

# Foreword

Dear Community Member:

The Lenawee Health Network is pleased to present to you the 2011 Lenawee County Community Health Needs Assessment. The data contained in this report will be invaluable to community agencies and businesses as they prioritize the needs and incorporate action plans into their strategy to improve the health of our community.

This report is based upon data obtained from responses to written surveys that were conducted in October through December 2011. These surveys focused on three age groups:

- Adult ages 19 and over
- Youth ages 12 to 18
- Children ages 0 to 11 (with parents providing responses for this age group)

We wish to thank all of the community members who responded to the surveys and for every school district in Lenawee County for supporting the process of the youth survey. This report would not be possible without this level of participation.

The last comprehensive community assessment of this kind was conducted over ten years ago. To address the need for an updated study, ProMedica Bixby Hospital applied for and was awarded an \$85,000 Rural Health Network Development Planning Grant for the purpose of organizing a community network and to conduct the county assessment. Thus the Lenawee Health Network was formed. (The membership of the network is listed in the acknowledgements). In order to maintain complete objectivity throughout the survey process, the network engaged the expert services of the Hospital Council of NW Ohio to administer the survey and compile the results.

We encourage you to use this report in your planning process and to collaborate with other community agencies to address the identified issues in order to improve the health of our community.

Sincerely,



Timothy J. Jakacki  
President  
ProMedica Bixby Hospital  
ProMedica Herrick Hospital



Carol Boyce  
Chairperson Lenawee Health Network  
Administrative Director  
ProMedica Bixby and Herrick Hospitals

# Acknowledgements

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Awarded to ProMedica Bixby Hospital

## **Member Organizations of the Lenawee Health Network (LHN):**

ProMedica Bixby and Herrick Hospitals	Goodwill Southeast Michigan
Adrian College	LEAHC
American Cancer Society	Lenawee County Department on Aging
Boys & Girls Club of Lenawee	Lenawee Great Start
Catholic Charities	Lenawee County Health Department
Communities in Schools of Lenawee	Lenawee Intermediate School District
Community Action Agency	Lenawee Substance Abuse Prevention
HOPE Community Center	Coalition
Lenawee Community Mental Health	Lenawee United Way
Family Counseling and Children's Services	YMCA of Lenawee
Family Medical Center of Michigan	

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Christine MacNaughton – Communities in Schools  
Sue Lewis – Catholic Charities  
Ted Crockett – YMCA of Lenawee County  
Milissa Spadafora – Goodwill Southeast Michigan  
Khristine Henson-Jones – LEAHC  
Christie Cadmus – Lenawee Great Start  
Kathryn Szewczuk – Lenawee County Mental Health Assoc.  
Sharon Hudson – Family Counseling and Children's Services

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# Lenawee County Community Assessment

## *Executive Summary*

This executive summary provides an overview of health-related data for Lenawee County adults (19 years of age and older), youth (ages 12 through 18), and children (ages 0-11) who participated in a county-wide health assessment survey during 2011. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after the survey instruments used by the Centers for Disease Control and Prevention for their national and state *Behavioral Risk Factor Surveillance System* (BRFSS) and *Youth Risk Behavior Surveillance System* (YRBSS) and the *National Survey of Children's Health* (NSCH) developed by the Child and Adolescent Health Measurement Initiative. The Healthy Communities Foundation of the Hospital Council of Northwest Ohio collected the data, guided the health assessment process and integrated sources of primary and secondary data into the final report.

## Primary Data Collection Methods

### **Design**

This community health assessment was cross-sectional in nature and included a written survey of adults, adolescents, and parents within Lenawee County. From the beginning, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the study. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment.

### **Instrument Development**

Four survey instruments were designed and pilot tested for this study: one for adults, one for adolescents, one for parents of children ages 0-5, and one for parents of children ages 6-11. As a first step in the design process, health education researchers from the University of Toledo and staff members from the Hospital Council of NW Ohio met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing the health status and health needs of adults and adolescents. The investigators decided to derive the majority of the adult survey items from the BRFSS. The majority of the survey items for the adolescent survey were derived from the YRBSS. The majority of the survey items for the parents of children 0-11 were derived from the NSCH. This decision was based on being able to compare local data with state and national data.

The Project Coordinator from the Hospital Council of NW Ohio conducted a series of meetings with the planning committee from Lenawee County. During these meetings, banks of potential survey questions from the BRFSS, YRBSS, and NSCH surveys were reviewed and discussed. Based on input from the Lenawee County planning committee, the Project Coordinator composed drafts of surveys containing 116 items for the adult survey, 72 items for the adolescent survey (grades 6-12), 78 items for the 0-5 survey, and 79 items for the 6-11 survey. The drafts were reviewed and approved by health education researchers at the University of Toledo.

### **Sampling**

#### *Adult Survey*

Adults ages 19 and over living in Lenawee County were used as the sampling frame for the adult survey. Since U.S. Census Bureau age categories do not correspond exactly to this age parameter, the

## Primary Data Collection Methods

investigators calculated the population of those 18 years and over living in Lenawee County. There were 76,764 persons ages 18 and over living in Lenawee County. The investigators conducted a power analysis to determine what sample size was needed to ensure a 95% confidence level with a corresponding confidence interval of 5% (i.e., we can be 95% sure that the “true” population responses are within a 5% margin of error of the survey findings.) A sample size of at least 383 responding adults was needed to ensure this level of confidence. The response rate for the mailing was 44% (n=329; CI=5.39%). The random sample of mailing addresses of adults from Lenawee County was obtained from American Clearinghouse in Louisville, KY.

### *Children 0-5 and 6-11 Surveys*

Children ages 0-11 residing in Lenawee County were used as the sampling frames for the surveys. Using U.S. Census Bureau data on the population of children ages 0-11, living in Lenawee County, it was determined that 6,878 children ages 0-5 and 7,714 children ages 6-11 reside in Lenawee County. The investigators conducted a power analysis based on a post-hoc distribution of variation in responses (70/30 split) to determine what sample size was needed to ensure a 95% confidence level with corresponding confidence interval of 5% (i.e., we can be 95% sure that the “true” population responses are within a 5% margin of error). Because many of the items were identical between the 0-5 and 6-11 surveys, these items were combined to analyze data for children 0-11. The sample size required to generalize to children ages 0-11 was 369 and this was exceeded by having a combined 471 surveys, CI=4.44%.

The random sample of mailing addresses of parents from Lenawee County was obtained from Hugo American Clearinghouse, Louisville, KY. They select a pool of parents based off of a number of sources which includes, birth records, education records, direct response data, etc.

## **Procedure**

### *Adult Survey*

Prior to mailing the survey to adults, an advance letter was mailed to 800 adults in Lenawee County. This advance letter was personalized, printed on Lenawee Health Network stationery and was signed by Timothy Jakacki, President, ProMedica Bixby Hospital and ProMedica Herrick Hospital and Patsy Bourgeois, Health Officer, Lenawee County Health Department. The letter introduced the county health assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' confidentiality would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

Two weeks following the advance letter, a three-wave mailing procedure was implemented to maximize the survey return rate. The initial mailing included a personalized hand signed cover letter (on Lenawee Health Network stationery) describing the purpose of the study; a questionnaire printed on colored paper; a self-addressed stamped return envelope; and a \$2 incentive. Approximately two weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging them to reply, another copy of the questionnaire on colored paper, and another reply envelope. A third wave postcard was sent two weeks after the second wave mailing. Surveys returned as undeliverable were not replaced with another potential respondent. The response rate for the mailing was 44% (n=329; CI=5.39%). This return rate and sample size means that the responses in the health assessment should be representative of the entire county.

## Primary Data Collection Methods

### *Adolescent Survey*

Schools and grades were randomly selected. Each student in that grade had to have an equal chance of being in the class that was selected, such as a general English or health class. Classrooms were chosen by the school principal. Passive permission slips were mailed home to parents of any student whose class was selected to participate. The response rate was 93% (n=585; CI=3.93%). The survey contained 72 questions and had a multiple choice response format.

### *Children 0-5 and 6-11*

Prior to mailing the survey to parents of 0-11 year olds, an advance letter was mailed to 1600 parents in Lenawee County. This advance letter was personalized, printed on Lenawee Health Network stationery and was signed by Timothy Jakacki, President, ProMedica Bixby Hospital and ProMedica Herrick Hospital and Patsy Bourgeois, Health Officer, Lenawee County Health Department. The letter introduced the county health assessment project and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' confidentiality would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

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Because much of the output combines identical items from the 0-5 and the 6-11 surveys, the number of returned surveys needed for power of the combined population (n=14,592) was 369 and this was exceeded by having a combined 471 surveys, CI=4.44%.

### **Data Analysis**

Individual responses were anonymous and confidential. Only group data are available. All data were analyzed by health education researchers at the University of Toledo using SPSS 17.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Lenawee County, the adult data collected was weighted by age, gender, race, and income using 2010 census data. Multiple weightings were created based on this information to account for different types of analyses. For more information on how the weightings were created and applied, see Appendix iii.

### **Limitations**

As with all county assessments, it is important to consider the findings in light of all possible limitations. First, the Lenawee County adult assessment had a high response rate (44%). However, if any important differences existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to the external validity of the results (the generalizability of the results to the population of Lenawee County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.



## **Primary Data Collection Methods**

Second, it is important to note that, although several questions were asked using the same wording as the CDC questionnaires and the NSCH questionnaire, the adult and parent data collection method differed. CDC adult data and NSCH child data were collected using a set of questions from the total question bank and adults were asked the questions over the telephone rather than as a mail survey. The youth CDC survey was administered in schools in a similar fashion as this county health assessment.

Third, this was the first time that parents of children ages 0-11 were surveyed in Lenawee County. Being a new instrument, there may have been questions that would be worded differently or additional items that would be asked the next time this assessment is completed.

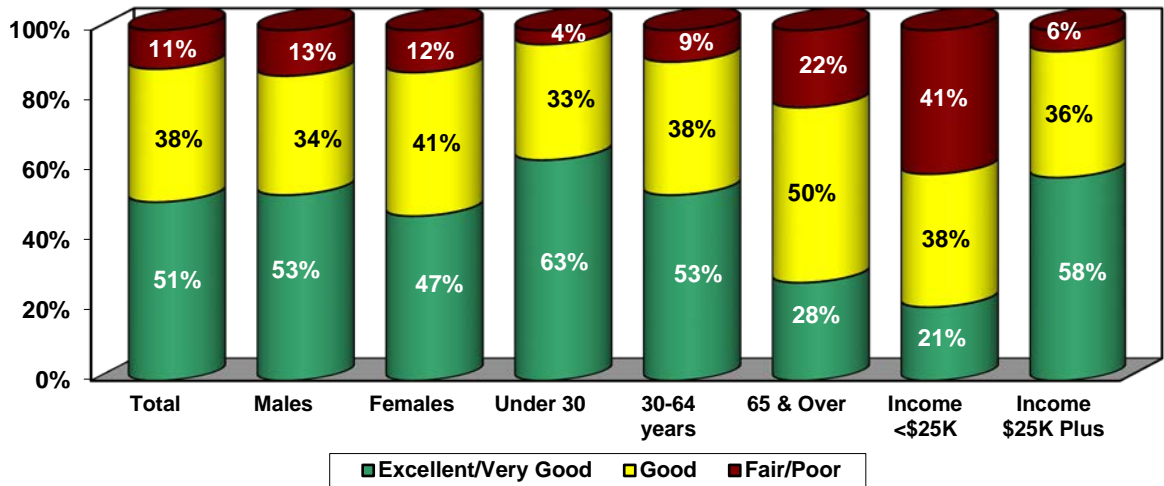
Finally, this survey asked parents questions regarding their young children. Should enough parents feel compelled to respond in a socially desirable manner which is not consistent with reality, this would represent a threat to the internal validity of the results.

## Lenawee County Executive Summary

### Health Perceptions

In 2011, over half (51%) of Lenawee County adults rated their health status as excellent or very good. Conversely, 11% of adults, increasing to 41% of those with annual incomes less than \$25,000, described their health as fair or poor.

**Lenawee County Adult Health Perceptions\***

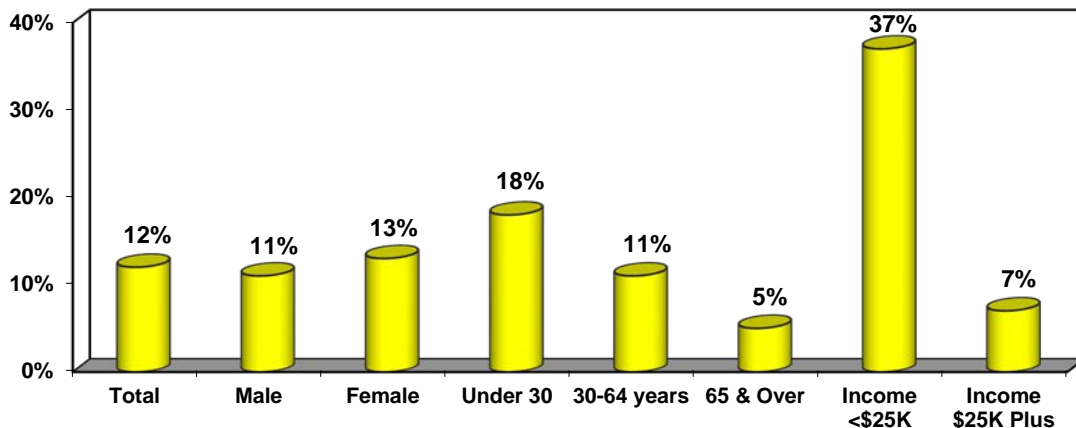


\*Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"

### Health Care Coverage

The 2011 health assessment data has identified that 12% of Lenawee County adults (9,212 adults) were without health care coverage. Those most likely to be uninsured were adults under age 30 and those with an income level under \$25,000. In Lenawee County, 13.7% of residents live below the poverty level. (Source U.S. Census, American Community Survey 5 Year Estimates, 2005-2009)

**Uninsured Lenawee County Adults**



# Lenawee County Executive Summary

## Health Care Access

The 2011 health assessment project identified that 58% of Lenawee County adults had visited a doctor for a routine checkup within the last year. 51% reported they had one particular doctor or healthcare provider they went to for routine medical care.

## Cardiovascular Health

Heart disease (27%) and stroke (6%) accounted for 33% of all Lenawee County adult deaths in 2009 (Source: MDCH, Vital Statistics 2009). The 2011 Lenawee County health assessment found that 6% of adults had a heart attack and 3% had a stroke at some time in their life. More than one-fourth (28%) of Lenawee County adults have been diagnosed with high blood pressure, 36% have high blood cholesterol, and 37% were obese, three known risk factors for heart disease and stroke.

## Cancer

Michigan Department of Community Health statistics indicate that from 2000-2008, a total of 1,842 Lenawee County residents died from cancer, the second leading cause of death in the county. The 2011 health assessment project has identified that 8% of Lenawee County adults were diagnosed with cancer at some time in their life. The American Cancer Society advises that reducing tobacco use, increasing cancer education and awareness, healthy diet and exercise habits, and early detection may reduce overall cancer deaths.

## Diabetes

In 2011, 12% or 9,212 of Lenawee County adults had been diagnosed with diabetes.

## Arthritis

According to the Lenawee County survey data, 35% or 26,867 of Lenawee County adults were diagnosed with arthritis. According to the 2009 BRFSS, 31% of Michigan adults and 26% of U.S. adults were told they have arthritis.

## Asthma

According to the Lenawee County survey data, 13% of Lenawee County adults had been diagnosed with asthma.

### Lenawee County Leading Types of Death 2009

*Total Deaths: 922*

1. Heart Disease (27% of all deaths)
2. Cancers (23%)
3. Chronic Lower Respiratory Diseases (7%)
4. Stroke (6%)
5. Alzheimer's Disease (5%)

*(Source: MDCH, Vital Statistics 2009)*

### Lenawee County Incidence of Cancer, 2007 All Types: 539 cases

- ❖ Lung and Bronchus: 74 cases (14%)
- ❖ Breast: 72 cases (13%)
- ❖ Prostate: 68 cases (13%)
- ❖ Colon and Rectum: 44 cases (8%)

**From 2005-2007, there were 1,332 cancer deaths in Lenawee County.**

*(Source: Michigan Community Health Information –Cancer)*

### Diabetes Facts

- ❖ Diabetes was the 6<sup>th</sup> leading cause of death in Lenawee County in 2009.
- ❖ Diabetes was the 7<sup>th</sup> leading cause of death in Michigan in 2009.
- ❖ In 2009, the Lenawee County age-adjusted mortality rate per 100,000 for diabetes was 29.4 deaths for both males and females (24.3 Michigan).

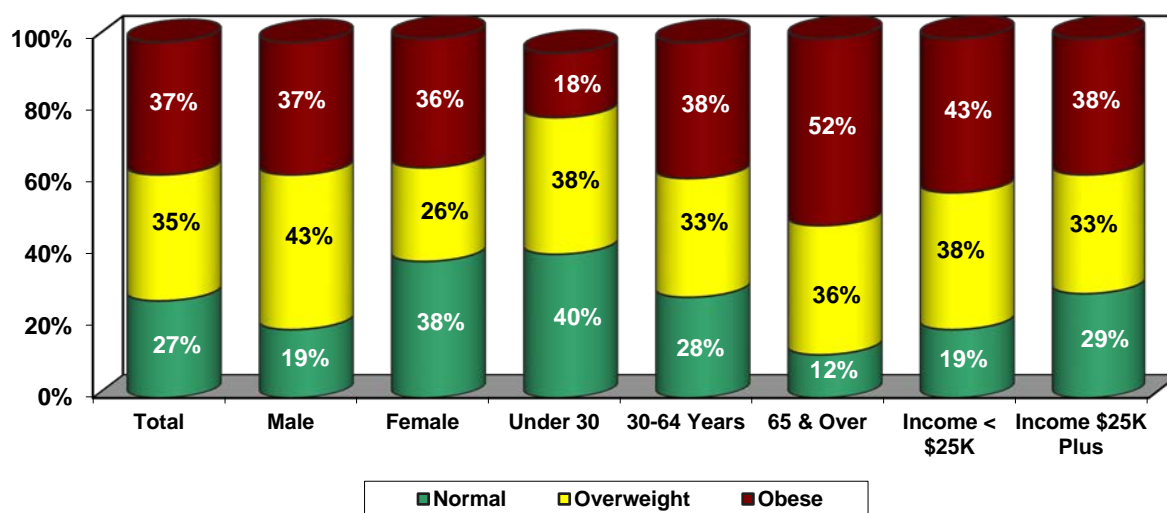
*(Source: MDCH, Vital Statistics, 2009)*

## Lenawee County Executive Summary

### Adult Weight Status

The 2011 Health Assessment project identified that 72% or 55,270 of Lenawee County adults were overweight or obese based on BMI. The 2010 BRFSS indicates that 32% of Michigan and 28% of U.S. adults were obese by BMI. More than one-third (37%) of Lenawee County adults were obese. Less than half (47%) of adults were trying to lose weight. 21% of adults had not been participating in any physical activities or exercise in the past month.

**Lenawee County Adult BMI Classifications**



*(Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight)*

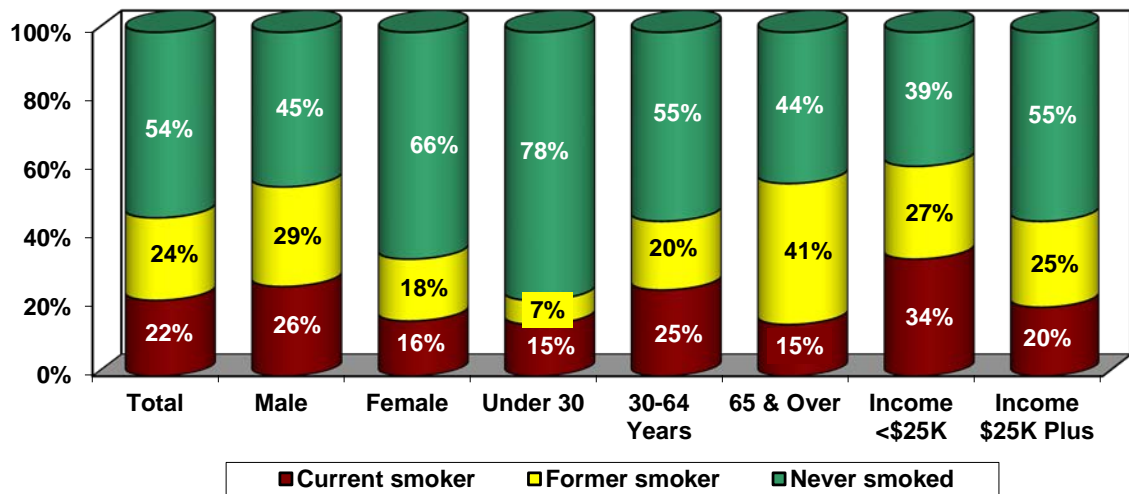
### Adult Tobacco Use

In 2011, 22% or 16,888 of Lenawee County adults were current smokers and 24% were considered former smokers. In 2011, the American Cancer Society (ACS) stated that tobacco use was the most preventable cause of disease and early death in the world, accounting for approximately 5.4 million premature deaths each year. ACS estimated that tobacco use would be linked to approximately one in five deaths in the U.S.

*(Source: Cancer Facts & Figures, American Cancer Society, 2011)*

## Lenawee County Executive Summary

### Lenawee County Adult Smoking Behaviors

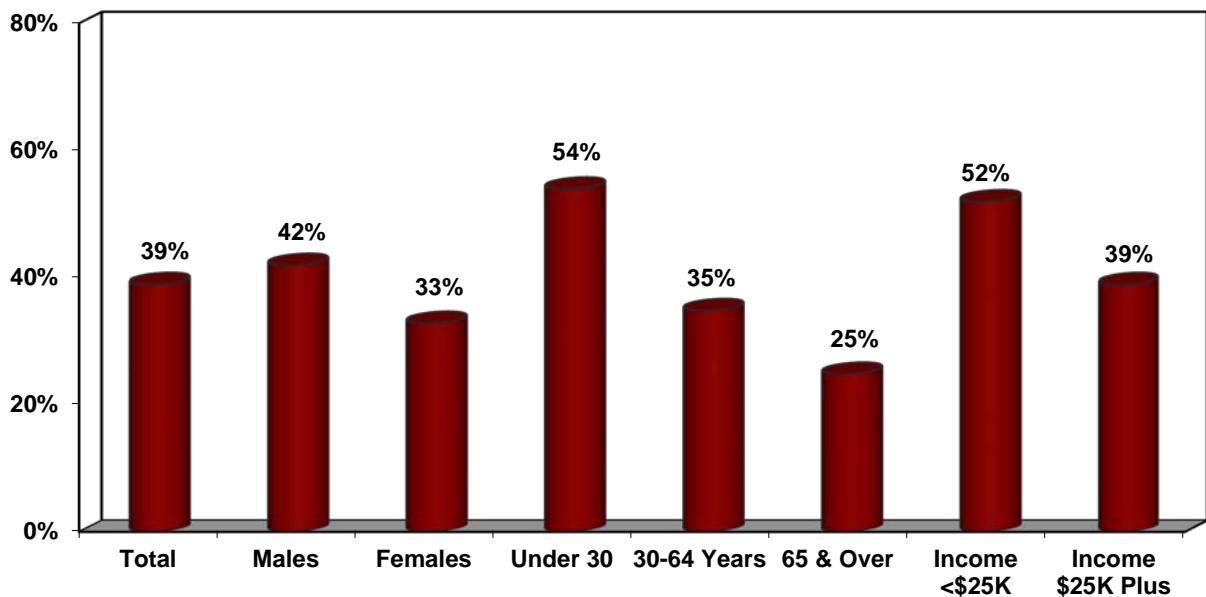


Respondents were asked:  
*"Have you smoked at least 100 cigarettes in your entire life?  
 If yes, do you now smoke cigarettes every day, some days or not at all?"*

### Adult Alcohol Consumption

In 2011, three-fifths (60%) or 46,058 of the Lenawee County adults had at least one alcoholic drink in the past month. In 2011, the health assessment indicated that 17% of Lenawee County adults were considered frequent drinkers (drank an average of three or more days per week, per CDC guidelines). 39% of adults who drank had five or more drinks on one occasion (binge drinking) in the past month. Nine percent of adults drove after having three or more drinks.

### Lenawee County Adult Drinkers Who Binge Drank in Past Month\*

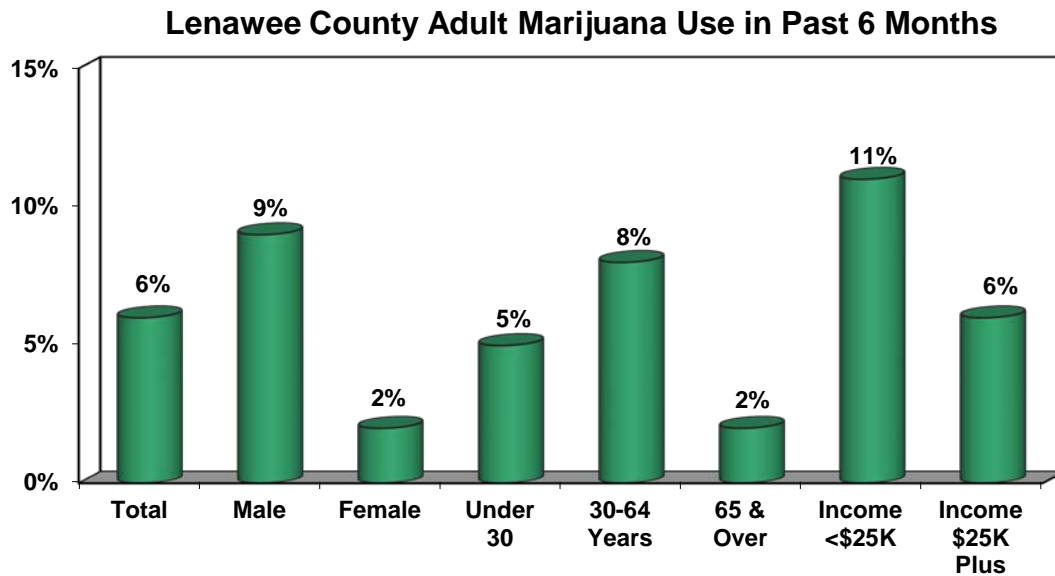


\*Based on adults who have drunk alcohol in the past month. Binge drinking is defined as having five or more drinks on an occasion (for males) or four or more drinks on an occasion (for females).

## Lenawee County Executive Summary

### Adult Marijuana and Other Drug Use

In 2011, 6% of Lenawee County adults had used marijuana during the past 6 months, and 9% of adults misused medications.

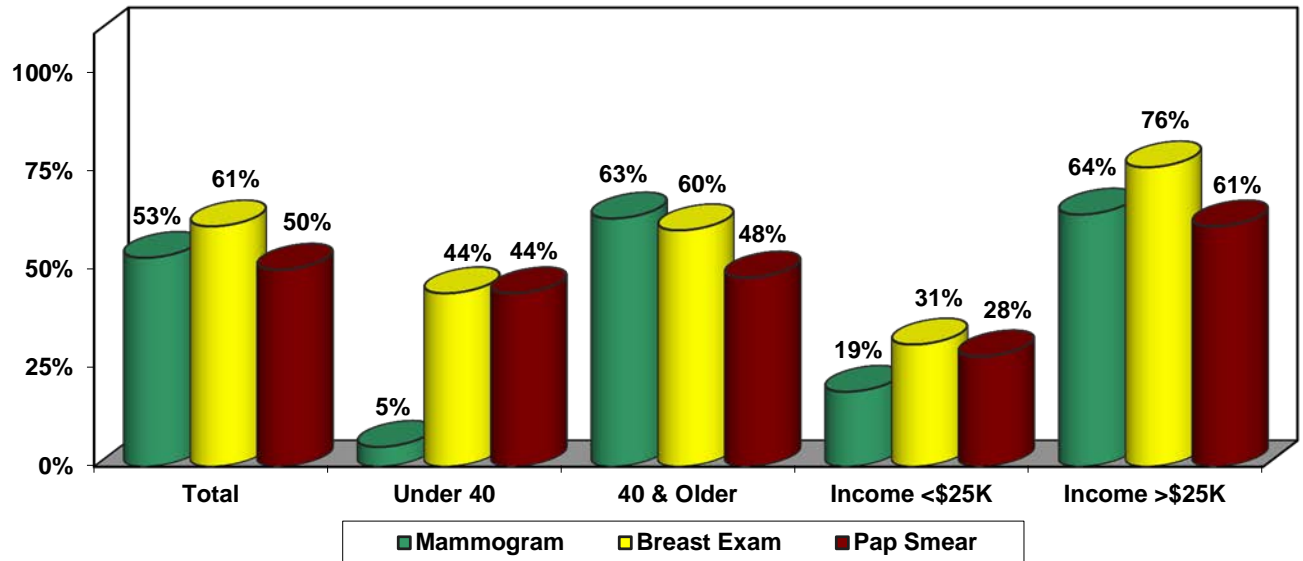


### Women's Health

In 2011, nearly two-thirds (63%) of Lenawee County women over the age of 40 reported having a mammogram in the past year. 61% of Lenawee County women have had a clinical breast exam and 50% have had a Pap smear to detect cancer of the cervix in the past year. The health assessment determined that more than one-fifth (23%) of women had high blood pressure, 33% had high blood cholesterol, 36% were obese, and 16% were identified as smokers, known risk factors for cardiovascular diseases.

## Lenawee County Executive Summary

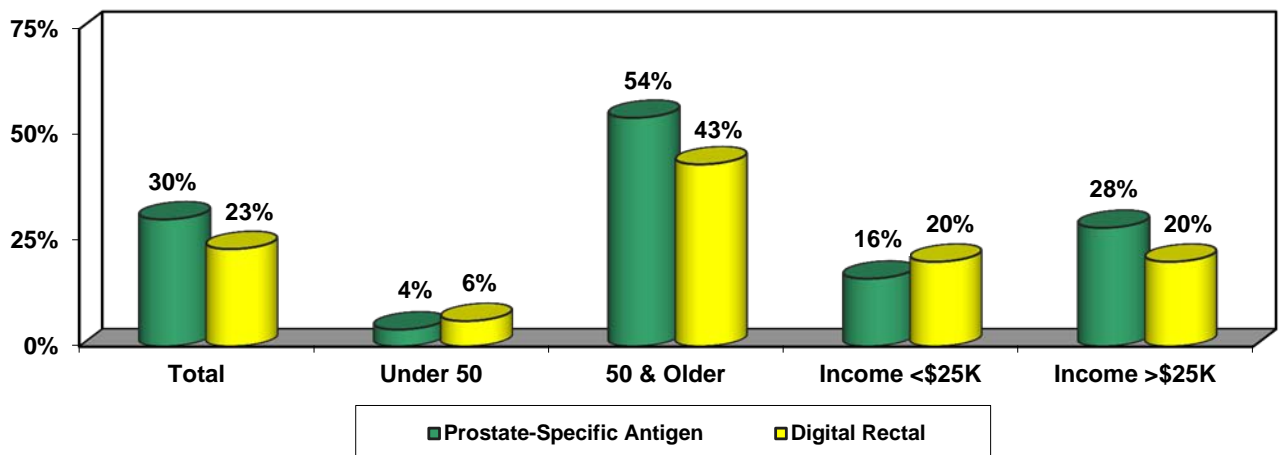
### Lenawee Women's Health Exams Within the Past Year



### Men's Health

In 2011, more than half (54%) of Lenawee County males over the age of 50 had a Prostate-Specific Antigen (PSA) test in the past year. 43% of males over the age of 50 had a digital rectal exam in the past year. Major cardiovascular diseases (heart disease and stroke) accounted for 33% and cancers accounted for 25% of all male deaths in Lenawee County in 2009. The health assessment determined that 7% of men had a heart attack, and 4% had a stroke at some time in their life. Almost one-third (30%) of men had been diagnosed with high blood pressure, 38% had high blood cholesterol, and 26% were identified as smokers, which, along with obesity (37%), are known risk factors for cardiovascular diseases.

### Lenawee Men's Health Exams Within the Past Year



## Lenawee County Executive Summary

### Preventive Medicine and Health Screenings

More than one-third (39%) of adults had a flu shot during the past 12 months. 57% of adults over 50 had received a colonoscopy or sigmoidoscopy in the past 5 years.

### Environmental Health/Disaster Preparedness

Insects and mold were the two most important perceived environmental health issues that threatened Lenawee County adults' health in the past year.

### Adult Sexual Behavior & Pregnancy Outcomes

In 2011, nearly three-fourths (73%) of Lenawee County adults had sexual intercourse. Six percent of adults had more than one partner. Even though young people aged 15-24 represent only 25% of the sexually experienced population, they acquire nearly half of all STDs (*Source: CDC, STDs in Adolescents and Young Adults, 2009 STD Surveillance*).

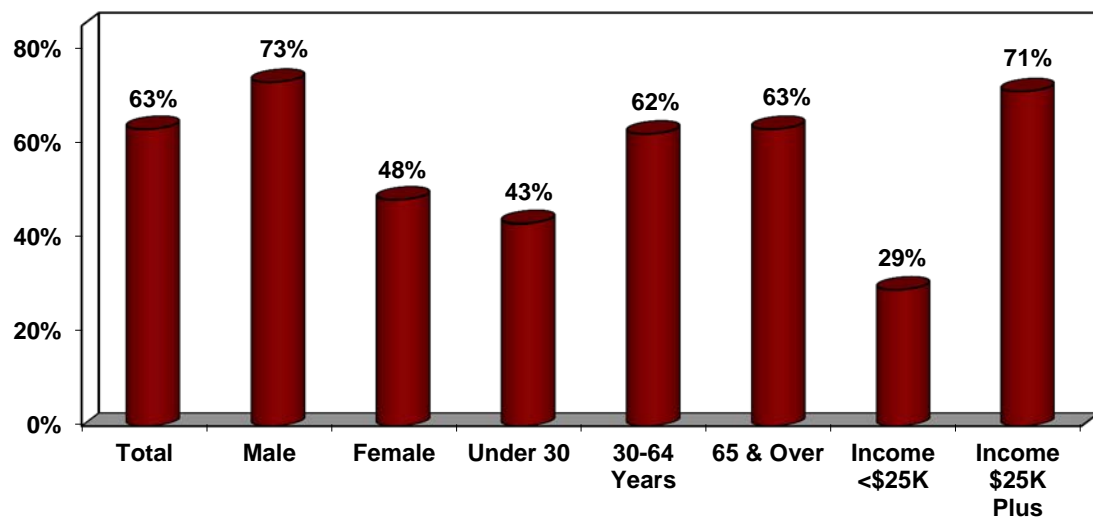
### Quality of Life

More than one-quarter (26%) Lenawee County adults in 2011 reported they were limited in some way because of a physical, mental or emotional problem.

### Social Context and Safety

The health assessment identified that 63% of Lenawee County adults kept a firearm in or around their home. About 1 in 14 (7%) adults were threatened, and 9% were abused in the past year.

**Lenawee County Adults With a Firearm in the Home**





## Lenawee County Executive Summary

### Adult Mental Health and Suicide

In 2011, 4% of Lenawee County adults considered attempting suicide. 9% of adults felt so sad or hopeless early every day for two or more weeks that they stopped doing usual activities.

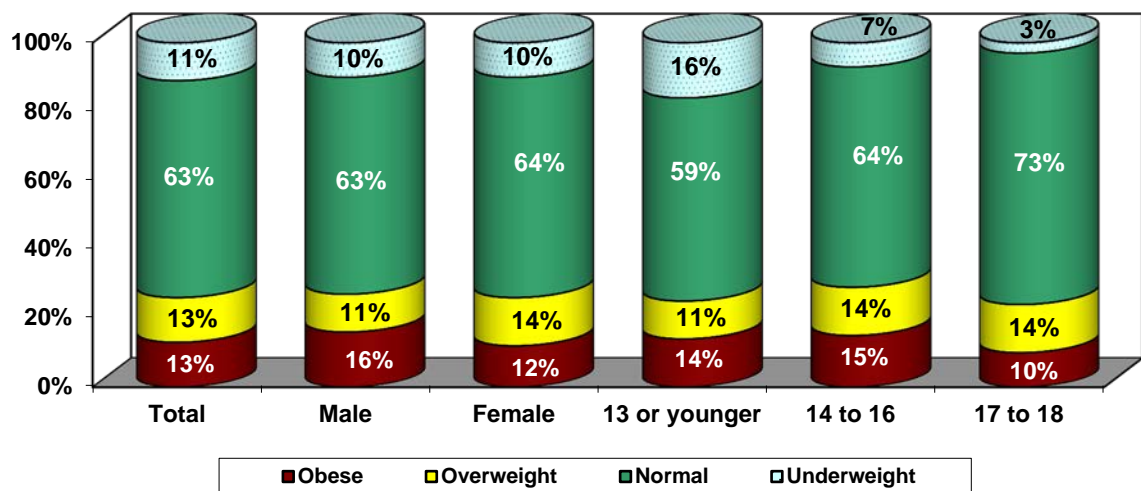
### Oral Health

The 2011 health assessment project has determined that more than two-thirds (72%) of Lenawee County adults had visited a dentist or dental clinic in the past year. The 2010 BRFSS reported that 70% of U.S. adults and 73% of Michigan adults had visited a dentist or dental clinic in the previous twelve months. More than three-fourths (76%) of Lenawee youth had visited the dentist for a check-up, exam, teeth cleaning, or other dental work in the past year.

### Youth Weight Status

The 2011 Health Assessment identified that 13% or 1,321 of Lenawee County youth were obese, according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 28% of Lenawee County youth reported that they were overweight. 73% of youth were exercising for 60 minutes on 3 or more days per week.

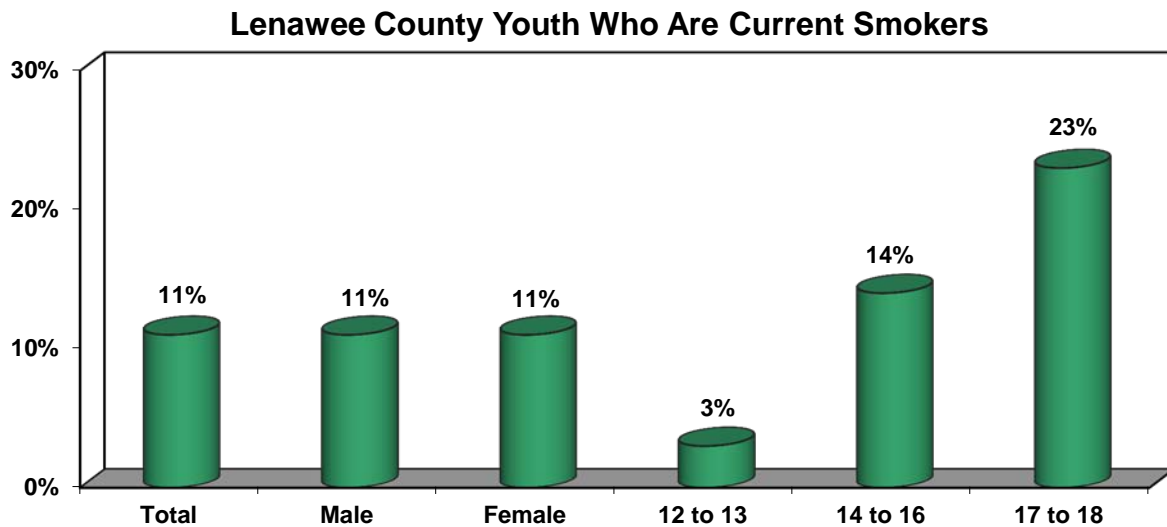
**Lenawee County Youth BMI Classifications**



## Lenawee County Executive Summary

### Youth Tobacco Use

The 2011 health assessment identified that 11% or 1,118 of Lenawee County youth (ages 12-18) were smokers, increasing to 23% of those who were 17-18 years old. Overall, 6% of Lenawee County youth indicated they had used chewing tobacco in the past year.



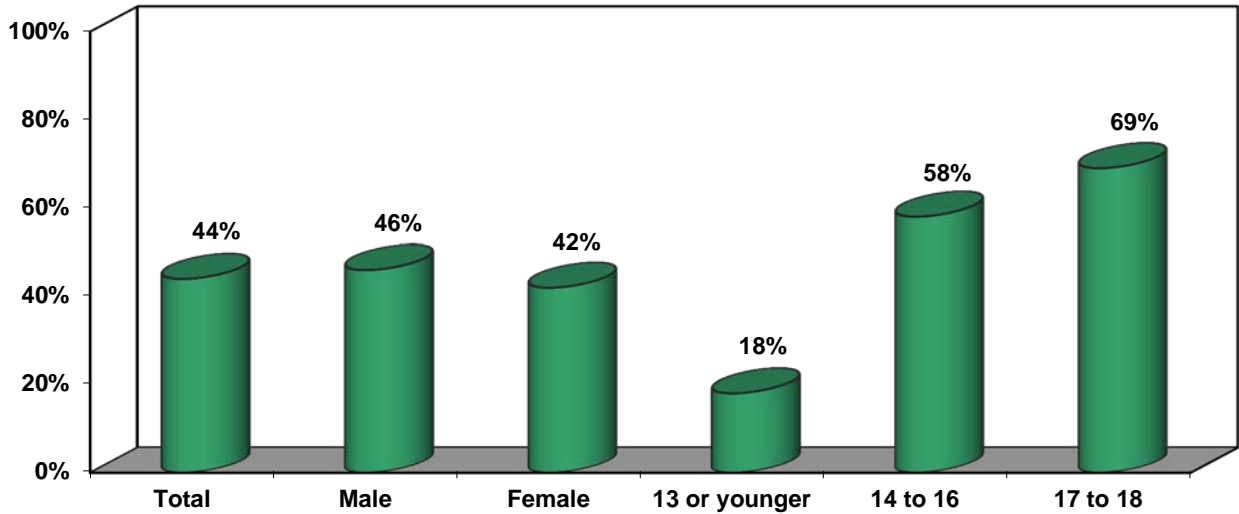
*Current smokers are those who have smoked at any time during the past 30 days.*

### Youth Alcohol Consumption

In 2011, the health assessment results indicated that 44% or 4,471 of Lenawee County youth had drunk at least one drink of alcohol in their life increasing to 69% of youth seventeen to eighteen years old. 36% of those who drank took their first drink by the age of 12. More than one-fifth (21%) of all Lenawee County youth and 38% of those 17-18 years had at least one drink in the past 30 days. Over half (57%) of the youth who reported drinking in the past 30 days had at least one episode of binge drinking. 9% of all youth drivers had driven a car in the past month after they had been drinking alcohol.

## Lenawee County Executive Summary

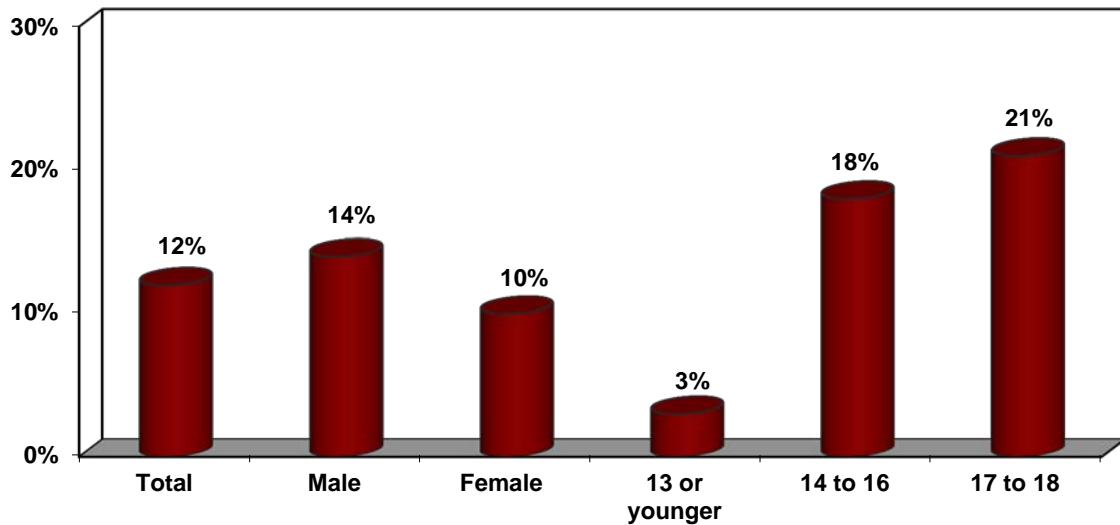
### Lenawee County Youth Who Had At Least One Drink In Their Lifetime



### Youth Marijuana and Other Drug Use

In 2011, 12% or 1,220 of Lenawee County youth had used marijuana at least once in the past 30 days, increasing to 20% of high school youth. During the past 12 months, 10% of Lenawee County youth had someone offer, sell, or give them an illegal drug on school property.

### Lenawee County Youth Who Used Marijuana in the Past Month

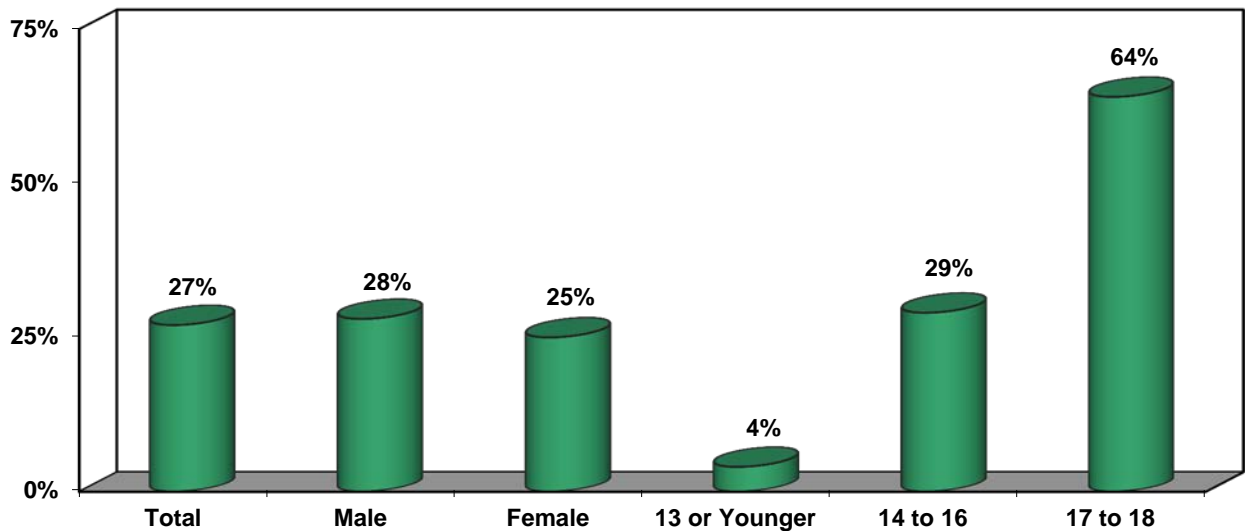


## Lenawee County Executive Summary

### Youth Sexual Behavior & Pregnancy Outcomes

In 2011, more than one-quarter (27%) or 2,744 of Lenawee County youth have had sexual intercourse, increasing to 64% of those ages 17 to 18. 23% of youth had participated in oral sex and 7% had participated in anal sex. 23% of youth participated in sexting. Of those who were sexually active, 54% had multiple sexual partners.

