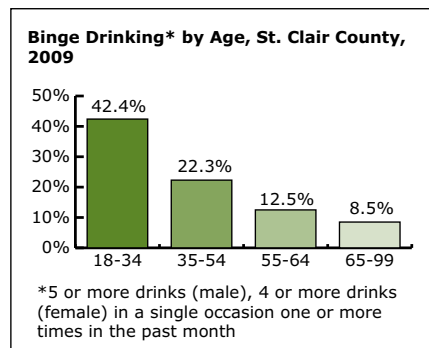
In addition to the frequency of drinking, alcohol consumption can be measured by asking residents about the volume they drank. Consumption of five or more drinks for males, or four or more drinks if female, on one occasion in the past month is known as binge drinking.

Binge drinking at least once in the past month was reported by 23.6% of St. Clair County adult residents, which was higher than Michigan at 17.1% or the nation at 15.8%.

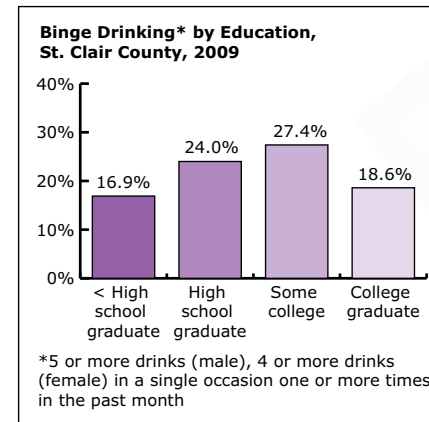


Binge drinking among St. Clair County residents was almost three times more likely among men than women. Males reported binge drinking more times than females over the month studied (4.6 times versus 3 times).

Age was the strongest predictor of binge drinking. The highest percentage of binge drinking occurred among 18 to 34 year-olds with a steep decline in binge drinking as age rises. Residents ages 65 and older were five times less likely to engage in binge drinking than the youngest adults.

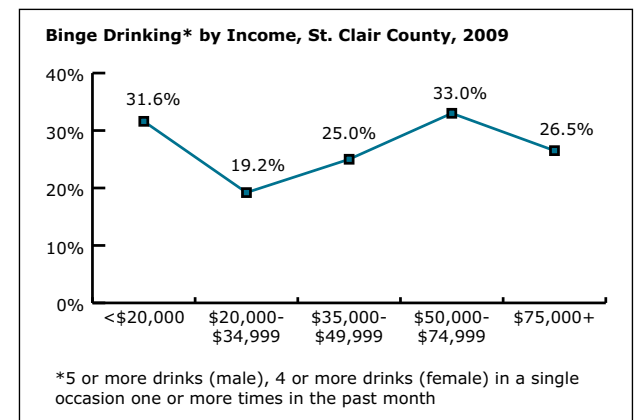


St. Clair County adult residents with less than a high school education reported the lowest level of binge drinking at 16.9%, followed by college graduates at 18.6%. Those with some college reported the highest at 27.4%.



In 2005, 20.7% of St. Clair County residents indicated they had binge drank in the prior month. An increase in reported binge drinking has occurred in Michigan and the nation as well.

The lowest percentage of binge drinking 19.2%, was reported by residents with an annual income of \$20,000-\$34,999, and the highest by those in the \$50,000-\$74,999 category at 33.0%, followed by those with less than \$20,000 at 31.6%.



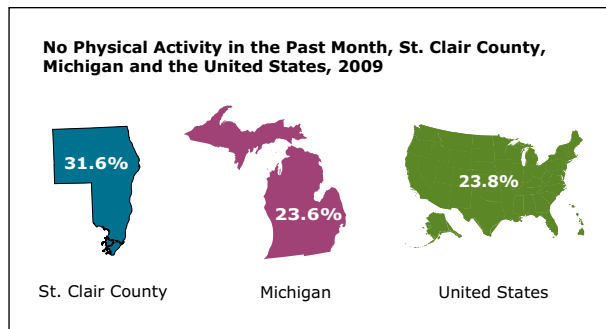
Physical Activity: None or Inadequate

Participation in regular physical activity is essential to sustaining good health. Regular exercise reduces the risk of chronic diseases such as colon cancer, diabetes, hypertension, and cardiovascular disease. Even moderate physical activity can help to maintain a healthy weight, muscle strength, bone mass, and joint function.