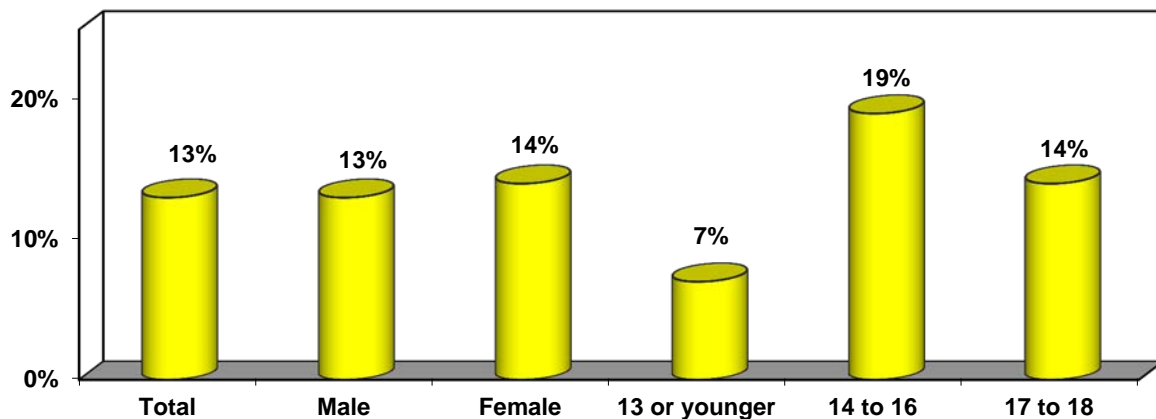
**Lenawee County Youth Who Had Sexual Intercourse**



### Youth Mental Health and Suicide

In 2011, 13% of Lenawee County youth had seriously contemplated suicide in the past year and 5% or 508 youth admitted actually attempting suicide in the past year.

**Lenawee County Youth Who Contemplated Suicide in Past 12 Months**

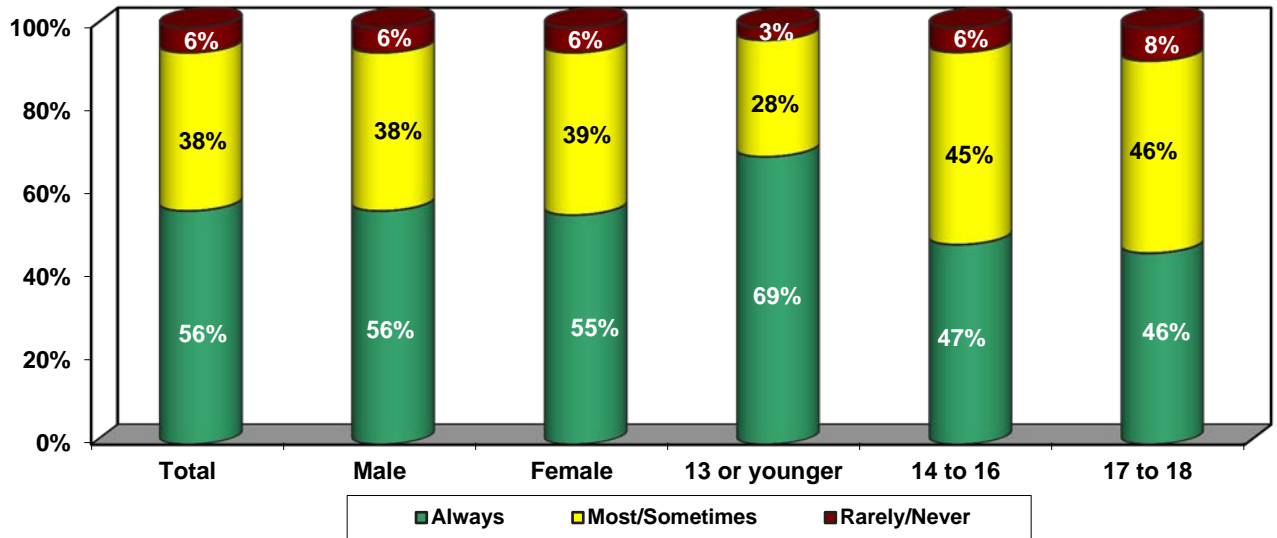


## Lenawee County Executive Summary

### Youth Safety and Support

In 2011, more than half (56%) of Lenawee County youth self-reported that they always wore a seatbelt when riding in a car driven by someone else. 33% of youth drivers texted while driving. 72% said they plan to graduate from high school.

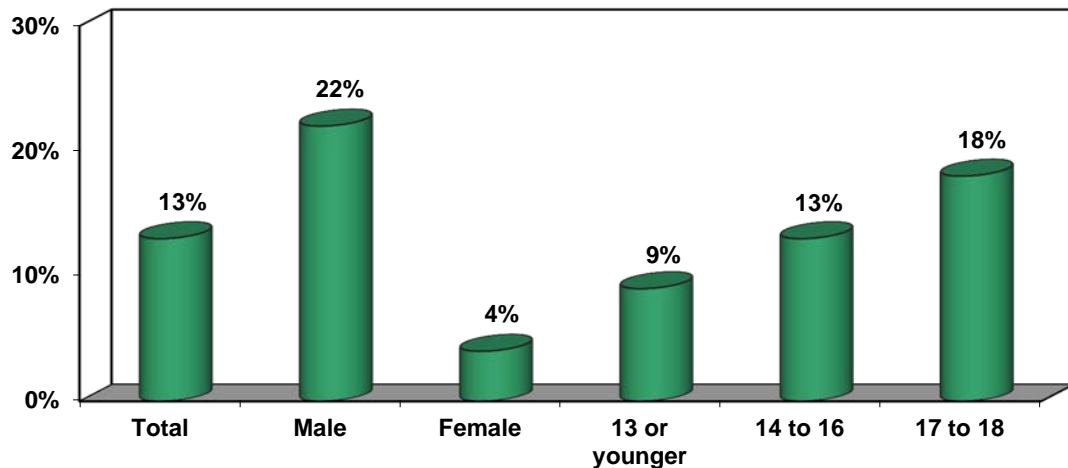
**Lenawee County Youth Seatbelt Use in the Past Month**



### Youth Violence

In Lenawee County, 13% of the youth had carried a weapon in the past month. 6% of youth had been threatened or injured by a weapon on school property in the past year. 49% or 4,980 of youth were bullied in the past year. 29% of youth had purposefully hurt themselves at some time in their life.

**Lenawee County Youth Carrying a Weapon during the Past 30 Days**



## **Lenawee County Executive Summary**

### **Children's Health & Functional Status**

In 2011, 20% or 2,918 children were classified as obese, and 17% were overweight. 80% of Lenawee County parents had taken their child ages 0-11 to the dentist in the past year. 17% of parents reported their child had asthma, and 7% of parents reported their child had ADD/ADHD. 89% of parents reported their child had been physically active for 60 minutes on three or more days in the past week.

### **Children's Health Insurance, Access, Utilization, & Medical Home**

In 2011, 6% of Lenawee County parents reported that their 0-11 year old was not covered by health insurance. 13% of parents or 1,897 parents reported their child did not receive all of the medical care he or she needed in the past year. 86% of parents had taken their child to the doctor for preventive care in the past year.

### **Early Childhood (Ages 0-5)**

The following information was reported by parents of 0-5 year olds. In 2011, 90% of mothers got prenatal care within the first three months during their last pregnancy. 9% of mothers smoked during their last pregnancy. 74% of parents put their child to sleep on his/her back. 28% of mothers never breastfed their child.

### **Middle Childhood (Ages 6-11)**

The following information was reported by Lenawee County parents of 6-11 year olds. In 2011, 25% of Lenawee County parents reported their child never wore a helmet when riding a bicycle. 50% of parents reported their child was bullied at some time in the past year. 87% of parents reported their child participated in extracurricular activities. 19% of parents reported their child had an email, MySpace, Facebook, Twitter, or another social networking account.

### **Family Functioning & Neighborhood Characteristics**

In 2011, 24% of Lenawee County parents reported they read to their child every day. 97% of parents reported their neighborhood was always or usually safe.

### **Parent Health**

In 2011, 33% of Lenawee County parents were overweight and 34% were obese. Parents missed work an average of 2.0 days per year due to their child being ill or injured.

## Lenawee County Trend Summary

Youth Variables	Lenawee County 2011 (6-12 grade)	Lenawee County 2011 (9-12 grade)	Michigan 2009 (9-12 grade)	U.S. 2009 (9-12 grade)
<b>Injury-Related Behavior</b>				
Rode with a driver who had been drinking in past 30 days	19%	21%	28%	28%
Carried a weapon in past 30 days	13%	14%	17%	18%
Threatened or injured with a weapon on school property in past 12 months	6%	4%	9%	8%
Seriously considered suicide in past 12 months	13%	17%	16%	14%
Attempted suicide in past 12 months	5%	7%	9%	6%
<b>Alcohol Use</b>				
Ever had at least one drink of alcohol in lifetime	44%	63%	70%	73%
Used alcohol during past 30 days	21%	36%	37%	42%
Binged during past 30 days (5 or more drinks in a couple of hours on an occasion)	12%	21%	23%	24%
<b>Tobacco Use</b>				
Lifetime cigarette use (ever tried cigarette smoking, even 1 or 2 puffs)	27%	43%	46%	46%
Used cigarettes on one or more of the past 30 days	11%	17%	19%	20%
<b>Sexual Behavior</b>				
Ever had sexual intercourse	27%	41%	46%	46%
Had four or more sexual partners	8%	12%	14%	14%
Used a condom at last sexual intercourse	72%	74%	61%	61%
Used birth control pills at last sexual intercourse	36%	40%	21%	20%
<b>Drug Use</b>				
Used marijuana in the past 30 days	12%	20%	21%	21%
Used cocaine in their lifetime	3%	3%	7%	6%
Used heroin in their lifetime	1%	1%	5%	3%
Used methamphetamines in their lifetime	2%	2%	6%	4%
Used steroids in their lifetime	3%	3%	4%	3%
Used prescription medication in order to get high or feel good	10%	15%	N/A	N/A
Used inhalants in order to get high in their lifetime	10%	12%	14%	12%
Offered, sold or given an illegal drug on school property during the past 12 months	10%	15%	30%	23%

N/A= not available

## Lenawee County Trend Summary

Adult Variables	Lenawee County 2011	Michigan 2010	U.S. 2010
<b>Alcohol Consumption</b>			
Had at least one alcoholic beverage in past month	60%	56%	54%
Binged in past month (5 or more drinks in a couple of hours on an occasion)	22%	15%	15%
<b>Tobacco Use</b>			
Current smoker (currently smoke some or all days)	22%	19%	17%
Former smoker (smoked 100 cigarettes in lifetime & now do not smoke)	24%	25%	25%
<b>Arthritis, Asthma, &amp; Diabetes</b>			
Has been diagnosed with arthritis	35%	31%*	26%*
Has been diagnosed with asthma	13%	16%	14%
Has been diagnosed with diabetes	12%	10%	10%
<b>Hypertension &amp; Cholesterol Awareness</b>			
Has been diagnosed with high blood pressure	28%	30%*	29%*
Has been diagnosed with high blood cholesterol	36%	39%*	38%*
<b>Health Status</b>			
Rated general health as fair or poor	11%	14%	15%
<b>Preventive Health</b>			
Has had a flu shot in past 12 months	39%	N/A	N/A
Dental visit within past year	72%	73%	70%
Women age 40 and over having had a mammogram in the past 2 years	81%	78%	75%
<b>Weight Status</b>			
Obese	37%	32%	28%
Overweight	35%	35%	36%

N/A= not available

\*2009 BRFSS Data



## Lenawee County Trend Summary

Child Comparisons	Lenawee County 2011 Ages 0-5	Michigan 2007 Ages 0-5	U.S. 2007 Ages 0-5	Lenawee County 2011 Ages 6-11	Michigan 2007 Ages 6-11	U.S. 2007 Ages 6-11
<b>Health and Functional Status</b>						
Rated health as excellent or very good	97%	89%	87%	98%	85%	84%
Diagnosed with asthma	17%	13%	9%	18%	16%	16%
Diagnosed with ADHD/ADD	3%	1%	1%	9%	6%	9%
Diagnosed with behavioral or conduct problems	2%	N/A	1%	7%	N/A	5%
Diagnosed with developmental delay or physical impairment	6%	4%	3%	7%	5%	6%
Diagnosed with anxiety problems	1%	N/A	1%	4%	N/A	3%
Diagnosed with hearing problems	6%	N/A	2%	2%	N/A	3%
No physical activity	2%	N/A	N/A	3%	7%	7%
<b>Health Insurance, Access and Utilization</b>						
Had public insurance	23%	38%	35%	14%	30%	28%
Been to doctor for preventive care	94%	94%	96%	81%	85%	86%
Dental care visit in past year	59%	56%	54%	93%	95%	90%
Received all the medical care they needed	86%	100%*	99%*	88%	99%*	98%*
Have a personal doctor or nurse	83%	94%	94%	87%	94%	92%
<b>Family Functioning &amp; Neighborhood Characteristics</b>						
Family eat a meal together every day of the week	47%	57%	58%	36%	47%	47%

\* 2003 national and state data

# Health Status Perceptions

## Key Findings

*In 2011, over half (51%) of Lenawee County adults rated their health status as excellent or very good. Conversely, 11% of adults, increasing to 41% of those with annual incomes less than \$25,000, described their health as fair or poor.*

## General Health Status

- ◆ In 2011, over half (51%) of Lenawee County adults rated their health as excellent or very good. Lenawee County adults with higher incomes (58%) were most likely to rate their health as excellent or very good, compared to 21% of those with incomes less than \$25,000. The 2010 BRFSS has identified that 53% of Michigan and 55% of U.S. adults self-reported their health as excellent or very good.
- ◆ 11% of adults rated their health as fair or poor. The 2010 BRFSS has identified that 14% of Michigan and 15% of U.S. adults self-reported their health as fair or poor.
- ◆ Lenawee County adults were most likely to rate their health as fair or poor if they:
  - Were widowed (50%)
  - Had an annual household income under \$25,000 (41%)
  - Were 65 years of age or older (22%)
  - Had high blood cholesterol (15%) or high blood pressure (18%)

### Adults Who Rated General Health Status Excellent or Very Good

- ◆ Lenawee County 51% (2011)
- ◆ Michigan 53% (2010)
- ◆ U.S. 55% (2010)

*(Source: BRFSS 2010 for Michigan and U.S.)*

## Physical Health Status

- ◆ In 2011, 23% of Lenawee County adults rated their physical health as not good on four days or more in the previous month, increasing to 35% of those with incomes less than \$25,000.

## Mental Health Status

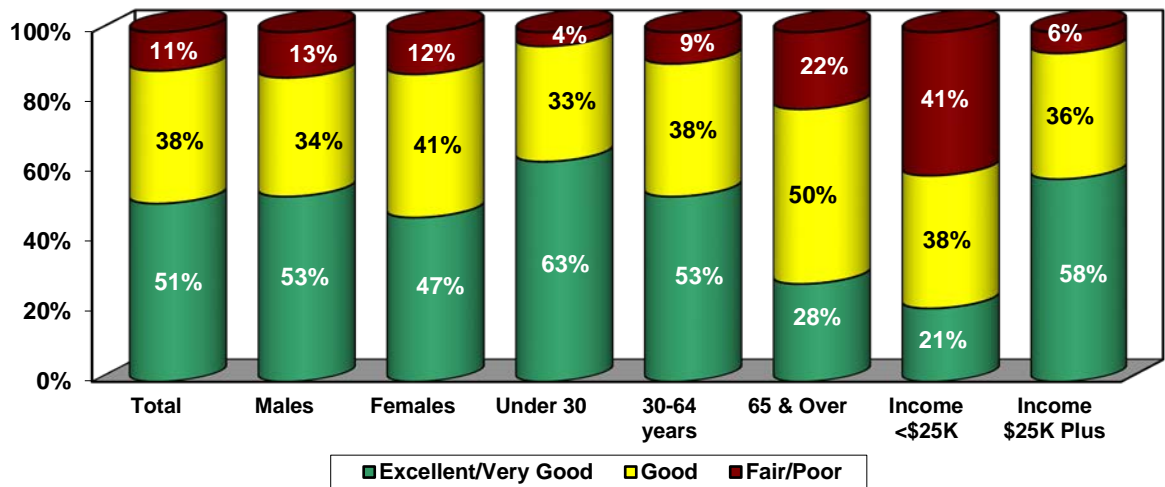
- ◆ In 2011, 22% of Lenawee County adults rated their mental health as not good on four days or more in the previous month, increasing to 33% of females and 42% of those with an annual income of less than \$25,000.
- ◆ Nearly one-third (32%) adults reported that poor mental or physical health kept them from doing usual activities such as self-care, work, or recreation in the past month.

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Rated health as excellent or very good	51%	53%	55%
Rated health as fair or poor	11%	14%	15%

## Health Status Perceptions

The following graph shows the percentage of Lenawee County adults who described their personal health status as excellent/very good, good, and fair/poor. Examples of how to interpret the information include: 51% of all Lenawee County adults, 63% of those under age 30, and 28% of those ages 65 and older rated their health as excellent or very good. The table shows the percentage of adults with poor physical and mental health in the past 30 days.

**Lenawee County Adult Health Perceptions\***



*\*Respondents were asked: "Would you say that in general your health is excellent, very good, good, fair or poor?"*

Health Status	No Days	1-3 Days	4-5 Days	6-7 Days	8 or More Days
<b>Physical Health Not Good in Past 30 Days*</b>					
Males	65%	5%	8%	2%	12%
Females	49%	16%	11%	5%	10%
Total	60%	10%	9%	3%	11%
<b>Mental Health Not Good in Past 30 Days*</b>					
Males	70%	8%	2%	2%	10%
Females	52%	11%	10%	3%	21%
Total	64%	9%	5%	3%	14%

*\*Totals may not equal 100% as some respondents answered "Don't know/Not sure".*

## Health Care Coverage

### Key Findings

*The 2011 health assessment data has identified that 12% of Lenawee County adults were without health care coverage. Those most likely to be uninsured were adults under age 30 and those with an income level under \$25,000. In Lenawee County, 13.7% of residents live below the poverty level. (Source U.S. Census, American Community Survey 5 Year Estimates, 2005-2009)*

### General Health Coverage

- ◆ In 2011, 88% Lenawee County adults had health care coverage, leaving 12% who were uninsured. The 2010 BRFSS reports uninsured prevalence rates for Michigan (14%) and the U.S. (15%).
- ◆ 12% of adults were without healthcare coverage, increasing to 37% of those with incomes less than \$25,000 and 18% of those under the age of 30.
- ◆ 15% of adults with children did not have healthcare coverage, compared to 10% of those who did not have children living in their household.
- ◆ The following types of health care coverage were used: employer (52%), someone else's employer (15%), Medicare (11%), self-paid plan (10%), multiple-including private sources (5%), Medicaid or medical assistance (3%), multiple-including government sources (1%), military/CHAMPUS/TriCare/VA (1%), and other (1%).
- ◆ Lenawee County adult health care coverage included the following: medical (99%), prescription coverage (89%), Lenawee County physicians (80%), their spouse (78%), immunizations (72%), dental (69%), mental health (67%), preventive care (67%), vision (63%), their children (62%), alcohol or substance abuse treatment (46%), home care (30%), skilled nursing (30%), and hospice (27%).
- ◆ Lenawee County adults reported the following issues regarding their health care coverage: co-pays too high (32%), deductibles too high (30%), premiums too high (29%), could not understand their insurance plan (9%), opted out of certain coverage because they could not afford it (8%), high HSA account deductibles (6%), opted out of certain coverage because they did not need it (3%), and working with their insurance company (3%).
- ◆ The top five reasons uninsured adults gave for being without health care coverage were:
  1. They lost their job or changed employers (41%)
  2. They could not afford to pay the insurance premiums (40%)
  3. Their employer does not/stopped offering coverage (21%)
  4. They became ineligible (13%)
  5. Their benefits from employer/former employer ran out (10%)
 (Percentages do not equal 100% because respondents could select more than one reason)

#### Lenawee County Medicaid Health Plan Enrollees

	Residents Enrolled in Medicaid	Health Plan of Enrollees
<b>Lenawee County February 2012</b>	11,152	Health Plan of Michigan & United Healthcare GLHP
<b>Lenawee County February 2011</b>	11,119	Health Plan of Michigan & United Healthcare GLHP

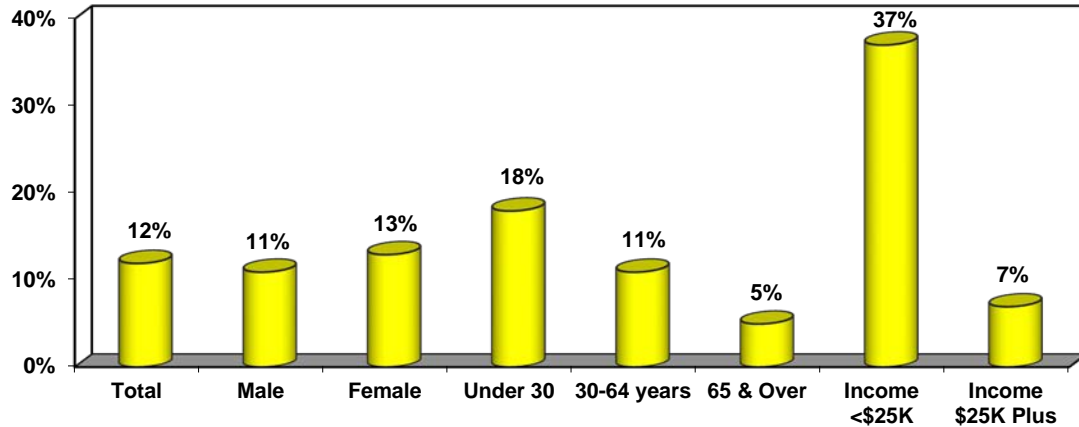
(Source: MDCH, Health Care Coverage, Medicaid and Center for Medicare & Medicaid Services, <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-State/michigan.html>)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Uninsured	12%	14%	15%

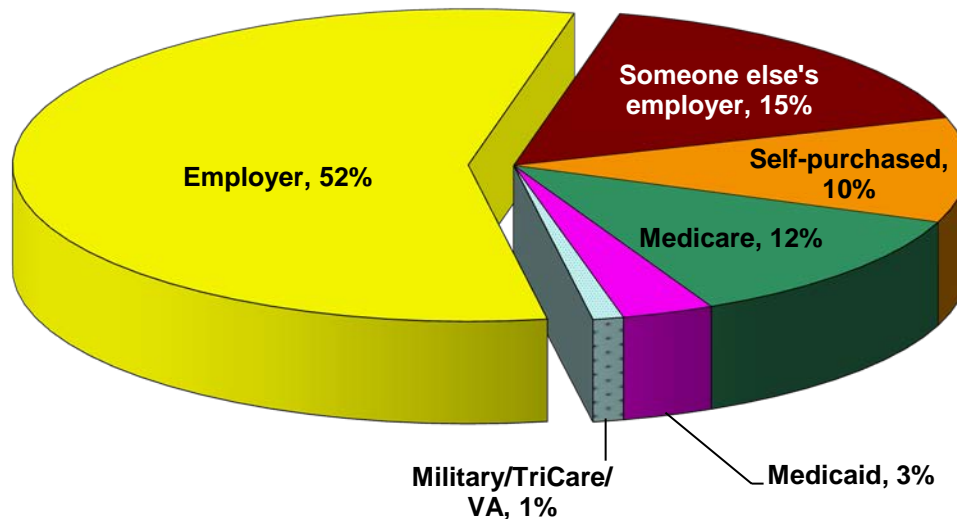
## Health Care Coverage

The following graph shows the percentages of Lenawee County adults who were uninsured by demographic characteristics. Examples of how to interpret the information in the first graph include: 12% of all Lenawee County adults were uninsured, 37% of adults with an income less than \$25,000 reported being uninsured and 18% of those under age 30 lacked health care coverage. The pie chart shows sources of Lenawee County adults' health care coverage.

**Uninsured Lenawee County Adults**



**Source of Health Coverage for Lenawee County Adults**



# Health Care Coverage

## Lenawee County Medicaid and Medicare Enrollees

As of February 2012, there were approximately 11,152 Lenawee County residents enrolled in Medicaid. As of March 2011, there were approximately 18,337 people enrolled in Medicare in Lenawee County.

(Source: Michigan Department of Community Health; Kaiser Family Foundation, Medicaid Health and Prescription Drug Plan Tracker, March 2011)

Medicaid Payments, FY 2008	Michigan Enrollees	Michigan *Expenditures	U.S. Enrollees	U.S. *Expenditures
<b>By Enrollment Group</b>				
Children	21%	\$1,972,570,063	20%	\$63,277,985,917
Adults	15%	\$1,377,430,920	13%	\$40,277,615,051
Disabled	41%	\$3,820,194,308	43%	\$136,101,049,777
Aged	22%	\$2,054,401,008	25%	\$78,085,258,876
<b>TOTAL</b>	<b>100%</b>	<b>\$9,224,596,300</b>	<b>100%</b>	<b>\$317,693,178,870</b>
<b>By Enrollee **(Average payment)</b>				
Children	21%	\$1,841	20%	\$2,164
Adults	15%	\$3,113	13%	\$2,668
Disabled	41%	\$12,104	43%	\$14,840
Aged	22%	\$14,832	25%	\$12,938

\*Spending includes both state and federal payments to Medicaid. The payment amounts from the source data reflect payments for services during federal fiscal year 2008, based on date of payment.

\*\*The average (mean) level of payments across all Medicaid enrollees does not include disproportionate share hospital payments (DSH).

(Source: Kaiser Family Foundation, Michigan State Health Facts, Medicaid 2008)

## A Guide to Michigan Medicaid Health Plans

All Medicaid health plans cover medically-necessary services such as:

- ❖ Ambulance
- ❖ Doctor visits
- ❖ Emergency care
- ❖ Family planning
- ❖ Health checkups for children and adults
- ❖ Hearing and speech
- ❖ Home health care
- ❖ Hospice care
- ❖ Hospital care
- ❖ Immunizations (shots)
- ❖ Lab and x-ray
- ❖ Medical supplies
- ❖ Medicine
- ❖ Mental health
- ❖ Physical and occupational therapy
- ❖ Prenatal care and delivery
- ❖ Surgery
- ❖ Vision

All Medicaid health plans are required to provide the services listed above.

Some of these services are limited. Your doctor or health plan can tell you what Medicaid covers.

(Source: Michigan Department of Community Health (MDCH), published January 2012)

## Health Care Access

### Key Findings

*The 2011 health assessment project identified that 58% of Lenawee County adults had visited a doctor for a routine checkup within the last year. 51% reported they had one particular doctor or healthcare provider they went to for routine medical care.*

### Health Care Access

- ◆ 58% of Lenawee County adults have visited their doctor for a routine checkup within the past year; 76% have visited their doctor within the past two years; 86% have visited their doctor within the past 5 years; and 3% have never visited their doctor for a routine checkup.
- ◆ 51% of Lenawee County adults reported they had one particular doctor or healthcare professional they go to for routine medical care, decreasing to 39% of those with incomes less than \$25,000. 32% of adults had more than one particular doctor or healthcare professional they go to for routine medical care, and 16% did not have one at all.
- ◆ When adults were sick or need advice about their health, they usually went to the following: a doctor's office (78%), no usual place (6%), urgent care center (5%), public health clinic or community health center (2%), chiropractor (<1%), hospital outpatient department (<1%), hospital emergency room (<1%), and some other place (2%).
- ◆ 55% of Lenawee County adults chose to go outside of Lenawee County for health care services in the past year. The top 5 services they sought outside of Lenawee County were: specialty care (28%), primary care (22%), dental services (17%), obstetrics/gynecology (8%), and cardiac care (7%).
- ◆ Lenawee County adults went outside of Lenawee County for mental health care services for the following reasons: insurance restrictions (5%), better quality program (4%), used to live in the area (3%), wait list in Lenawee County too long (2%), did not like the local programs (2%), worked in the area (1%), and word of mouth (1%).
- ◆ Lenawee County adults had the following problems when they needed health care in the past year: did not have enough money for health care or insurance (11%), could not get appointments when they wanted them (7%), were too busy to get the healthcare they needed (6%), could not find a doctor they were comfortable with (6%), healthcare plan did not allow them to see any doctors in Lenawee County (5%), had to change doctors because of their healthcare plan (4%), could not find a doctor to take them as a patient (3%), did not have transportation (2%), were too embarrassed to seek help (2%), did not have childcare (<1%), and some other problem that kept them from getting healthcare (1%).
- ◆ The following might prevent Lenawee County adults from seeing a doctor if they were sick, injured, or needed some kind of health care: cost (37%), no insurance (18%), hours not convenient (13%), difficult to get an appointment (12%), worried they might find something wrong (11%), could not get time off work (10%), frightened of the procedure or doctor (6%), difficult to find/no transportation (4%), do not trust or believe doctors (3%), and some other reason (6%).
- ◆ Lenawee County adults had the following transportation problems when they needed health care: could not afford gas (5%), no car (4%), no driver's license (3%), disabled (2%), car does not work (1%), no car insurance (1%), and other car issues/expenses (2%).

### Predictors of Access to Health Care

Adults are more likely to have access to medical care if they:

- ❖ Earn a higher income
- ❖ Have a regular primary care provider
- ❖ Have health insurance
- ❖ Utilize preventive services in a clinic setting
- ❖ Have a college education
- ❖ Work for a large company

*(Source: Healthy People 2020 and CDC)*



## Health Care Access

- ◆ During the past year, Lenawee adults did not get a prescription from their doctor filled because: they could not afford to pay the out-of-pocket expenses (8%), they had no insurance (7%), they did not think they needed it (5%), their co-pays were too high (5%), there was no generic equivalent of what was prescribed (5%), no transportation (2%), their deductibles were too high (1%), their premiums were too high (1%), they opted out of prescription coverage because they could not afford it (1%), and they were taking too many medications (1%).
- ◆ 13% of Lenawee County adults had looked for a program to help with marital or family problems for either themselves or a loved one. Of those looked, 80% found one and 20% did not find one.
- ◆ 15% of Lenawee County adults had looked for a program to help with depression, anxiety, or some other mental health problem for either themselves or a loved one. Of those who looked, 78% found one and 22% did not find one. Reasons for not looking for such a program included: not needed (75%), had not thought of it (7%), did not know how to find a program (4%), co-pay/deductible too high (3%), could not afford to go (3%), stigma of seeking mental health services (2%), did not feel the services they had received were good (1%), other priorities (1%), fear (1%), transportation (<1%), and other (3%).
- ◆ 11% of Lenawee County adults had looked for a program to assist in care for the elderly or disabled adult (either in-home or out-of-home) for either themselves or a loved one. Of those who looked, 47% looked for in-home care, 23% looked for an assisted living program, 15% looked for out-of-home placement, 3% looked for respite/overnight care, 3% looked for day care, and 9% looked for multiple types of care.

### Lenawee County Health Care Statistics

- ❖ In 2010, Lenawee County was ranked 15<sup>th</sup> of 83 Counties in Michigan for Health Outcomes Rank.
- ❖ In 2010, 12,606 (16.0%) of all Lenawee County residents were enrolled in Medicaid.
- ❖ In 2010, 8,929 (9.0%) of all Lenawee County residents were uninsured.

*(Source: Michigan Department of Community Health: <http://www.michigan.gov/mdch/>)*

## Healthy People 2020 Access to Quality Health Services

Objective	Healthy People 2020 Target	Lenawee County	Michigan	U.S.
AHS-1.1: Persons under age of 65 years with health care insurance	100%	82% age 20-24 83% age 25-34 89% age 35-44 85% age 45-54 92% age 55-64 (2011)	72% age 18-24 80% age 25-34 84% age 35-44 86% age 45-54 91% age 55-64 (2010)	74% age 18-24 80% age 25-34 85% age 35-44 87% age 45-54 89% age 55-64 (2010)
AHS-5.1: Persons who report a usual primary care provider	95%	51% (2011)	N/A	76%* (2007)

\*U.S. baseline is age-adjusted to the 2000 population standard

*(Sources: Healthy People 2020 Objectives, BRFSS, MDCH, Vital Statistics, 2011 Assessment)*



# Cardiovascular Health

## Key Findings

Heart disease (27%) and stroke (6%) accounted for 33% of all Lenawee County adult deaths in 2009 (Source: MDCH, Vital Statistics 2009). The 2011 Lenawee County health assessment found that 6% of adults had a heart attack and 3% had a stroke at some time in their life. More than one-fourth (28%) of Lenawee County adults have been diagnosed with high blood pressure, 36% have high blood cholesterol, and 37% were obese, three known risk factors for heart disease and stroke.

## Heart Disease and Stroke

- ◆ In 2011, 6% of Lenawee County adults reported they had a heart attack or myocardial infarction, increasing to 16% of those over the age of 65.
- ◆ 3% of Lenawee County adults reported having had a stroke, increasing to 7% of those over the age of 65.

## High Blood Pressure (Hypertension)

- ◆ More than one-fourth (28%) of Lenawee County adults had been diagnosed with high blood pressure. The 2009 BRFSS reports hypertension prevalence rates of 30% for Michigan and 29% for the U.S.
- ◆ 75% of Lenawee County adults have had their blood pressure taken by a doctor, nurse, or other health professional within the past six months. 90% have had their blood pressure taken within the past year and 94% have had their blood pressure taken within the past two years.
- ◆ Lenawee County adults diagnosed with high blood pressure were more likely to:
  - Have rated their health as fair or poor (75%)
  - Have been overweight or obese (67%)
  - Be age 65 years or older (66%)

## High Blood Cholesterol

- ◆ More than one-third (36%) of adults had been diagnosed with high blood cholesterol. The 2009 BRFSS reported that 39% of Michigan adults and 38% of U.S. adults have been told they have high blood cholesterol.
- ◆ Three-fifths (60%) of adults had their blood cholesterol checked in the past year.
- ◆ Lenawee County adults with high blood cholesterol were more likely to:
  - Have been overweight or obese (82%)
  - Have rated their health as fair or poor (79%)
  - Be age 65 years and older (58%)
  - Have incomes less than \$25,000 (44%)

### Lenawee County Leading Types of Death 2009

**Total Deaths: 922**

1. Heart Disease (27% of all deaths)
2. Cancers (23%)
3. Chronic Lower Respiratory Diseases (7%)
4. Stroke (6%)
5. Alzheimer's Disease (5%)

(Source: MDCH, Vital Statistics 2009)

### Michigan Leading Types of Death 2009

**Total Deaths: 86,310**

1. Heart Disease (27% of all deaths)
2. Cancers (23%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (5%)
5. Accidents, Unintentional Injuries (4%)

(Source: MDCH, Vital Statistics 2009)

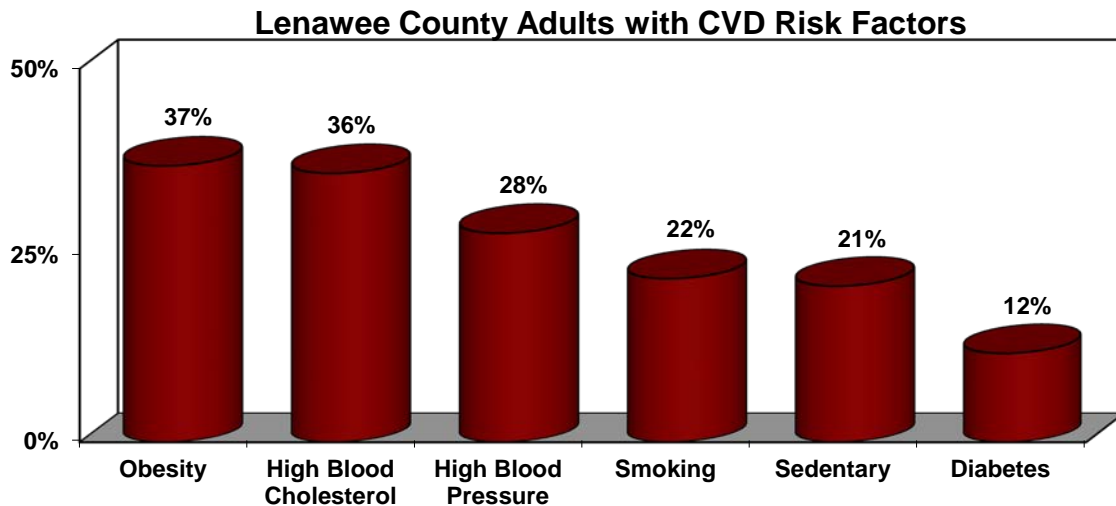
2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Had a heart attack	6%	5%	4%
Had a stroke	3%	3%	3%
Had high blood pressure	28%	30%*	29%*
Had high blood cholesterol	36%	39%*	38%*

N/A – Not asked

\*2009 BRFSS Data

## Cardiovascular Health

The following graph demonstrates the percentage of Lenawee County adults who had major risk factors for developing cardiovascular disease (CVD). (Source: 2011 Lenawee County Health Assessment)



### Risk Factors for Cardiovascular Disease That Can Be Modified or Treated:

**Cholesterol** – As blood cholesterol rises, so does risk of coronary heart disease. When other risk factors (such as high blood pressure and tobacco smoke) are present, this risk increases even more. A person's cholesterol level is also affected by age, sex, heredity and diet.

**High Blood Pressure** – High blood pressure increases the heart's workload, causing the heart to thicken and become stiffer and causes the heart not to work properly. It also increases your risk of stroke, heart attack, kidney failure and congestive heart failure. When high blood pressure exists with obesity, smoking, high blood cholesterol levels or diabetes, the risk of heart attack or stroke increases several times.

**Obesity and Overweight** – People who have excess body fat — especially at the waist — are more likely to develop heart disease and stroke even if they have no other risk factors. Excess weight increases the heart's work. It also raises blood pressure and blood cholesterol and triglyceride levels, and lowers HDL ("good") cholesterol levels. Many obese and overweight people may have difficulty losing weight. But by losing even as few as 10 pounds, you can lower your heart disease risk.

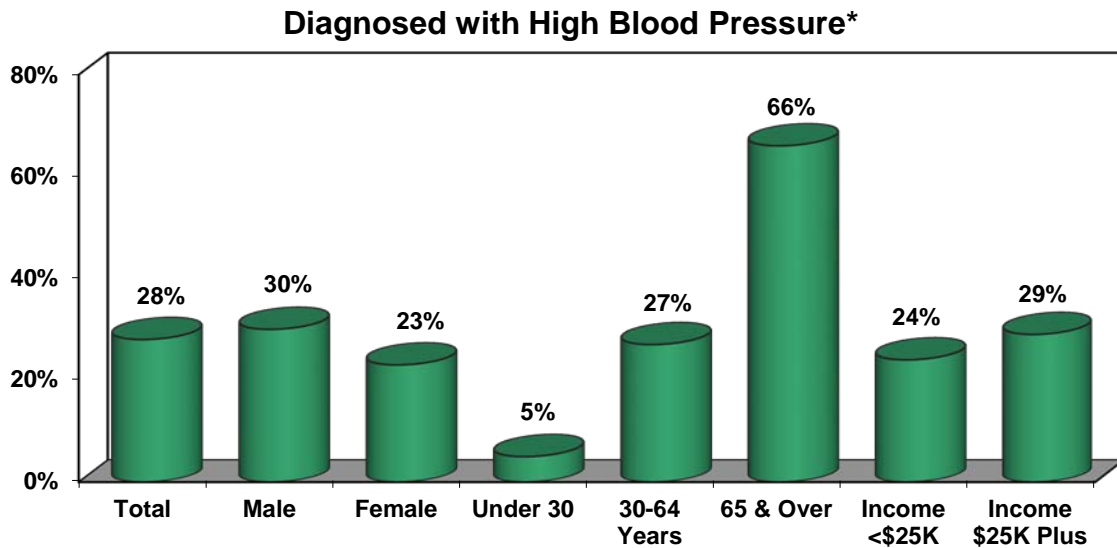
**Smoking** – Smokers' risk of developing coronary heart disease is 2-4 times that of nonsmokers. People who smoke a pack of cigarettes a day have more than twice the risk of heart attack than people who've never smoked. People who smoke cigars or pipes seem to have a higher risk of death from coronary heart disease (and possibly stroke) but their risk isn't as great as cigarette smokers. Exposure to other people's smoke increases the risk of heart disease even for nonsmokers.

**Physical Inactivity** – An inactive lifestyle is a risk factor for coronary heart disease. Regular, moderate-to-vigorous physical activity helps prevent heart and blood vessel disease. However, even moderate-intensity activities help if done regularly and long term. Physical activity can help control blood cholesterol, diabetes and obesity, as well as help lower blood pressure in some people.

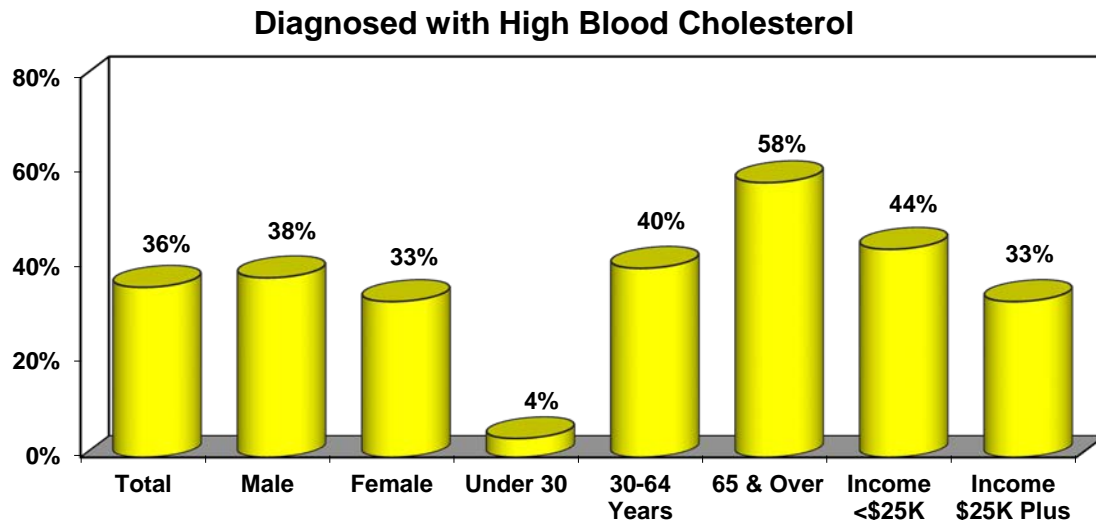
**Diabetes Mellitus** – Diabetes seriously increases your risk of developing cardiovascular disease. Even when glucose levels are under control, diabetes increases the risk of heart disease and stroke, but the risks are even greater if blood sugar is not well controlled. At least 65% of people with diabetes die of some form of heart or blood vessel disease. (Source: American Heart Association, *Risk Factors for Coronary Heart Disease*, 6-20-11)

## Cardiovascular Health

The following graphs show the number of Lenawee County adults who have been diagnosed with high blood pressure and high blood cholesterol. Examples of how to interpret the information on the first graph include: 28% of all Lenawee County adults have been diagnosed with high blood pressure, 30% of all Lenawee County males, 23% of all females, and 66% of those 65 years and older.



*\*Does not include respondents who indicated high blood pressure during pregnancy only.*

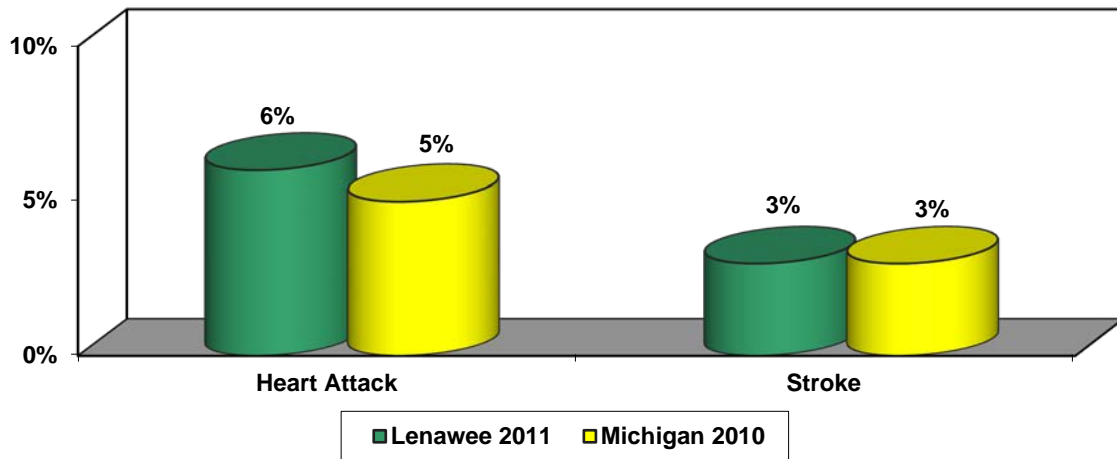


## Cardiovascular Health

The following graphs show the Lenawee County and Michigan age-adjusted mortality rates per 100,000 population for heart disease and stroke by gender and race/ethnicity.

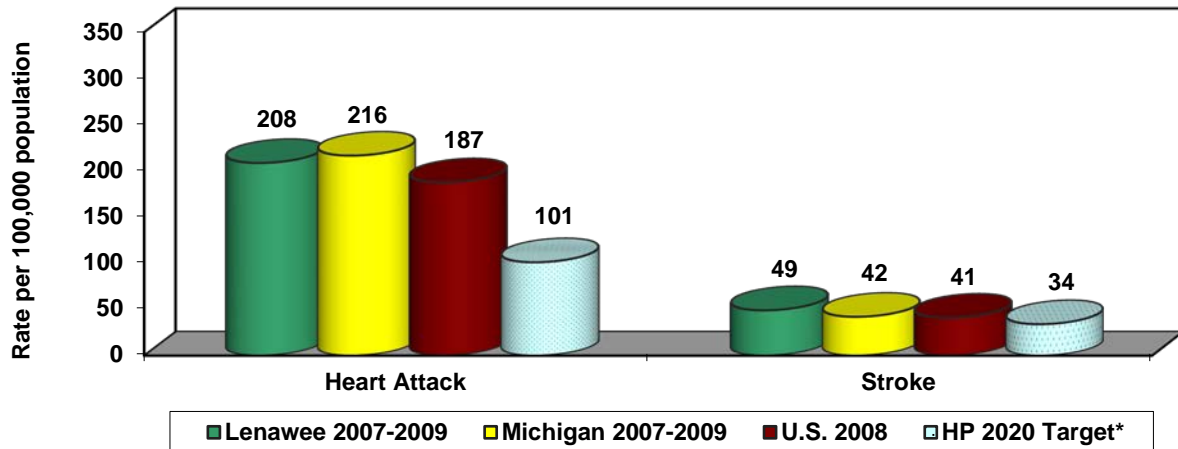
- The 2011 assessment shows that heart attacks are 2 times more prevalent than strokes in Lenawee County.
- When age differences are accounted for, the statistics indicate that from 2007-2009, the Lenawee County heart disease mortality rate is lower than the figure for the state, but higher than the U.S. figure and the Healthy People 2020 target.
- The Lenawee County age-adjusted stroke mortality rate for 2007-2009 is higher than the Michigan rate, the U.S. rate, and the Healthy People 2020 target.
- Disparities exist for heart disease mortality rates by gender in Lenawee County.

**Cardiovascular Disease Prevalence**



*(Source: 2011 Lenawee Health Assessment and BRFSS)*

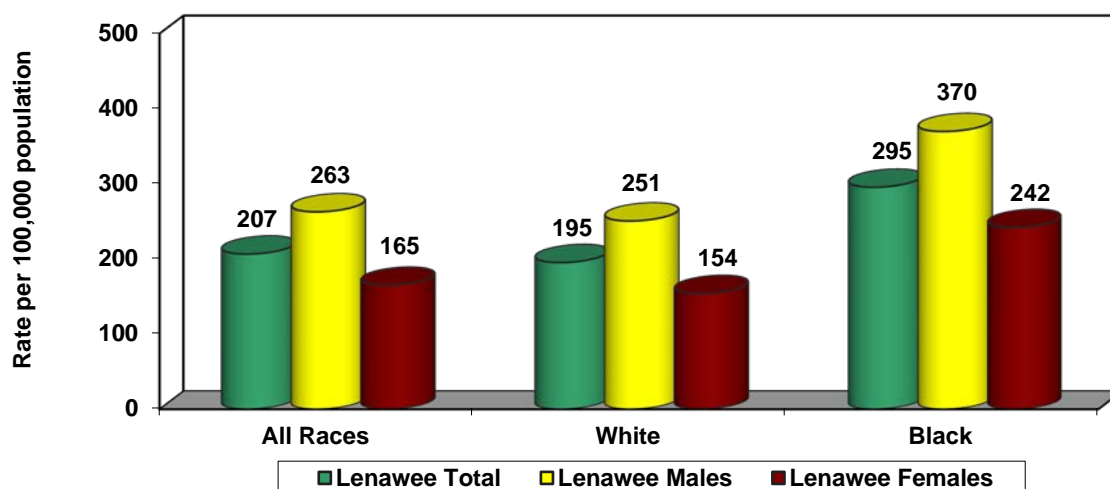
**Age-Adjusted Heart Disease and Stroke Mortality Rates**



\*The Healthy People 2020 Target objective for Coronary Heart Disease is reported for heart attack mortality.  
*(Source: MDCH, Vital Statistics, Healthy People 2020)*

## Cardiovascular Health

**Age-Adjusted Heart Disease Mortality Rates by Gender and Race  
2009**



(Source: MDCH, Vital Statistics, 2009)

## Healthy People 2020 Objectives

### High Blood Pressure

Objective	Target	U.S. Baseline*	Lenawee Survey Population Baseline (2011)
HDS-4: Increase the portion of adults who have had their blood pressure measured within the preceding 2 years and can state whether it was normal or high	93%	91% Adults age 18 and up (2008)	94%
HDS-5: Reduce proportion of adults with hypertension	27%	30% Adults age 18 and up (2005-2008)	28%

### Blood Cholesterol

Objective	Target	U.S. Baseline*	Lenawee Survey Population Baseline (2011)
HDS-7: Decrease proportion of adults with high total blood cholesterol (TBC)	14%	15% Adults age 2- & up with TBC > 240 mg/dl (2005-2008)	36%
HDS-6: Increase proportion of adults who had their blood cholesterol checked within the preceding 5 years	82%	75% Adults age 18 & up (2008)	81%

\*All U.S. figures age-adjusted to 2000 population standard.  
(Source: Healthy People 2020)

# Cancer

## Key Findings

*Michigan Department of Community Health statistics indicate that from 2000-2008, a total of 1,842 Lenawee County residents died from cancer, the second leading cause of death in the county. The 2011 health assessment project has identified that 8% of Lenawee County adults were diagnosed with cancer at some time in their life. The American Cancer Society advises that reducing tobacco use, increasing cancer education and awareness, healthy diet and exercise habits, and early detection may reduce overall cancer deaths.*

## Cancer Facts

- ◆ About one in twelve (8%) Lenawee County adults had been diagnosed with cancer at some time in their life.
- ◆ The Michigan Department of Community Health (MDCH) vital statistics indicate that from 2000-2008, cancers caused 23% (1,842 of 7,928 total deaths) of all Lenawee County resident deaths. The largest percent (29%) of cancer deaths were from lung and bronchus cancer. *(Source: MDCH Vital Statistics)*
- ◆ Age-adjusted cancer mortality rates (calculated by MDCH per 100,000 population) have decreased for Lenawee County from 197.1 in 2000 to 176.1 in 2008. The Michigan cancer mortality rate also shows a downward trend from 202.5 in 2000 to 185.5 in 2008. *(Source: MDCH Vital Statistics)*
- ◆ The American Cancer Society reports that smoking tobacco is associated with cancers of the mouth, lips, nasal cavity (nose) and sinuses, larynx (voice box), pharynx (throat), and esophagus (swallowing tube). Also, smoking has been associated with cancers of the stomach, pancreas, kidney, bladder, uterine cervix, and acute myeloid leukemia. The 2011 health assessment project has determined that 22% of Lenawee County adults are current smokers and many more were exposed to environmental tobacco smoke, also a cause of heart attacks and cancer.

### Lenawee County Incidence of Cancer, 2007 All Types: 539 cases

- ◆ Lung and Bronchus: 74 cases (14%)
- ◆ Breast: 72 cases (13%)
- ◆ Prostate: 68 cases (13%)
- ◆ Colon and Rectum: 44 cases (8%)

**From 2005-2007, there were 1,332 cancer deaths in Lenawee County.**

*(Source: Michigan Community Health Information –Cancer)*

## Lung Cancer

- ◆ The MDCH reports that lung cancer was the second leading cause of male invasive cancer incidence from 2005 to 2007 in Lenawee County, with a per year average of 35 cases for males. In Lenawee County, 26% of male adults are current smokers<sup>1</sup> and 50% have stopped smoking for one or more days in the past 12 months because they were trying to quit. *(Source: 2011 Lenawee County Health Assessment)*
- ◆ The MDCH reports that lung cancer was the second leading cause of female invasive cancer incidence from 2005 to 2007 in Lenawee County, with a per year average of 29 cases for females. Approximately 16% of female adults in the county are current smokers<sup>1</sup> and 50% have stopped smoking for one or more days in the past 12 months because they were trying to quit. *(Source: 2011 Lenawee County Health Assessment)*
- ◆ According to the American Cancer Society, smoking causes 87% of lung cancer deaths in the U.S. In addition, individuals living with smokers have a 30% greater risk of developing lung cancer than those who do not have smokers living in their household. Working in an environment with tobacco smoke also increases the risk of lung cancer.

## Breast Cancer

- ◆ In Lenawee County, breast cancer was the leading cause of female invasive cancer incidence from 2005 to 2007, with an average of 58 cases per year.
- ◆ In 2011, 61% of Lenawee County females reported having had a clinical breast examination in the past year.
- ◆ 63% of Lenawee County females over the age of 40 had a mammogram in the past year.
- ◆ If detected early, the 5-year survival rate for breast cancer is 93%. *(Source: American Cancer Society Facts & Figures 2011)*
- ◆ For women in their 20s and 30s, a clinical breast exam should be done at least once every 3 years. Mammograms for women in their 20s and 30s are based upon increased risk (e.g., family history, past breast cancer) and physician recommendation. *(Source: American Cancer Society Facts & Figures 2011)*

<sup>1</sup>Have smoked over 100 cigarettes in lifetime and currently smoke some or all days.

# Cancer

## Colon and Rectum Cancer

- ◆ In Lenawee County, colorectal cancer was the third leading cause of male and female invasive cancer incidence from 2005 to 2007, with a per year average of 21 new invasive cancer cases for females and 20 for males.
- ◆ The American Cancer Society recognizes any cancer involving the esophagus, stomach, small intestine, colon, liver, gallbladder or pancreas as a digestive cancer.
- ◆ The American Cancer Society reports several risk factors for colorectal cancer including: age; personal or family history of colorectal cancer, polyps, or inflammatory bowel disease; alcohol use; a high-fat or low-fiber diet lacking an appropriate amount of fruits and vegetables; physical inactivity; obesity; diabetes; and smoking.
- ◆ In the U.S., most cases of colon cancer occur in individuals over the age of 50. Because of this, the American Cancer Society suggests that every person over the age of 50 have regular colon cancer screenings. In 2011, 57% of Lenawee County adults over the age of 50 reported having been screened for colorectal cancers within the past 5 years.

## Prostate Cancer

- ◆ In Lenawee County, prostate cancer was the leading cause of male invasive cancer incidence from 2005 to 2007, with an average of 61 cases per year.
- ◆ 54% of Lenawee County males over the age of 50 had a PSA test in the past year.
- ◆ The Michigan Department of Community Health statistics indicate that prostate cancer caused 113 male cancer deaths from 2000-2008 in Lenawee County.
- ◆ African American men are twice as likely as white American men to develop prostate cancer and are more likely to die of prostate cancer. In addition, about 62% of prostate cancers occur in men over the age of 65. Other risk factors include strong familial predisposition, diet high in processed meat or dairy foods, and obesity. Prostate cancer is more common in North America and Northwestern Europe than in Asia and South America. *(Source: Cancer Facts & Figures 2011, The American Cancer Society)*

### 2011 Cancer Estimations

- ❖ In 2011, about 171,600 cancer deaths were expected to be caused by tobacco use.
- ❖ One-third of the 571,950 cancer deaths were expected to be related to overweight, obesity, physical activity and poor nutrition.
- ❖ About 78% of all cancers were diagnosed in people 55 years or older.
- ❖ About 1,596,670 new cancer cases were expected to be diagnosed in 2011, not including non-invasive cancers of any site except urinary bladder and did not include basal and squamous cell skin cancer.
- ❖ Approximately 571,950 people were expected to die of cancer, more than 1,500 people per day in 2011.

*(Source: American Cancer Society, Facts and Figures 2011)*

### Breast Cancer Screening

#### Types of Screening:

- ❖ **Mammogram** – an X-ray of the breast. **Mammogram is the best way to find breast cancer.**
- ❖ **Clinical breast exam** – an examination by a doctor or nurse, who uses his or her hands to feel for lumps or other changes
- ❖ **Breast self-exam** – when you check your own breasts for lumps, changes in size or shape of the breast, or any other changes in the breast or underarm.

*(Source: CDC, Breast Cancer, 11-3-2011)*



# Cancer

## Lenawee, Monroe, Hillsdale, & Michigan Cancer Deaths 2000-2008

Type of Cancer	Lenawee Number of Cancer Deaths	Monroe Number of Cancer Deaths	Hillsdale Number of Cancer Deaths	Michigan Number of Cancer Deaths
<b>Primary Sites</b>				
Trachea, Lung & Bronchus	531	763	243	51,720
Colon, Rectum & Anus	174	274	96	17,035
Breast	122	165	70	13,137
Prostate	113	120	41	8,871
<b>Total All Sites</b>	1,842	2,579	855	178,885

(Source: MDCH, Cancer Statistics, updated 8-2-10)

## Lenawee County Number of Cancer Cases, 2000-2007

Year	All Sites	Breast	Colon & Rectum	Lung	Prostate
2000	498	77	64	65	102
2001	561	95	40	64	120
2002	461	70	44	65	104
2003	504	65	47	73	82
2004	510	62	46	67	87
2005	501	62	53	74	78
2006	292	35	26	42	36
2007	539	76	44	74	68

(Source: MDCH, Cancer Statistics, updated 8-2-10)

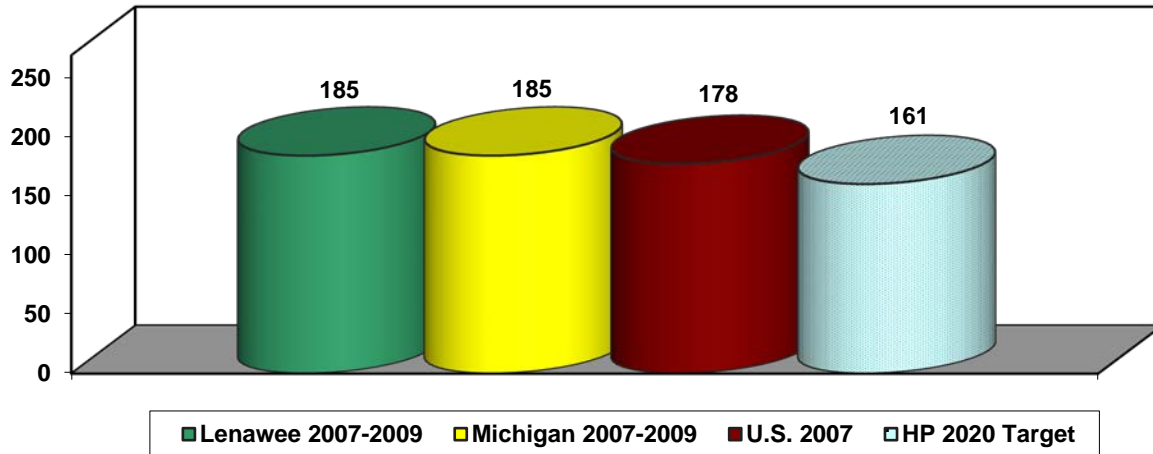


## Cancer

The following graph shows the Lenawee County, Michigan and U.S. age-adjusted mortality rates (per 100,000 population, 2000 standard) for all types of cancer in comparison to the Healthy People 2020 objective, and cancer as a percentage of total deaths in Lenawee County by gender. The graph indicates:

- ◆ When age differences are accounted for, Lenawee County and Michigan had a higher cancer mortality rate than the national rate and the Healthy People 2020 target objective.

**Healthy People 2020 Objective  
and Age-Adjusted Mortality Rates for All Cancers\***



*\*Age-adjusted rates/ 100,000 population, 2000 standard*

*(Source: Michigan Department of Community Health, Vital Records & Health Statistics Section, updated 3-1-2011; Healthy People 2020)*

### Healthy People 2020 Breast Cancer

Objective	Healthy People 2020 Target	Lenawee County 2011	Michigan Baseline	U.S. Baseline
C-17: Increase the proportion of women who receive a mammogram in the past two years	81%	81% (of women 40 and over) (2011)	81%* (2010)	74%** (2008)

*\*Michigan baseline is based on women ages 50 and up (BRFSS, 2010)*

*\*\*U.S. baseline is age-adjusted to the 2000 population standard, for women ages 50 to 74  
(Sources: Healthy People 2020 Objectives, 2010 BRFSS, 2011 Assessment)*

# Diabetes

## Key Findings

*In 2011, 12% of Lenawee County adults had been diagnosed with diabetes.*

## Diabetes

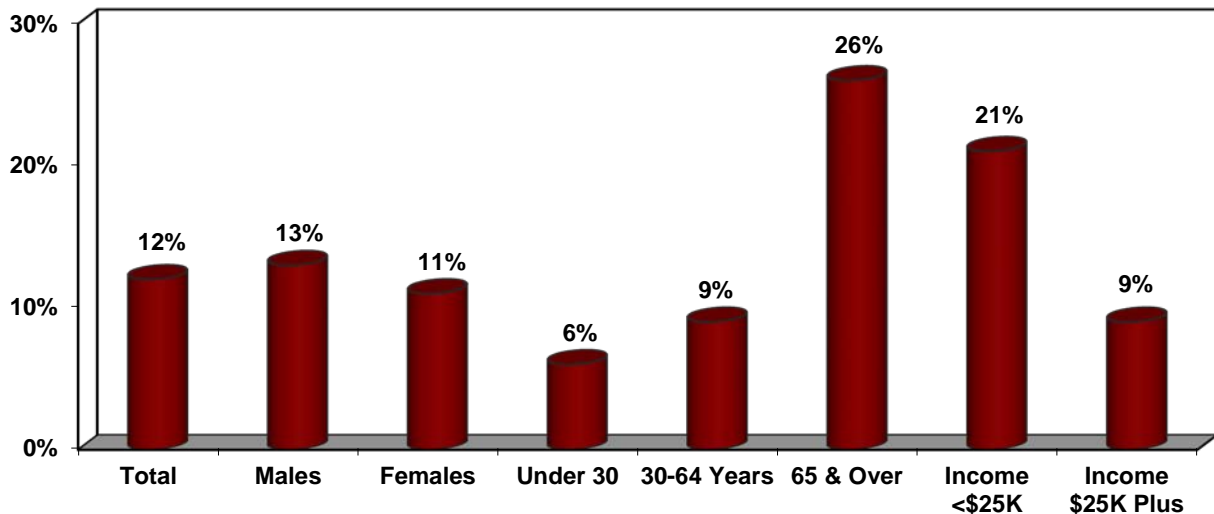
- ◆ The 2011 health assessment project has identified that 12% of Lenawee County adults had been diagnosed with diabetes, increasing to 26% of those over the age of 65. The 2010 BRFSS reports and Michigan prevalence of 11% and 10% for the U.S.
- ◆ The average age of onset (diagnoses) was 43.1 years old.
- ◆ Those with diabetes are using the following to treat it: diabetes pills (57%), checking blood sugar (57%), exercise (43%), and insulin (26%). 3% were not doing anything to treat their diabetes.
- ◆ 9% of adults had been told by a doctor, nurse, or other health professional that they had pre-diabetes, increasing to 16% of those with annual incomes less than \$25,000.
- ◆ Lenawee County adults diagnosed with diabetes also had one or more of the following characteristics or conditions:
  - 82% were obese or overweight
  - 71% had been diagnosed with high blood cholesterol
  - 59% had been diagnosed with high blood pressure

## Diabetes Facts

- ❖ Diabetes was the 6<sup>th</sup> leading cause of death in Lenawee County in 2009.
- ❖ Diabetes was the 7<sup>th</sup> leading cause of death in Michigan in 2009.
- ❖ In 2009, the Lenawee County age-adjusted mortality rate per 100,000 for diabetes was 29.4 deaths for both males and females (24.3 Michigan).

*(Source: MDCH, Vital Statistics, 2009)*

**Lenawee County Adults Diagnosed with Diabetes**



2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Diagnosed with diabetes	12%	11%	10%

# Diabetes

## Diabetes Complications

The complications associated with type 2 diabetes are numerous and serious including:

- ❖ **Heart disease and stroke** – 2 of 3 people with diabetes die from heart disease or stroke;
- ❖ **Kidney disease** caused by uncontrolled high blood pressure, uncontrolled blood sugar, and/or genetics;
- ❖ **Glaucoma** – diabetics are 40% more likely to suffer from glaucoma, which can develop into blindness;
- ❖ **Cataracts** – diabetics are 60% more likely to develop cataracts; cataracts can also lead to the development of glaucoma;
- ❖ **Retinopathy** – nonproliferative retinopathy does not cause loss of sight but can develop into proliferative retinopathy which causes loss of vision. Those with type 1 diabetes almost always develop nonproliferative retinopathy as do most people with type 2 diabetes; proliferative retinopathy is rare;
- ❖ **Neuropathy** is nerve damage to the feet that results in loss of feeling. It is one of the most common complications of diabetes. Poor blood flow or changes in the shape feet and toes may also cause problems. There are many forms of neuropathy but it is important to know that it can be very painful and disabling; however, for early neuropathy, symptoms can disappear with tight control of blood sugar, weight loss toward an ideal weight, and regular exercise;
- ❖ Various **foot complications** are experienced more commonly with people who have diabetes. Some of these foot complications include **neuropathy**, extremely **dry skin**, **calluses** that can develop into **foot ulcers** that do not heal quickly, **poor circulation**, and **amputation**. Amputation of the foot or leg is more common, usually as a result of decreased circulation, neuropathy, and/or slowly healing wounds;
- ❖ **Skin Complications** – Some of the many skin complications that diabetics are more likely to experience are **fungal infections**, **bacterial infections**, **atherosclerosis** (thickening of the arteries), **diabetic dermopathy** (harmless patches of light brown, scaly skin), **necrobiosis lipoidica diabetorum** (NLD – red skin patches that can be itchy and painful that can break open into sores and need treatment), etc.; and,
- ❖ **Gastroparesis** occurs as a result of neuropathy where the nerves to the stomach are damaged and stop working. Multiple complications can result from the stomach taking too long to empty its contents ranging from uncontrolled blood sugar to complete blockage from the stomach to the small intestine.
- ❖ Well controlled diabetes can greatly reduce the complications of diabetes, but diabetics will still have a shortened life span.

(Source: American Diabetes Association, *All about Diabetes, Type 2 Diabetes, Complications*)

# Diabetes

## Adult Diabetes Screening Standards

Type 1 diabetes is usually diagnosed in children and young adults, and was previously known as juvenile diabetes. In type 1 diabetes, the body does not produce insulin. Type 2 diabetes is the most common form of diabetes. In type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin, most likely because the insulin is defective.

The American Diabetes Association maintains that community screening is not recommended since there is not sufficient evidence that community screening for type 2 diabetes is cost-effective, as well as the potential harm caused by lack of continuous care following diagnosis; therefore, screening should be based upon clinical judgment and patient preference. Health care provider type 2 diabetes **screening standards for adults** are as follows:

- ❖ Every three years for those age 45 and over, especially for those with a Body Mass Index (BMI) of 25 or greater;
- ❖ Testing can be done more frequently for those at younger ages who are overweight and have one or more of the risk factors listed in the box on page 1;
- ❖ Patients who experience one or more of the known symptoms for diabetes (e.g. frequent urination, excessive thirst, extreme hunger, unusual weight loss, increased fatigue, irritability, blurry vision, etc.);
- ❖ Patients who have a family history of type 2 diabetes;
- ❖ Patients who belong to certain race/ethnic groups (specifically, African American, American Indian, Pacific Islander, or Hispanic American/Latino);
- ❖ Patients who have signs of or conditions associated with insulin resistance (e.g., high blood pressure, abnormal cholesterol, polycystic ovary syndrome, etc.); and,
- ❖ As deemed necessary by the health care professional.

## Youth Diabetes Screening Standards

The incidence of type 2 diabetes in children and adolescents has been shown to be increasing. Consistent with screening recommendations for adults, only children and youth at substantial risk for the presence or the development of type 2 diabetes should be tested. The American Diabetes Association recommends that overweight youths (defined as BMI greater than 85th percentile for age and sex, weight for height greater than 85th percentile, or weight greater than 120% of ideal for height) with any two of the risk factors listed below be screened:

- ❖ Have a family history of type 2 diabetes in first- and second-degree relatives;
- ❖ Belong to a certain race/ethnic group (Native Americans, African-Americans, Hispanic Americans, Asians/South Pacific Islanders);
- ❖ Have signs of insulin resistance or conditions associated with insulin resistance (acanthosis nigricans, hypertension, dyslipidemia, polycystic ovary syndrome).

Testing should be done every 2 years starting at age 10 years or at the onset of puberty if it occurs at a younger age.

For more information about diabetes, please visit the American Diabetes Association's website at [www.diabetes.org](http://www.diabetes.org).

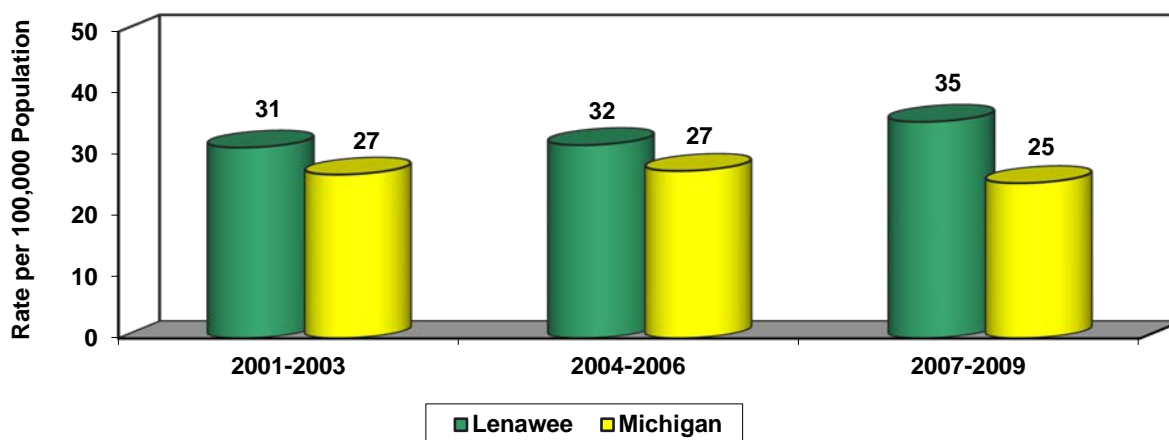
*(Source: American Diabetes Association, Diabetes Care, Screening for Type 2 Diabetes, 2011)*

## Diabetes

The following graphs show age-adjusted mortality rates from diabetes for Lenawee County and Michigan residents with comparison to the Healthy People 2020 target objective.

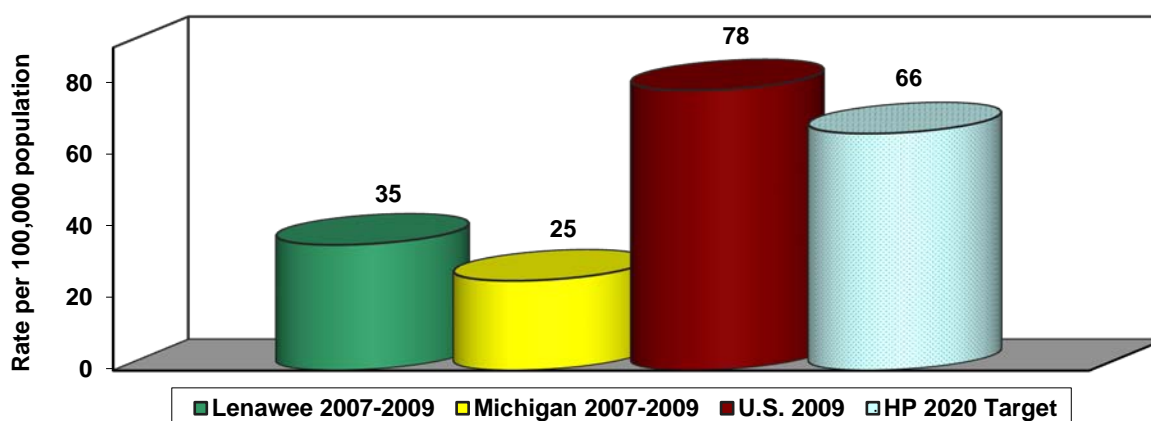
- ◆ Lenawee County's age-adjusted diabetes mortality rate increased from 2001 to 2009.
- ◆ From 2007 to 2009, both Lenawee County and Michigan's age-adjusted diabetes mortality rates were less than half of the national rate and both met the Healthy People 2020 target objective.

**Diabetes Age-Adjusted Mortality Rates**



(Source: MDCH, Vital Statistics, updated, 2009)

**Healthy People 2020 Objective and Age-adjusted Mortality Rates for Diabetes**



(Source: MDCH, Vital Statistics, updated 2009, and Healthy People 2020, CDC)

# Arthritis

## Key Findings

According to the Lenawee County survey data, 35% of Lenawee County adults were diagnosed with arthritis. According to the 2009 BRFSS, 31% of Michigan adults and 26% of U.S. adults were told they have arthritis.

## Arthritis

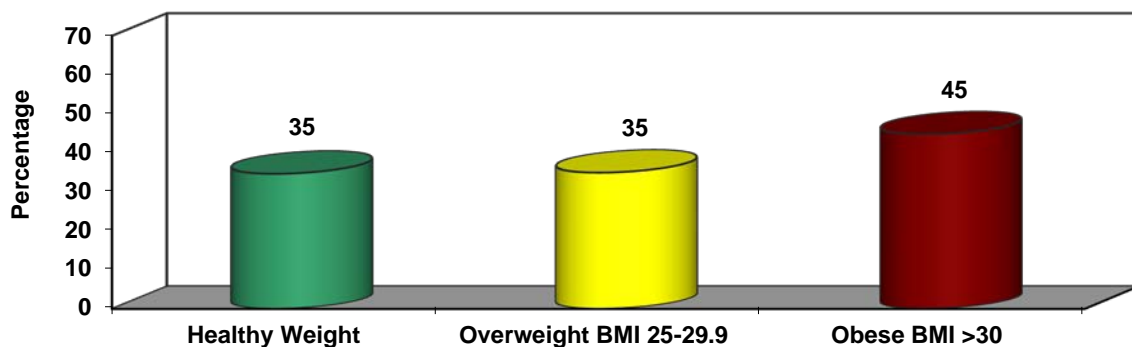
- ◆ Just over one-third (35%) of Lenawee County adults were told by a health professional that they had some form of arthritis.
- ◆ 69% of those over the age of 65 were diagnosed with arthritis.
- ◆ According to the 2009 BRFSS, 31% of Michigan adults and 26% of U.S. adults were told they have arthritis.
- ◆ About 1 in 5 U.S. adults have doctor diagnosed arthritis. Approximately 1 in 20 of working age adults reported that arthritis limited their work. (Source: CDC Arthritis at a Glance 2011)
- ◆ Adults are at higher risk of developing arthritis if they are female, have genes associated with certain types of arthritis, have an occupation associated with arthritis, are overweight or obese, and/or have joint injuries or infections. (Source CDC)

### What Can Be Done to Address Arthritis?

- ❖ Self-management education programs can reduce pain and costs. The Arthritis Foundation holds classes called the Self-Help Program that teaches people how to manage arthritis and lessen its effects.
- ❖ Physical activity can have significant benefits for people with arthritis. The benefits include improvements in physical function, mental health, quality of life, and reductions in pain.
- ❖ Weight management and injury prevention are two ways to lower a person's risk for developing osteoarthritis.
- ❖ Early diagnosis and proper management can decrease or avoid the amount of pain that a person may experience or disability that accompanies arthritis.

(Source: CDC, National Center for Chronic Disease Prevention and Health Promotion, Arthritis at a Glance 2011)

**Arthritis-Attributable Activity Limitations Increase with Weight**



(Source for graph: Arthritis at a Glance 2011, Morbidity and Mortality Weekly Report 2010; 59(39):999-1003.)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2009	U.S. 2009
Diagnosed with arthritis	35%	31%	26%

# Asthma & Other Respiratory Disease

## Key Findings

According to the Lenawee County survey data, 13% of Lenawee County adults had been diagnosed with asthma.

## Asthma & Other Respiratory Disease

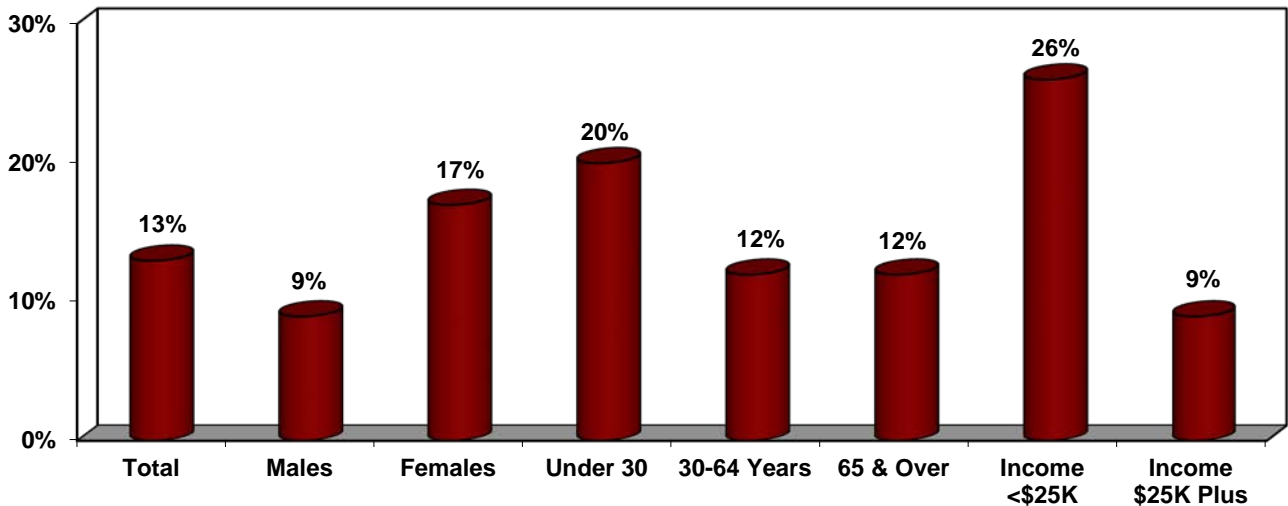
- ◆ In 2011, 13% of Lenawee County adults had been diagnosed with asthma, increasing to 20% of those under the age of 30 and 26% of those with annual incomes less than \$25,000.
- ◆ 16% of Michigan and 14% of U.S. adults have ever been diagnosed with asthma. (Source: 2010 BRFSS)
- ◆ There are several important factors that may trigger an asthma attack. Some of these triggers are secondhand smoke, dust mites, outdoor air pollution, cockroach allergens, pets, mold, infections linked to the flu, colds, and respiratory viruses. (Source: CDC- National Center for Environmental Health, 2011)
- ◆ Chronic lower respiratory disease was the 3<sup>rd</sup> leading cause of death in Lenawee County and Michigan in 2009. (Source: Michigan Department of Community Health)

### Chronic Respiratory Conditions

- ◆ Asthma is a chronic lung disease that inflames and narrows airways. It can cause recurring periods of wheezing, chest tightness, shortness of breath and coughing.
- ◆ Chronic bronchitis is a condition where the bronchial tubes (the tubes that carry air to your lungs) become inflamed. Bronchitis can cause wheezing, chest pain or discomfort, a low fever, shortness of breath and a cough that brings up mucus. Smoking is the main cause of chronic bronchitis.
- ◆ Chronic Obstructive Pulmonary Disorder (COPD) is a disease that over time makes it harder to breathe. COPD can cause large amounts of mucus, wheezing, shortness of breath, chest tightness, and other symptoms. Smoking is the main cause of COPD.

(Source: National Heart, Lung, Blood Institute, 2011)

Lenawee County Adults Diagnosed with Asthma

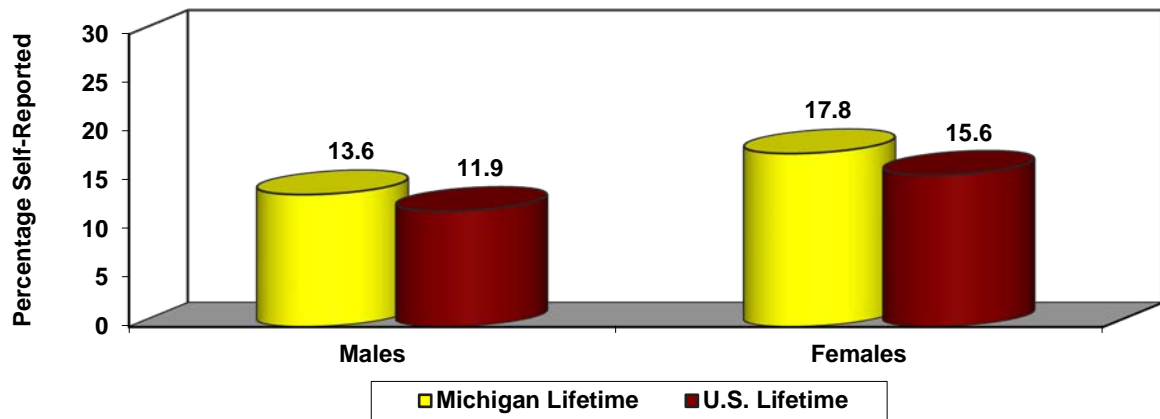


2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Had been diagnosed with asthma	13%	16%	14%

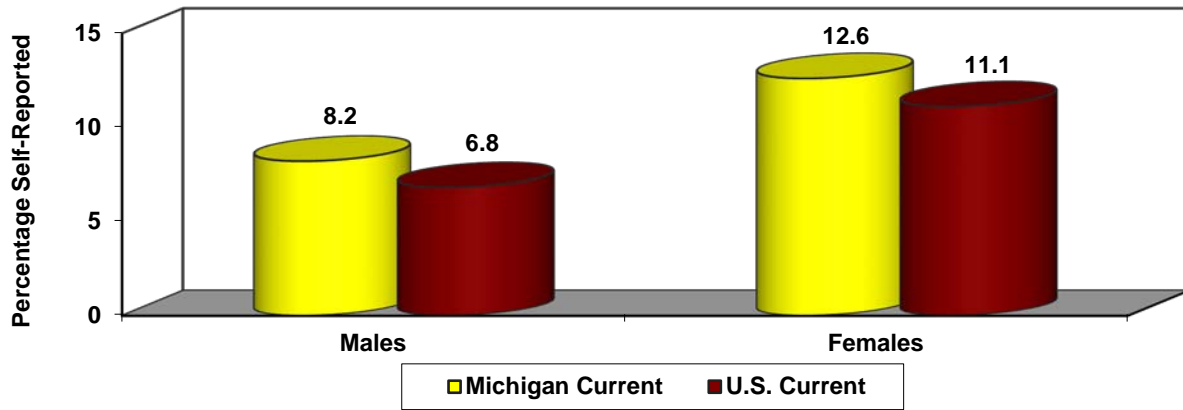
## Asthma & Other Respiratory Disease

The following graphs demonstrate the lifetime and current prevalence rates of asthma by gender for Michigan and U.S. residents.

**Adult Lifetime Asthma Prevalence Rates By Gender**



**Adult Current Asthma Prevalence Rates By Gender**



*(Source: 2010 BRFSS)*



# Adult Weight Status

## Key Findings

*The 2011 Health Assessment project identified that 72% of Lenawee County adults were overweight or obese based on BMI. The 2010 BRFSS indicates that 32% of Michigan and 28% of U.S. adults were obese by BMI. More than one-third (37%) of Lenawee County adults were obese. Less than half (47%) of adults were trying to lose weight. 21% of adults had not been participating in any physical activities or exercise in the past month.*

## Adult Weight Status

- ◆ In 2011, the health assessment indicated that nearly three-fourths (72%) of Lenawee County adults were either overweight (35%) or obese (37%) by Body Mass Index (BMI). This puts them at elevated risk for developing a variety of diseases (see below).
- ◆ Less than half (47%) of adults were trying to lose weight, 38% were trying to maintain their current weight or keep from gaining weight and 3% were trying to gain weight.
- ◆ Lenawee County adults did the following to lose weight or keep from gaining weight: ate less food, fewer calories, or foods low in fat (54%), exercised (50%), ate a low-carb diet (16%), smoked cigarettes (3%), used a weight loss program (2%), participated in a prescribed dietary or fitness program (2%), took prescribed medications (2%), went without eating 24 or more hours (1%), and took diet pills, powders or liquids without a doctor's advice (<1%).
- ◆ On an average day, adults spent time doing the following: 2.7 hours watching television, 1.2 hours on the computer outside of work, 0.9 hours on their cell phone, and 0.2 hours playing video games.

## Defining the Terms

- ◆ Obesity: An excessively high amount of body fat compared to lean body mass.
- ◆ Body Mass Index (BMI): The contrasting measurement/relationship of weight to height. CDC uses this measurement to determine overweight and obesity.
- ◆ Underweight: Adults with a BMI less than 18.5.
- ◆ Normal: Adults with a BMI of 18.5 to 24.9.
- ◆ Overweight: Adults with a BMI of 25 to 29.9.
- ◆ Obese: Adults with a BMI of 30 or greater.

*(Source: CDC)*

## Physical Activity

- ◆ In Lenawee County, 56% of adults were engaging in physical activity for at least 30 minutes 3 or more days per week. 32% of adults were exercising 5 or more days per week. About one-fifth (21%) of adults were not participating in any physical activity in the past week, including those who were unable to exercise.
- ◆ 92% of adults had participated in the following physical activities or exercise in the past year: walking (66%), exercise machines (26%), running/jogging (20%), cycling (17%), strength training (14%), swimming (7%), and other types of physical activities (19%).
- ◆ Lenawee County adults gave the following reasons for not exercising: time (29%), weather (19%), pain/discomfort (14%), could not afford a gym membership (12%), no sidewalks (6%), did not know what activity to do (4%), no gym available (3%), safety (3%), did not have child care (2%), no walking or biking trails (2%), doctor advised them not to exercise (1%), and other reasons (10%).
- ◆ The CDC recommends that adults participate in moderate exercise for at least 2 hours and 30 minutes every week or vigorous exercise for at least 1 hour and 15 minutes every week. Whether participating in moderate or vigorous exercise, CDC also recommends muscle-strengthening activities that work all major muscle groups on 2 or more days per week *(Source: CDC, Physical Activity for Everyone)*

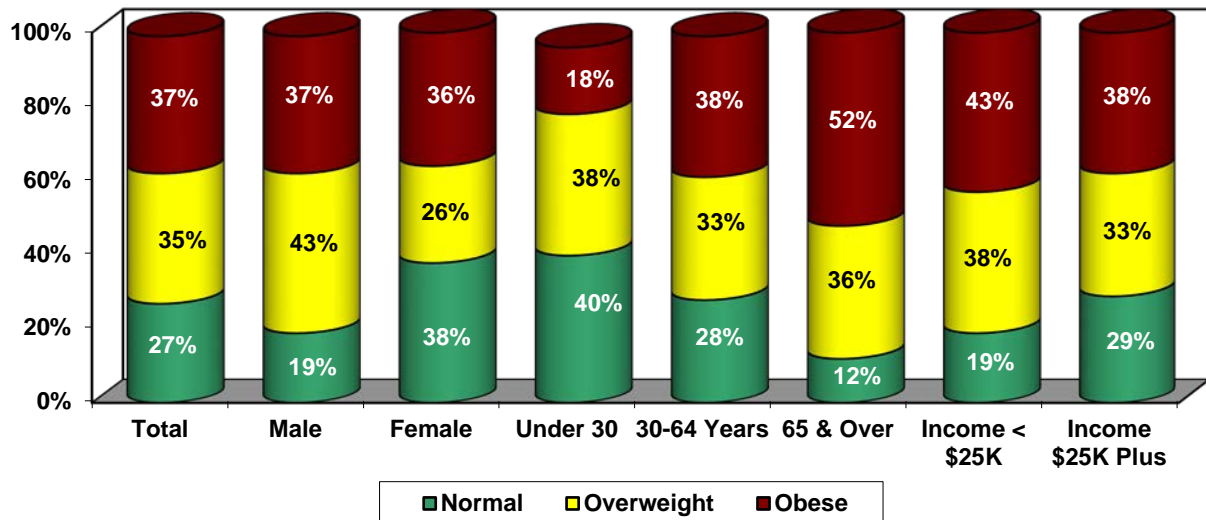
## Nutrition

- ◆ In 2011, 5% of Lenawee County adults ate 5 or more servings of fruits and vegetables per day. 91% ate 1 to 4 servings per day. The American Cancer Society recommends that adults eat 5-9 servings of fruits and vegetables per day to reduce the risk of cancer and to maintain good health. The 2009 BRFSS reported that only 23% of Michigan and U.S. adults were eating the recommended number of servings of fruits and vegetables.
- ◆ Lenawee County adults get their fruits and vegetables from the following places: large grocery store (72%), local grocery store (68%), Farmer's Market (33%), restaurants (7%), convenience store (2%), food pantry (2%), community garden (2%), and other places (4%).
- ◆ 64% of adults read food labels or consider nutritional content when choosing the foods they eat.
- ◆ Adults ate out in a restaurant or brought home take-out food an average of 2.6 times per week.

## Adult Weight Status

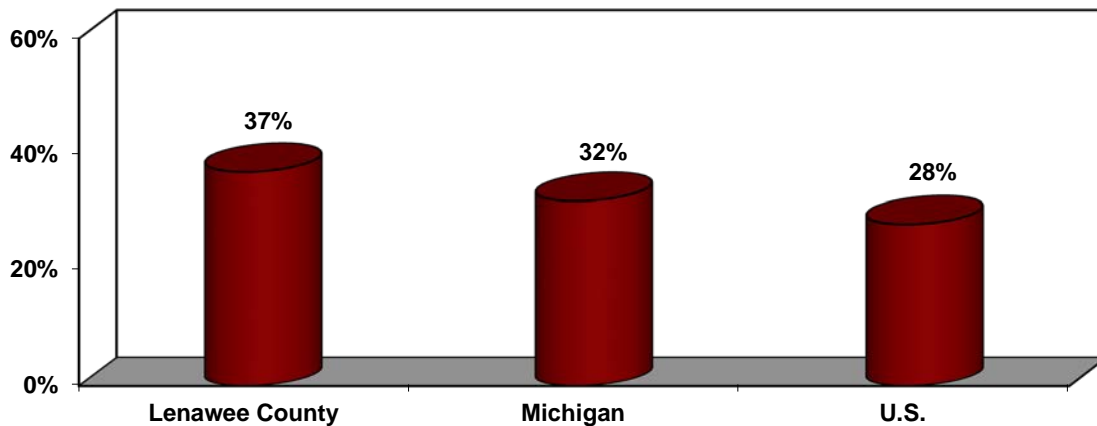
The following graphs show the percentage of Lenawee County adults who were overweight or obese by Body Mass Index (BMI) and the percentage of Lenawee County adults who were obese compared to Michigan and U.S. Examples of how to interpret the information include: 27% of all Lenawee County adults were classified as normal weight, 35% overweight and 37% obese.

**Lenawee County Adult BMI Classifications**



*(Percentages may not equal 100% due to the exclusion of data for those who were classified as underweight)*

**Obesity in Lenawee County, Michigan, and U.S. Adults**



*(Source: 2011 Lenawee County Health Assessment and 2010 BRFSS)*

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Obese	37%	32%	28%
Overweight	35%	35%	36%

# Adult Tobacco Use

## Key Findings

*In 2011, 22% of Lenawee County adults were current smokers and 24% were considered former smokers. In 2011, the American Cancer Society (ACS) stated that tobacco use was the most preventable cause of disease and early death in the world, accounting for approximately 5.4 million premature deaths each year. ACS estimated that tobacco use would be linked to approximately one in five deaths in the U.S. (Source: Cancer Facts & Figures, American Cancer Society, 2011)*

## Adult Tobacco Use Behaviors

- ◆ The 2011 health assessment identified that more than one-fifth (22%) of Lenawee County adults were current smokers (those who indicated smoking at least 100 cigarettes in their lifetime and currently smoke some or all days). The 2010 BRFSS reported current smoker prevalence rates of 19% for Michigan and 17% for the U.S. Nearly one-quarter (24%) of Lenawee County adults indicated that they were former smokers (smoked 100 cigarettes in their lifetime and now do not smoke).
- ◆ Lenawee County adult smokers were more likely to:
  - Have rated their general health as poor (86%)
  - Have been separated (80%)
  - Have incomes less than \$25,000 (34%)
  - Have been male (26%)
- ◆ 49% of the current smokers responded that they had stopped smoking for at least one day in the past year because they were trying to quit smoking.
- ◆ Lenawee County adults used the following other tobacco products: flavored cigarettes (14%), cigars (7%), swishers (6%), chewing tobacco (6%), little cigars (4%), snuff (3%), black and milds (3%), e-cigarettes (3%), cigarillos (3%), hookah (2%), and bidis (1%).
- ◆ In the past 30 days, 14% of adults reported they or someone else had smoked cigarettes, cigars or pipes inside their home.
- ◆ Lenawee County adults think smoking should be banned in the following places: school campuses (93%), stadiums (85%), near public entrances (84%), work sites (77%), university campuses (75%), and parks/trails/playgrounds (71%).