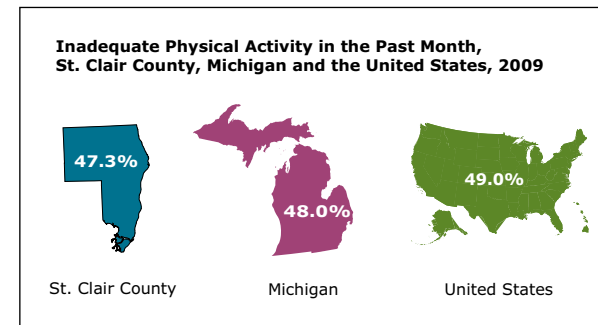
Leisure time physical activity, or how often people choose to engage in exercise or other forms of physical activity outside of their regular jobs, is one measure of overall physical activity. Among those residents who do choose to participate in physical activity, the health benefits they gain are dependent on how intense the activity is.

Adequate physical activity is defined as participating in either 30 minutes or more of moderate physical activity (such as walking, bicycling, or gardening) at least five times a week, or 20 minutes or more of vigorous physical activity (such as jogging, swimming, or playing tennis) at least three times per week. Any amount of physical activity less than this is considered inadequate.

Almost one-third of St. Clair County residents said they had not participated in any physical activity outside of work during the past month. This is significantly higher than the percentage of inactive residents throughout Michigan (23.6%) and in the nation as a whole (23.8%).



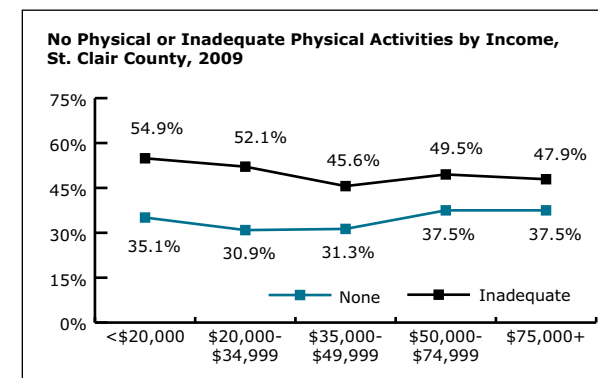
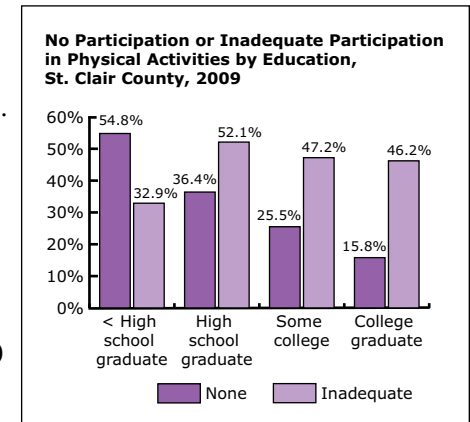
Almost half (47.3%) of St. Clair County residents reported an inadequate amount of physical activity, which was similar to state (48.0%) and national (49.0%) comparisons.



Those with less than high school attainment reported the highest percentage of no physical activity at 54.8% and college graduates were the lowest at 15.8%.

This may be explained in part by the differences in the physical requirements of the jobs held by these two groups.

Residents in the lowest and highest income groups were the most likely to be physically inactive. St. Clair County residents earning between \$20,000 and \$50,000 were more likely to be active outside of their regular jobs.



Those with annual incomes under \$35,000 reported the highest levels of inadequate physical activity. The lowest level was reported by those with incomes of \$35,000-\$49,999 at 45.6%.

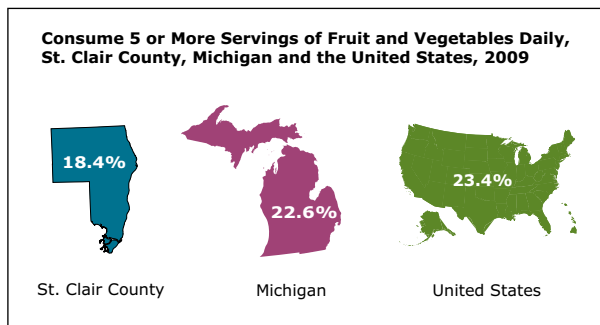
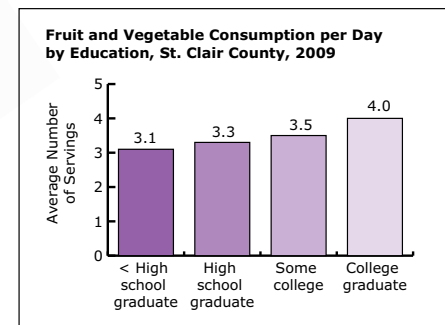
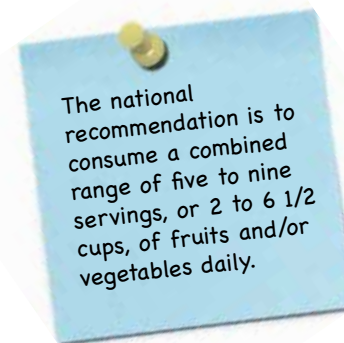
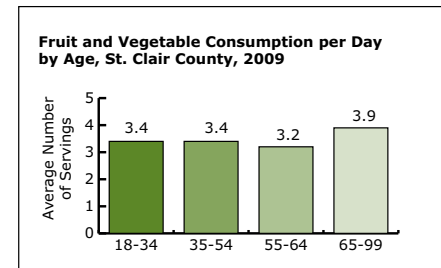
Inadequate Fruit and Vegetable Consumption



Diets rich in fruits and vegetables provide essential nutrients important for sustaining good health. Most fruits and vegetables are a rich source of vitamins, minerals, and fiber. In addition, they are low in fat and calories, and play a key role in maintaining a healthy weight.

St. Clair County residents consumed an average of 3.5 servings of fruits and/or vegetables each day. This reflects an increase over the average number of servings reported in 2005 which was 1.0 of fruit and 1.4 of vegetables. Increases in the average number of servings of fruit and vegetable consumed by St. Clair County residents were consistent across all measures.

The highest average number of servings of fruits and vegetables was reported by residents 65 years and older at 3.9 servings daily.

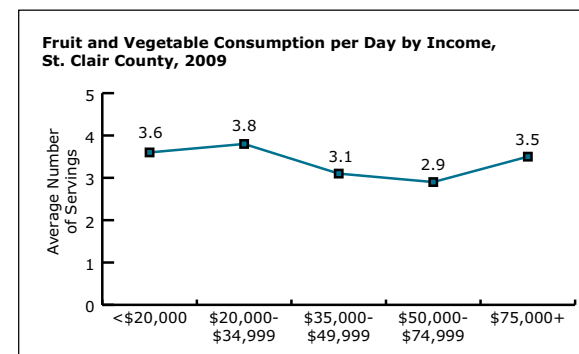
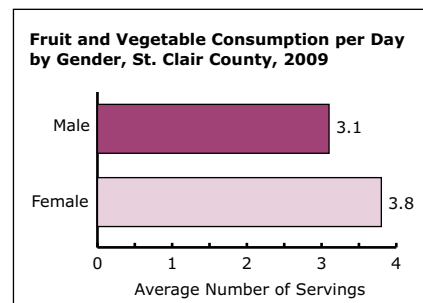


Only 18.4% of St. Clair County residents consumed 5 or more servings of fruit and vegetables daily which was lower than the state (22.6%) and national (23.4%) percentages.

Consumption of an adequate amount of fruits and vegetables increased with educational attainment.

St. Clair County residents earning between \$50,000 and \$75,000 annually were significantly less likely to consume the recommended amount of fruits and vegetables.

A greater percentage of females (23.1%) consumed the recommended number of fruits and/or vegetables each day than males (13.3%). Still, over three-quarters of both groups of St. Clair County residents did not get the recommended amount of these essential foods.