## Tobacco Use and Health

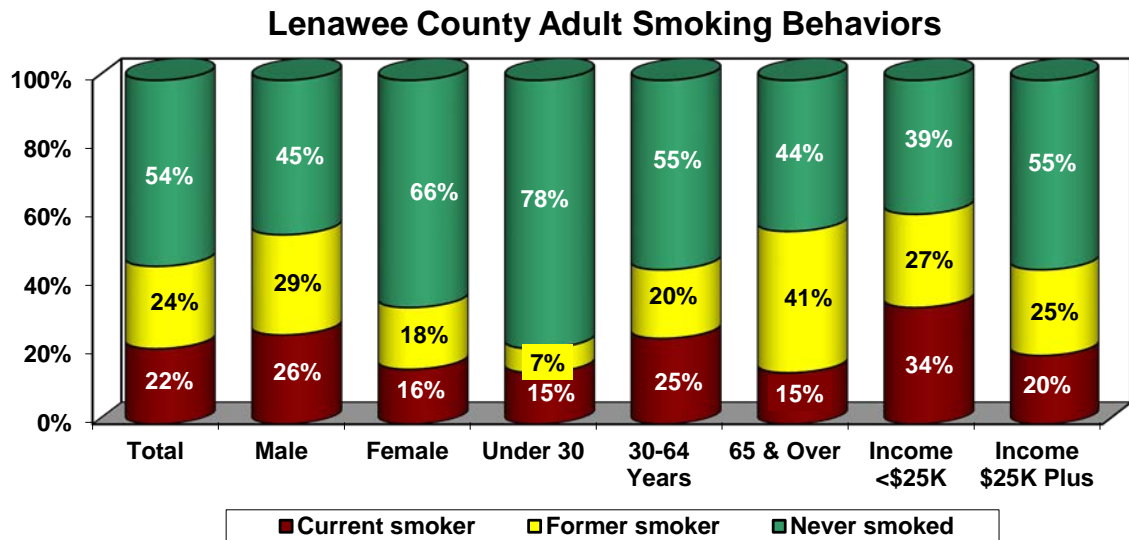
- ◆ Tobacco use is the most preventable cause of death in the U.S. and in the world
- ◆ 87% of all lung cancers deaths and at least 30% of all cancer deaths in the U.S. can be attributed to smoking.
- ◆ When compared to non-smokers, the risk of developing lung cancer is 23 times higher in male smokers and 13 times higher in female smokers.
- ◆ Tobacco use is also associated with at least 20 types of cancer such as cervical, mouth, pharyngeal, esophageal, pancreatic, kidney and bladder.
- ◆ Tobacco use contributes to heart disease, stroke, bronchitis, emphysema, COPD, chronic sinusitis, severity of colds, pneumonia and low birth weight in infants.

*(Source: Cancer Facts & Figures, American Cancer Society, 2011)*

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Current smoker	22%	19%	17%
Former smoker	24%	25%	25%

## Adult Tobacco Use

The following graph shows the percentage of Lenawee County adults who used tobacco. Examples of how to interpret the information include: 22% of all Lenawee County adults were current smokers, 24% of all adults were former smokers, and 54% had never smoked.



*Respondents were asked:*  
*"Have you smoked at least 100 cigarettes in your entire life?*  
*If yes, do you now smoke cigarettes everyday, some days or not at all?"*

### Costs of Tobacco Use

- ❖ If a pack-a-day smoker spent \$4/pack, they would spend: \$28/week, \$112/month, or \$1,456/year.
- ❖ 22% of Lenawee County adults indicated they were smokers. That is approximately 16,888 adults.
- ❖ If 16,888 adults spent \$1,456/year, then \$24,588,928 is spent a year on cigarettes in Lenawee County.

### Smoking and Tobacco Facts

- ❖ Tobacco use is the most preventable cause of death in the U.S.
- ❖ Approximately 49,000 deaths per year in the U.S. are from secondhand smoke exposure.
- ❖ Typically, smokers die 13 to 14 years earlier than non-smokers.
- ❖ In 2009, cigarette smoking was highest in prevalence in adults among American Indians/Native Americans (23%), followed by whites (22.1%), African Americans (21.3%), Hispanics (14.5%), and Asians (12.0%).
- ❖ Smoking costs over \$193 billion in lost productivity (\$97 billion) and health care expenses (\$96 billion) per year.
- ❖ In 2006, the cigarette industry spent more than \$34 million per day on advertising and promotional expenses.

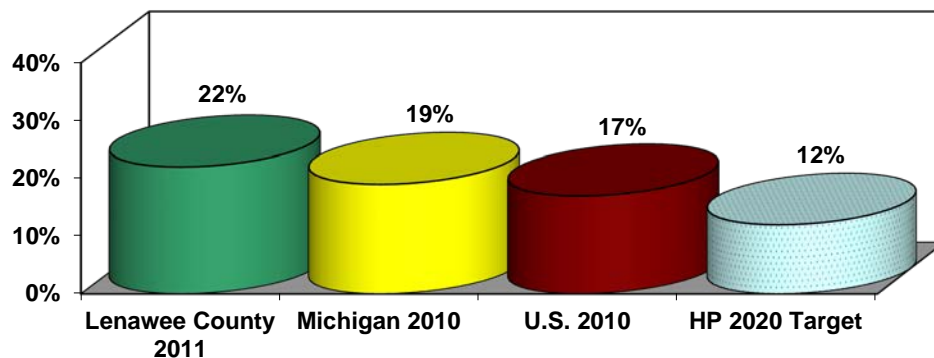
*(Source: CDC: Fast Facts on Smoking and Tobacco Use, accessed from [http://www.cdc.gov/tobacco/data\\_statistics/fact\\_sheets/fast\\_facts/index.htm](http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/index.htm))*

## Adult Tobacco Use

The following graphs show Lenawee County, Michigan, and U.S. adult cigarette smoking rates and age-adjusted mortality rates per 100,000 population for chronic lower respiratory diseases (formerly COPD) and trachea, bronchus and lung cancers in comparison with the Healthy People 2020 objectives. The BRFSS rates shown for Michigan and the U.S. were for adults 18 years and older. These graphs show:

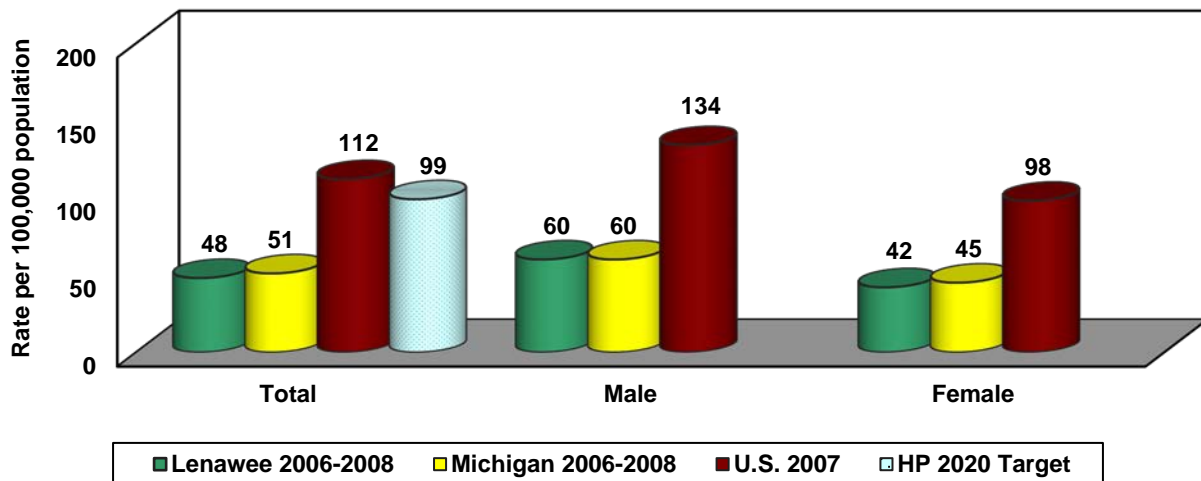
- ◆ Lenawee County adult cigarette smoking rate was higher than the rate for Michigan, the U.S. and the Healthy People 2020 Goal.
- ◆ In 2009, Lenawee County's age-adjusted mortality rate for Chronic Lower Respiratory Disease was higher than the Michigan and U.S. rates, but lower than the Healthy People 2020 target objective.
- ◆ The percentage of mothers who smoked during pregnancy in Lenawee County in 2009 was higher than the Michigan rate.
- ◆ Disparities existed by gender for Lenawee County trachea, bronchus, and lung cancer age-adjusted mortality rates, as well as chronic lower respiratory disease mortality rates. The Lenawee male rates were higher than the Lenawee female rates in both cases.

**Healthy People 2020 Objectives & Cigarette Smoking Rates**



(Source: 2011 Assessment, BRFSS and HP2020)

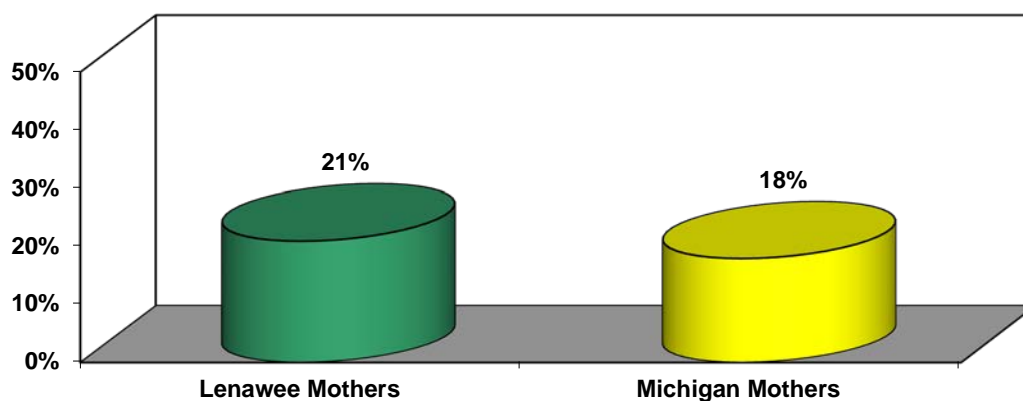
**Age-Adjusted Mortality Rates for Chronic Lower Respiratory Diseases (Formerly COPD)**



(Source: MDCH, Vital Statistics HP2020)  
HP2020 does not report different goals by gender.

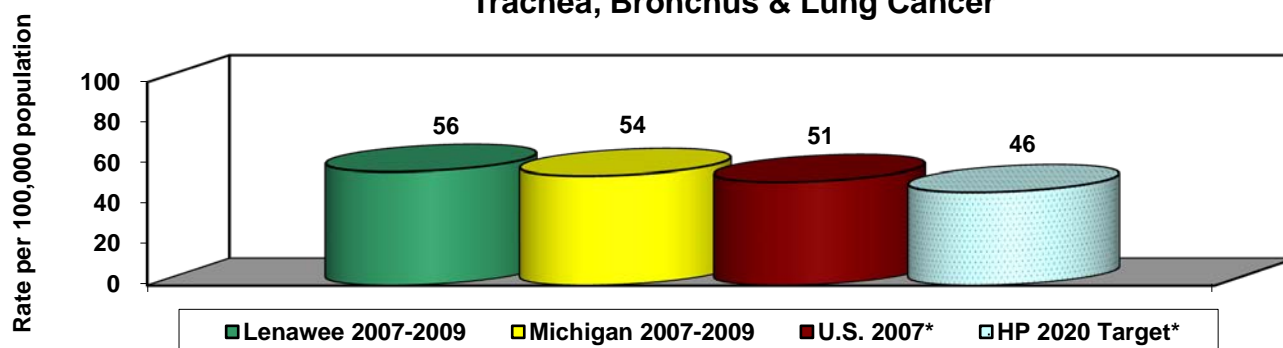
## Adult Tobacco Use

**Births to Mothers Who Smoked During Pregnancy, 2009**



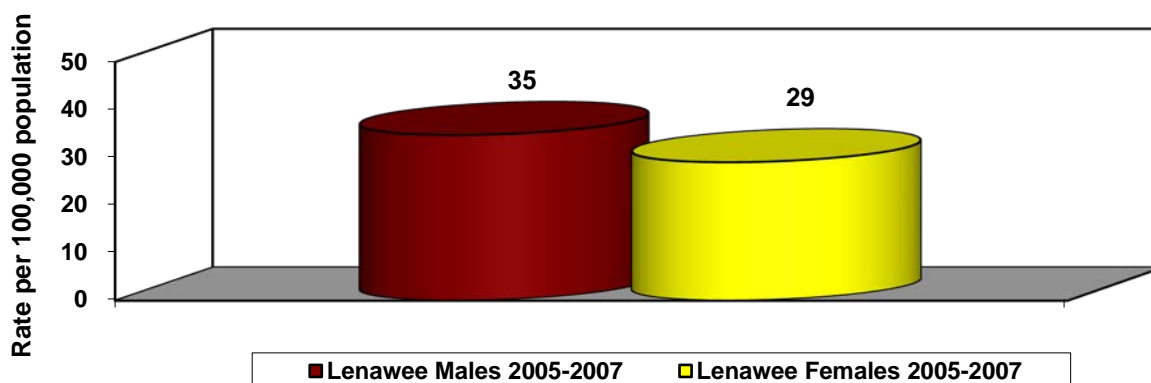
(Source: MDCH Births, Vital Statistics, 2009)

**Age-Adjusted Mortality Rates for Trachea, Bronchus & Lung Cancer**



\*Healthy People 2020 Target and U.S. 2007 data are for lung cancer only  
(Source: Healthy People 2020, MDCH, updated 3-1-11)

**Age-Adjusted Mortality Rates by Gender for Trachea, Bronchus & Lung Cancer**



(Source: MDCH Information updated 8-2-10)



# Adult Alcohol Consumption

## Key Findings

*In 2011, three-fifths (60%) of the Lenawee County adults had at least one alcoholic drink in the past month. In 2011, the health assessment indicated that 17% of Lenawee County adults were considered frequent drinkers (drank an average of three or more days per week, per CDC guidelines). 39% of adults who drank had five or more drinks on one occasion (binge drinking) in the past month. Nine percent of adults drove after having three or more drinks.*

## Lenawee County Adult Alcohol Consumption

- ◆ In 2011, three-fifths (60%) of the Lenawee County adults had at least one alcoholic drink in the past month, increasing to 73% of those under the age of 30. The 2010 BRFSS reported current drinker prevalence rates of 56% for Michigan and 55% for the U.S.
- ◆ About one in six (17%) adults were considered frequent drinkers (drank on an average of three or more days per week).
- ◆ Of those who drank, Lenawee County adults drank 2.6 drinks on average, increasing to 3.7 drinks for those under the age of 30.
- ◆ Of all adults, 22% were considered binge drinkers. The 2010 BRFSS reported binge drinking rates of 15% for Michigan and 15% for the U.S.
- ◆ 39% of those who drink reported they had five or more alcoholic drinks on an occasion in the last month and would be considered binge drinkers by definition (See box above).
- ◆ 9% of adults reported driving within a couple hours after having 3 or more drinks.
- ◆ As a result of drinking alcohol, 4% of adults indicated that they or a family member repeatedly failed to fulfill obligations at work or home, were placed in a dangerous situation, or had legal problems.
- ◆ All (100%) Lenawee parents disapproved of their child doing the following: drinking alcohol, drinking alcohol and driving, riding in a vehicle with someone who had been drinking alcohol, and binge drinking.

## Binge Drinking Dangers

- ❖ Binge drinking is defined as five or more drinks for a male and 4 or more drinks for a female on one occasion or in a short period of time.
- ❖ The prevalence of males binge drinking is higher than the prevalence of females binge drinking.
- ❖ Approximately 75% of the alcohol consumed in the U.S. is in the form of binge drinks.
- ❖ The highest proportion age group to binge drink is in the 18-20 year old group at 51%.
- ❖ Most people who binge drink are not alcohol dependent.
- ❖ Unintentional injuries, violence, alcohol poisoning, hypertension, sexually transmitted diseases, cardiovascular diseases, sexual dysfunction and unintentional pregnancy are a few of the adverse health effects of binge drinking.

(Source: CDC, National Center for Chronic Disease Prevention and Health Promotion, Binge Drinking, 12-17-10)

## Caffeinated Alcoholic Beverages

- ❖ Drinkers who consume alcohol mixed with energy drinks are 3 times more likely to binge drink than drinkers who do not report mixing alcohol with energy drinks.
- ❖ Drinkers who consume alcohol with energy drinks are about twice as likely as drinkers who do not report mixing to report being taken advantage of sexually, to report taking advantage of someone else sexually, and to report riding with a driver who was under the influence of alcohol.
- ❖ Currently, more than 25 brands of caffeinated alcoholic beverages are sold in retail alcohol outlets, including convenience stores.

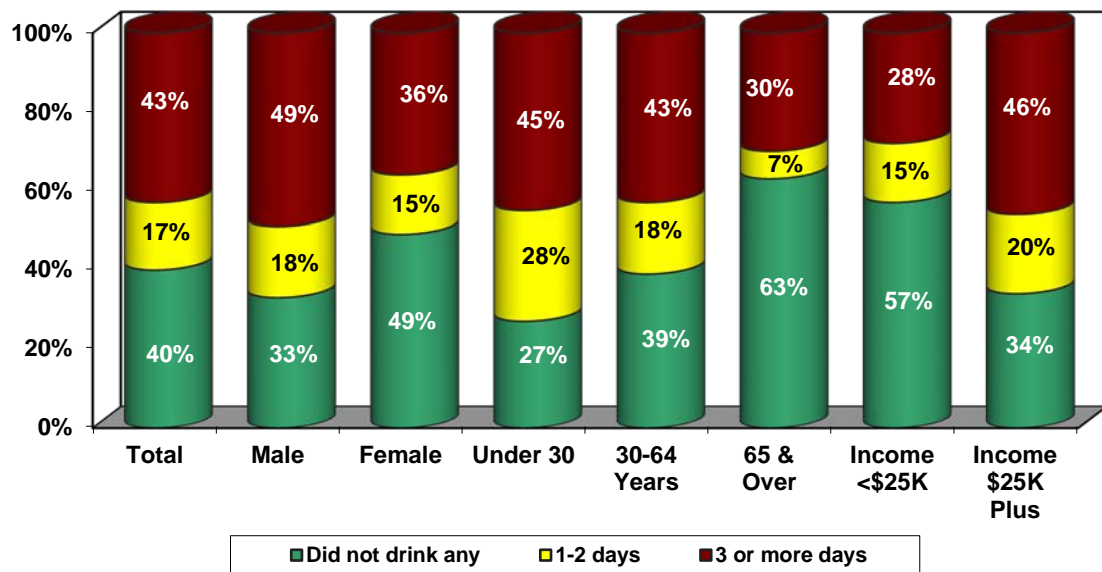
(Source: CDC, Alcohol and Public Health, Fact Sheets, Caffeinated Alcoholic Beverages, July 2010, <http://www.cdc.gov/alcohol/fact-sheets/cab.htm>)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Drank alcohol at least once in past month	60%	56%	55%
Binge drinker (drank 5 or more drinks on occasion)	22%	15%	15%

## Adult Alcohol Consumption

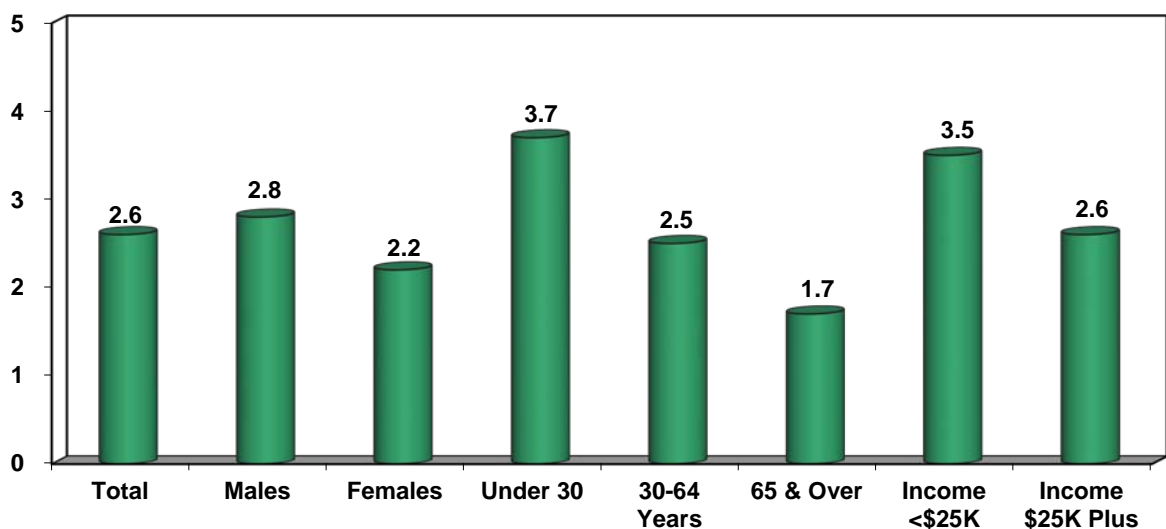
The following graphs show the percentage of Lenawee County adults consuming alcohol and the amount consumed on average. Examples of how to interpret the information shown on the first graph include: 40% of all Lenawee County adults did not drink alcohol, 33% of Lenawee County males did not drink and 49% of adult females reported they did not drink.

**Average Number of Days Drinking Alcohol in the Past Month**



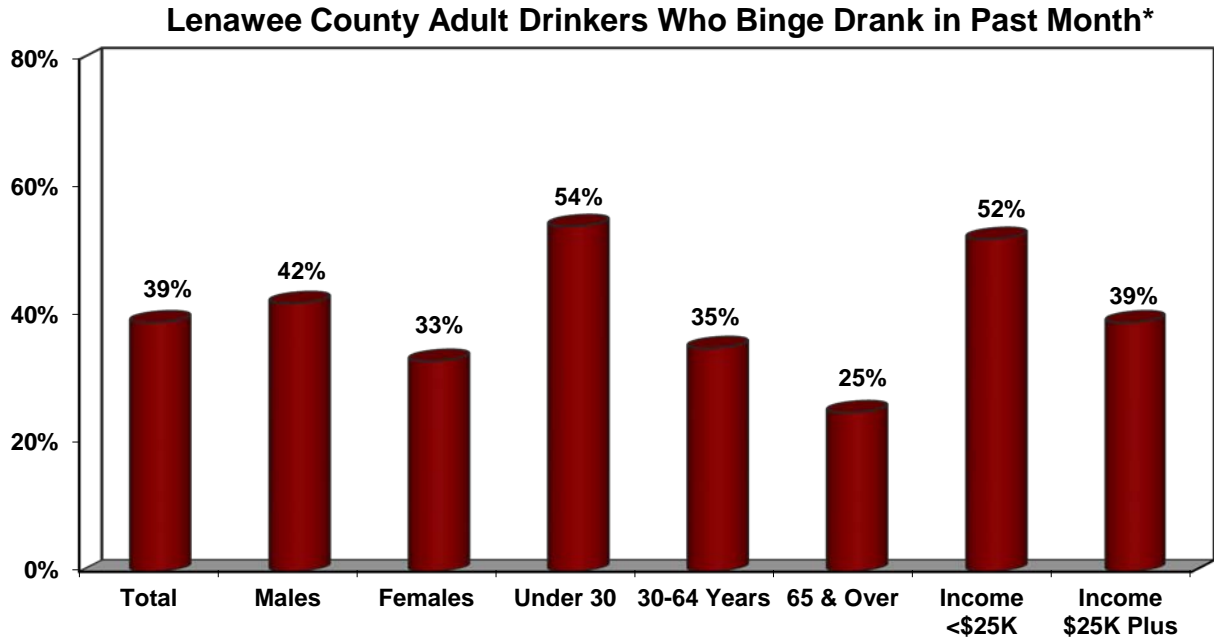
*Percentages may not equal 100% as some respondents answered "don't know"*

**Adults Average Number of Drinks Consumed Per Occasion**

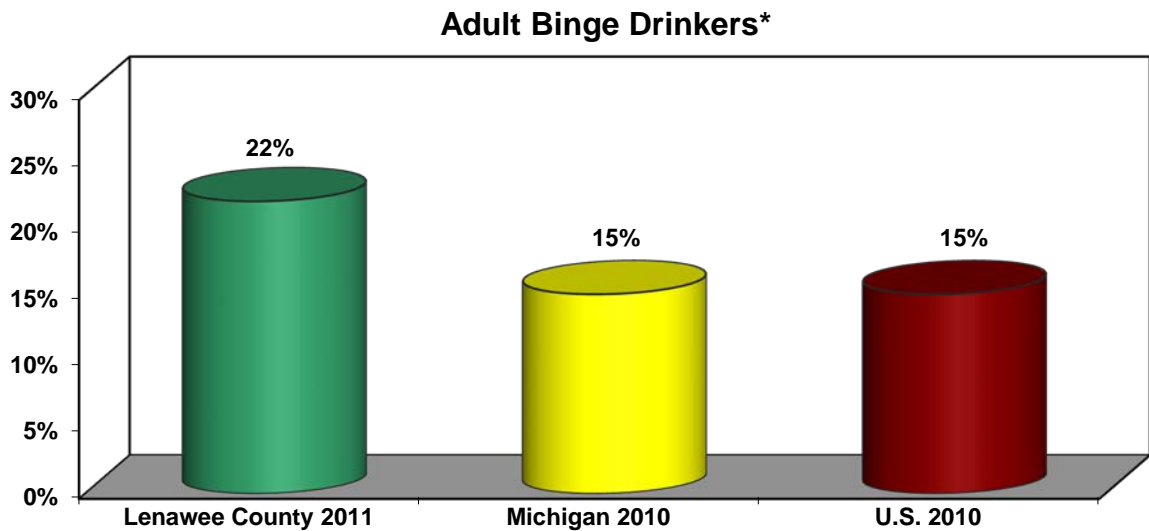




## Adult Alcohol Consumption



*\*Based on adults who have drank alcohol in the past month. Binge drinking is defined as having five or more drinks (for males) or four or more drinks (for females) on an occasion.*



*(Source: 2010 BRFSS, 2011 Lenawee County Health Assessment)*

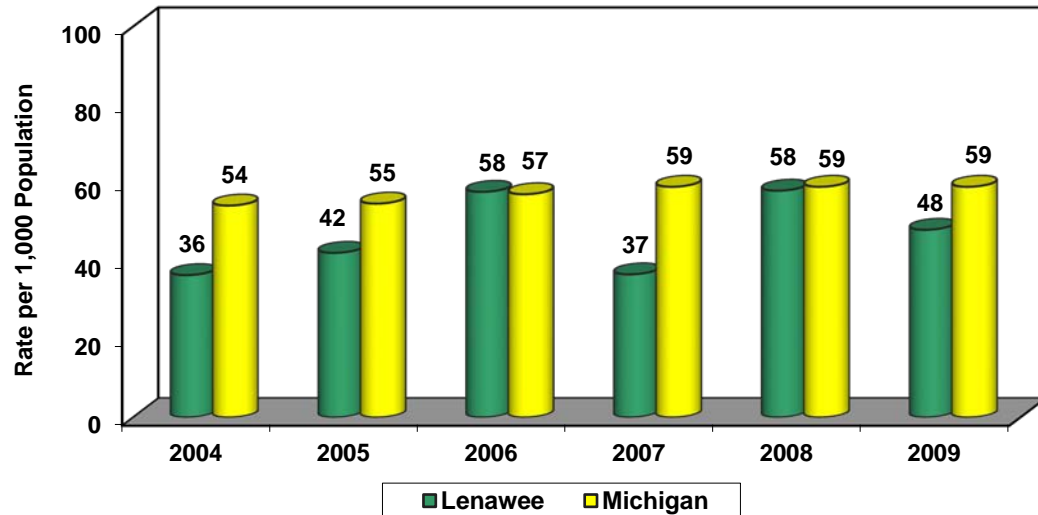
*\*Based on all adults. Binge drinking is defined as having five or more drinks on an occasion.*

## Motor Vehicle Accidents

The following graphs show Lenawee County and Michigan age-adjusted motor vehicle accident mortality rates per 100,000 population with comparison to Healthy People 2020 Objective. The graphs show:

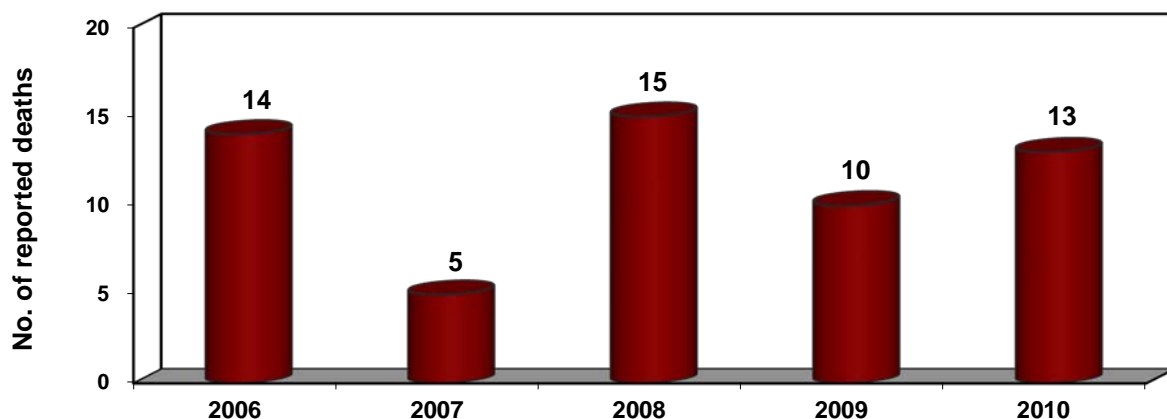
- ◆ From 2004-2009, the Lenawee County age-adjusted transport fatality rate fluctuated, but remained under the state rates overall.
- ◆ Lenawee County residents who were 65 and older experienced the highest number of deaths in 2010.

**Lenawee County and Michigan, Age-Adjusted Transport Fatality Rate  
All Ages, Both Sexes, 2004-2009**



(Source: MDCH, Vital Statistics, updated 1-24-2011)

**Lenawee County Number Motor Vehicle Deaths  
from 2006 to 2010  
N= 57**



(Source: Michigan Office of Highway Safety Planning, 2010)

## Lenawee County Crash Statistics

	City of Adrian 2010	Lenawee County 2010	Michigan 2010
Total Crashes	532	2,511	282,075
Alcohol-Related Total Crashes	14	124	9,986
Fatal Crashes	2	13	868
Alcohol-Related Fatal Crashes	0	1	264
Alcohol Impaired Drivers in Crashes	14	124	9,986
Injury Crashes	128	512	51,672
Alcohol-Related Injury Crashes	6	60	4,007
Property Damage Only	402	1,986	229,535
Alcohol-Related Property Damage Only	8	63	5,715
Deaths	2	16	937
Alcohol-Related Deaths	0	2	238
Total Non-Fatal Injuries	166	734	70,501
Alcohol-Related Injuries	6	85	5,458

*(Source: Michigan Office of Highway Safety Planning, Crash Reports, 2010 Traffic Crash Facts)*

### Lenawee County Experience

- ❖ In 2010, Lenawee County had 2,511 crashes involving 4,607 people — 4,571 motor vehicle drivers and passengers, 20 bicyclists, and 16 pedestrians.
- ❖ Lenawee County experienced the highest number of fatal crashes (2) in March, August, October, and November, and the highest number of persons killed (3) in October and November.
- ❖ Lenawee County driver statistics indicate 7.5 percent of licensed drivers were age 16-20, and 14.4 percent of drivers in that age group were involved in crashes.

*(Source: Michigan Office of Highway Safety Planning, Crash Reports, 2010 Traffic Crash Facts, [http://www.michigantrafficcrashfacts.org/doc/2010/MTCF\\_CountyProfiles\\_2010.pdf](http://www.michigantrafficcrashfacts.org/doc/2010/MTCF_CountyProfiles_2010.pdf))*

### Michigan Experience

- ❖ Michigan experienced a 7.6 percent increase in traffic fatalities from 2009 to 2010.
- ❖ Deaths among vehicle occupants (drivers and passengers only) increased 2.3 percent from 2009 to 2010.
- ❖ In 2010, more fatal crashes occurred between 3:00 and 5:59 PM than any other time period. More fatal crashes occurred on Friday than any other day. More fatal crashes occurred in August than any other month.

*(Source: Michigan Office of Highway Safety Planning, Crash Reports, 2010 Traffic Crash Facts, [http://www.michigantrafficcrashfacts.org/doc/2010/2010MTCF\\_vol1.pdf](http://www.michigantrafficcrashfacts.org/doc/2010/2010MTCF_vol1.pdf) and <http://www.michigantrafficcrashfacts.org/doc/2010/genfacts2010.pdf>)*

# Adult Marijuana and Other Drug Use

## Key Findings

*In 2011, 6% of Lenawee County adults had used marijuana during the past 6 months, and 9% of adults misused medications.*

## Adult Drug Use

- ◆ Six percent (6%) of Lenawee County adults had used marijuana in the past 6 months.
- ◆ No Lenawee County adults reported using other recreational drugs such as cocaine, methamphetamines, heroin, LSD, inhalants, or Ecstasy.
- ◆ When asked about their frequency of marijuana in the past six months, 63% of Lenawee County adults who used marijuana did so almost every day, and 11% did so less than once a month.
- ◆ 9% of adults had used medication not prescribed for them or they took more than prescribed to feel good or high and/or more active or alert during the past 6 months.
- ◆ When asked about their frequency of medication misuse in the past six months, 38% of Lenawee County adults who used these drugs did so almost every day and 35% did so less than once per month.
- ◆ Lenawee County adults used the following over-the-counter medications in a way that was not intended: cold and cough medicines (11%), sleeping pills (3%), energy boosters (2%), weight loss or diet pills (2%), and motion sickness pills (1%).

## Drug-Related Emergency Department Visits

- ❖ In the U.S. in 2009, there were nearly 4.6 million drug-related emergency department (ED) visits. Almost one half (2.1 million) were attributed to drug misuse or abuse.
- ❖ The misuse or abuse of pharmaceuticals resulting in ED visits occurred at a rate of 405.4 visits per 100,000 population, compared with a rate of 317.1 per 100,000 population for illicit drugs.
- ❖ Alcohol was a factor in the drug misuse or abuse accounting for about one third (31.8%) or 650,000 visits.

(Source: SAMHSA, Drug Abuse Warning Network Report, December 28, 2010, <http://oas.samhsa.gov/2k10/DAWN034/EDHighlightsHTML.pdf>)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Adults who used marijuana in the past 6 months	11%	N/A	N/A
Adults who misused prescription drugs in the past 6 months	9%	N/A	N/A

## Commonly Abused Prescription Drugs

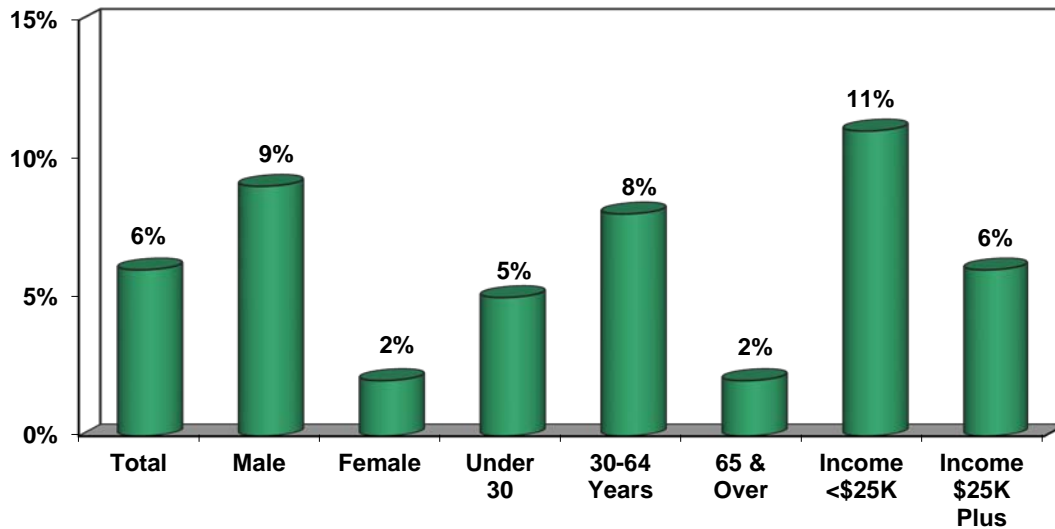
- ❖ **Opioids**—most often prescribed to relieve pain. Examples include: Codeine, Percocet, Darvon (Propoxyphene), Duragesic (Fentanyl), Dilaudid (Hydromorphone), Demerol (Meperidine), OxyContin (Oxycodone), and Vicodin (hydrocodone)
- ❖ **Central Nervous System (CNS) Depressants**—may be used to treat anxiety and sleep disorders. Examples include: Mebaral (mephobarbital), Nembutal (pentobarbital sodium), Valium (diazepam), Librium (chlordiazepoxide HCL), Xanax (alprazolam), and ProSom (estazolam)
- ❖ **Stimulants**—prescribed to treat narcolepsy, attention-deficit hyperactivity disorder (ADHD), asthma and obesity. Examples include: Dexedrine (dextroamphetamine), and Ritalin (methylphenidate)

(Source: National Institute on Drug Abuse, [www.nida.nih.gov](http://www.nida.nih.gov))

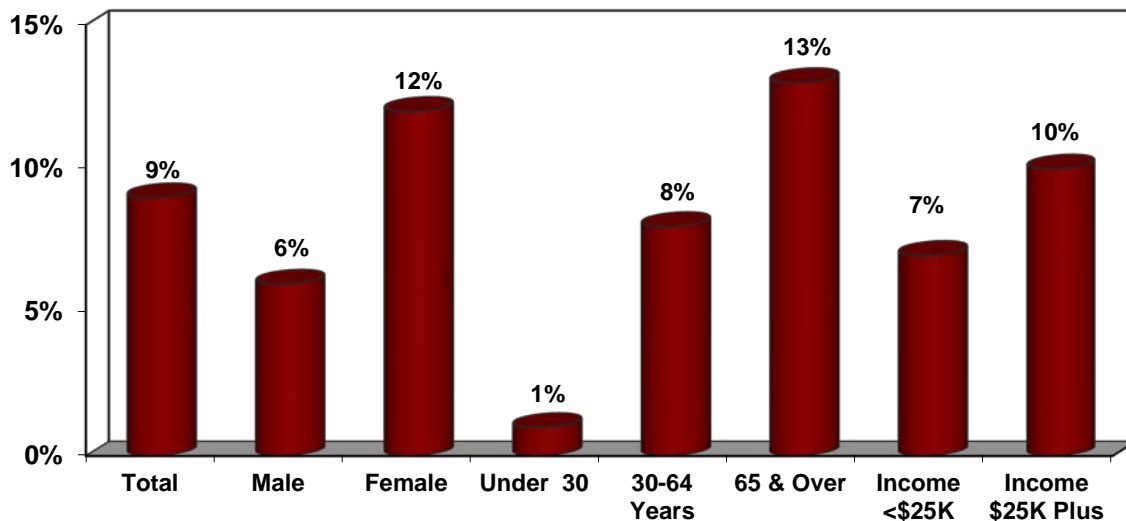
## Adult Marijuana and Other Drug Use

The following graphs are data from the 2011 Lenawee County Health Assessment indicating adult marijuana use and medication misuse in the past six months. Examples of how to interpret the information include: 6% of all Lenawee County adults used marijuana in the past six months, 5% of adults under the age of 30 were current users and 11% of adults with incomes less than \$25,000 were current users.

**Lenawee County Adult Marijuana Use in Past 6 Months**



**Lenawee County Adult Medication Misuse in Past 6 Months**



# Women's Health

## Key Findings

*In 2011, nearly two-thirds (63%) of Lenawee County women over the age of 40 reported having a mammogram in the past year. 61% of Lenawee County women have had a clinical breast exam and 50% have had a Pap smear to detect cancer of the cervix in the past year. The health assessment determined that more than one-fifth (23%) of women had high blood pressure, 33% had high blood cholesterol, 36% were obese, and 16% were identified as smokers, known risk factors for cardiovascular diseases.*

## Women's Health Screenings

- ◆ In 2011, 78% of women had a mammogram at some time and more than half (53%) had this screening in the past year.
- ◆ Nearly two-thirds (63%) of women ages 40 and over had a mammogram in the past year and 81% had one in the past two years. The 2010 BRFSS reported that 76% of women 40 and over in the U.S. and 78% in Michigan had a mammogram in the past two years.
- ◆ Most (95%) Lenawee County women have had a clinical breast exam at some time in their life and 61% had one within the past year.
- ◆ This assessment has identified that 95% of Lenawee County women have had a Pap smear and 50% report having had the exam in the past year. 70% of women had a Pap smear in the past two years.

### Lenawee County Female Leading Types of Death, 2009

**Total Female Resident Deaths: 509**

1. Heart Diseases (25% of all deaths)
2. Cancers (20%)
3. Chronic Lower Respiratory Diseases (8%)
4. Stroke (7%)
5. Unintentional Injuries (3%)

*(Source: MDCH, updated 2009)*

### Michigan Female Leading Types of Death, 2009

**Total Female Resident Deaths: 43,399**

1. Heart Diseases (26% of all deaths)
2. Cancers (22%)
3. Chronic Lower Respiratory Diseases (6%)
4. Stroke (6%)
5. Alzheimer's Disease (4%)

*(Source: MDCH, updated 2009)*

## Women's Health Concerns

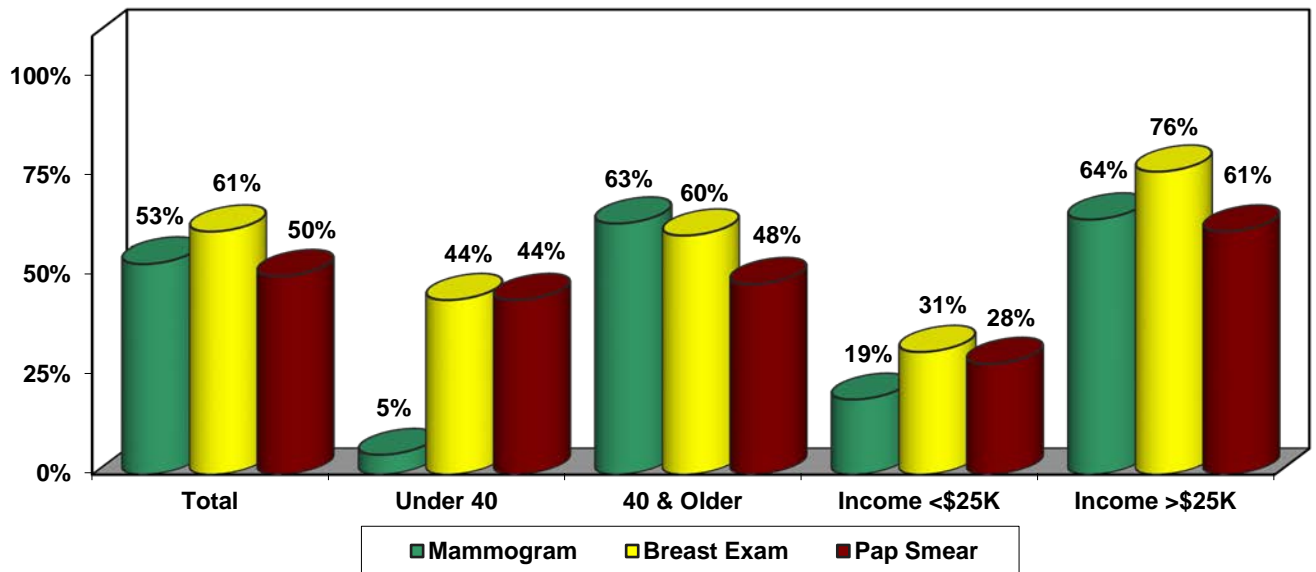
- ◆ Women used the following as their usual source of services for female health concerns: private gynecologist (48%), general or family physician (37%), family planning clinic (4%), health department clinic (1%), and community health center (1%). 7% did not have a usual source.
- ◆ Women who have gone through menopause have done the following for treatment of menopause: seen a doctor (56%), hormone replacement therapy (34%), naturopathic remedies (18%), pelvic floor rehab (1%), and other (17%).
- ◆ Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Lenawee County the 2011 health assessment has identified that:
  - 16% of all women were current smokers (16% U.S., 17% Michigan, 2010 BRFSS)
  - 62% were overweight or obese (57% U.S., 61% Michigan, 2010 BRFSS)
  - 33% were diagnosed with high blood cholesterol (36% U.S., 37% Michigan, 2009 BRFSS)
  - 23% were diagnosed with high blood pressure (28% U.S. and 28% Michigan, 2009 BRFSS)
  - 51% were exercising less than three days per week (includes 5% who were unable to exercise)
  - 11% have been diagnosed with diabetes (10% U.S., 9% Michigan, 2010 BRFSS)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Age 40 and over having had a mammogram in the past 2 years	81%	78%	75%

## Women's Health

The following graph shows the percentage of Lenawee County female adults that had various health exams in the past year. Examples of how to interpret the information shown on the graph include: 53% of Lenawee County females have had a mammogram within the past year, 61% have had a clinical breast exam, and 50% have had a Pap smear.

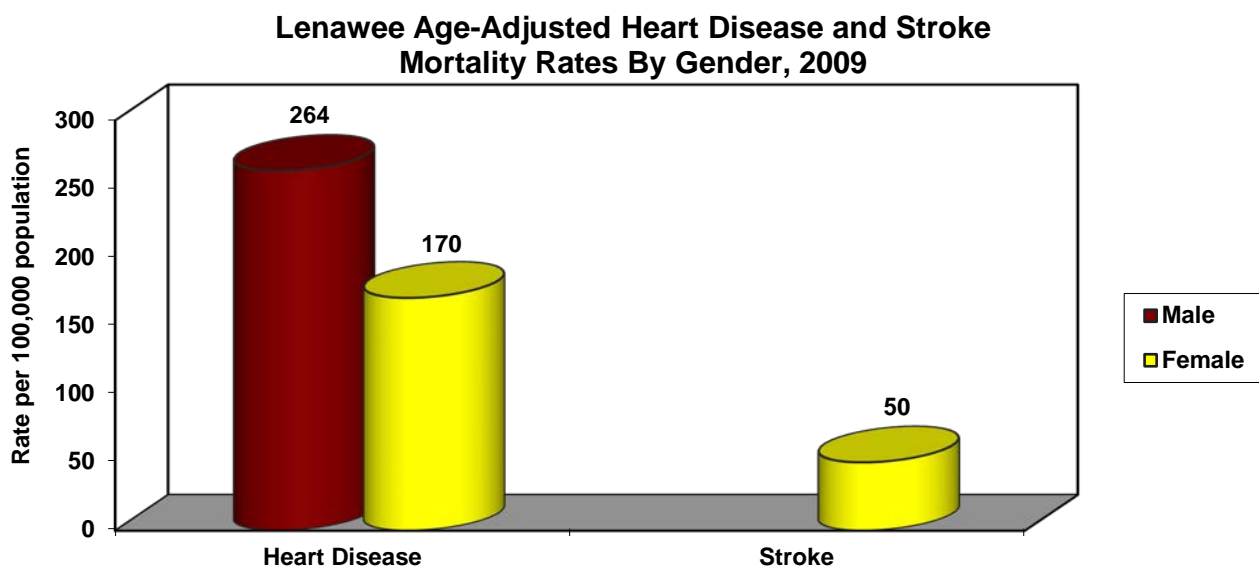
**Lenawee Women's Health Exams Within the Past Year**



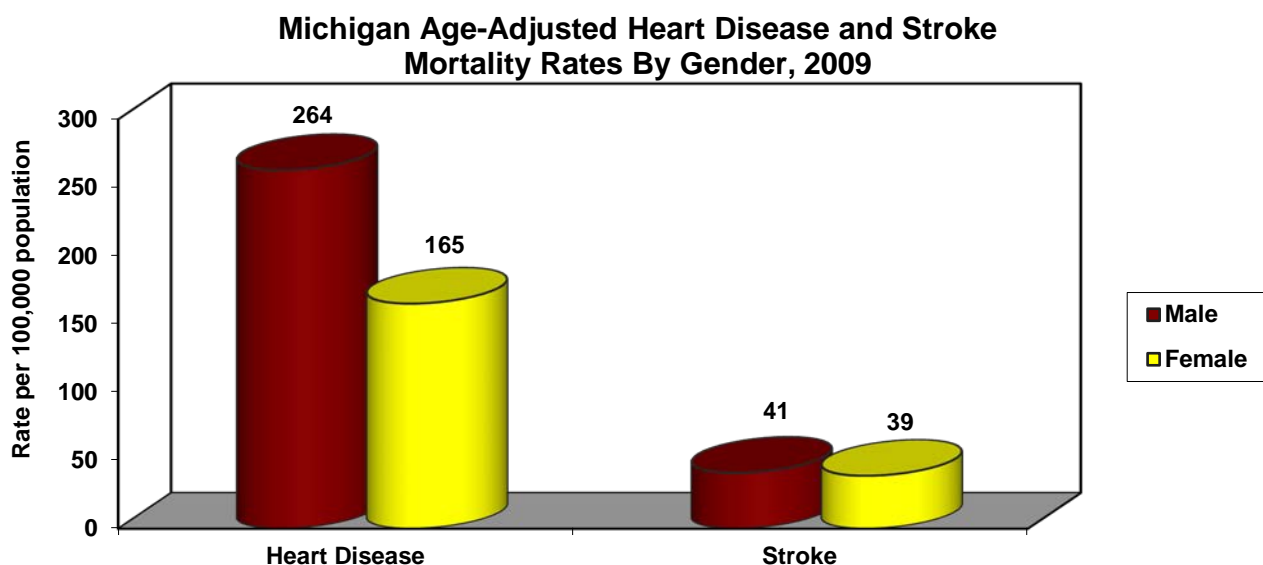
## Women's Health

The following graphs show the Lenawee County and Michigan age-adjusted mortality rates per 100,000 population for cardiovascular diseases. The graphs show:

- ◆ In 2009, the Lenawee County female age-adjusted mortality rate was lower than the male rate for heart disease.
- ◆ In 2009, the Michigan female age-adjusted mortality rate was lower than the male rate for both heart disease and stroke.
- ◆ The Lenawee County female heart disease and stroke mortality rates were higher than the Michigan female rates.



*\* Male Stroke Rate was not available because there were fewer than 20 events that negate any usefulness for comparative purposes.  
(Source: MDCH, Vital Statistics, updated 2009)*



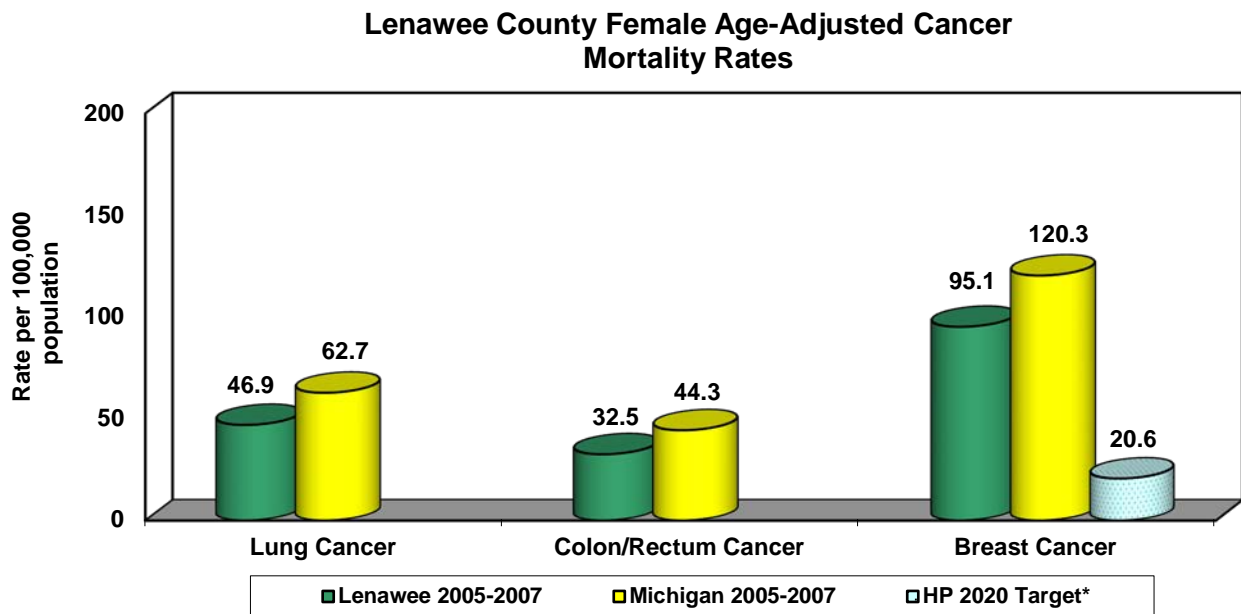
*(Source: MDCH, Vital Statistic, updated 2009)*



## Women's Health

The following graphs show the Lenawee County age-adjusted mortality rates per 100,000 population for women's health with comparison to Healthy People 2020 objectives when available. The graphs show:

- ◆ From 2005-2007, the Lenawee County age-adjusted mortality rate for female lung cancer was less than the Michigan rate.
- ◆ From 2005-2007, the Lenawee County age-adjusted breast cancer mortality rate was higher than the Healthy People 2020 target objective and lower than the Michigan rate.



*\*Note: Healthy People 2020 target rates are not gender specific; Healthy People 2020 Targets may not be available for all diseases.  
(Source: MDCH, updated 8-2-10, and Healthy People 2020)*

# Men's Health

## Key Findings

In 2011, more than half (54%) of Lenawee County males over the age of 50 had a Prostate-Specific Antigen (PSA) test in the past year. 43% of males over the age of 50 had a digital rectal exam in the past year. Major cardiovascular diseases (heart disease and stroke) accounted for 33% and cancers accounted for 25% of all male deaths in Lenawee County in 2009. The health assessment determined that 7% of men had a heart attack, and 4% had a stroke at some time in their life. Almost one-third (30%) of men had been diagnosed with high blood pressure, 38% had high blood cholesterol, and 26% were identified as smokers, which, along with obesity (37%), are known risk factors for cardiovascular diseases.

## Men's Health Screenings

- ◆ Almost half (47%) of Lenawee County males had a Prostate-Specific Antigen (PSA) test at some time in their life and 30% had one in the past year.
- ◆ Nearly three-fifths (59%) of men had a digital rectal exam in their lifetime and 23% had one in the past year.
- ◆ 84% of males age 50 and over had a PSA test at some time in their life, and 54% had one in the past year.
- ◆ 91% of males age 50 and over had a digital rectal exam at some time in their life, and 43% have had one in the past year.

## Men's Health Concerns

- ◆ In 2009, major cardiovascular diseases (heart disease and stroke) accounted for 33% of all male deaths in Lenawee County (Source: MDCH, Vital Statistics)
- ◆ In 2011, the health assessment determined that 7% of men had a heart attack and 4% had a stroke at some time in their life.
- ◆ Major risk factors for cardiovascular disease include smoking, obesity, high blood cholesterol, high blood pressure, physical inactivity, and diabetes. In Lenawee County the 2011 health assessment has identified that:
  - 26% of all men were current smokers(19% U.S., 21% Michigan, 2010 BRFSS)
  - 80% were overweight or obese (71% U.S., 72% Michigan, 2010 BRFSS)
  - 38% were diagnosed with high blood cholesterol (40% U.S., 41% Michigan, 2009 BRFSS)
  - 30% were diagnosed with high blood pressure (30% U.S., 32% Michigan, 2009 BRFSS)
  - 39% were exercising less than three days per week (includes 3% who were unable to exercise)
  - 13% have been diagnosed with diabetes (9% U.S., 11% Michigan, 2010 BRFSS)
- ◆ In 2009, cancer was the second leading cause of death for Lenawee County males (N=105 male resident deaths). Cancer was also the second leading cause of death for Michigan males (N=10,471 resident deaths) (Source: MDCH, Vital Statistics).

### Lenawee County Male Leading Types of Death, 2009

**Total Male Resident Deaths: 413**

1. Heart Diseases (29% of all deaths)
2. Cancers (25%)
3. Chronic Lower Respiratory Diseases (6%)
4. Diabetes Mellitus (5%)
5. Stroke (4%)

(Source: MDCH, updated 2009)

### Michigan Male Leading Types of Death, 2009

**Total Male Resident Deaths: 42,908**

1. Heart Diseases (27% of all deaths)
2. Cancers (24%)
3. Chronic Lower Respiratory Diseases (5%)
4. Unintentional Injuries (5%)
5. Stroke (4%)

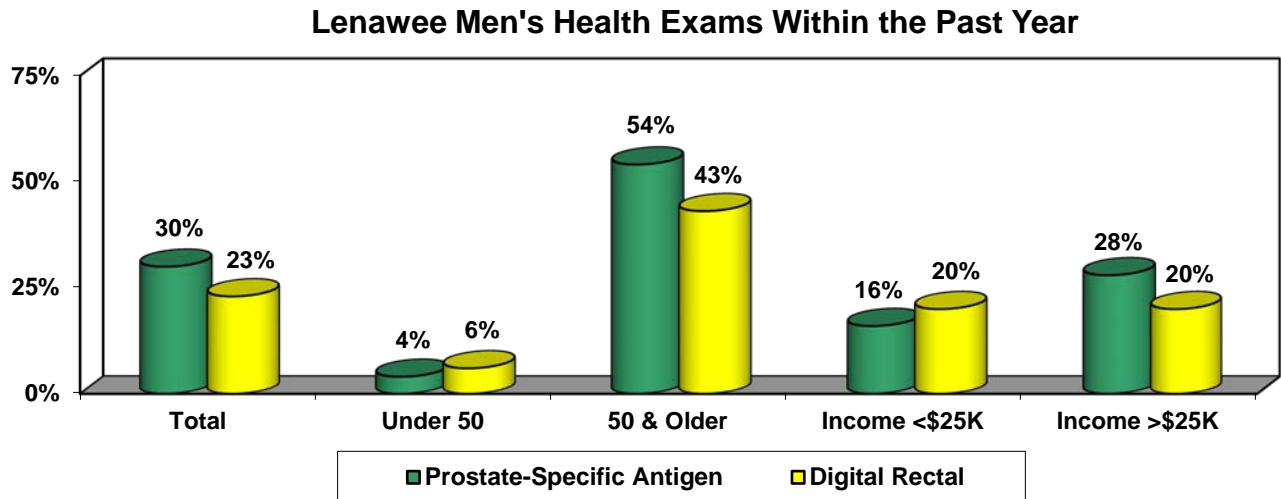
(Source: MDCH, updated 2009)

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Had a PSA test within the past two years	42%	55%	53%
Men diagnosed with high blood cholesterol	38%	41%*	40%*
Men who were current smokers	26%	21%	19%

\*BRFSS Data for High Blood Cholesterol is reported for 2009

## Men's Health

The following graph shows the percentage of Lenawee County males surveyed that have had the listed health exams in the past year. Examples of how to interpret the information shown on the graph include: 30% of Lenawee County males have had a PSA test within the past year and 23% have had a digital rectal exam.



### Men's Health Data

- ❖ Approximately 12% of adult males aged 18 years or older reported fair or poor health.
- ❖ 22% of adult males in the U.S. currently smoke.
- ❖ Of the adult males in the U.S., 31.5% had 5 or more drinks in 1 day at least once in the past year.
- ❖ Only 52% of adult males in the U.S. met the 2008 federal physical activity guidelines for aerobic activity through leisure-time aerobic activity.
- ❖ There are 20% of males under the age of 65 without health care coverage.
- ❖ The leading causes of death for males in the United States are heart disease, cancer and accidents (unintentional injuries).

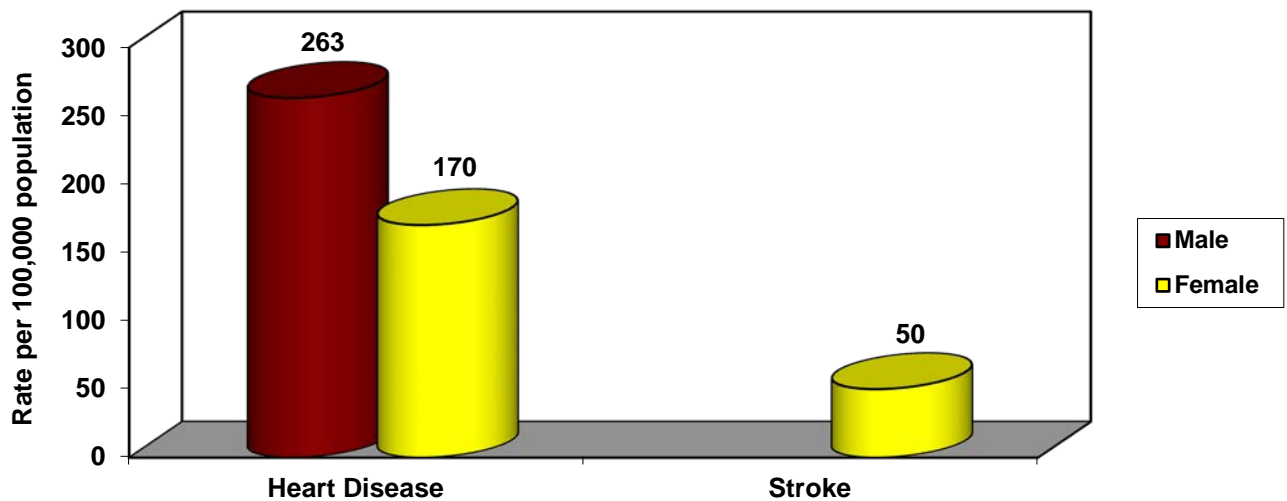
(Source: CDC, National Center for Health Statistics, Men's Health, Fast Stats, 2/18/2011 from [http://www.cdc.gov/nchs/fastats/mens\\_health.htm](http://www.cdc.gov/nchs/fastats/mens_health.htm))

## Men's Health

The following graphs show the Lenawee County and Michigan age-adjusted mortality rates per 100,000 population for men's cardiovascular diseases. The graphs show:

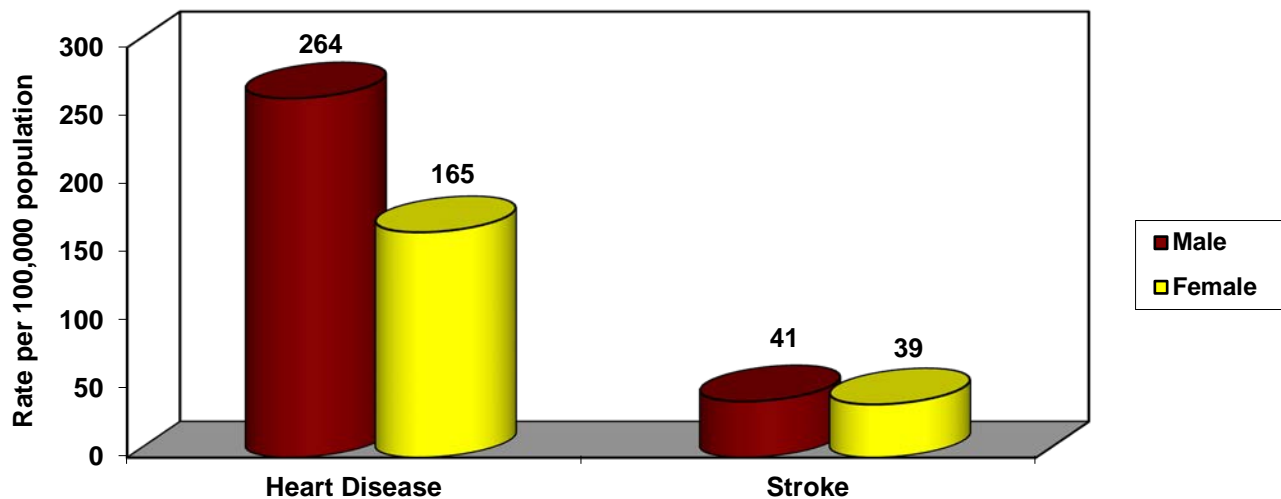
- ◆ In 2009, the Lenawee County male age-adjusted mortality rate was higher than the female rate for heart disease.
- ◆ In 2009, the Michigan male age-adjusted mortality rate was higher than the female rate for both heart disease and stroke.
- ◆ The Lenawee County male heart disease mortality rate was lower than the Michigan male rate.

**Lenawee County Age-Adjusted Heart Disease and Stroke Mortality Rates By Gender, 2009**



*\* Male Stroke Rate was not available because there were fewer than 20 events that negate any usefulness for comparative purposes.  
(Source: MDCH, Vital Statistics, updated 2009)*

**Michigan Age-Adjusted Heart Disease and Stroke Mortality Rates By Gender, 2009**



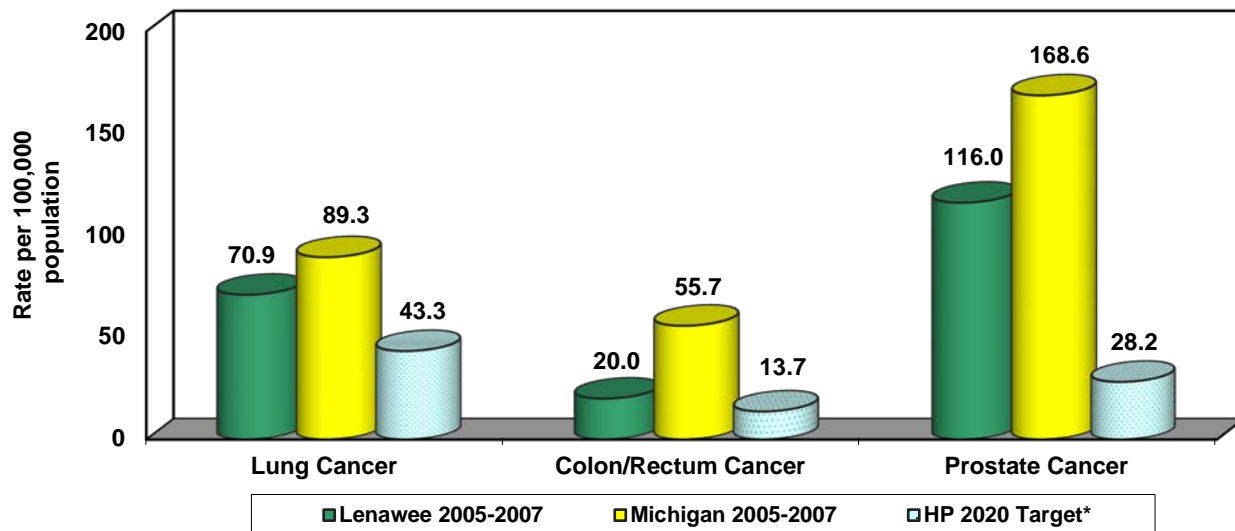
*(Source: MDCH, Vital Statistic, updated 2009)*

## Men's Health

The following graph shows the Lenawee County age-adjusted mortality rates per 100,000 population for men's health with comparison to Healthy People 2020 objectives. The graph shows:

- ◆ From 2005-2007, the Lenawee County age-adjusted mortality rate for male lung cancer was less than the Michigan rate.
- ◆ The age-adjusted prostate cancer mortality rate in Lenawee County for 2005-2007 was lower than the Michigan rate, but much greater than the Healthy People 2020 objective.

**Lenawee County Male Age-Adjusted Cancer Mortality Rates**



*\*Note: the Healthy People 2020 target rates are not gender specific.  
(Source: MDCH, updated 8-2-10 and Healthy People 2020)*

# Adult Preventive Medicine and Health Screenings

## Key Findings

*More than one-third (39%) of adults had a flu shot during the past 12 months. 57% of adults over 50 had received a colonoscopy or sigmoidoscopy in the past 5 years.*

## Preventive Medicine

- ◆ More than one-third (39%) of Lenawee County adults had a seasonal/H1N1 flu vaccine during the past 12 months.
- ◆ Of those who had a seasonal flu vaccine, 100% had the shot and no one had the nasal spray.
- ◆ Two-thirds (67%) of adults have had a tetanus shot in the past 10 years.

## Ways to Prevent Seasonal Flu

1. Get vaccinated each year.
2. Avoid close contact with people who are sick.
3. Stay home when you are sick.
4. Cover your mouth and nose.
5. Wash your hands.
6. Avoid touching eyes, nose, or mouth.
7. Practice other good health habits, such as get plenty of sleep, exercise routinely, drink plenty of fluids, eat a nutritious diet.

*(Source: Centers for Disease Control, National Center for Immunization and Respiratory Diseases (NCIRD), Fact Sheet: Good Health Habits for Preventing Seasonal Flu)*

## Preventive Health Screenings and Exams

- ◆ 32% of adults had a colonoscopy or sigmoidoscopy in the past five years, increasing to 57% of those over the age of 50.
- ◆ 58% of adults had been to the doctor for a routine visit in the past year.
- ◆ In the past year, 63% of Lenawee County women ages 40 and over have had a mammogram.
- ◆ In the past year, 54% of men ages 50 and over had a Prostate-Specific Antigen (PSA) test.
- ◆ Lenawee County adults indicated they were at risk (based on family history) for the following: high blood pressure (56%), heart disease (49%), diabetes (46%), cancer (42%), high blood cholesterol (37%), alcohol addiction (11%), Alzheimer's disease (10%), mental illness (6%), and drug addiction (1%).
- ◆ Lenawee County adults reported the following as symptoms of a heart attack: chest pain or discomfort (94%), shortness of breath (82%), pain or discomfort in the arms and shoulder (82%), pain or discomfort in the jaw, neck, or back (61%), feeling weak, lightheaded, or faint (57%), and sudden trouble seeing in one or both eyes (32%).
- ◆ Lenawee County adults reported the following as symptoms of stroke: sudden numbness or weakness of face, arm or leg (90%), sudden confusion or trouble speaking (87%), sudden trouble walking, dizziness or loss of balance (78%), sudden trouble seeing in one or both eyes (68%), severe headache with no known cause (54%), and sudden chest pain or discomfort (28%).

## Preventive Counseling Services

- ◆ Lenawee County adults indicated that their doctor or other health professional had discussed the following topics with them within the past year: physical activity or exercise (42%), diet or eating habits (31%), immunizations (23%), significance of family health history (19%), depression/anxiety/emotional problems (16%), quitting smoking (11%), alcohol use when taking prescription drugs (8%), alcohol use (7%), injury prevention (7%), sexual practices (4%), domestic violence (2%), and illicit drug abuse (2%).

### Lenawee County Adult Health Screening Results

GENERAL SCREENING RESULTS	Total Sample
Diagnosed with High Blood Pressure	28%
Diagnosed with High Blood Cholesterol	36%
Diagnosed with Diabetes	12%
Diagnosed with a Heart Attack	6%
Diagnosed with a Stroke	3%

*(Percentages based on all Lenawee County adults surveyed)*

# Environmental Health/Disaster Preparedness

## Key Findings

*Insects and mold were the two most important perceived environmental health issues that threatened Lenawee County adults' health in the past year.*

## Environmental Health

- ◆ Lenawee County adults thought the following threatened their health in the past year:
  - Insects (12%)
  - Mold (7%)
  - Rodents or mice (4%)
  - Temperature regulation (4%)
  - Chemicals found in household products (3%)
  - Unsafe water supply (1%)
  - Plumbing problems (1%)
  - Sewage/waste water problems (1%)
  - Bed bugs (1%)
  - Excess medications in the home (<1%)
  - Radon (<1%)
  - Cockroaches (<1%)

### Potential Health Effects of Mold

- ❖ Mold does not always cause health problems indoors.
- ❖ People who are sensitive to mold may experience nasal stuffiness, eye irritation, wheezing, or skin irritation when exposed to mold.
- ❖ Severe reactions include a fever and shortness of breath.
- ❖ Increased risk for infections that may develop into fungal infections is more likely in people with chronic lung diseases like COPD and immune-compromised people.

(Source: CDC, National Center for Environmental Health, Facts about *Stachybotrys chartarum* and Other Molds, Obtained from: <http://www.cdc.gov/mold/stachy.htm>)

## Disaster Preparedness

- ◆ Lenawee County households had the following disaster preparedness supplies: cell phone (92%), working flashlight and working batteries (87%), 3-day supply of nonperishable food for everyone who lives there (63%), working battery operated radio and working batteries (60%), 3-day supply of prescription medication for each person who takes prescribed medicines (55%), and 3-day supply of water for everyone in the household (1 gallon of water per person per day) (34%).
- ◆ 94% of households had multiple disaster preparedness supplies, and 4% had no disaster preparedness supplies.
- ◆ Lenawee County adults would use the following as their main method or way of getting information from authorities in a large-scale disaster or emergency: television (65%), radio (56%), cell phone (32%), internet (27%), land line phone (9%), neighbors (7%), print media (1%), and other (3%).

### Additional Items to Consider Adding to Basic Emergency Supply Kit

- |  |                                     |
|--|-------------------------------------|
| ○ Prescription medications and glasses   | ○ Cash or traveler's checks         |
| ○ Sleeping bag or warm blanket for each person   | ○ Fire extinguisher                 |
| ○ Additional clothing including a long sleeved shirt, pants and sturdy shoes                                       | ○ Matches in a waterproof container |
| ○ Household unscented chlorine bleach and medicine dropper   | ○ Paper and pencil                  |
| ○ Feminine supplies and personal hygiene items   | ○ Infant formula and diapers        |
| ○ Mess kits, paper cups, plates and plastic utensils, paper towels   |                                     |
| ○ Books, games, puzzles or other activities for children   |                                     |
| ○ Family documents such as copies of insurance policies & bank account records in a waterproof, portable container |                                     |

Source: Federal Emergency Management Agency (FEMA), Ready: Prepare. Plan. Stay Informed., Emergency Supply List, Obtained from: [http://www.ready.gov/america/\\_downloads/checklist3.pdf](http://www.ready.gov/america/_downloads/checklist3.pdf))



# Adult Sexual Behavior and Pregnancy Outcomes

## Key Findings

*In 2011, nearly three-fourths (73%) of Lenawee County adults had sexual intercourse. Six percent of adults had more than one partner. Even though young people aged 15-24 represent only 25% of the sexually experienced population, they acquire nearly half of all STDs (Source: CDC, STDs in Adolescents and Young Adults, 2009 STD Surveillance).*

## Adult Sexual Behavior

- ◆ Nearly three-fourths (73%) of Lenawee County adults had sexual intercourse in the past year.
- ◆ 6% of adults reported they had intercourse with more than one partner in the past year, increasing to 15% of those under the age of 30.
- ◆ Lenawee County adults used the following methods of birth control: vasectomy (29%), hysterectomy (19%), abstinence (16%), tubes tied (13%), condoms (9%), birth control pill (7%), withdrawal (7%), IUD (2%), and rhythm method (1%).
- ◆ 14% of Lenawee County adults were not using any method of birth control.
- ◆ Lenawee County adults did not use birth control for the following reasons:
  - They or their partner had a hysterectomy/vasectomy/tubes tied (47%)
  - They or their partner is too old (21%)
  - They did not think they were going to have sex (no regular partner) (7%)
  - They did not think they or their partner could get pregnant (5%)
  - They wanted to get pregnant (5%)
  - They or their partner did not like birth control/had a fear of side effects (3%)
  - They did not want to use birth control (2%)
  - They do not care if they or their partner gets pregnant (2%)
  - Their partner is currently pregnant (1%)
  - Their partner did not want to use birth control (1%)
  - They had a lapse in use of a method (1%)
  - They or their partner is currently breastfeeding (1%)
  - They have a same-sex partner (<1%)
  - Religious preferences (<1%)
- ◆ Lenawee County adults were diagnosed with the following sexually transmitted diseases (STDs) in the past 5 years: human papilloma virus (HPV) (3%), and gonorrhea (1%).
- ◆ 11% of adults have been forced to have sexual activity when they did not want to, increasing to 19% of females.

## Ways to Have Safer Sex

- ❖ Be honest with your partner.
- ❖ Protect yourself and your partner from body fluids.
- ❖ Sexual play without intercourse can be enjoyable and safer than intercourse.
- ❖ Ask questions about partner's history (drugs, sexual partners, and whether or not they've been tested).
- ❖ Get the correct treatment if you become infected.
- ❖ Getting tested regularly for HIV/AIDS and other sexually transmitted diseases.

(Source: Planned Parenthood: Preventing STIs/STDs,  
<http://www.plannedparenthood.org/sexual-health/std/preventing-stis-stds.htm>)

## Risk Factors for Contracting Sexually Transmitted Infections

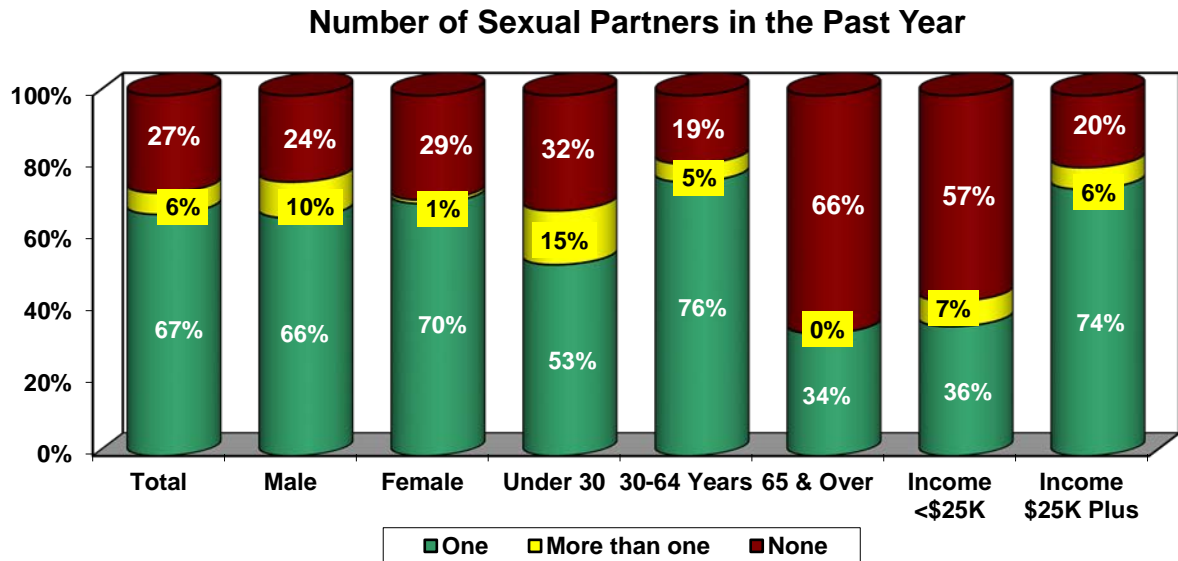
- ❖ Having unprotected sex
- ❖ Having multiple sex partners
- ❖ Having a history of one or more STIs
- ❖ Transmission from mother to infant
- ❖ Injecting drugs
- ❖ Abusing alcohol or using recreational drug

(Source: Mayo Foundation for Medical Education and Research, 2-24-2011)



## Adult Sexual Behavior and Pregnancy Outcomes

The following graph shows the sexual activity of the Lenawee County adults. Examples of how to interpret the information in graph one include: 67% of all Lenawee County adults had one sexual partner in the last 12 months and 6% had more than one, and 66% of males had one partner in the past year.



*Respondents were asked: "During the past 12 months, with how many different people have you had sexual intercourse?"*

### Types of Contraception

**Sterilization:** For females, this is also known as having their "tubes tied". Female sterilization involves the surgical closing of the fallopian tubes which carry the eggs from the ovaries to the uterus. For males, sterilization is referred to as a vasectomy. This procedure involves the surgical closing of tubes that carry sperm.

**Abstinence:** The voluntary refraining from sexual activity. **Abstinence is the only contraceptive method that is 100% effective in the prevention of both pregnancy and the transmission of sexually transmitted diseases.**

**Barrier Methods (Condoms):** The male condom is a tube of thin material (latex rubber) that is rolled over the erect penis prior to contact with the vagina. This is the most commonly used barrier method. The female condom is a seven-inch long pouch of polyurethane with two flexible rings and is inserted into the vagina prior to intercourse.

**Hormonal Methods:** Whether administered as a pill, patch, shot, ring or implant, hormone medications contain manufactured forms of the hormones estrogen and/or progesterone. They work by either preventing a woman's ovary from releasing an egg, thickening cervical mucus, making it harder for sperm to reach the egg, or by thinning the lining of the uterus making it harder for a fertilized egg to implant in the uterine wall.

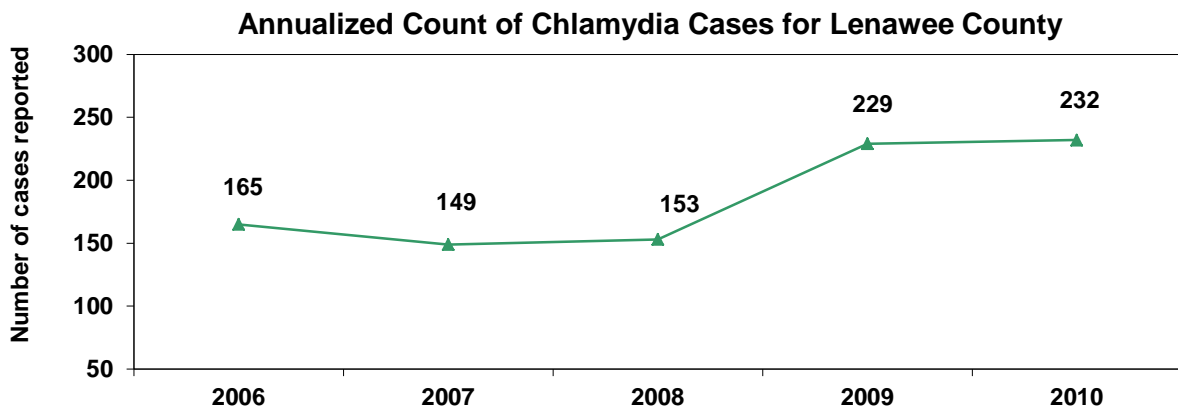
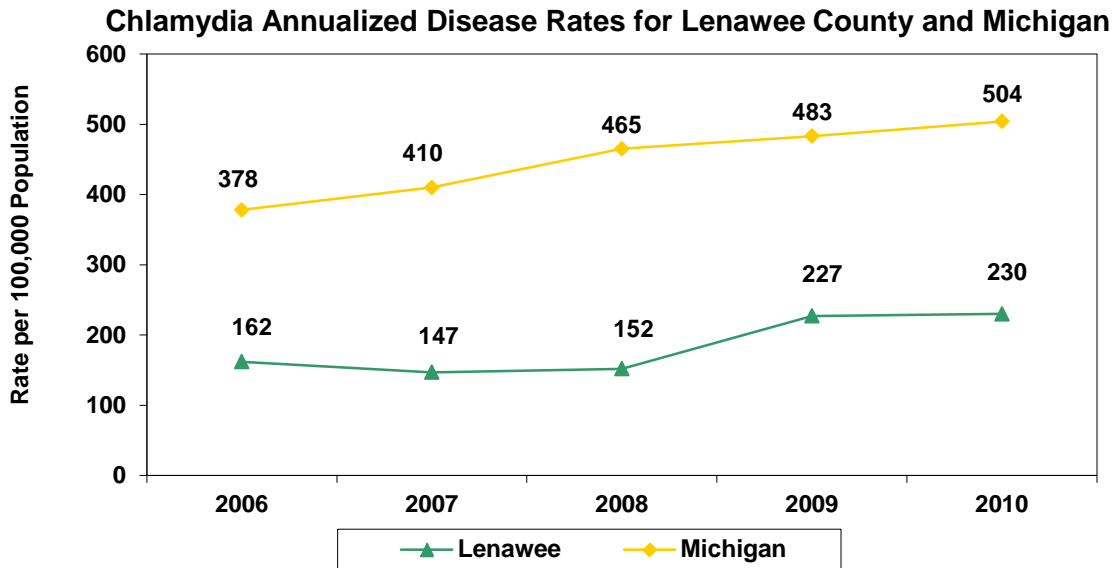
**Intrauterine Device (IUD):** a small plastic device containing copper or hormones and is inserted into the uterus by a medical professional.

*(Source: The American Pregnancy Association; Overview: Birth Control Methods, <http://www.americanpregnancy.org/preventingpregnancy/overviewtypesbirthcontrol.html>)*

## Adult Sexual Behavior and Pregnancy Outcomes

The following graphs show Lenawee County Chlamydia and Gonorrhea disease cases per 100,000 population updated June 6, 2011 by the Michigan Department of Community Health. The data shows:

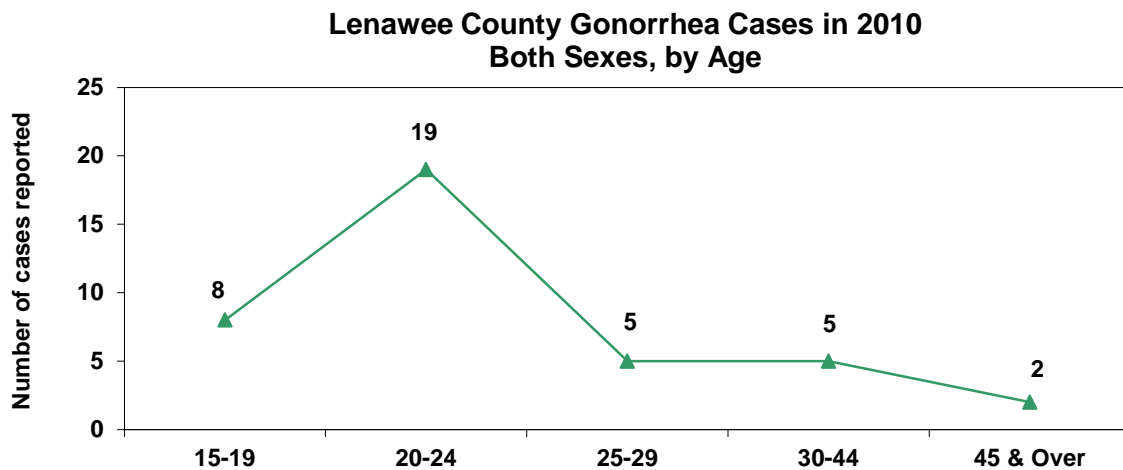
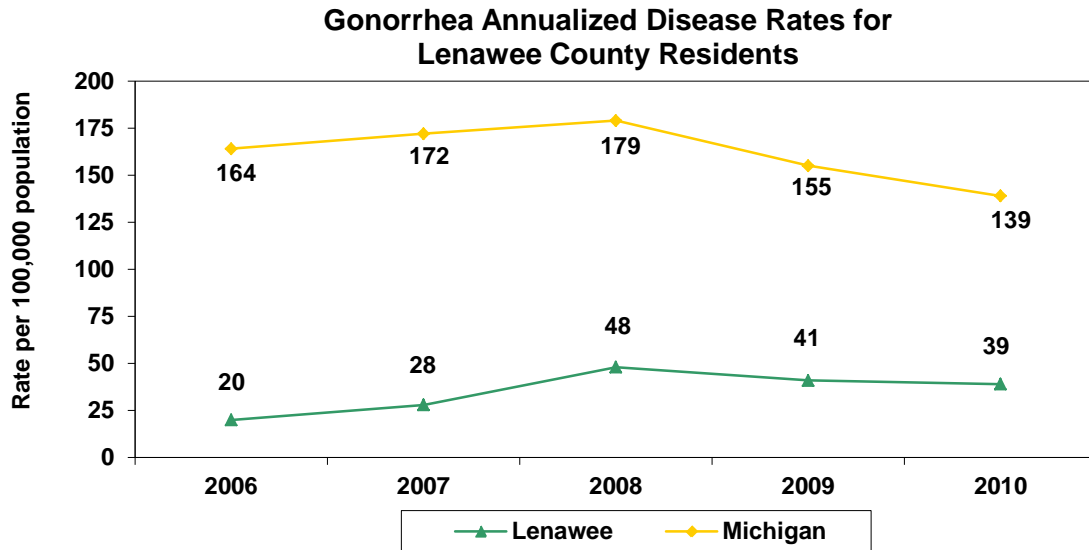
- ◆ The Lenawee County Chlamydia rate fluctuated from 2006 to 2010, but increased overall.
- ◆ In 2010, the U.S. rate for new Chlamydia cases was 426.0 per 100,000 population. (Source: CDC, *Sexually Transmitted Diseases Surveillance*, 2010)



(Source: Michigan Sexually Transmitted Diseases Database, Updated 6-6-2011)

## Adult Sexual Behavior and Pregnancy Outcomes

- ◆ The Lenawee County Gonorrhea rate fluctuated from 2006 to 2010. These rates remained well below the Michigan rate.
- ◆ In 2010, the U.S. rate for new Gonorrhea cases for the total population was 100.8 per 100,000 population. *(Source: CDC, Sexually Transmitted Diseases Surveillance, 2010)*
- ◆ The Healthy People 2020 Objective for Gonorrhea is 257 new female and 198 new male cases per 100,000 population.



*(Source: Michigan Sexually Transmitted Diseases Database, Updated 6-6-2011)*

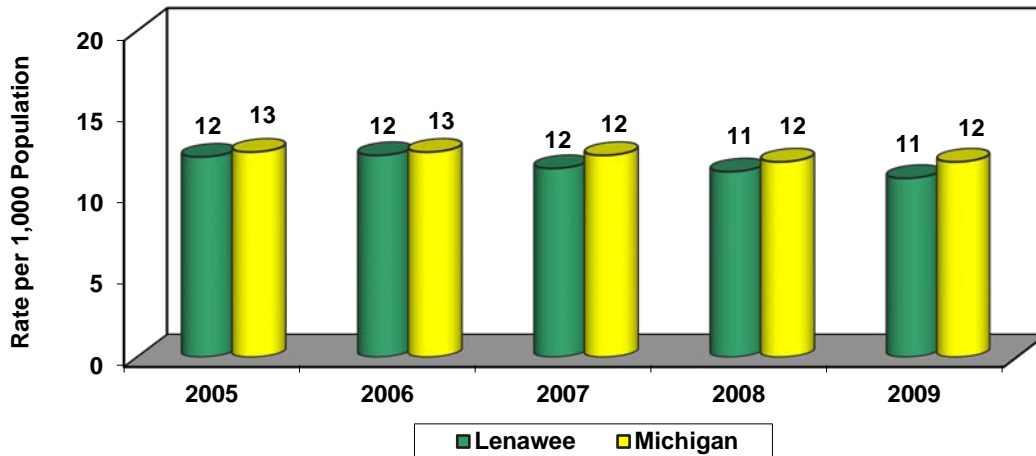
## Adult Sexual Behavior and Pregnancy Outcomes

### Pregnancy Outcomes

*\*Please note that the pregnancy outcomes data includes all births to adults and adolescents.*

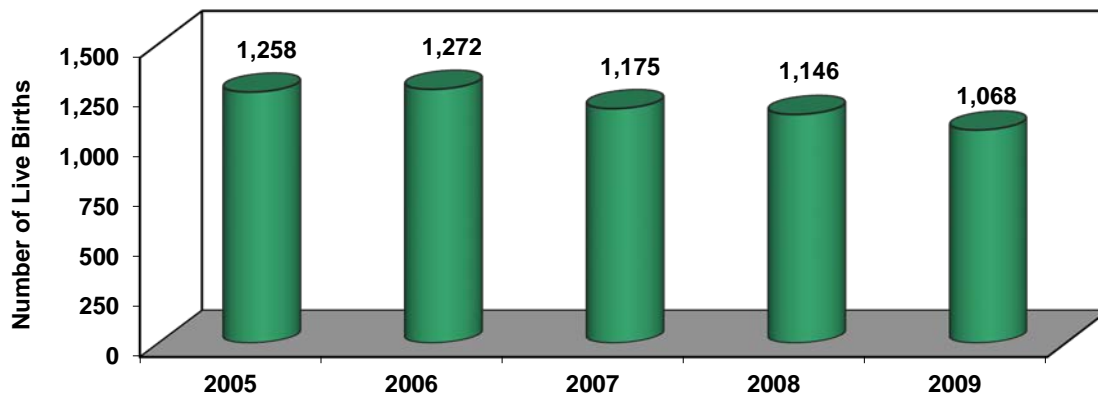
- ◆ From 2005-2009, there was an average of 1,184 live births per year in Lenawee County.
- ◆ In 2010, the U.S. fertility rate was 64.7 per 1,000 women ages 15-44 (*Source: National Center for Health Statistics, CDC, 2010*).