Poor Rest or Sleep

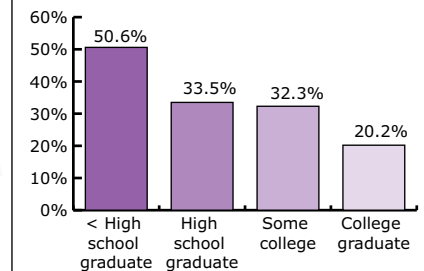
Sleep is an essential physiological process for healthy body functioning. Sleep deprivation, or not getting enough sleep, can cause nervous system problems such as impaired memory or hallucinations, retard growth, depress the immune system, and increase variability in heart rates.



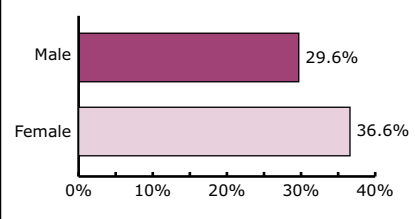
"If left untreated, sleep disorders and chronic short sleep are associated with an increased risk of heart disease, high blood pressure, obesity, diabetes, and all-cause mortality."
from <http://healthypeople.gov/2020>

One-third of St. Clair County residents reported experiencing poor sleep at least half or more of the days during the past month. This was slightly higher than the percentage of Michigan residents during 2008 who report poor sleep at 28.1% and a national estimate at 25%.

14 or More Days of Poor Rest or Sleep in the Past Month by Education, St. Clair County, 2009



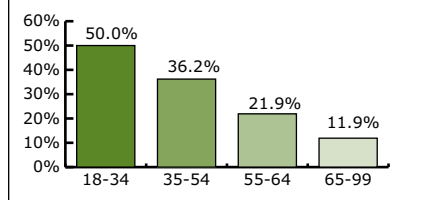
14 or More Days of Poor Rest or Sleep in the Past Month by Gender, St. Clair County, 2009



Females reported having slightly poorer sleep than males in both St. Clair County and Michigan, but age was the strongest predictor of getting poor rest or sleep.

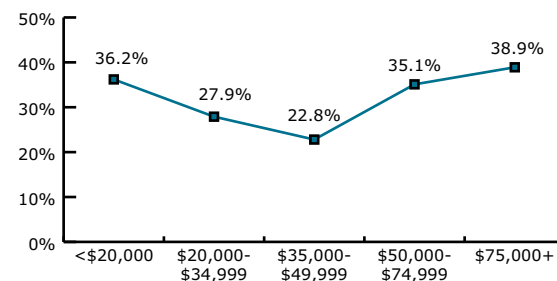
Half of all residents under the age of 35 reported not getting enough sleep or rest in the past month, compared to 36.2% of 35-54 year-olds, 21.9% of 55-64 year-olds, and only 11.9% of 65-99 year-olds. This trend was also reflected among Michigan residents as a whole.

14 or More Days of Poor Rest or Sleep in the Past Month by Age, St. Clair County, 2009



Education level was also strongly correlated to poor sleep. Residents without a high school diploma were more than twice as likely as those with a college degree to report not getting enough sleep.

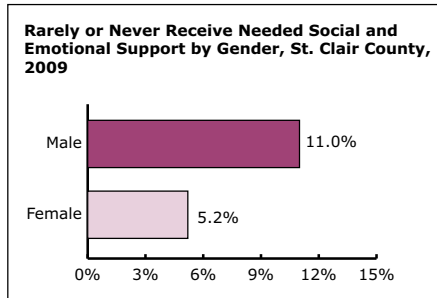
14 or More Days of Poor Rest or Sleep in the Past Month by Income, St. Clair County, 2009



The lowest and highest income categories reported the highest percentages of poor rest or sleep, 36.2% and 38.9% respectively. St. Clair County residents with annual household incomes of \$35,000-\$49,999 reported the lowest at 22.8%.