**Lenawee County and Michigan Crude Birth Rates**



*\* Crude birth rates are live births per 1,000 resident population.*

**Lenawee County Total Live Births**



*(Source for graphs: Michigan Department of Community Health, Natality and Pregnancy, Updated 1-25-12)*

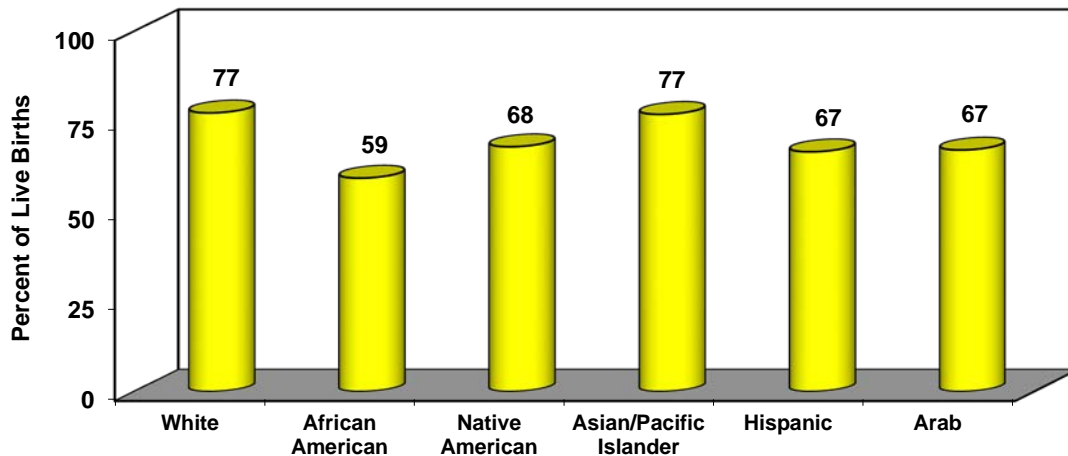
# Adult Sexual Behavior and Pregnancy Outcomes

## Pregnancy Outcomes

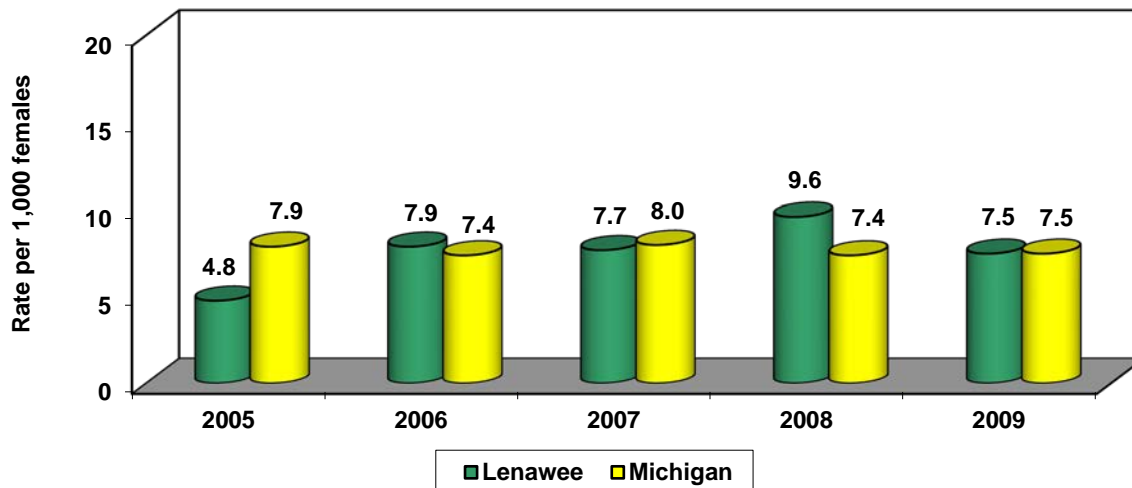
*\*Please note that the pregnancy outcomes data includes all births to adults and adolescents.*

- ◆ In 2009, the percentage of live births to mothers in Lenawee County with prenatal care beginning in the first trimester was highest among Whites and Asian/Pacific Islanders.
- ◆ From 2005 to 2009, Lenawee County and Michigan infant mortality rates fluctuated overall.
- ◆ In 2010, the U.S. infant mortality rate was 6.1 *(Source: National Vital Statistics System, CDC, 2011).*

**Lenawee County Percent of Live Births with Prenatal Care Beginning in the First Trimester, by Race/Ancstry of Mother 2009**



**Lenawee County Infant Mortality Rates 2005 to 2009**



*\*Deaths occurring to individuals less than 1 year of age.*

*\*The infant death rate is the number of resident infant deaths divided by total resident live births X 1,000*

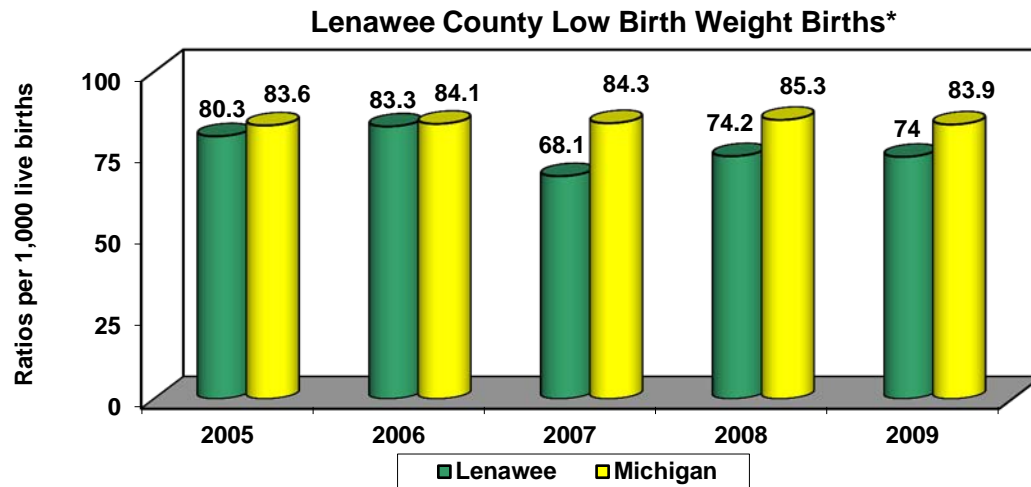
*(Source for graphs: Michigan Department of Community Health, Natality and Pregnancy, Updated 1-25-12)*

# Adult Sexual Behavior and Pregnancy Outcomes

## Pregnancy Outcomes

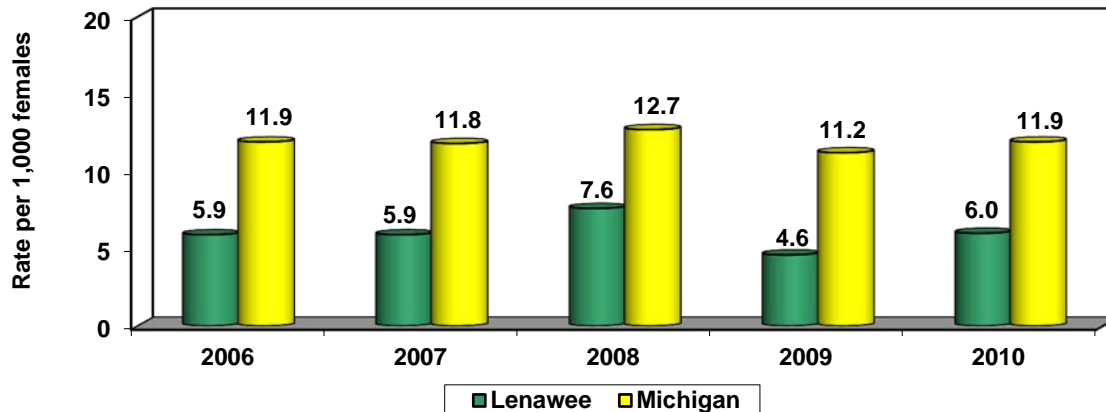
*\*Please note that the pregnancy outcomes data includes all births to adults and adolescents*

- ◆ From 2005 to 2009, Lenawee County low birth weight births decreased overall and remained below the state rates.
- ◆ From 2006 to 2010, Lenawee County abortion rates fluctuated, but remained below the Michigan rates for the same time period.
- ◆ In 2009, 8.2% of all U.S. live births were low birth weight births. (Source: National Center for Health Statistics, CDC 2009)



*\*Low birth weight is less than 2500 grams. Ratios are low weight births per 1,000 live births.*

## Abortion Rates by County and State for Females ages 15-44 2006 to 2010



*\*Rates are per 1,000 females ages 15-44.*

*(Source for graphs: Michigan Department of Community Health, Natality and Pregnancy, Updated 1-25-12)*

## Quality of Life and Safety

### Key Findings

*More than one-quarter (26%) Lenawee County adults in 2011 reported they were limited in some way because of a physical, mental or emotional problem.*

### Impairments and Health Problems

- ◆ More than one-quarter (26%) Lenawee County adults are limited in some way because of a physical, mental or emotional problem (23% Michigan, 21% U.S., 2010 BRFSS), increasing to 56% of those with incomes less than \$25,000 and 41% of those over the age of 65.
- ◆ Lenawee County adults reported the following as the most limiting health problems: back or neck problems (17%), arthritis/rheumatism (16%), walking problems (8%), obesity (8%), and fractures/bone or joint injury (6%).
- ◆ As a result of impairments or health problems, Lenawee County adults needed help with the following: household chores (13%), getting around for other purposes (8%), shopping (7%), doing necessary business (5%), bathing (2%), dressing (2%), getting around the house (1%), and adult care (1%).

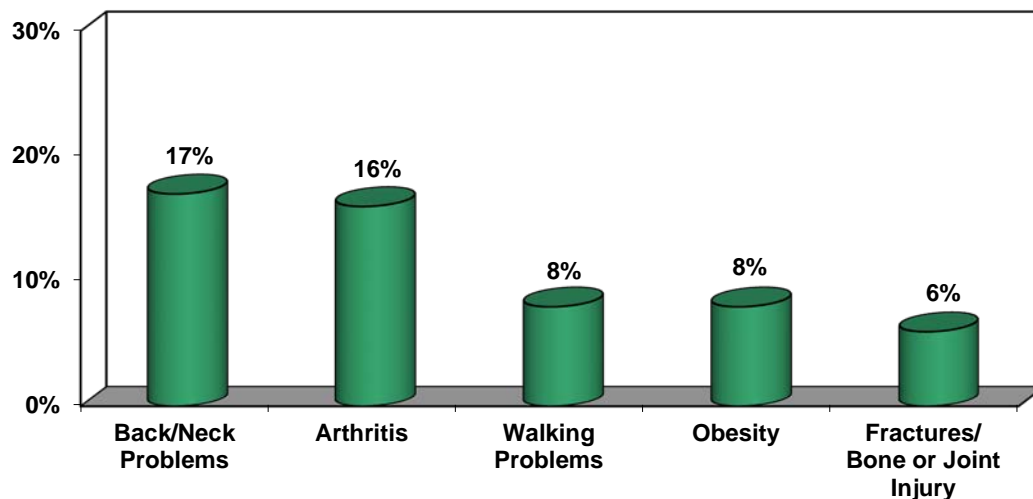
### Back Pain Prevention

The best things you can do to prevent back pain are:

- ❖ Exercise often and keep your back muscles strong.
- ❖ Maintain a healthy weight or lose weight if you weigh too much.
- ❖ Make sure you are getting enough calcium and vitamin D every day. This is very important to keep bones strong.
- ❖ Try to stand up straight and avoid heavy lifting when you can. If you do lift something heavy, bend your legs and keep your back straight.

Source: National Institutes of Health, National Institute of Arthritis and Musculoskeletal and Skin Diseases,  
[http://www.niams.nih.gov/Health\\_Info/Back\\_Pain/back\\_pain\\_ff.asp](http://www.niams.nih.gov/Health_Info/Back_Pain/back_pain_ff.asp), updated 9/09

**Lenawee County Most Limiting Health Problems**



2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Limited in some way due to physical, emotional, or mental problems	26%	23%	21%

## Social Context and Safety

### Key Findings

*The health assessment identified that 63% of Lenawee County adults kept a firearm in or around their home. About 1 in 14 (7%) adults were threatened, and 9% were abused in the past year.*

### Safety

- ◆ Nearly two-thirds (63%) of Lenawee County adults kept a firearm in or around their home. 4% of adults reported they were unlocked and loaded.
- ◆ About 1 in 14 (7%) adults were threatened in the past year. Of those who were threatened, 64% were threatened by their spouse or partner, 36% by a child, 18% by someone outside their home, and 23% were threatened by someone else.
- ◆ In the past year, 9% of adults were abused.
- ◆ Of those who were abused, they were abused in the following ways: verbally (67%), emotionally (48%), financially (26%), through electronic methods (4%), and physically (4%).
- ◆ Of those who were abused, 55% were abused by their spouse or partner, 34% by someone outside their home, 17% by a child, and 31% were abused by someone else.

### Social Context

- ◆ 9% of adults needed help meeting their general daily needs such as food, clothing, shelter, or paying utility bills in the past 30 days, increasing to 26% of those with incomes less than \$25,000.
- ◆ In the past year, adults sought assistance for the following: food (8%), utilities (5%), rent/mortgage (4%), personal/family counseling (3%), free tax preparation (2%), transportation (2%), emergency shelter (1%), legal aid services (1%), clothing (1%), and credit counseling (<1%).
- ◆ Lenawee County adults indicated they would have problems obtaining the following assistance if they needed it: someone to loan them \$50 (14%), someone to help pay for their medical expenses (12%), someone to help if they were sick and needed to be in bed (8%), someone to talk about their problems (8%), someone to take them to a clinic or doctor's office if they needed a ride (7%), someone to accompany them to their doctor's appointments (6%), back-up childcare (4%), and someone to explain directions from their doctor (3%).
- ◆ 4% of adults have called 211, a non-emergency information referral hotline. 53% of adults had never heard of 211.
- ◆ Parents discussed the following with their 12-to-17 year old in the past year: dating and relationships (100%), eating habits (92%), screen time (88%), negative effects of marijuana and other drugs (84%), body image (78%), abstinence and how to refuse sex (76%), negative effects of alcohol (75%), negative effects of tobacco (73%), refusal skills/peer pressure (71%), bullying (67%), school/legal consequences of using tobacco/alcohol/other drugs (67%), energy drinks (63%), social media issues (61%), anxiety/depression/suicide (59%), condom use/safer sex/STD prevention (57%), negative effects of misusing prescription medication (55%), and birth control (51%).

### Food Security in the United States

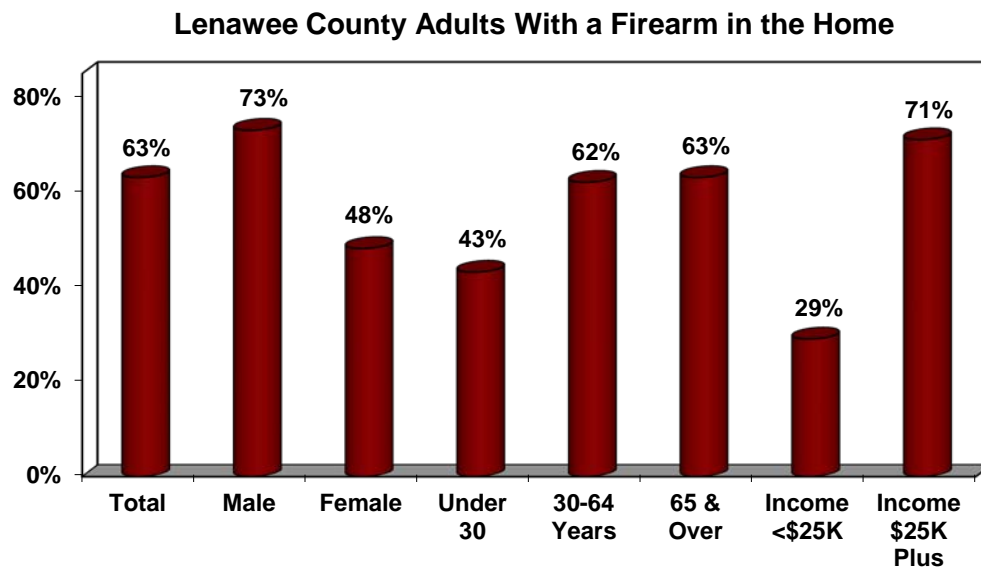
- ◆ At some point in 2010, 14.5% of households were uncertain of having, or unable to acquire, enough food to meet the needs of all of their members because they had insufficient money or other resources for food (food insecure).
- ◆ Approximately 9.1% (10.9 million) of U.S. households experienced low food security in 2010.

*(Source: U.S. Department of Agriculture, Food Security in the United States: Statistics and Graphics, 2010)*



## Social Context and Safety

The following graph shows the percentage of Lenawee County adults that had a firearm in the home. Examples of how to interpret the information shown on the first graph include: 63% of all Lenawee County adults kept a firearm in their home, 73% of males, and 43% of those under 30 kept a firearm in their home.



### Firearm Injury Prevention

According to The American College of Emergency Physicians (ACEP), the improper use of firearms results in death and injury. Below are some of the College supported efforts to prevent firearm-related injuries and deaths:

- ❖ Aggressively enforce current laws against illegal possession, purchase, sale, or use of firearms;
- ❖ Encourage the creation and evaluation of community and school-based education programs targeting the prevention of firearm injuries;
- ❖ Educate the public about the risks of improperly stored firearms, especially in the home;
- ❖ Increase funding for the development, evaluation, and implementation of evidence-based programs and policies to reduce firearm-related injury and death
- ❖ Work with stakeholders to develop comprehensive strategies to prevent firearm injury and death

*(Source: Firearm Injury Prevention, Annals of Emergency Medicine, v. 57 issue 6, 2011, p. 691)*

# Mental Health and Suicide

## Key Findings

*In 2011, 4% of Lenawee County adults considered attempting suicide. 9% of adults felt so sad or hopeless nearly every day for two or more weeks that they stopped doing usual activities.*

## Adult Mental Health

- ◆ 4% of Lenawee County adults considered attempting suicide in the past year.
- ◆ Less than 1% of adults attempted suicide.
- ◆ 9% of adults felt so sad or hopeless nearly every day for two or more weeks in a row that they stopped doing usual activities, increasing to 24% of those with annual incomes less than \$25,000.
- ◆ 7% of Lenawee County adults have used a program to help with depression, anxiety, or emotional problems for either themselves or a loved one. 75% did not need such a program. Reasons for not using such a program include: had not thought of it (5%), could not afford it (3%), stigma of seeking mental health services (3%), did not know how to find a program (2%), other priorities (1%), fear (1%), high copay/deductible (<1%), and other reasons (3%).
- ◆ Lenawee County adults were diagnosed with or treated for the following mental health issues: a mood disorder (11%), an anxiety disorder (6%), a psychotic disorder (1%), and some other mental health disorder (3%). 11% indicated they had taken medication for one or more mental health issues.

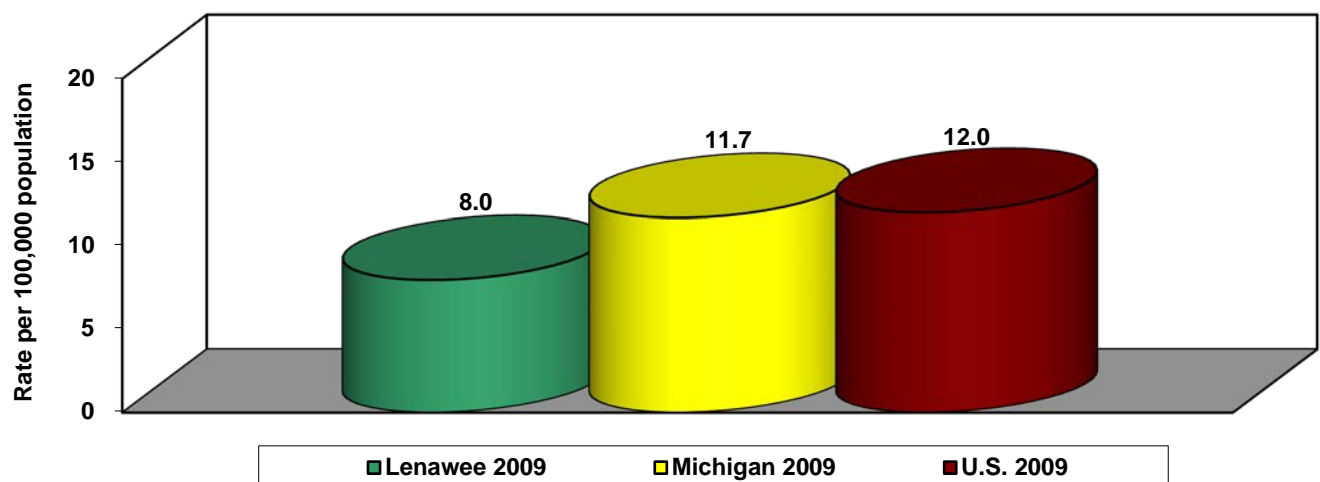
## Stigma of Mental Illness

*(Based on 2007 BRFSS data)*

- ◆ Most adult with mental health symptoms (78%) and without mental health symptoms agreed that treatment can help persons with mental illness lead normal lives.
- ◆ 57% of adults believed that people care and are sympathetic to persons with mental illness.
- ◆ Only 25% of adults with mental health symptoms believed that people are caring and sympathetic to persons with mental illness.

*(Sources: CDC, National Center for Chronic Disease Prevention and Health Promotion, Stigma of Mental Illness, July 2011, [http://www.cdc.gov/mentalhealth/data\\_stats/mental-illness.htm](http://www.cdc.gov/mentalhealth/data_stats/mental-illness.htm))*

**Age-Adjusted Suicide Mortality Rates for  
Lenawee County Residents, Michigan, and U.S.  
2009**

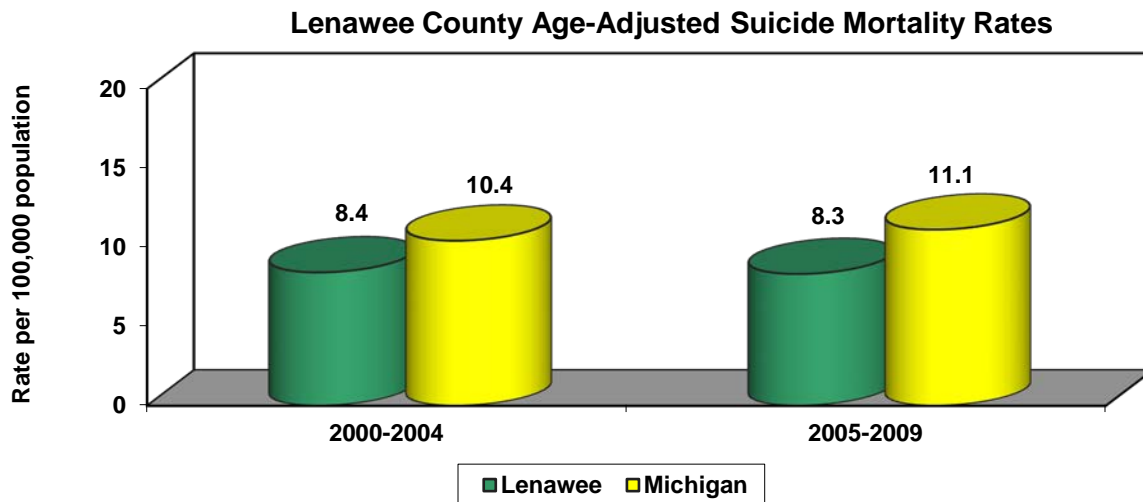


*(Source: MDCH, Vital Statistics, Statewide Fatal Injuries, updated 1-24-11, and CDC, Fast Stats, Suicide, updated 1-27-12)*

## Mental Health and Suicide

The following graphs show the Michigan and Lenawee County age-adjusted suicide mortality rates per 100,000 population. The graph shows:

- ◆ The Lenawee County age-adjusted suicide mortality rate remained the same during the five year moving averages of 2000 to 2004 to 2005 to 2009. The Lenawee County rate remained below the Michigan rate over each five year period.



(Source: MDCH, Vital Statistics)

### Warning Signs for Suicide

More than 90 percent of people who kill themselves are suffering from one or more psychiatric disorders, in particular:

- ◆ Major depression
- ◆ Bipolar depression
- ◆ Drug abuse and dependence
- ◆ Alcohol abuse and dependence
- ◆ Schizophrenia
- ◆ Post-Traumatic Stress Disorder (PTSD)
- ◆ Eating disorders
- ◆ Personality disorders

The core symptoms of major depression are a “down” or depressed mood most of the day or a loss of interest or pleasure in activities that were previously enjoyed for at least two weeks, as well as:

- ◆ Changes in sleeping patterns
- ◆ Change in appetite or weight
- ◆ Intense anxiety, agitation, restlessness
- ◆ Fatigue or loss of energy
- ◆ Decreased concentration, indecisiveness or poorer memory
- ◆ Feelings of hopelessness, worthlessness, self-reproach or excessive or inappropriate guilt
- ◆ Recurrent thoughts of suicide

### Prevention: Take it Seriously

Fifty to 75% of all suicides give some warning of their intentions to a friend or family member. Recognize the *Imminent Dangers*:

- ◆ Threatening to hurt or kill oneself
- ◆ Talking or writing about death, dying, or suicide
- ◆ Looking for ways to kill oneself (weapons, pills, or other means)
- ◆ Has made plans or preparations for a potentially serious attempt

(Source: American Foundation for Suicide Prevention, *When You Fear Someone May Take Their Life*,  
[http://www.afsp.org/index.cfm?fuseaction=home.viewpage&page\\_id=F2F25092-7E90-9BD4-C4658F1D2B5D19A00](http://www.afsp.org/index.cfm?fuseaction=home.viewpage&page_id=F2F25092-7E90-9BD4-C4658F1D2B5D19A00))

# Oral Health

## Key Findings

*The 2011 health assessment project has determined that almost three-fourths (72%) of Lenawee County adults had visited a dentist or dental clinic in the past year. The 2010 BRFSS reported that 70% of U.S. adults and 73% of Michigan adults had visited a dentist or dental clinic in the previous twelve months. More than three-fourths (76%) of Lenawee youth had visited the dentist for a check-up, exam, teeth cleaning, or other dental work in the past year.*

## Access to Dental Care

- ◆ In the past year, 72% of Lenawee County adults had visited a dentist or dental clinic, decreasing to 41% of adults with annual household incomes less than \$25,000.
- ◆ When asked how long it had been since their last visit to a dentist or dental clinic, 11% of Lenawee County adults reported that it had been more than one year but less than two years, 8% reported that it had been more than two years but less than five years, and 7% responded it had been five or more years ago.
- ◆ When asked the main reason for not visiting a dentist in the last year, more than one-quarter (26%) said because of cost, 24% said because they did not have insurance, 18% said they had no reason to go, 9% said fear, apprehension, nervousness, pain, and dislike going, 4% said they could not get into the office or clinic, 2% said they had other priorities, 1% had not thought of it, and 1% said they do not have/know a dentist.
- ◆ 55% of adults indicated that none of their permanent teeth have been removed because of tooth decay or gum disease. 29% said 5 or fewer teeth had been removed, 10% said 6 or more, and 4% said all of their teeth had been removed because of tooth decay or gum disease.
- ◆ 14% of those over the age of 65 had all of their permanent teeth removed.
- ◆ In the past year, 76% of Lenawee County youth had visited the dentist for a check-up, exam, teeth cleaning, or other dental work. 10% responded more than one year but less than 2 years, and 4% responded more than 2 years ago.

### Lenawee County Dental Care Resources - 2011

- ◆ General Dentists- 49
- ◆ Specialty Dentists- 2
- ◆ Healthy Kids Dentists- 78
- ◆ Number of dentists who treat Medicaid patients- 5
- ◆ Medicaid Dental Coverage – Healthy Kids Dental Fee-for-Service, Adult

*(Source: Michigan Oral Health Coalition, 2011)*

Adult Oral Health	Within the Past Year	Within the Past 2 Years	Within the Past 5 Years	5 or More years	Never
<b>Time Since Last Visit to Dentist/Dental Clinic</b>					
Males	68%	12%	10%	8%	0%
Females	77%	11%	5%	5%	1%
Total	72%	11%	8%	7%	<1%

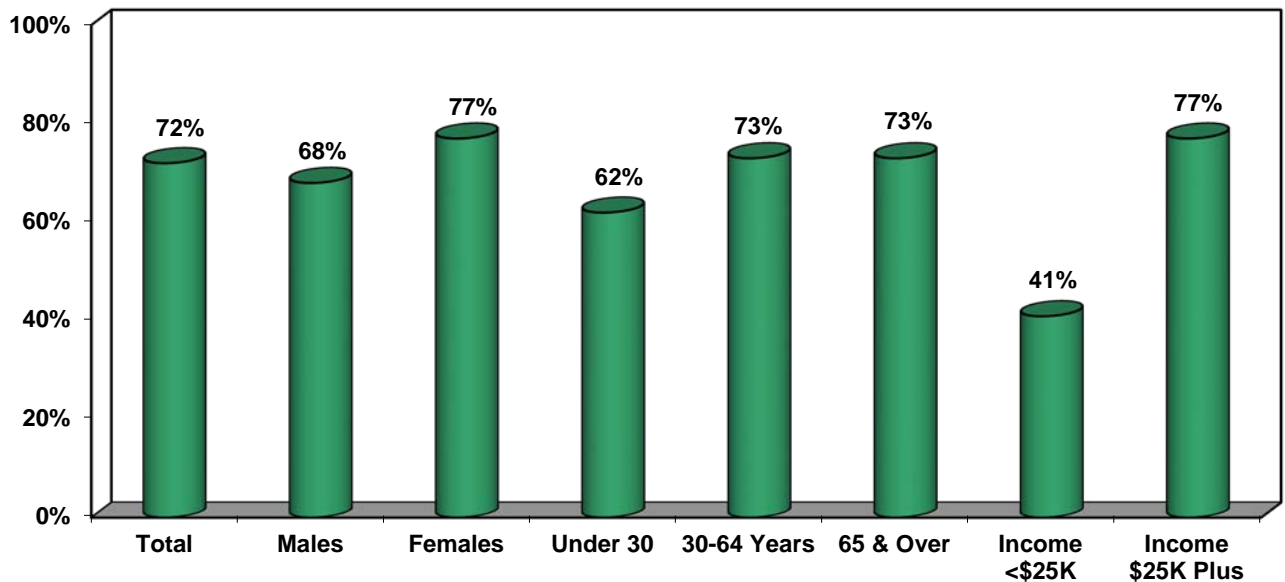
*Totals may not equal 100% as respondents answered do not know.*

2011 Adult Comparisons	Lenawee County 2011	Michigan 2010	U.S. 2010
Adults who have visited the dentist in the past year	72%	73%	70%
Adults who had one or more permanent teeth removed	55%	41%	44%
Adults 65 years and older who had all of their permanent teeth removed	14%	13%	17%

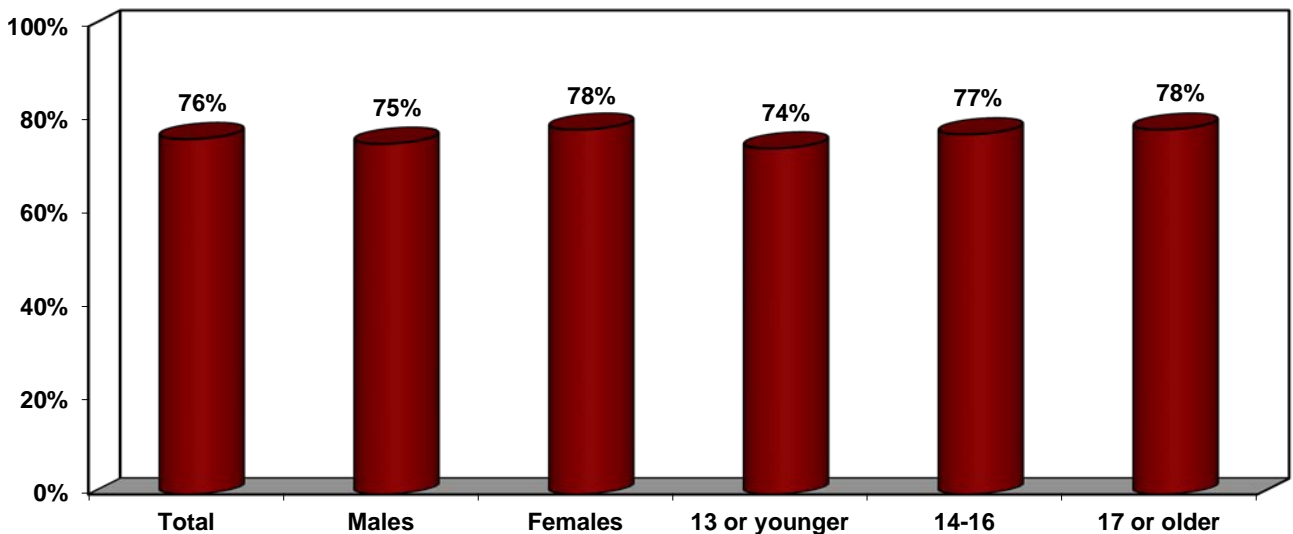
## Oral Health

The following graphs provide information about the frequency of Lenawee County adult and youth dental visits. Examples of how to interpret the information on the first graph include: 72% of all Lenawee County adults had been to the dentist in the past year, 62% of those under the age of 30 and 41% of those with incomes less than \$25,000.

**Lenawee County Adults Visiting a Dentist in the Past Year**



**Lenawee County Youth Visiting a Dentist in the Past Year**



# Youth Weight Status

## Key Findings

*The 2011 Health Assessment identified that 13% of Lenawee County youth were obese, according to Body Mass Index (BMI) by age. When asked how they would describe their weight, 28% of Lenawee County youth reported that they were overweight. 73% of youth were exercising for 60 minutes on 3 or more days per week.*

## Youth Weight Status

- ◆ BMI for children is calculated differently from adults. The CDC uses BMI-for-age, which is gender and age specific as children's body fatness changes over the years as they grow. In children and teens, BMI is used to assess underweight, normal, overweight, and obese.
- ◆ In 2011, 13% of youth were classified as obese by Body Mass Index (BMI) calculations (2009 YRBS reported 12% for Michigan, 12% for the U.S.). 13% of youth were classified as overweight, 63% were normal weight, and 11% were underweight.
- ◆ 28% of youth described themselves as being either slightly or very overweight (2009 YRBS reported 28% for Michigan, 28% for the U.S.).
- ◆ 45% of all youth were trying to lose weight, increasing to 57% of Lenawee County female youth (compared to 33% of males).
- ◆ In the past 30 days, 5% of all Lenawee County youth (2009 YRBS reported 13% for Michigan, 11% for the U.S.) reported going without eating for 24 hours or more to lose weight or keep from gaining weight. 3% smoked cigarettes to lose weight or keep from gaining weight, 2% took diet pills, powders, or liquids without a doctor's advice, and 1% vomited or took laxatives.
- ◆ 51% of youth exercised to try to lose weight or keep from gaining weight in the past month, and 30% of youth ate less food, fewer calories, or foods lower in fat to try to lose weight or keep from gaining weight.

## Nutrition

- ◆ 15% of Lenawee County youth ate 5 or more servings of fruits and vegetables per day. 79% ate 1 to 4 servings of fruits and vegetables per day.
- ◆ 45% of Lenawee County youth drank energy drinks. They did so for the following reasons: to stay awake (23%), to get pumped up (14%), to help them perform (5%), to drink before games or practice (7%), to mix with alcohol (6%), and for some other reason (23%).

## Physical Activity

- ◆ 73% of Lenawee County youth participated in at least 60 minutes of physical activity on 3 or more days in the past week. 51% did so on 5 or more days in the past week and 29% did so every day in the past week. 13% of youth did not participate in any physical activity in the past week. The CDC recommends that children and adolescents participate in at least 60 minutes of physical activity per day.
- ◆ Lenawee County youth spent an average of 2.6 hours watching TV, 1.3 hours playing video games, 1.9 hours on the computer, and 3.4 hours on their cell phone on an average day of the week.
- ◆ Lenawee County youth spent an average of 2.6 hours with their family, 1.7 hours on homework, 0.9 hours reading for pleasure, and 2.2 hours doing extracurricular activities on an average day of the week.
- ◆ 84% of youth participated in extracurricular activities. They participated in the following: sports or intramural programs (55%), school club or social organization (23%), church youth group (17%), church or religious organization (16%), taking care of siblings after school (15%), babysitting for other kids (15%), part-time job (13%), volunteering in the community (10%), gang (3%), or some other organized activity (11%).
- ◆ Youth gave the following reasons for not participating in extracurricular activities: they watched younger siblings (10%), could not afford it (9%), transportation (8%), activities did not exist (6%), they had a job (5%) and their parents would not take them to the activities (3%).

## Obese Adolescents

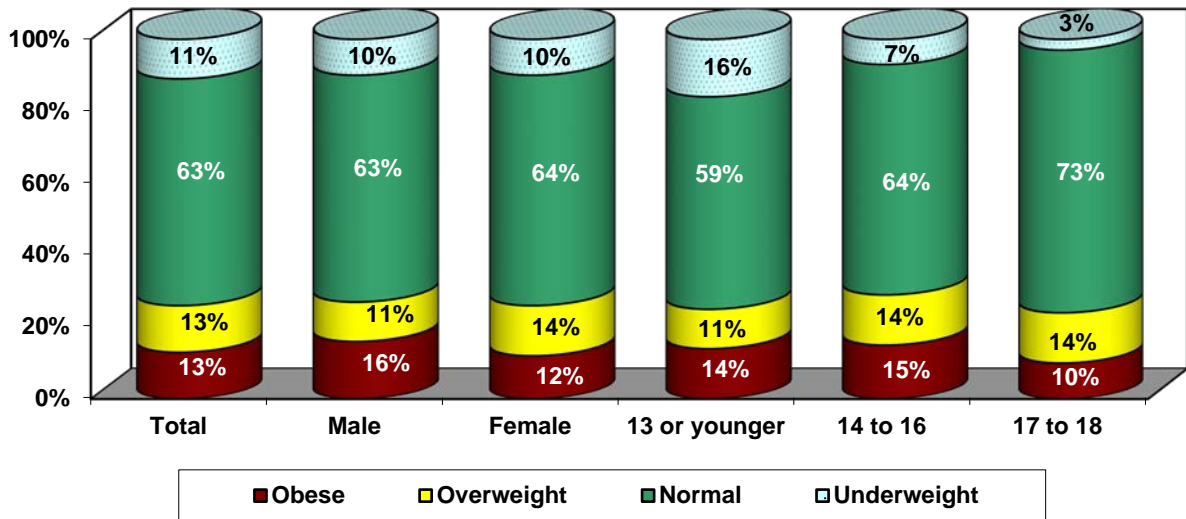
- ◆ Obese adolescents have a 70% chance of being overweight or obese as adults. If the parents are overweight as well, the risk increases to 80%.
- ◆ Poor self-esteem and depression are additional consequences of childhood obesity.
- ◆ Sedentary activities, such as television, computer and video games, contribute to the children's inactive lifestyles.
- ◆ Youth who are obese have an increased frequency for heart disease, diabetes, and other health problems than those children who have a healthy weight.

*(Source: Surgeon General's Call to Action To Prevent and Decrease Overweight and Obesity 2001 and 2007 YRBS)*

## Youth Weight Status

The following graph shows the percentage of Lenawee County youth who were classified as obese, overweight, normal, or underweight by Body Mass Index (BMI). The table shows the ways youth lost weight. Examples of how to interpret the information in the first graph include: 63% of all Lenawee County youth were classified as normal weight, 13% were obese, 13% were overweight, and 11% were calculated to be underweight for their age and gender.

**Lenawee County Youth BMI Classifications**



Lenawee County Youth did the following to lose weight in the past 30 days:	Percent
Exercised	51%
Ate less food, fewer calories, or foods lower in fat	30%
Went without eating for 24 hours	5%
Smoked	3%
Took diet pills, powders, or liquids without a doctor's advice	2%
Vomited or took laxatives	1%

2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> -12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> -12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> -12 <sup>th</sup> )
Obese	13%	15%	12%	12%
Went without eating for 24 hours or more	5%	6%	13%	11%



# Youth Tobacco Use

## Key Findings

*The 2011 health assessment identified that 11% of Lenawee County youth (ages 12-18) were smokers, increasing to 23% of those who were 17-18 years old. Overall, 6% of Lenawee County youth indicated they had used chewing tobacco in the past year.*

## Youth Tobacco Use Behaviors

- ◆ The 2009 YRBS reports that 46% of youth in Michigan had tried cigarette smoking (2009 YRBS reports 46% of U.S. youth) and the 2011 health assessment indicated that 27% of Lenawee County youth had done the same.
- ◆ About in one six (16%) of those who have smoked a whole cigarette did so by the age of 10, and 36% had done so by the age of 12. The average age of onset for smoking was 12.8 years old.
- ◆ In 2011, 11% of Lenawee County youth were current smokers, having smoked at some time in the past 30 days (2009 YRBS reported 19% for Michigan and 20% for the U.S). 23% of 17-18 year olds were current smokers, compared to 3% of those 13 and younger and 14% of 14-16 year olds.
- ◆ Almost one-quarter (23%) of current smokers smoked cigarettes daily.
- ◆ Almost three-fourths (71%) of the Lenawee County youth identified as current smokers were also current drinkers, defined as having had a drink of alcohol in the past 30 days.
- ◆ 40% of youth smokers borrowed cigarettes from someone else, 38% asked someone else to buy them cigarettes, 23% said a person 18 or older gave them the cigarettes, 20% bought cigarettes from a store or gas station, 20% took cigarettes from a store or family member, 2% got them from a vending machine, and 20% got them some other way.
- ◆ Lenawee County youth used the following forms of tobacco the most in the past year: cigarettes (17%), black and milds (9%), cigars (8%), chewing tobacco or snuff (6%), swishers (6%), flavored cigarettes (5%), hookah (4%), cigarillos (4%), snus (3%), and little cigars (3%).
- ◆ In the past 30 days, 6% of Lenawee County youth used chewing tobacco or snuff (2007 YRBS reported 9% for Michigan and 2009 YRBS reported 9% for the U.S.) increasing to 11% of males.
- ◆ Almost half (47%) of Lenawee County youth smokers had tried to quit smoking in the past year.
- ◆ Four-fifths (80%) of Lenawee County youth reported that their parents would disapprove of them smoking cigarettes, decreasing to 74% of those in middle school.

## Tobacco Sales and Promoting to Youth

- ◆ All states have laws making it illegal to sell cigarettes to anyone under the age of 18, yet 14% of students under the age of 18 who currently smoke cigarettes reported they usually obtained their own cigarettes by buying them in a store or gas station during the 30 days before the survey.
- ◆ Cigarette companies spent more than \$15.2 billion in 2003 to promote their products.
- ◆ Children and teenagers constitute the majority of all new smokers, and the industry's advertising and promotion campaigns often have special appeal to these young people.
- ◆ Eighty-three percent of young smokers (aged 12-17) choose the three most heavily advertised brands.

(Source: CDC Adolescent and School Health, Tobacco Use Prevention through Schools, obtained from: <http://www.cdc.gov/healthyyouth/tobacco/facts.htm>, retrieved 11-3-11)

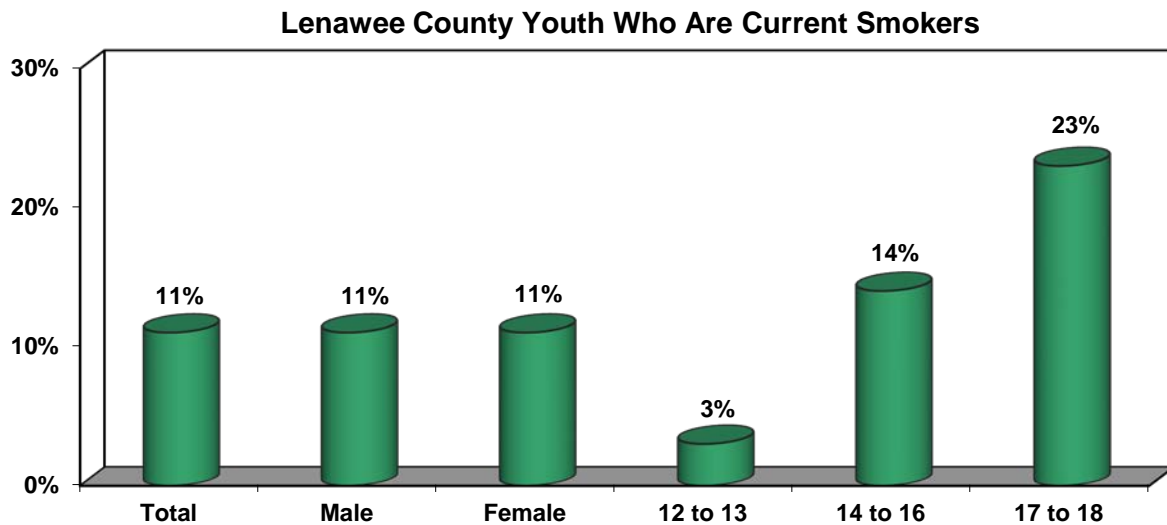
2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> – 12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> – 12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )
Ever tried cigarettes	27%	43%	46%	46%
Current smokers	11%	17%	19%	20%
Used chewing tobacco or snuff	6%	10%	9%*	9%

\*2007 YRBS Data



## Youth Tobacco Use

The following graph shows the percentage of Lenawee County youth who smoked cigarettes. Examples of how to interpret the information include: 11% of all Lenawee County youth were current smokers, 11% of males smoked, and 11% of females were current smokers. The table shows differences in specific risk behaviors between current smokers and non-current smokers (nonsmokers).



*Current smokers are those who have smoked at any time during the past 30 days.*

### Behaviors of Lenawee Youth *Current Smokers vs. Non-Current Smokers*

Youth Behaviors	Current Smoker	Non-Current Smoker
Attempted suicide in the past 12 months	23%	3%
Have had at least one drink of alcohol in the past 30 days	71%	15%
Have used marijuana in the past 30 days	58%	7%
Have participated in sexual intercourse	72%	22%

*Current smokers are those youth surveyed who have self-reported smoking at any time during the past 30 days.*

# Youth Alcohol Consumption

## Key Findings

*In 2011, the health assessment results indicated that 44% of Lenawee County youth had drunk at least one drink of alcohol in their life increasing to 69% of youth seventeen to eighteen years old. 36% of those who drank, took their first drink by the age of 12. More than one-fifth (21%) of all Lenawee County youth and 38% of those 17-18 years had at least one drink in the past 30 days. Over half (57%) of the youth who reported drinking in the past 30 days had at least one episode of binge drinking. 9% of all youth drivers had driven a car in the past month after they had been drinking alcohol.*

## Youth Alcohol Consumption

- ◆ In 2011, the health assessment results indicate that more than two-fifths (44%) of all Lenawee County youth (ages 12 to 18) have had at least one drink of alcohol in their life, increasing to 69% of 17-18 year olds (2009 YRBS reports 69% for Michigan and 73% for the U.S.).
- ◆ About one-fifth (21%) of the youth had at least one drink in the past 30 days, increasing to 38% of 17-18 year olds (2009 YRBS reports 37% for Michigan and 42% for the U.S.).
- ◆ Of those who drank, 57% had five or more alcoholic drinks on an occasion in the last month and would be considered binge drinkers by definition.
- ◆ Based on all youth surveyed, 12% were defined as binge drinkers (2009 YRBS reports 23% for Michigan and 24% for the U.S.).
- ◆ 6% of youth who reported drinking in the past 30 days, drank on at least 10 or more days during the month.
- ◆ More than one-third (36%) of Lenawee County youth who reported drinking at sometime in their life had their first drink by the age of 12, 37% took their first drink between the ages of 13 and 14, and 27% drank between the ages of 15 and 18. The average age of onset was 12.9 years old.
- ◆ Lenawee County youth drinkers reported they got their alcohol from the following: someone gave it to them (40%), someone older bought it for them (27%), took it from a store of family member (12%), a parent gave it to them (10%), a friend's parent gave it to them (7%), bought in a store (6%), bought it at a public event (2%), bought it with a fake ID (2%), and some other way (23%).
- ◆ During the past month 19% of all Lenawee County youth had ridden in a car driven by someone who had been drinking alcohol (2009 YRBS reports 28% for Michigan and 28% for the U.S.).
- ◆ 9% of all youth drivers had driven a car in the past month after they had been drinking alcohol, increasing to 13% of those over the age of 17 (2009 YRBS reports 8% for Michigan and 10% for the U.S.).
- ◆ About three-fourths (77%) of Lenawee County youth reported that their parents would disapprove of them drinking alcohol, decreasing to 70% of 17-18 year olds.
- ◆ Among youth drinkers, 10% had been on school property under the influence of alcohol at least once in the past 30 days.

### National Institute of Health Facts about Underage Drinking

- ◆ Alcohol is the drug of choice among America's adolescents, used by more young people than tobacco or illicit drugs.
- ◆ The 2008 National Survey on Drug Use and Health estimates there are 10.1 million underage drinkers in the United States. According to the 2008 Monitoring the Future Study, 39% of current 8th graders, 58% of 10th graders, 72% of 12th graders, and 85% of college students have tried alcohol.
- ◆ Underage drinkers consume, on average, 4 to 5 drinks per occasion about 5 times a month. By comparison, drinkers age 26 and older consume 2 to 3 drinks per occasion, about 9 times a month.