Other Health Concerns

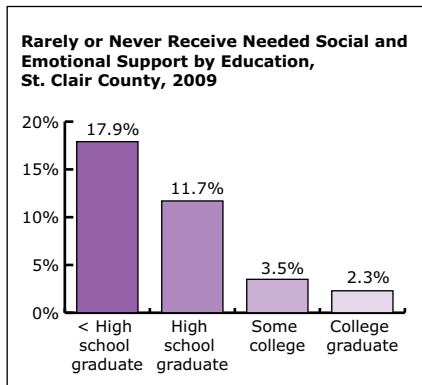
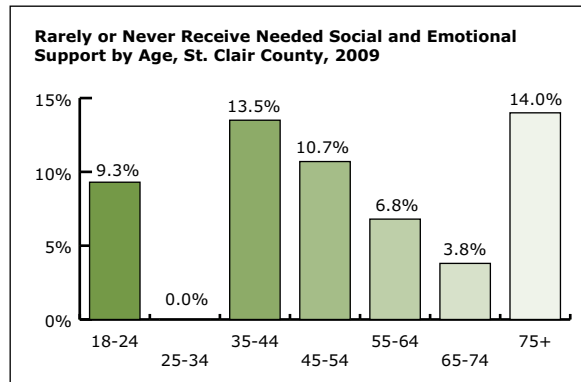
Social and Emotional Support



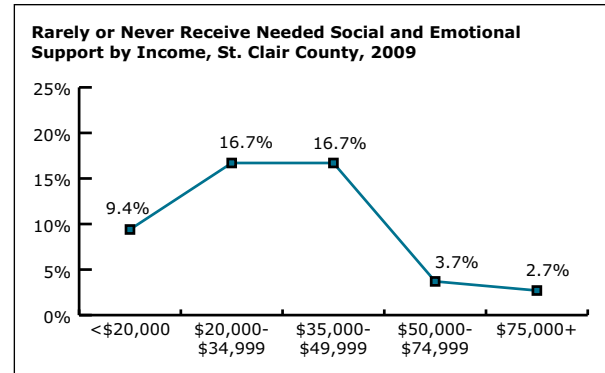
Over 90% of St. Clair County adult residents reported receiving adequate social and emotional support.

Those who reported rarely or never receiving such support varied significantly by gender with 11% of males compared to 5.2% of females.

Never or rarely receiving social and emotional support decreased with age through ages 35-74 then increased significantly in the 75+ age group. This may in part be due to the loss of a spouse, relatives and friends.



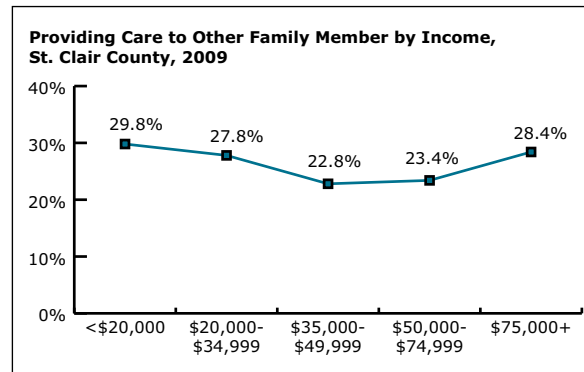
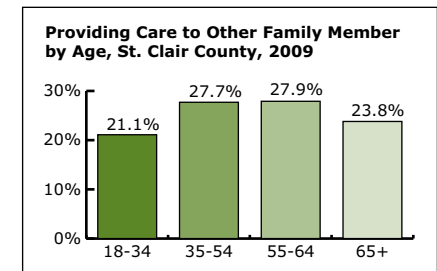
Lack of social and emotional support decreased with educational attainment from a high of 17.9% for those residents with less than a high school education to 2.3% for college graduates.



The highest annual income group reported the lowest lack of support. Income does increase access to supportive services.

Caregiver Responsibilities

Over a quarter of St. Clair County adult residents provided health related care to other family members. Males reported serving as a care giver at about one-half of the rate of females, or 17.2%. Surprisingly, reported care giving does not vary much by age group, with the highest rate, nearly 28%, for those age 35-64 years.



Care giving was similar across income levels, from 22.8% of those with incomes of \$35,000-\$49,999, 29.8% of those less than \$20,000, and 28.4% of \$75,000 or more.

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