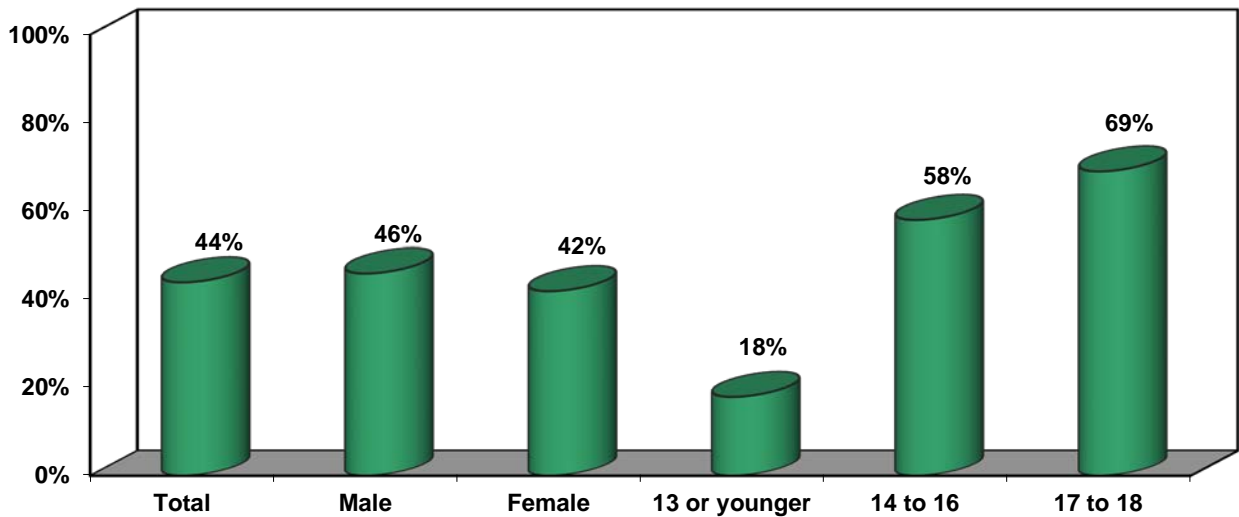
(Source: National Institute of Health, Underage Drinking Fact Sheet, <http://report.nih.gov/NIHfactsheets/ViewFactSheet.aspx?csid=21&key=U#U>; Updated 2/14/11)

2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> – 12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> – 12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )
Ever tried alcohol	44%	63%	69%	73%
Current drinker	21%	36%	37%	42%
Binge drinker	12%	21%	23%	24%
Rode with someone who was drinking	19%	21%	28%	28%
Drank and drove	9%	9%	8%	10%

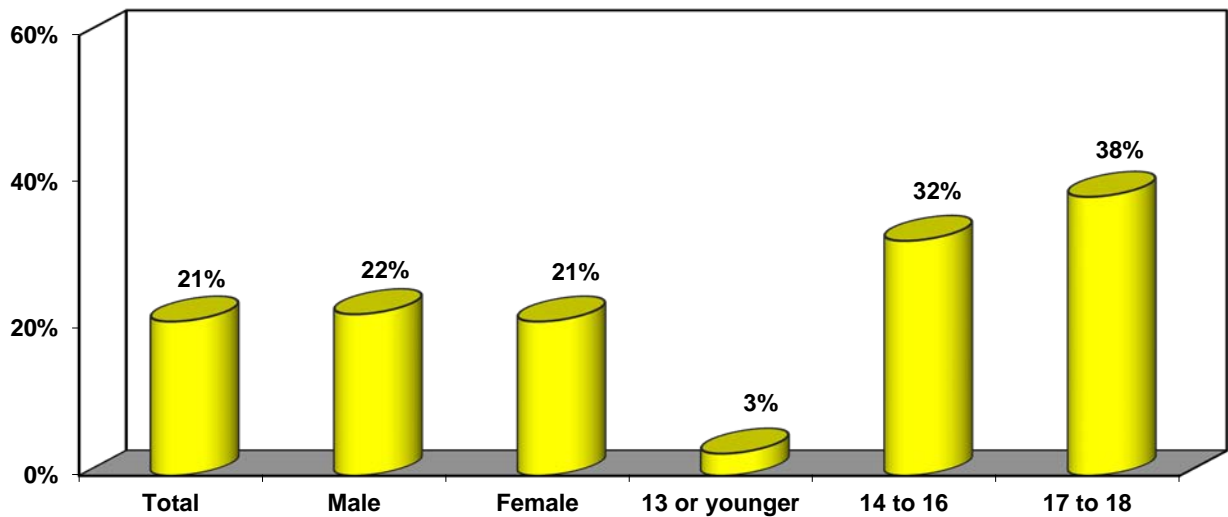
## Youth Alcohol Consumption

The following graphs show the percentage of Lenawee County youth who have drunk in their lifetime and those who are current drinkers. Examples of how to interpret the information include: 44% of all Lenawee County youth have drunk at some time in their life, 46% of males, and 42% of females had drank.

**Lenawee County Youth Who Had At Least One Drink In Their Lifetime**

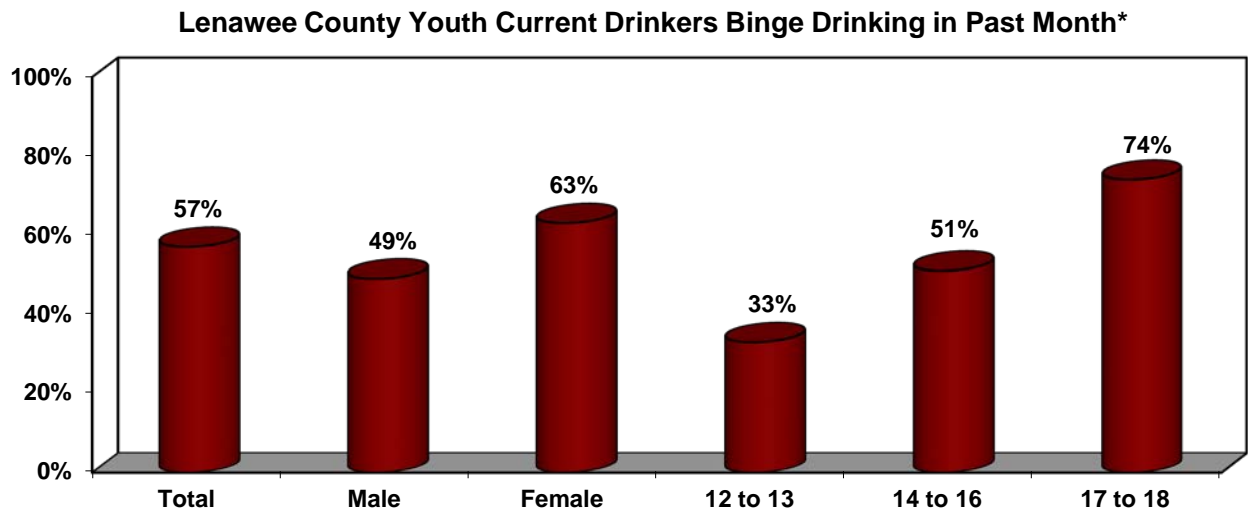


**Lenawee County Youth Who Were Current Drinkers**



## Youth Alcohol Consumption

The following graph shows the percentage of Lenawee County youth who were binge drinkers. Examples of how to interpret the information include: 57% of current drinkers binge drank in the past month, 49% of males, and 63% of females had binge drank. The table shows differences in specific risk behaviors between current drinkers and non-current drinkers.



*\*Based on all current drinkers. Binge drinking is defined as having five or more drinks on an occasion.*

**Behaviors of Lenawee Youth**  
*Current Drinkers vs. Non-Current Drinkers*

Youth Behaviors	Current Drinker	Non-Current Drinker
Considered attempting suicide in the past 12 months	28%	9%
Have smoked in the past 30 days	37%	4%
Have used marijuana in the past 30 days	42%	4%
Have had sexual intercourse	64%	16%

*Current drinkers are those youth surveyed who have self-reported drinking at any time during the past 30 days.*

# Youth Marijuana and Other Drug Use

## Key Findings

*In 2011, 12% of Lenawee County youth had used marijuana at least once in the past 30 days, increasing to 20% of high school youth. During the past 12 months, 10% of Lenawee County youth had someone offer, sell, or give them an illegal drug on school property.*

## Youth Drug Use

- ◆ In 2011, 12% of all Lenawee County youth had used marijuana at least once in the past 30 days, increasing to 20% of high school youth. The 2009 YRBS found a prevalence of 21% for Michigan youth and a prevalence of 21% for U.S. youth who had used marijuana one or more times during the past 30 days.
- ◆ 10% of youth used medications that were not prescribed for them or took more than prescribed to feel good or get high at sometime in their lives, increasing to 22% of those ages 17-18.
- ◆ Youth who misused prescription medications got them in the following ways: a friend gave it to them (47%), their parents gave it to them (29%), they took it from a friend or family member (17%), bought it from someone else (15%), bought it from a friend (10%), and another family member gave them it to them (9%).
- ◆ 10% of youth used inhalants, 3% used steroids, 3% used cocaine, 2% used methamphetamines, and 1% used heroin.
- ◆ During the past 12 months, 10% of all Lenawee County youth reported that someone had offered, sold, or given them an illegal drug on school property increasing to 16% of those over the age of 17 and 15% of high school youth (2009 YRBS reports 30% for Michigan and 23% for the U.S.).
- ◆ Lenawee County youth have tried the following sometime during their life: K2/spice (9%), Posh/salvia/synthetic marijuana (7%), misused over-the-counter medication (5%), ecstasy/MDMA (2%), bath salts (2%), and pharm party/skittles (1%).
- ◆ More than four-fifths (81%) of Lenawee County youth reported that their parents would disapprove of them smoking marijuana, decreasing to 74% of those in middle school.

## 2007 National Survey on Drug Use and Health (NSDUH)

- ❖ Rates of current use remained stable from 2006 to 2007 among youths aged 12 to 17 for all drugs except use of heroin, which decreased.
- ❖ From 2002 to 2007, rates of current use among youths aged 12 to 17 declined significantly for illicit drugs overall.
- ❖ The rate of current marijuana use among youths aged 12 to 17 decreased from 8.2 percent in 2002 to 6.7 percent in 2007.

*(Source: Department of Health and Human Services, SAMHSA, NSDUH, 2007)*

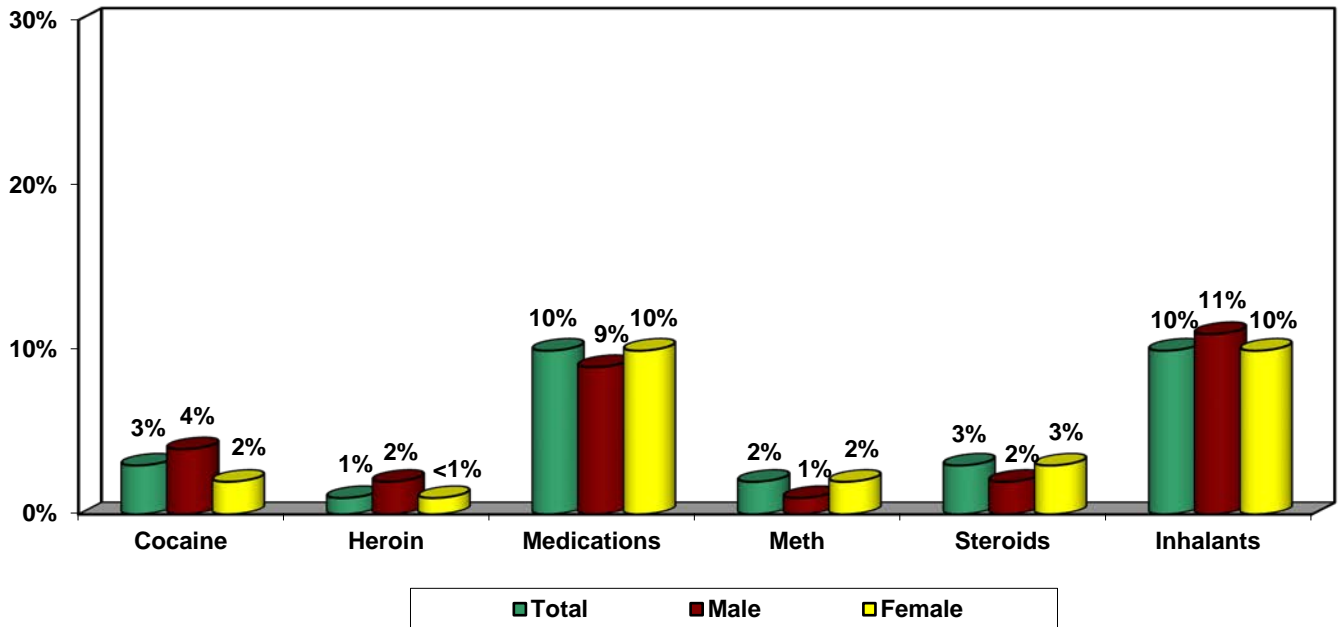
2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> - 12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> - 12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> - 12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> - 12 <sup>th</sup> )
Youth who used marijuana in the past 30 days	12%	20%	21%	21%
Ever used methamphetamines	2%	2%	6%	4%
Ever used cocaine	3%	3%	7%	6%
Ever used heroin	1%	1%	5%	3%
Ever used steroids	3%	3%	4%	3%
Ever used inhalants	10%	12%	12%*	12%
Ever misused medications	10%	15%	N/A	N/A
Youth who reported that someone offered, sold, or gave them an illegal drug on school property	10%	15%	30%	23%

\*2007 YRBS Data

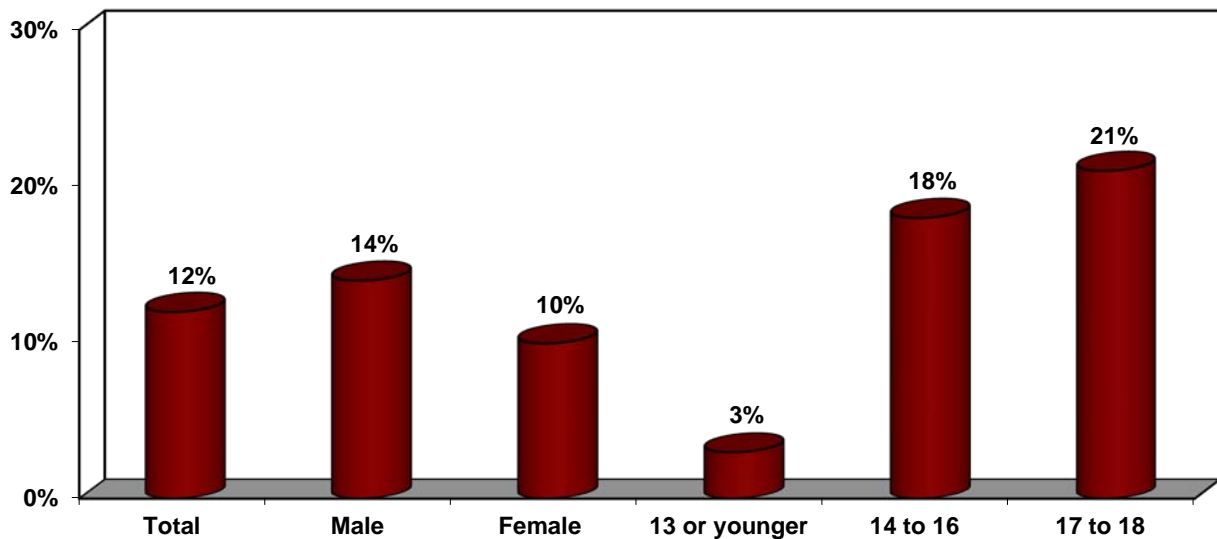
## Youth Marijuana and Other Drug Use

The following graphs are data from the 2011 Lenawee County Health Assessment indicating youth lifetime drug use, marijuana use in the past 30 days, and the percent of youth who had been offered, sold, or given an illegal drug on school property in the past month. Examples of how to interpret the information include: 3% of all youth had used cocaine, 10% had used medications, and 10% had used inhalants.

**Lenawee County Youth Lifetime Drug Use**

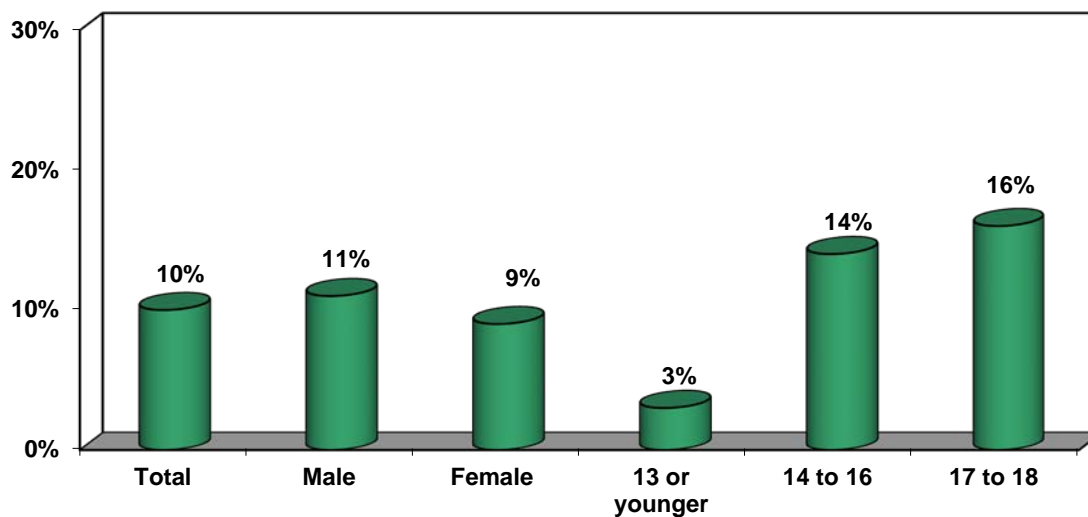


**Lenawee County Youth Who Used Marijuana in the Past Month**



## Youth Marijuana and Other Drug Use

**Lenawee County Youth Offered, Sold, or Given Illegal Drugs by Someone on School Property in the Past 12 Months**



**Behaviors of Lenawee Youth**  
*Current Marijuana Users vs. Non-Current Marijuana Users*

Youth Behaviors	Current Marijuana User	Non-Current Marijuana User
Have had at least one drink of alcohol in the past 30 days	42%	4%
Smoked tobacco in the past 30 days	59%	7%
Have participated in sexual intercourse	36%	5%

# Youth Sexual Behavior and Teen Pregnancy Outcomes

## Key Findings

*In 2011, more than one-quarter (27%) of Lenawee County youth have had sexual intercourse, increasing to 64% of those ages 17 to 18. 23% of youth had participated in oral sex and 7% had participated in anal sex. 23% of youth participated in sexting. Of those who were sexually active, 54% had multiple sexual partners.*

## Youth Sexual Behavior

- ◆ More than one-quarter (27%) Lenawee County youth have had sexual intercourse, increasing to 64% of those over the age of 17. The 2009 YRBS reports that 46% of Michigan youth have had sexual intercourse and 46% of U.S. youth have had sexual intercourse.
- ◆ 23% of youth had participated in oral sex, increasing to 58% of those ages 17 to 18.
- ◆ 7% of youth had participated in anal sex.
- ◆ 23% of youth had participated in sexting, increasing to 42% of those ages 17 to 18.
- ◆ 23% of youth had viewed pornography, increasing to 37% of males.
- ◆ Of those youth who were sexually active in their lifetime, 46% had one sexual partner and 54% had multiple partners.
- ◆ 12% of all Lenawee County high school youth had 4 or more partners (2009 YRBS reports 14% for Michigan and 14% for the U.S.).
- ◆ Of those youth who were sexually active, 28% had done so by the age of 13. Another 49% had done so by 15 years of age. The average age of onset was 14.4 years old.
- ◆ Of all high school youth, 8% were sexually active by the age of 13 (2009 YRBS reports 5% for Michigan, and 6% for the U.S.).
- ◆ Lenawee County youth had experienced the following: wanted to get pregnant (2%), had a miscarriage (2%), have been pregnant (1%), got someone pregnant (1%), engaged in a type of sexual activity in exchange for something of value (1%), tried to get pregnant (<1%), had an abortion (<1%), and had a child (<1%).
- ◆ 88% of youth were taught about pregnancy prevention, sexually transmitted diseases, HIV or AIDS infection, or the use of condoms. They were taught about these issues by the following: school (81%), home (46%), their doctor (24%), their friends (21%), the internet (10%), church (7%), and somewhere else (6%). (Totals are greater than 100% because more than one answer could be chosen).
- ◆ Nearly three-fourths (72%) of youth who were sexually active used condoms to prevent pregnancy, 36% used birth control pills, 24% used the withdrawal method, and 4% used Depo-Provera. However, 11% were engaging in intercourse without a reliable method of protection.

### Facts About “Sexting”

- ❖ One in five teen girls (22%) say they have electronically sent, or posted online, nude or semi-nude images of themselves.
- ❖ Almost one in five teen boys (18%) say they have sent or posted nude/semi nude images of themselves
- ❖ One-third (33%) of teen boys and one-quarter (25%) of teen girls say they have had nude/semi-nude images—originally meant to be private—shared with them.
- ❖ 15% of teens who have sent sexually suggestive content such as text messages, email, photographs or video say they have done so with someone *they only know online*.
- ❖ Fully one-third of young teen girls (ages 13-16) have received sexually suggestive messages.
- ❖ Nearly half of young people (49% total, 39% of teens, 59% of young adults) have sent sexually suggestive text messages or email messages to someone

(Source: National Campaign to Prevent Teen Pregnancy, 2011, obtained from: [http://www.thenationalcampaign.org/sextech/PDF/SexTech\\_PressReleaseFIN.pdf](http://www.thenationalcampaign.org/sextech/PDF/SexTech_PressReleaseFIN.pdf))

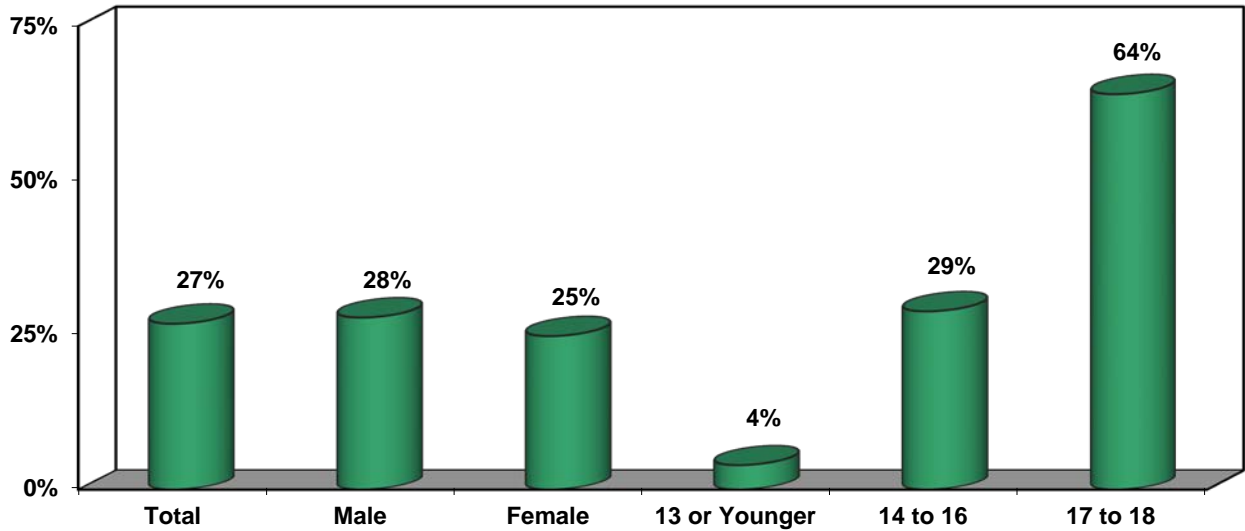
2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> – 12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> – 12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> – 12 <sup>th</sup> )
Ever had sexual intercourse	27%	41%	46%	46%
Used a condom at last intercourse	72%	74%	61%	61%
Used birth control pills at last intercourse	36%	40%	21%	20%
Had multiple sexual partners	54%	53%	N/A	N/A



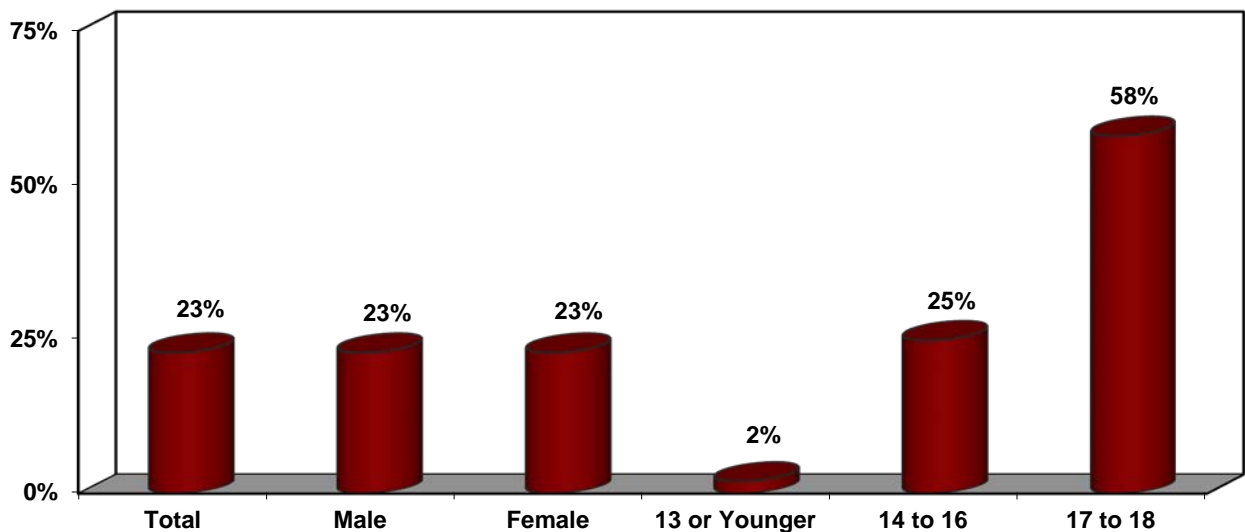
## Youth Sexual Behavior and Teen Pregnancy Outcomes

The following graphs show the percentage of Lenawee County youth who participated in sexual intercourse and oral sex. Examples of how to interpret the information include: 27% of all Lenawee County youth had sexual intercourse, 28% of males, and 25% of females had sex.

**Lenawee County Youth Who Had Sexual Intercourse**



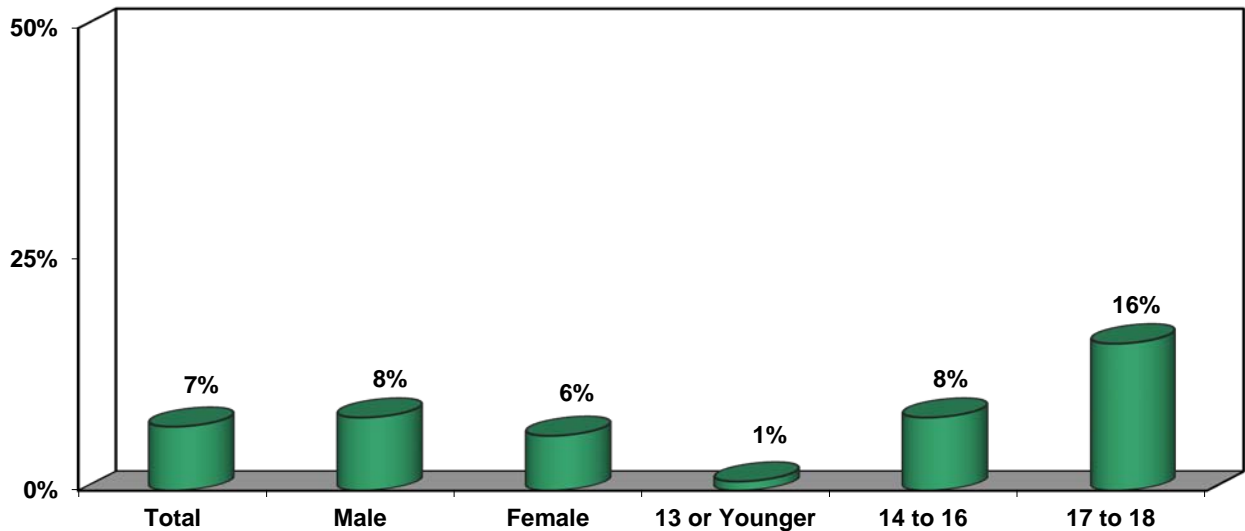
**Lenawee County Youth Who Participated in Oral Sex**



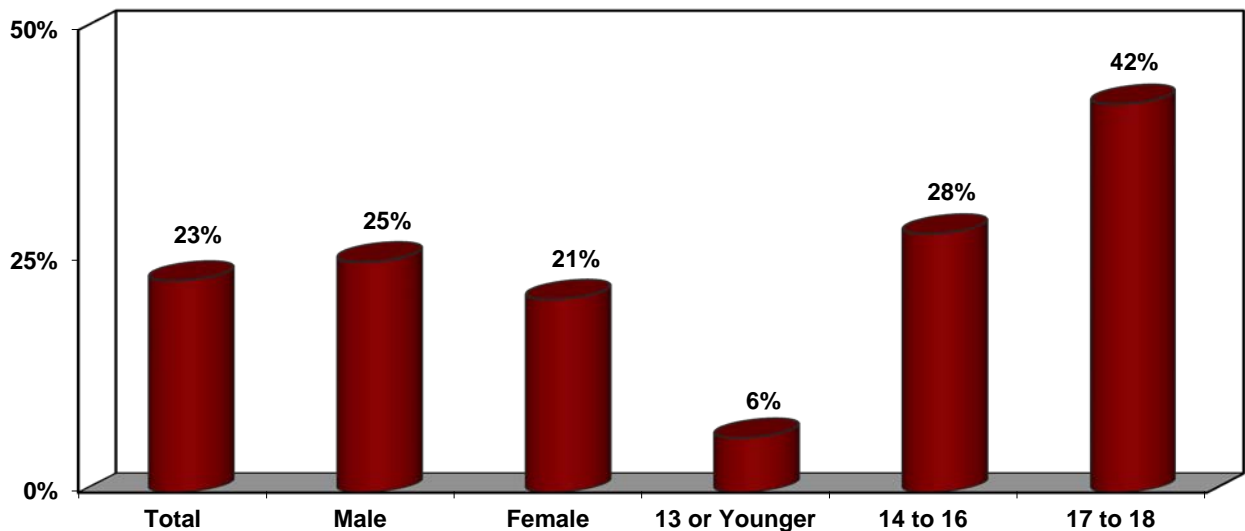
## Youth Sexual Behavior and Teen Pregnancy Outcomes

The following graphs show the percentage of Lenawee County youth who participated in anal sex and sexting. Examples of how to interpret the information include: 7% of all Lenawee County youth participated in anal sex, 8% of males, and 6% of females.

**Lenawee County Youth Who Participated in Anal Sex**



**Lenawee County Youth Who Participated in Sexting**



Teen Birth Weight Rate Comparisons	Lenawee County 2009 (Ages 15-19)	Michigan 2009 (Ages 15-19)	U.S 2009 (Ages 15-17)	Healthy People 2020 Goal (Ages 15-17)
Birth Rate (per 1,000 live births)	32.6	32.7	20.1	36.2

*(Source: Michigan Department of Health Vital Statistics (updated 2-16-11), CDC, Healthy People 2020)*

# Youth Mental Health and Suicide

## Key Findings

*In 2011, 13% of Lenawee County youth had seriously contemplated suicide in the past year and 5% admitted actually attempting suicide in the past year.*

## Youth Mental Health

- ◆ In 2011, 13% of Lenawee County youth reported seriously considering attempting suicide in the past twelve months compared to the 2009 YRBS rate of 16% for Michigan youth and 14% for U.S. youth.
- ◆ In the past year, 5% of Lenawee County youth had attempted suicide and 2% had made more than one attempt. The 2009 YRBS reported a suicide attempt prevalence rate of 9% for Michigan youth and a 6% rate for U.S. youth. Of those who attempted suicide, 28% of them resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse.
- ◆ Lenawee County youth reported the following ways of dealing with anxiety, stress, or depression: sleeping (37%), hobbies (31%), talking to someone in their family (27%), talking to a peer (25%), exercising (23%), eating (17%), writing in a journal (10%), shopping (9%), breaking something (9%), smoking/using tobacco (6%), using illegal drugs (5%), self-harm (5%), using prescribed medication (4%), and drinking alcohol (4%), vandalism/violent behavior (4%), using un-prescribed medication (2%), and gambling (1%).
- ◆ Nearly one-quarter (23%) of youth reported they felt sad or hopeless almost every day for two weeks or more in a row that stopped them from doing some usual activities, increasing to 28% of females (2009 YRBS reported 27% for Michigan and 26% for the U.S.).

## Risk Factors of Suicide

- ❖ Mental Health disorder, especially depression
- ❖ Substance abuse
- ❖ Stressful life events
- ❖ Prior suicide attempt
- ❖ Has experienced violence
- ❖ Feeling socially isolated
- ❖ Experiences poor parent/child communication
- ❖ Has medical condition
- ❖ Served jail/prison time
- ❖ Has access to lethal suicide methods (for instance, firearms)

*(Source: CDC, National Depression and Manic Depression Association)*

2011 Youth Comparisons	Lenawee 2011 (6 <sup>th</sup> -12 <sup>th</sup> )	Lenawee 2011 (9 <sup>th</sup> -12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> -12 <sup>th</sup> )
Youth who had seriously considered suicide	13%	17%	16%	14%
Youth who had attempted suicide	5%	7%	9%	6%

## Mental Health and Suicide Facts

- ❖ In 2009 16% of Michigan high school youth indicated that they had seriously considered attempting suicide in the past 12 months, compared to 14% in the U.S. Females (19%) considering suicide more than males (13%).
- ❖ In Michigan, 9% of high school youth actually attempted suicide one or more times in the past 12 months (11% of all females and 7% of all males). In Michigan, 3% of high school youth indicated that their suicide attempt required medical attention by a doctor or nurse in the past 12 months (3% of all females and males).

*(Source: CDC, National Center for Chronic Disease Prevention and Health Promotion, 2009 YRBS, Unintentional Injuries and Violence)*

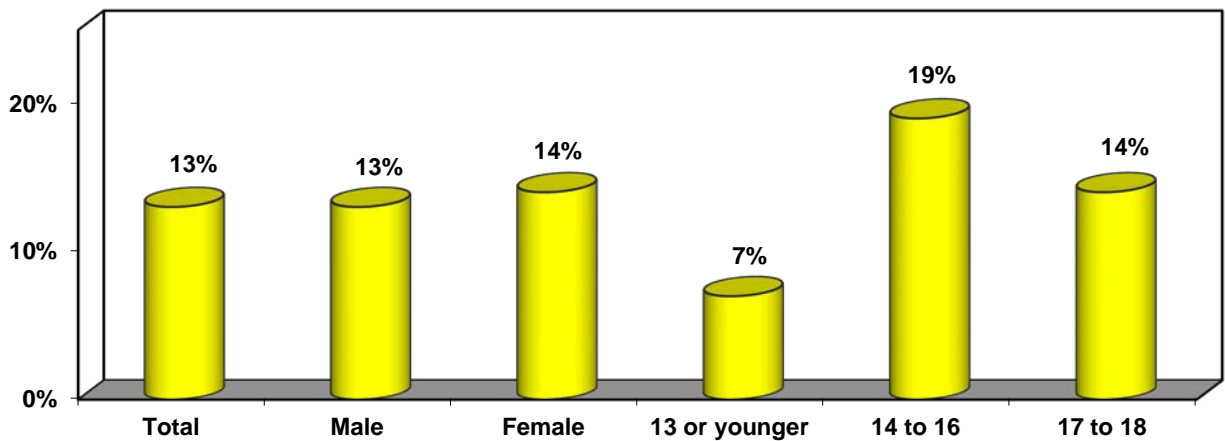
- ❖ According to the American Association of Suicidology, Protective factors for youth include: 1) family and school connectedness, 2) reduced access to firearms, 3) safe schools, 4) academic achievement, and 5) self-esteem

*(Source: AAS, [http://www.suicidology.org/c/document\\_library/get\\_file?folderId=248&name=DLFE:484.pdf](http://www.suicidology.org/c/document_library/get_file?folderId=248&name=DLFE:484.pdf))*

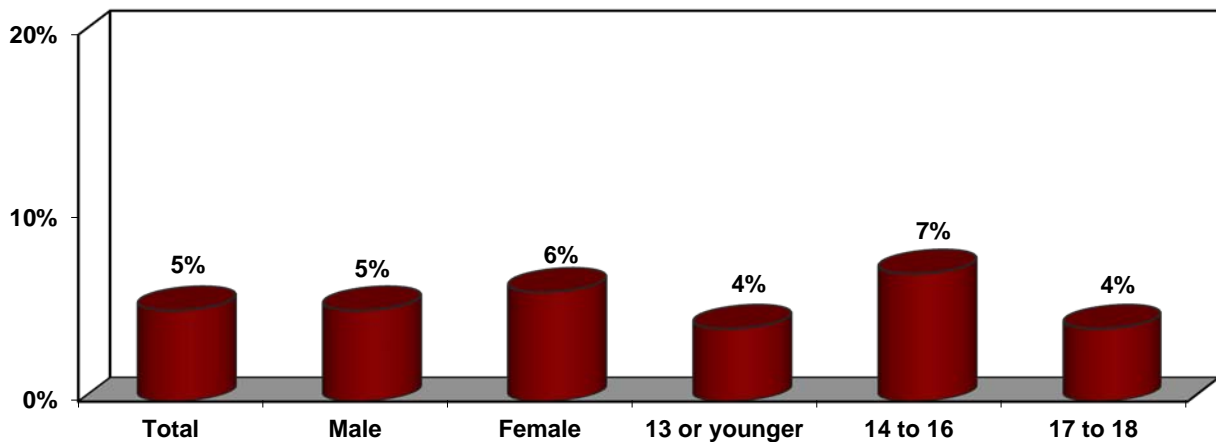
## Mental Health and Suicide

The following graphs show the percentage of Lenawee County youth who contemplated and/or attempted suicide in the past 12 months (i.e., the first graph shows that 13% of all youth had contemplated suicide, 13% of males and 14% of females).

**Lenawee County Youth Who Contemplated Suicide in Past 12 Months**



**Lenawee County Youth Who Attempted Suicide in Past 12 Months**



# Mental Health and Suicide

## Teen Suicide Signals

The strongest risk factors for attempted suicide in teens are:

- ❖ Depression
- ❖ Alcohol abuse
- ❖ Aggressive or disruptive behaviors

In 2011, the *American Psychiatric Association* advises one should consult a mental health professional, parent, or school counselor if several of the following symptoms, experiences, or behaviors are present:

- ❖ Depressed mood
- ❖ Substance abuse
- ❖ Difficulties in dealing with sexual orientation
- ❖ Family loss or instability; significant problems with parents
- ❖ Unplanned pregnancy
- ❖ Frequent episodes of running away or being incarcerated
- ❖ Withdrawal from family and friends
- ❖ Expressions of suicidal thoughts, or talk of death or the afterlife during moments of sadness or boredom
- ❖ Loss of interest in or enjoyment in activities that were once pleasurable
- ❖ Impulsive, aggressive behavior, frequent expressions of rage

## Suicide Risk Factors

**A risk factor is anything that increases the likelihood that persons will harm themselves including:**

- ❖ Previous suicide attempt(s)
- ❖ History of mental disorders, particularly depression
- ❖ History of alcohol and substance abuse
- ❖ Family history of suicide
- ❖ Family history of child maltreatment
- ❖ Feelings of hopelessness
- ❖ Impulsive or aggressive tendencies
- ❖ Physical illness
- ❖ Feeling socially isolated
- ❖ Barriers to accessing mental health treatment
- ❖ Loss (relational, social, work, or financial)
- ❖ Has easy access to lethal suicide methods (for instance, firearms)
- ❖ Unwillingness to seek help because of the stigma attached to mental health and substance abuse disorders or suicidal thoughts
- ❖ Cultural and religious beliefs (i.e., the belief that suicide is not a resolution of a personal dilemma)
- ❖ Local epidemics of suicide

(Source: CDC, National Center for Injury Prevention and Control, *Risk and Protective Factors*, <http://www.cdc.gov/ViolencePrevention/suicide/riskprotectivefactors.html>)

## Suicide Protective Factors

**Protective factors defend people from the risks associated with suicide and include:**

- ❖ Effective clinical care for mental, physical, and substance abuse disorders
- ❖ Easy access to a variety of clinical interventions and support for those seeking help
- ❖ Family and community support
- ❖ Support from ongoing medical and mental health care relationships
- ❖ Skills in problem solving, conflict resolution, and nonviolent handling of disputes
- ❖ Cultural and religious beliefs that discourage suicide and support self-preservation instincts

(Source: CDC, National Center for Injury Prevention and Control, *Suicide: Risk and Protective Factors*, <http://www.cdc.gov/ViolencePrevention/suicide/riskprotectivefactors.html>)

## Warning Signs of Suicide

**Recognizing Warning Signs of Suicide in Others**

- ❖ Withdrawal
- ❖ Unexpected rage or anger
- ❖ Pessimism
- ❖ Taking care of business-preparing for the family's welfare
- ❖ Unrelenting low mood
- ❖ Sleep problems
- ❖ Hopelessness
- ❖ Drug or alcohol abuse
- ❖ Desperation
- ❖ Recent impulsiveness and taking unnecessary risks
- ❖ Anxiety, psychic pain and inner tension risks
- ❖ Threatening suicide or expressing a strong wish to die
- ❖ Making a plan: giving away prized possessions, sudden or impulsive purchase of a firearm, or obtaining other means of killing oneself such as poisons or medications

(Source: *American Foundation for Suicide Prevention*, 2011)

# Youth Safety and Support

## Key Findings

*In 2011, more than half (56%) of Lenawee County youth self-reported that they always wore a seatbelt when riding in a car driven by someone else. 33% of youth drivers texted while driving. 72% said they plan to graduate from high school.*

## Personal Safety

- ◆ More than half (56%) of youth always wore a seatbelt when riding in a car driven by someone else, increasing to 69% of those 13 and younger.
- ◆ Nearly three-fourths (73%) of youth had been to the doctor for a routine check-up in the past year.
- ◆ In the past 30 days, 19% of youth had ridden in a car driven by someone who had been drinking alcohol and 9% had driven a car themselves after drinking alcohol, increasing to 13% of 17-18 year olds.
- ◆ Lenawee County youth drivers did the following while driving: wore a seatbelt (71%), talked on their cell phone (41%), ate (40%), text (33%), used Facebook on their cell phone (8%), used cell phone for other things (8%), used the Internet on their cell phone (6%), applied makeup (4%), and read (2%).
- ◆ Over four-fifths (83%) of youth had a facebook or other social networking account. Of those who had an account, they reported the following: they knew all of “my friends” (71%), their account was currently checked private 49%), their parents had their password (25%), they had been asked to meet someone they met online (8%), their friends had their password (6%), they had problems as a result of their account (5%), and they had participated in sexual activity with someone they met online (4%).

### Michigan Youth Leading Causes of Death 2009

- ❖ Accidents, Unintentional Injuries
- ❖ Homicide
- ❖ Suicide
- ❖ Cancer
- ❖ Diseases of the Heart

*\*Statistics for ages 15-24*

*(Source: Michigan Department of Health Vital Statistics, updated 2-19-11)*

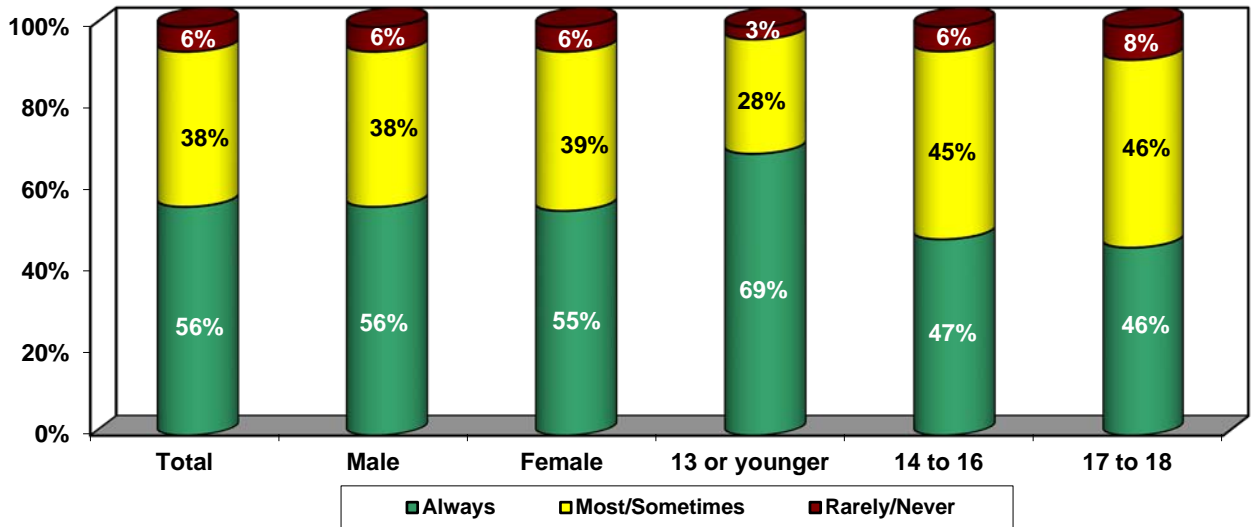
## Support

- ◆ More than one-third (36%) of youth described their grades in school as mostly A's; 36% described their grades as mostly B's, 16% mostly C's, 4% mostly D's and 1% mostly F's.
- ◆ Lenawee youth had the following plans for the future: graduate from high school (72%), attend a 4-year college (63%), follow their career path (53%), attend a community college or technical/trade school (28%), attend LISD Tech Center (16%), join the military (13%), and not finish high school (1%).
- ◆ 87% of youth reported they had at least one adult they could talk to and look up to at home. 72% reported having such a person at school, and 66% said they had at least one adult in their community they could talk to and look up to.

2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> -12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> -12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> -12 <sup>th</sup> )
Always wore a seatbelt	56%	47%	N/A	N/A
Ridden in a car driven by someone who had been drinking alcohol in past month	19%	21%	28%	28%

## Youth Safety

**Lenawee County Youth Seatbelt Use in the Past Month**



### Texting While Driving Statistics and Information

- ❖ In January 2009, it was estimated there were 636,000 crashes attributed to cell phone use in the U.S. each year. Of those crashes, 25% were due to cell phone use and an additional 3% (at a minimum) can be attributed to text messaging. *(National Safety Council).*
- ❖ Texting while operating a motor vehicle can take nearly 40% of your brain capacity off the road *(National Safety Council, fna.gov).*
- ❖ In 2009, 5,500 fatal crashes were reported to have involved cell phones as a distraction and over 440,000 people were reported with injuries *(The National Highway Traffic and Safety Administration; basheinlaw.com).*
- ❖ Cell phone using drivers' are 23 times more likely to be involved in an accident while texting and driving *(Virginia Tech Transportation Institute, 2009).*

# Youth Violence Issues

## Key Findings

*In Lenawee County, 13% of the youth had carried a weapon in the past month. 6% of youth had been threatened or injured by a weapon on school property in the past year. 49% of youth were bullied in the past year. 29% of youth had purposefully hurt themselves at some time in their life.*

## Violence-Related Behaviors

- ◆ In 2011, 13% of Lenawee County youth had carried a weapon (such as a gun, knife or club) in the past 30 days, increasing to 22% of males (2009 YRBS reported 17% for Michigan and 18% for the U.S.).
- ◆ During the past month, 3% of Lenawee County youth had carried a weapon such as a gun, knife, or club on school property, increasing to 7% of those over the age of 17.
- ◆ In the past year, 6% of youth were threatened or injured with a weapon such as a gun, knife, or club on school property.
- ◆ 4% of youth did not go to school on one or more days because they did not feel safe at school or on their way to or from school (2009 YRBS reported 7% for Michigan and 5% for the U.S.).
- ◆ 29% of youth purposefully hurt themselves by cutting, burning, scratching, hitting, biting, etc. at some time in their life, increasing to 37% of females.
- ◆ 49% of youth had been bullied in the past year. The following types of bullying were reported:
  - 39% were verbally bullied (teased, taunted or called you harmful names)
  - 24% were indirectly bullied (spread mean rumors about you or kept you out of a “group”)
  - 13% were physically bullied (you were hit, kicked, punched or people took your belongings)
  - 10% were cyber bullied (teased, taunted or threatened by e-mail or cell phone)
- ◆ In the past year, 24% of youth were in a physical fight, increasing to 30% of males.
- ◆ 11% of youth reported an adult or caregiver hit, slapped or physically hurt them on purpose in the past 12 months.
- ◆ 6% of youth reported a boyfriend or girlfriend hit, slapped, or physically hurt them on purpose in the past 12 months.
- ◆ 6% of youth were physically forced to have sexual intercourse when they did not want to, compared to 10% of Michigan youth in 2007 and 7% of U.S. youth in 2009 (Source: 2009 YRBS).

## Facts Concerning Youth Violence

- ❖ Youth violence is defined by the CDC as “harmful behaviors that can start early and continue into young adulthood.”
- ❖ In 2007, 5,764 youth ages 10-24 were murdered, averaging 16 per day.
- ❖ Emergency rooms treated in excess of 656,000 youth ages 10-24 for violence-related injuries in 2008.
- ❖ Approximately 20% of high school students reported being bullied on school property in 2009.

(Source: CDC, Understanding Youth Violence Fact Sheet, 2010)

2011 Youth Comparisons	Lenawee County 2011 (6 <sup>th</sup> -12 <sup>th</sup> )	Lenawee County 2011 (9 <sup>th</sup> -12 <sup>th</sup> )	Michigan 2009 (9 <sup>th</sup> -12 <sup>th</sup> )	U.S. 2009 (9 <sup>th</sup> -12 <sup>th</sup> )
Carried a weapon in past month	13%	14%	17%	18%
Did not go to school because felt unsafe	4%	2%	7%	5%
Physically hurt by a boyfriend/girlfriend	6%	7%	N/A	10%
Forced to have sexual intercourse	6%	8%	10%	7%

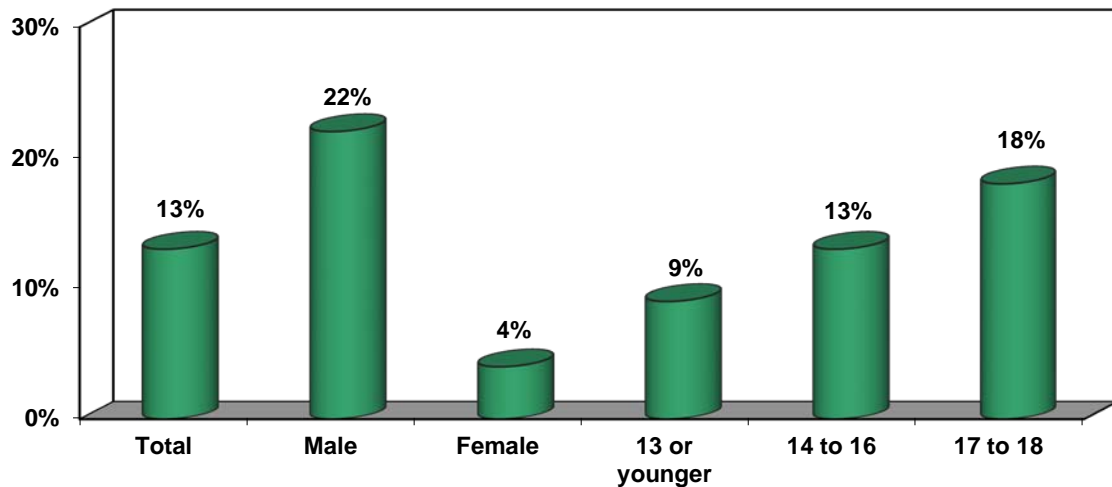
\*N/A – Not available



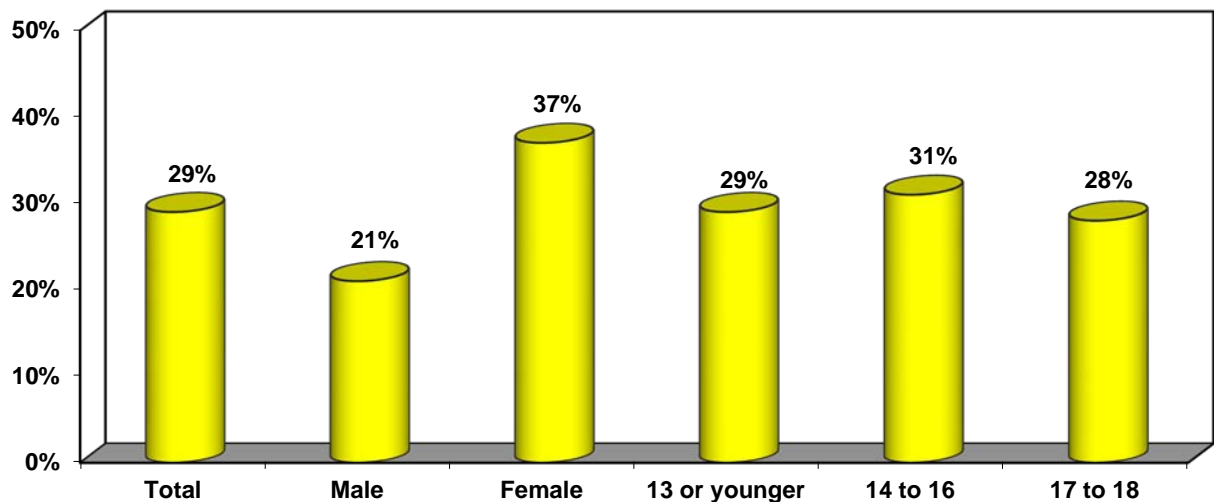
## Youth Violence Issues

The following graphs show Lenawee County youth carrying a weapon in the past 30 days and those who purposefully hurt themselves. The graphs show the number of youth in each segment giving each answer (i.e., the first graph shows that 13% of all youth carried a weapon in the past 30 days, 22% of males and 4% of females).

**Lenawee County Youth Carrying a Weapon during the Past 30 Days**



**Lenawee County Youth Who Purposefully Hurt Themselves During Their Life**



## Youth Violence Issues

### Types of Bullying Lenawee County Youth Experienced in Past Year

Youth Behaviors	Total	Male	Female	13 or younger	14-16 Years old	17 to 18
Physically Bullied	13%	16%	10%	17%	12%	5%
Verbally Bullied	39%	37%	42%	42%	38%	37%
Indirectly Bullied	24%	16%	33%	23%	23%	30%
Cyber Bullied	10%	6%	15%	9%	11%	10%

### Health Risk Behaviors by Bullied vs. Not Bullied Students

Youth Behaviors	Bullied	Not Bullied
Were depressed (felt sad or hopeless almost every day for two weeks or more in a row that they stopped doing usual activities)	35%	11%
Contemplated suicide in the past 12 months	19%	8%
Attempted suicide in the past 12 months	8%	3%
Have had at least one drink of alcohol in the past 30 days	21%	21%
Have smoked in the past 30 days	13%	9%

# Children's Health and Functional Status

## Key Findings

*In 2011, 20% of children were classified as obese, and 17% were overweight. 80% of Lenawee County parents had taken their child ages 0-11 to the dentist in the past year. 17% of parents reported their child had asthma, and 7% of parents reported their child had ADD/ADHD. 89% of parents reported their child had been physically active for 60 minutes on three or more days in the past week.*

## Health of Children ages 0-11

- ◆ In 2011, 20% of children were classified as obese by Body Mass Index (BMI) calculations. 17% of children were classified as overweight, 54% were normal weight, and 9% were underweight.
- ◆ More than half (58%) of Lenawee County parents of 0-11 year olds rated their child's health as excellent. 1% rated their child's health as poor.
- ◆ 40% of children had a seasonal flu vaccine (88% received a shot and 12% received nasal spray).
- ◆ 80% of children had been to the dentist in the past year, increasing to 93% of 6-11 year olds. 1% of 6-11 year olds had never been to the dentist.
- ◆ Parents gave the following reasons for not getting dental care for their child: their child was not old enough to go to the dentist (55%), no insurance (17%), costs too much (13%), could not find a dentist who accepts their insurance (5%), transportation problems (5%), child refused to go (4%), did not know where to go for treatment (2%), inconvenient times/could not get an appointment (1%), dissatisfaction with dentist (1%), health plan problems (1%), no referral (1%), and other (9%).
- ◆ Parents reported their child had the following allergies:
  - Pollen (13%)
  - Ragweed (12%)
  - Grasses (9%)
  - Mold (7%)
  - Cats (6%)
  - House dust mites (6%)
  - Dogs (4%)
  - Fungi (3%)
  - Peanuts (3%)
  - Tree nuts (2%)
  - Red dye (2%)
  - Watermelon (1%)
  - Bees (1%)
  - Eggs (1%)
  - Strawberries (1%)
  - Horses (1%)
  - Shellfish (1%)
  - Fish (1%)
  - Milk (1%)
  - Soy (<1%)
  - Other (10%)
- ◆ 4% of children had an epi-pen for their allergy.
- ◆ A doctor told Lenawee County parents their 0-11 year old child had the following at some time:
  - Asthma (17%)
  - ADD/ADHD (7%)
  - Developmental delay or physical impairment (7%)
  - Urinary tract infections (6%)
  - Behavioral or conduct problems (5%)
  - Pneumonia (5%)
  - Learning Disability (5%)
  - Hearing problems (4%)
  - Birth defect (3%)
  - Vision problems that cannot be corrected by glasses or contact lenses (2%)
  - Anxiety Problems (3%)
  - Bone, joint, muscle problems (2%)
  - Depression (6-11 year olds) (2%)
  - Autism (2%)
  - Head injury (1%)
  - Epilepsy (1%)
  - Digestive tract infections (1%)
  - Diabetes (1%)
  - Genetic Diseases (1%)

## National Survey of Children's Health, 2007

- ❖ 9% of Michigan children ages 0-5 were diagnosed with asthma, increasing to 11% of 6-11 year olds.
- ❖ 1% of Michigan children ages 0-5 were diagnosed with ADD/ADHD, increasing to 5% of 6-11 year olds.
- ❖ 4% of Michigan children ages 0-5 were diagnosed with a developmental disability, increasing to 5% of 6-11 year olds.

*(Source: National Survey of Children's Health, 2007 ) <http://nscdata.org> )*

## Children's Health and Functional Status

- ◆ 20% of Lenawee County parents thought that their child had difficulties with one or more of the following: concentration (14%), emotions (10%), behavior (7%), and being able to get along with people (3%).
- ◆ The above difficulties were being managed in the following ways: family and friends take care of it (65%), professional help (50%), schools or day care (46%), and do not need help (6%).
- ◆ 11% of parents reported their child had an emotional, developmental, or behavioral problem that required treatment or counseling, increasing to 25% of those with incomes less than \$25,000.
- ◆ Lenawee County children usually ate the following for breakfast: cereal (78%), milk (67%), toast (45%), fruit/fruit juice (37%), eggs (36%), yogurt (33%), oatmeal (28%), pop tart/donut/pastry (26%), bacon/sausage/ham (23%), at a school breakfast program (21%), pizza (2%), and other foods (10%). 2% of parents reported that their child rarely ate breakfast.
- ◆ 9% of parents reported that their child ate 5 or more servings of fruits and vegetables per day. 88% ate one to four servings per day.
- ◆ 89% of parents reported their child was physically active for at least 60 minutes on 3 or more days in the past week. 35% had done so every day of the week.
- ◆ 16% of Lenawee County children spent four or more hours watching TV, 4% spent four or more hours playing non-active video games, 3% spent four or more hours on the computer, and <1% spent four or more hours on a cell phone.

Child Comparisons	Lenawee County 2011 Ages 0-5	Michigan 2007 Ages 0-5	U.S. 2007 Ages 0-5	Lenawee County 2011 Ages 6-11	Michigan 2007 Ages 6-11	U.S. 2007 Ages 6-11
Rated health as excellent or very good	97%	89%	87%	98%	85%	84%
Diagnosed with asthma	17%	9%	9%	18%	11%	16%
Diagnosed with ADHD/ADD	3%	1%	1%	9%	5%	9%
Diagnosed with behavioral or conduct problems	2%	N/A	1%	7%	N/A	5%
Diagnosed with developmental delay or physical impairment	6%	4%	3%	7%	5%	6%
Diagnosed with anxiety problems	1%	N/A	1%	4%	N/A	3%
Diagnosed with vision problems that cannot be corrected	0%	N/A	1%	4%	N/A	2%
Diagnosed with bone, joint, or muscle problems	1%	2%	2%	3%	2%	3%
Diagnosed with hearing problems	6%	N/A	2%	2%	N/A	3%
Diagnosed with epilepsy	0%	N/A	<1%	2%	N/A	1%
Diagnosed with a head injury	0%	N/A	<1%	2%	N/A	2%
Diagnosed with autism	1%	N/A	1%	3%	N/A	1%
Diagnosed with diabetes	0%	N/A	<1%	1%	N/A	<1%
Diagnosed with depression	1%	0%	1%	2%	2%	2%
No physical activity	2%	N/A	N/A	3%	10%	7%

## Children's Health and Functional Status

### Children's Dental Health

- ❖ Severe dental problems can result in poor performance or absence from school.
- ❖ Of Michigan children ages 0-17, 3% had an unmet need for dental care in 2007.
- ❖ 10% of Michigan children ages 0-17 have had a recent toothache.
- ❖ For Michigan Medicaid consumers ages 0-17, 76% had a dental visit in 2007.
- ❖ In 2011, 1% of Lenawee County 6-11 year olds had never been to the dentist.
- ❖ Even though low-income children ages 0-18 in Michigan had higher rates of dental coverage, they were less likely to have a dental visit in the past year. 75% of low-income children ages 0-18 (200% FPL or less) had a dental visit in the past year, 87% of higher-income children had a dental visit within the past year.

(Source: ODH)

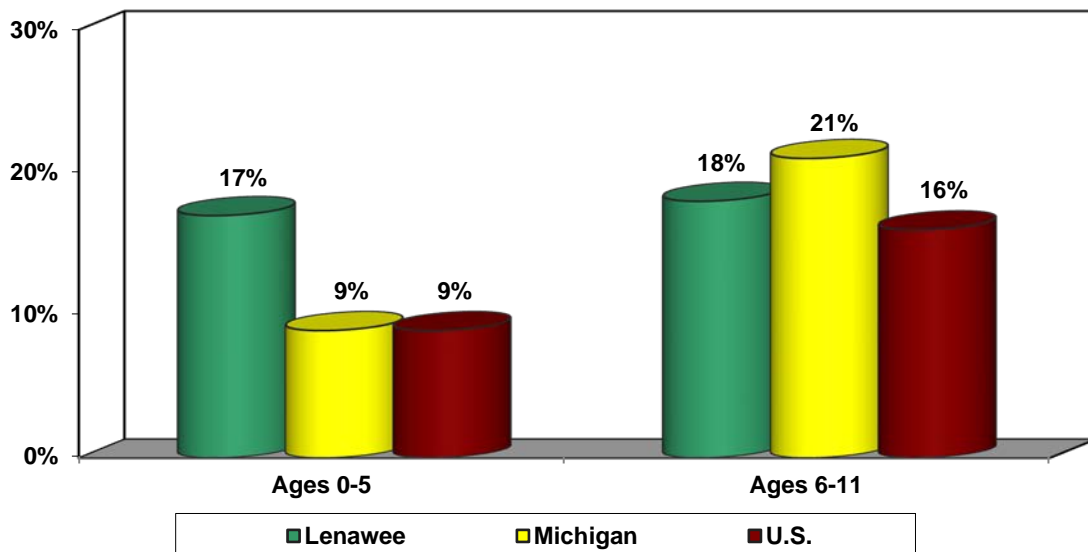
### Asthma

- ◆ In 2007, 29% of children with food allergy also had reported asthma compared with 12% of children without food allergy.
- ◆ 8% of U.S. children ages 0-4 have asthma, while 14% of children ages 5-14 have asthma.

(Source: CDC, National Center for Health Statistics Data Brief October 2008)

The following graph shows that Lenawee County has a higher percentage of children ages 0-5 that are diagnosed with asthma than both Michigan and the U.S. For children ages 6-11, Lenawee County has a smaller percentage diagnosed with asthma than Michigan, but a high percentage than the U.S.

**Diagnosed with Asthma**



## Children's Health and Functional Status

### Children's Health

- ❖ About 30 to 50 percent of students with ADHD will also have a learning disability.
- ❖ If a child has cortex-based disorders, emotional regulatory disorders, or chronic motor and/or vocal tic disorder the child has up to a 50% chance that he or she will have at least one of the others as well. Cortex-based disorders are learning, language, and/or motor disabilities. Emotional regulatory disorders are anxiety disorders, which may include panic attacks, depression, anger-control disorders, and obsessive-compulsive disorder.
- ❖ About 1 out of every 33 babies is born with a major birth defect.
- ❖ The causes of about 70% of birth defects are unknown.
- ❖ Most birth defects happen during early pregnancy; before the woman knows she is pregnant.
- ❖ Parents who have a child with an Autism Spectrum Disorder (ASD) have a 2 to 8% chance of having a second child with an ASD.
- ❖ About 40% of children with an ASD do not talk at all. Another 25 to 30% have some words at 12 to 18 months of age and lose them. Others may speak, but not until later in childhood.
- ❖ ASD is reported to occur in all racial, ethnic, and socioeconomic groups, yet are on average 4 to 5 times more likely to occur in boys rather than in girls.

*(Source: CDC, Learning Disabilities Association of America, National Birth Defects Prevention Network)*

### Children's Nutrition

- ❖ Healthy eating contributes to overall healthy growth and development, including healthy bones, skin, and energy levels; and a lowered risk of dental caries, eating disorders, constipation, malnutrition, and iron deficiency anemia.
- ❖ Hunger and food insufficiency in children are associated with poor behavioral and academic functioning.
- ❖ 39% of children ages 2-17 meet the USDA's dietary recommendations for fiber.
- ❖ Less than 40% of U.S. children and adolescents meet the U.S. dietary guidelines for saturated fat.
- ❖ Of U.S. children ages 2-5 100% get the total recommended amount of fruit, grains, and milk. While 73% get the total recommended amount of meat and beans, only 44% get the total recommended amount of vegetables. Of U.S. children ages 6-11 100% get the total recommended amount of grains. 58% get the total recommended amount of fruit, 46% get the total recommended amount of vegetables, 87% get the total recommended amount of milk, and 78% get the total recommended amount of meat and beans.
- ❖ Overweight and obesity, influenced by poor diet and inactivity, are significantly associated with an increased risk of diabetes, high blood pressure, high cholesterol, asthma, joint problems, and poor health status. The prevalence of obesity among children ages 6-11 has more than doubled in the past 20 years. Overweight child and adolescents are more likely to become overweight or obese adults. One study has shown that children who became obese by the age of eight were more severely obese as adults.
- ❖ Research suggests that not having breakfast can affect children's intellectual performance. 100% of Lenawee County children ages 6-11 eat breakfast compared to 92% of U.S. children. 77% of U.S. adolescents ages 12-19 eat breakfast.

*(Source: CDC, [childstats.gov](http://childstats.gov))*

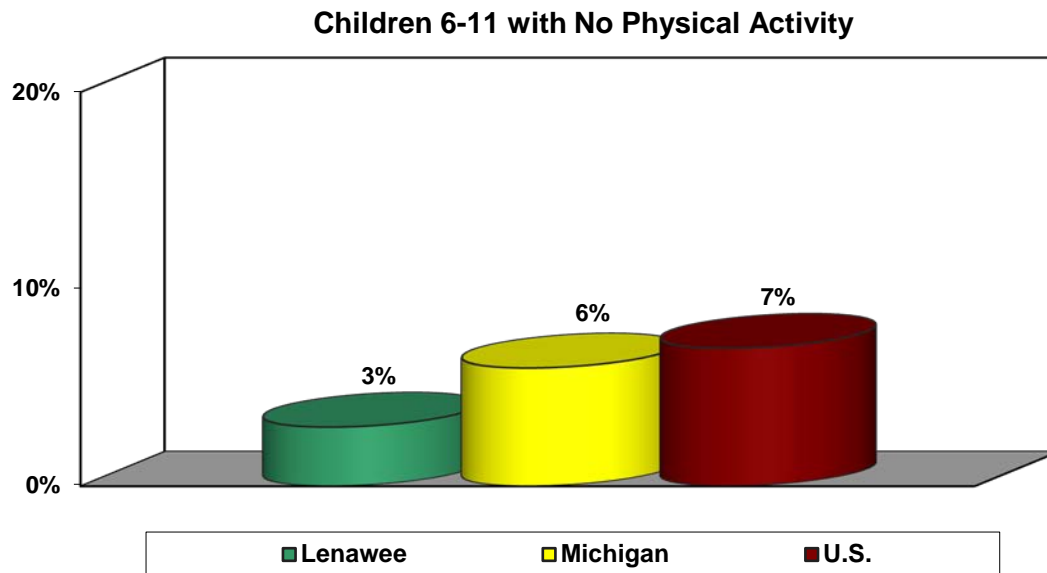
## Children's Health and Functional Status

### Physical Activity

- ◆ 10% of Michigan children ages 6-11 have not participated in physical activity for at least 30 minutes in the past week. During the past week 24% of Michigan children ages 6-11 have participated in physical activity for at least 20 minutes 1 to 3 days, 33% have participated in physical activity for at least 20 minutes 4 to 6 days, and 33% have participated in physical activity for at least 20 minutes every day.

(Source: National Survey of Children's Health, Data Resource Center)

The following graph shows that Lenawee County children ages 6-11 participate in some type of physical activity more than both Michigan and the U.S. children. Although the percent of Michigan children that do not participate in any physical activity is close to the percent of children in the U.S., Lenawee County has a lower percent of children ages 6-11 that participate in no physical activity.



### TV, Video Games, and Computer Usage

- ❖ The average time Lenawee County children ages 0-11 spend watching TV is 2.1 hours, and the average time playing video games is 0.7 hours.
- ❖ For parents of Michigan children ages 6-11, 17% have no rules about what programs their children can watch, and 83% of parents of Michigan children ages 6-11 have rules about what programs their children can watch.
- ❖ Lenawee County children ages 0-11 use a computer for an average of 0.7 hours on an average day. Michigan children ages 6-11 use a computer on an average weekday for purposes other than school work for the following: no time (19%), less than an hour (32%), 1-3 hours (40%), and more than 3 hours (5%). 4% of Michigan children ages 6-11 do not own a computer.

(Source: National Survey of Children's Health, Data Resource Center and Lenawee County Health Assessment)

# Children's Health Insurance, Access, Utilization, & Medical Home

## Key Findings

*In 2011, 6% of Lenawee County parents reported that their 0-11 year old was not covered by health insurance. 13% of parents reported their child did not receive all of the medical care he or she needed in the past year. 86% of parents had taken their child to the doctor for preventive care in the past year.*

## Health Insurance (Ages 0-11)

- ◆ 6% of parents reported that their child did not have health insurance.
- ◆ Lenawee County children had the following types of health insurance: parent's employer (60%), Medicaid or State Children's Health Insurance Program (17%), someone else's employer (13%), multiple-including employer (4%), self-pay (3%), Medicare (1%), and some other type (1%).
- ◆ Parents reported their child's health insurance covered the following: prescription coverage (96%), doctor visits (95%), hospital stays (95%), well visits (95%), immunizations (94%), dental (87%), mental health (75%), and vision (73%).

## National Survey of Children's Health, 2007

- ❖ 5% of 0-5 year old and 5% of 6-11 year old Michigan children were without insurance at some time in the past year.
- ❖ 38% of 0-5 year old and 30% of 6-11 year old Michigan children had public insurance.
- ❖ 94% of 0-5 year old and 85% of 6-11 year old Michigan children had been to the doctor for preventive care in the past year.

*(Source: National Survey of Children's Health, 2007 <http://nschdata.org>)*

## Access and Utilization

- ◆ In the past year, parents reported that someone in the household received the following: benefits from free or reduced breakfast or lunch (25%), Bridge Card/food stamps (17%), WIC program (9%), mental health/substance abuse treatment (5%), cash assistance from a welfare program (3%), and subsidized child care through DHS (1%).
- ◆ 13% of parents reported their child did not get all of the medical care they needed in the past year. They gave the following reasons: costs too much (6%), treatment is ongoing (3%), no insurance (2%), health plan problem (2%), inconvenient time/could not get appointment (2%), could not find a doctor who accepts child's insurance (2%), transportation problems (1%), no referral (1%), did not know where to go for treatment (1%), did not like the doctor (1%), doctor did not know how to treat or provide care (1%), vaccine shortage (<1%), and other reasons (2%).
- ◆ 10% of parents reported their child did not get all of the prescription medications they needed in the past year. They gave the following reasons: costs too much (5%), treatment is ongoing (2%), health plan problem (1%), no insurance (1%), no referral (1%), doctor did not know how to treat or provide care (<1%), dissatisfaction with doctor (<1%), inconvenient times/could not get an appointment (<1%), and other reasons (1%).
- ◆ 6% of parents indicated their child had received mental health care or counseling in the past year.

## Medical Home

- ◆ 86% of parents reported they had one or more people they think of as their child's personal doctor.
- ◆ The Healthy People 2020 objective for children who have access to a medical home is 63%.
- ◆ Lenawee County parents reported the following as the place they usually go if their child is sick or they need advice about their child's health: doctor's office (86%), Family Medical Center (6%), multiple places-including a doctor's office (5%), urgent care center (2%), hospital emergency room (<1%), and some other place (1%).



## Children's Health Insurance, Access, Utilization, & Medical Home

- ◆ 86% of children had visited their health care provider for preventive care in the past year.
- ◆ Lenawee County parents were referred to the following specialists for their child: ear, nose, and throat (28%), pediatric dentist (19%), heart doctor (11%), neurologist (7%), psychiatrist (7%), endocrinologist (5%), geneticist (4%), oncologist (3%), and other (16%).
- ◆ 17% of children needed special services, equipment, or other care in the past year (such as physical therapy, wheelchairs, special education services, or counseling), increasing to 35% of those with incomes less than \$25,000. Those services most needed were speech therapy (9%), occupational therapy (5%), counseling (5%) and special education (4%).

Child Comparisons	Lenawee County 2011 Ages 0-5	Michigan 2007 Ages 0-5	U.S. 2007 Ages 0-5	Lenawee County 2011 Ages 6-11	Michigan 2007 Ages 6-11	U.S. 2007 Ages 6-11
Had public insurance	23%	38%	35%	14%	30%	28%
Been to doctor for preventive care in past year	94%	94%	96%	81%	85%	85%
Dental care visit in past year	59%	56%	54%	93%	95%	90%
Received all the medical care they needed	86%	100%*	99%*	88%	99%*	98%*
Have a personal doctor or nurse	83%	94%	94%	87%	94%	92%

\* 2003 national and state data

### Usual Place of Health Care

- ◆ 95% of U.S. children have a usual place of health care. 98% of children with private health insurance, 96% of children with Medicaid or other public insurance, and 73% of uninsured children have a usual place of health care.
- ◆ 74% used a doctor's office, 24% used a clinic, 1% used a hospital outpatient clinic, and 1% used an emergency room as their usual place of health care. 85% of children with private insurance used a doctor's office, while only 60% of children with Medicaid or other public insurance used a doctor's office. 3% of uninsured children used an emergency room as their usual place of health care.
- ◆ 41% of children with poor families used a clinic as their usual place of health care, while only 16% of children with non-poor families used a clinic.
- ◆ 62% of children with private health insurance were in excellent health, while 45% of children with Medicaid or other public insurance were in excellent health. Children in fair or poor health were more likely to use a clinic as their usual place of health care (36%) than children in excellent or very good health (23%).

(Source: National Survey of Children's Health, 2007 <http://nschdata.org>)

### Preventive Care

- ◆ 87% of Michigan children and 89% of U.S. children had a preventive medical visit in the past year, while 83% of Michigan children and 78% of U.S. children had a preventive dental visit in the past year.
- ◆ 18% of Michigan children ages 10 months to 5 years and 20% of U.S. children ages 10 months to 5 years received a standardized screening for developmental or behavioral problems.
- ◆ 60% of Michigan children ages 2-17 and 60% of U.S. children ages 2-17 with problems requiring counseling received mental health care in the past year.

(Source: National Survey of Children's Health, 2007 <http://nschdata.org>)

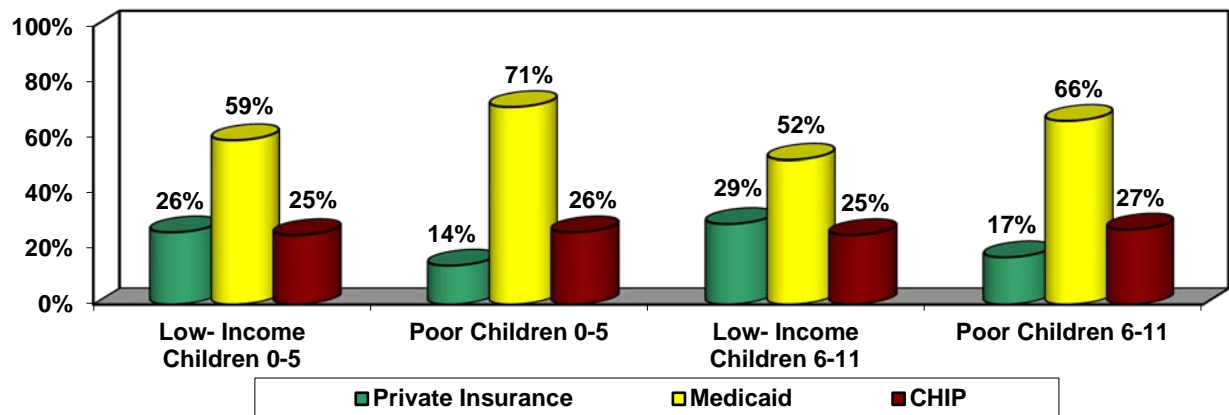
# Children's Health Insurance, Access, Utilization, & Medical Home

## Low-Income Families and Health Insurance

- ◆ As children get older they are more likely to become uninsured.
- ◆ In the United States, 14% of low-income family children ages 0-5 are uninsured; also 14% of poor family children ages 0-5 are uninsured. 16% of low-income children ages 6-11 are uninsured, and 17% of poor family children ages 6-11 are uninsured. For children ages 12-17, 19% of those of low-income families, and 20% of those of poor families are uninsured. (Source: National Center for Children in Poverty), Basic Facts About Low-income Children, 2009, Released October 2010)

The following graph shows the percent of low-income children that have different types of health insurance or no health insurance. The graph also shows the percent of poor children that have different types of health insurance or no health insurance. The types of health insurance include uninsured, private insurance, Medicaid, or Children Health Insurance Program (CHIP). Low-income is 100-200% of the Federal Poverty Level (FPL), while poor is 0-99% of the FPL. Children that have more than one type of health insurance are included in both percents. Children that are in poor families are more likely to be uninsured or on Medicaid than those of low-income families. Children of low-income families are more likely than those of poor families to have private insurance. Children of low-income families are just as likely as those of poor families to be covered by CHIP.

**Children's Health Insurance Coverage in the United States**



(Source: National Center for Children in Poverty, Basic Facts About Low-income Children, 2009, Released October 2010)

## Health Insurance

- ❖ In the United States every 39 seconds a child is born uninsured.
- ❖ 11% of U.S. children are uninsured; while in Michigan 6% of children are uninsured.
- ❖ In 2007, parents reported that 10% of Michigan children and 15% of U.S. children did not have consistent coverage in the past year.
- ❖ In 2007, 10% of Michigan children residing in urban areas were uninsured at one time during the 12 months prior to the survey, while 13% of Michigan children residing in rural areas were without health insurance for some period of time.
- ❖ In 2007, more Michigan children were covered by job-based insurance than any other type of insurance.
- ❖ 40% of Michigan children with special health care needs are covered by Medicaid/Children Health Insurance Program (CHIP), while only 30% of all Michigan children were covered by Medicaid/CHIP.

(Source: Children's Defense Fund, National Survey of Children's Health)

## Children's Health Insurance, Access, Utilization, & Medical Home

### Unmet Medical Needs

- ❖ Children in near-poor families were more likely to have unmet medical needs and to have delayed medical care than children in poor families or children in families that were not poor.
- ❖ 3% of children were unable to get needed medical care because the family could not afford it, and 5% of children had medical care delayed because of worry about the cost.
- ❖ Children in single-mother families were more likely to have been unable to get medical care compared with children in two-parent families or in single-father families.
- ❖ 15% of uninsured children had not had contact with a doctor or other health professional in more than two years (including those that had never had contact) compared with only 2% of children with private insurance.

*(Source: National Health Interview Survey, 2008)*

### Prescriptions

- ❖ 13% of U.S. children had a health problem in 2008 for which prescription medication had been taken regularly for at least three months. 16% of children ages 12-17, 14% of children ages 5-11, and 7% of children ages 0-5 were on regular prescription medication.
- ❖ 13% of white children, 12% of black children, and 8% of Asian children were on regular prescription medications.
- ❖ 15% of children with Medicaid or other public health insurance, 13% of children with private insurance, and 6% of uninsured children have been on regular prescription medications for at least three months.

*(Source: National Health Interview Survey, 2008)*

### Emergency Room Visits

- ❖ In 2008, 14% of U.S. children had an emergency room visit in the past year. 7% of U.S. children had two or more emergency room visits in the past year.
- ❖ 12% of children in single-mother families had two or more visits to an emergency room in the past year, while only 6% of children in two-parent families had two or more visits to an emergency room in the past year.
- ❖ 11% of children with Medicaid or other public insurance had two or more emergency room visits in the past year. 6% of uninsured children had two or more emergency room visits in the past year. 5% of children with private health insurance had two or more emergency room visits in the past year.

*(Source: National Health Interview Survey, 2008)*

## Early Childhood (0-5 year olds)

### Key Findings

*The following information was reported by parents of 0-5 year olds. In 2011, 90% of mothers got prenatal care within the first three months during their last pregnancy. 9% of mothers smoked during their last pregnancy. 74% of parents put their child to sleep on his/ her back. 28% of mothers never breastfed their child.*

### Early Childhood

- ◆ The following information was reported by Lenawee County parents of 0-5 year olds:
- ◆ During their last pregnancy, mothers did the following: got prenatal care within the first 3 months (90%), took a multi-vitamin (82%), took folic acid (40%), smoked cigarettes (9%), experienced perinatal depression (7%), experienced domestic violence (2%), used alcohol (1%), used marijuana (1%), used drugs that were not prescribed for them (1%), and looked for options for an unwanted pregnancy (1%).
- ◆ When asked how parents put their child to sleep as an infant, 74% said on their back, 13% said on their side, 6% said on their stomach, and 5% said in bed with them or another person. The Healthy People 2020 Target Objective for infants who are put to sleep on their backs is 76%.
- ◆ Parents reported their child slept in the following as an infant: crib/bassinette (93%), pack n' play (44%), swing (36%), car seat (32%), in bed with them or another person (30%), couch or chair (10%), and on the floor (5%).
- ◆ Mothers breastfed their child: more than 9 months (22%), 4 to 9 months (17%), 7 weeks to 3 months (13%), 3 to 6 weeks (10%), 2 weeks or less (10%), still breastfeeding (1%), and never breastfed (28%).
- ◆ 36% of parents reported their child had been tested for lead poisoning and 10% did not know.
- ◆ 14% of parents were concerned that their child may not be developing similarly to other children his or her age.
- ◆ Parents reported their child regularly attended the following in the past month: nursery school, pre-school, or kindergarten (47%), child care in their home provided by a relative (25%), child care outside of their home provided by a relative (24%), family-based child care outside of their home (23%), a child care center (21%), elementary school (14%), child care in their home provided by a babysitter (10%), and head start or early start program (9%).
- ◆ Parents were very concerned about the following: having enough time for their child (10%), relationship with child (7%), child's academic achievement (6%), child talking (4%), learning difficulties (2%), child's self-esteem (2%), anxiety (2%), cell phone and technology use (2%), violence in home, school, or neighborhood (2%), how child copes with stress (1%), bullying (1%), Internet use (1%), getting along with others (1%), depression (1%), and risky behaviors (1%).

### National Survey of Children's Health, 2007

- ❖ 53% of Michigan and 48% of U.S. parents of 0-5 year olds read to their child every day.
- ❖ 11% of Michigan and 13% of U.S. parents of 0-5 year olds reported their child watched 4 or more hours of TV each day.
- ❖ 28% of Michigan and 25% of U.S. parents of 0-5 year olds never breastfed their child.

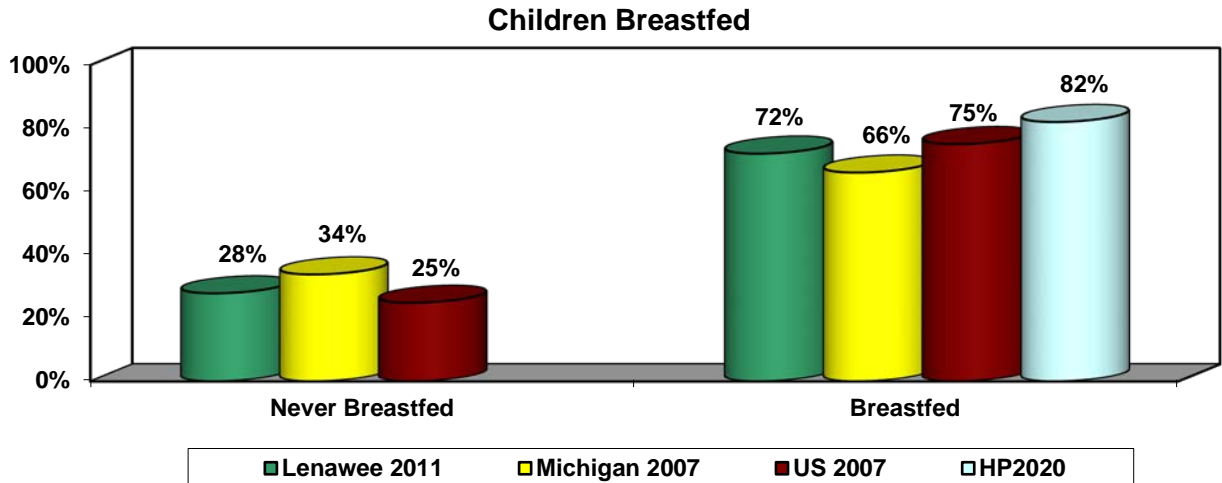
*(Source: National Survey of Children's Health, 2007 <http://nscldata.org> )*

Child Comparisons	Lenawee County 2011 0-5 years	Michigan 2007 0-5 years	U.S. 2007 0-5 years
Parent reads to child every day	34%	53%	48%
Spent 4 or more hours watching TV	15%	11%	13%
Never breastfed their child	28%	28%	25%

## Early Childhood (0-5 years old)

### Breastfeeding

The following graph shows the percent of infants who have been breastfed or given breast milk from Lenawee County, Michigan, and U.S. Lenawee County has a smaller percent than the U.S., and a larger percent than Michigan of children who have been breastfed for any length of time. The graph also shows the percent of children from Lenawee County, Michigan, and U.S. who have never been breastfed or given breast milk. Michigan has the largest percent of children never breastfed, then Lenawee County, and the U.S. has the smallest percent never breastfed or given breast milk.



(Source: National Survey of Children's Health, Data Resource Center)

### Sleep and SIDS

- ❖ Babies should be placed on his/her back with face and head clear of blankets and other soft items. Doctors have not found an increase in choking or other problems in infants who sleep on their backs.
- ❖ Sudden Infant Death Syndrome (SIDS) is the leading cause of death in children between one month and one year. SIDS is most likely to occur between two and three months, it also occurs more often in males than females. Native American infants are three times more likely than Caucasians to die of SIDS and African-Americans are two to three times more likely than Caucasians to die of SIDS.
- ❖ SIDS is likely to occur if an infant is sleeping on his/her stomach, using a soft or unsafe bed, has loose bedding materials like blankets and pillows, overheating due to clothing, blankets or room temperature, mother's age is younger than 20 years, mother smoked during pregnancy, mother received late or no prenatal care, child was born with a premature or low birth weight, or the baby is exposed to secondhand smoke.
- ❖ Side sleeping infants is not as safe as back sleeping. Infants who sleep on their sides can roll onto their stomachs; which puts them at a greater risk for SIDS.
- ❖ Studies show that pacifiers may protect against SIDS. Pacifiers are recommended from one month for breast-fed infants to one year. The pacifier should be used when placing the baby down to sleep, but should not be reinserted once the infant falls asleep. If the infant refuses the pacifier, he/she should not be forced to take it. Pacifiers should be cleaned regularly and should not be coated with sweet substances.

(Sources: National Sleep Foundation)

## Early Childhood (0-5 years old)

### Benefits of Breakfast for Children

- ❖ Breakfast provides children with the energy and essential nutrients they need to concentrate on school work and learn. Studies show that breakfast provides as much as 25 percent of the recommended daily allowance for key nutrients, such as calcium, protein, vitamins A and B6, magnesium, iron and zinc.
- ❖ Research shows that children who eat breakfast have higher achievement scores, lower rates of absence and tardiness, and increased concentration in the classroom.
- ❖ Another important benefit of breakfast for children is that establishing the healthy habit of eating breakfast early in life could stave off many adulthood health problems associated with poor diet, such as diabetes and obesity.
- ❖ A drop in blood sugar can mean a decline in energy level and the onset of hunger symptoms like a stomachache or headache, which interfere with learning.

*(Sources: <http://www.mealsmatter.org/Articles-And-Resources/Healthy-Living-Articles/Benefits-Breakfast-Children.aspx>, Meals Matter, Dairy Council of California)*

### Child Care

- ❖ Children ages 0-5 from single-mother households are more likely to have a parent who cut back or quit working in the past year due to child care issues (19%), than children in two-parent households (11%).
- ❖ Of children ages 0-5 who needed child care, 67% have parents who made different arrangements for care at the last minute due to circumstances beyond their control.

*(Sources: [childhealthdata.gov](http://childhealthdata.gov), Data Resource Center for Child & Adolescent Health)*

## Middle Childhood (6-11 years old)

### Key Findings

*The following information was reported by Lenawee County parents of 6-11 year olds. In 2011, 25% of Lenawee County parents reported their child never wore a helmet when riding a bicycle. 50% of parents reported their child was bullied at some time in the past year. 87% of parents reported their child participated in extracurricular activities. 19% of parents reported their child had an email, MySpace, Facebook, Twitter, or another social networking account.*

### Middle Childhood

- ◆ The following information was reported by Lenawee County parents of 6-11 year olds.
- ◆ Parents reported their 6-11 year old always wore a helmet when riding the following: scooter/dirt bike (53%), rollerblades/skates (29%), a skateboard (26%), and a bicycle (25%).
- ◆ Parents reported their 6-11 year old never wore a helmet when riding the following: rollerblades/skates (37%), a skateboard (35%), a bicycle (25%), and a scooter/dirt bike (17%).
- ◆ 76% of parents reported they felt their child was always safe at school. 20% reported usually and 3% reported sometimes.
- ◆ 50% of parents reported their child was bullied in the past year. The following types of bullying were reported:
  - 36% were verbally bullied (teased, taunted or called you harmful names)
  - 16% were physically bullied (you were hit, kicked, punched or people took your belongings)
  - 15% were indirectly bullied (spread mean rumors about you or kept you out of a “group”)
  - <1% were cyber bullied (teased, taunted or threatened by e-mail or cell phone)
- ◆ Children were enrolled in the following types of schools: public (87%), private or parochial (8%), homeschooled (4%), out-of-county school (<1%), and charter (<1%).
- ◆ 16% of parents reported their child spent 4 or more hours watching TV on an average day after school, and 5% spent 4 or more hours playing video games.
- ◆ 9% of Lenawee County children ages 6-11 spent time home alone without an adult.
- ◆ Parents reported their child participated in the following activities in the past year: sports team/sports lessons (64%), religious group (33%), club or organization (24%), library program (14%), 4H (10%), Latchkey (5%), and some other organized activity (29%).
- ◆ Reasons for not participating in such activities include: could not afford it (17%), child had no interest (12%), parent was too busy (7%), transportation (6%), programs not available (4%), child was too busy (4%), and other reasons (5%).
- ◆ During the past year, children ages 6-11 missed an average of 3.1 days of school because of illness or injury.
- ◆ Almost one in five (19%) parents reported their child had an email, MySpace, Facebook, Twitter, or another social networking account. Of those who had an account, they reported the following: they had their child’s password (88%), they knew all of the people in their child’s “my friends” (76%), and their child’s account was checked private (52%), and their child had a problem as a result of their account (2%). No parents reported that their child’s friends had their passwords.

### National Survey of Children’s Health, 2007

- ❖ 6% of Michigan and 5% of U.S. parents of 6-11 year olds reported their child missed 11 or more days of school due to an illness or injury.
- ❖ 12% of Michigan and 9% of U.S. parents of 6-11 year olds reported their child watched 4 or more hours of TV or playing video games each day.
- ❖ 8% of Michigan and 9% of U.S. parents of 6-11 year olds reported their child spent time home alone without an adult.

*(Source: National Survey of Children’s Health, 2007 [http:// nschdata.org](http://nschdata.org))*



## Middle Childhood (6-11 years old)

- ◆ Parents reported their child read: almost every day (84%), a few times a week (12%), a few times a month (1%), almost never-child cannot read (2%), and almost never-child has no interest (1%).
- ◆ Parents reported the following related to their child's academic success. The child: makes very high grades (64%), makes average grades (29%), makes below average grades (5%), and needs a great deal of help to be successful (3%).
- ◆ Parents discussed the following topics with their child in the past year: eating habits (73%), screen time (69%), tobacco (60%), alcohol (55%), body image (52%), marijuana and other drugs (45%), refusal skills (39%), dating and relationships (24%), abstinence and how to refuse sex (12%), condoms/safer sex/STD prevention (5%), and birth control (1%).
- ◆ Parents were very concerned about the following: having enough time for their child (11%), child's academic achievement (10%), relationship with child (6%), learning difficulties (6%), child's self-esteem (5%), how child copes with stress (4%), anxiety (4%), bullying (3%), Internet use (2%), getting along with others (2%), violence in home, school, or neighborhood (2%), cell phone and technology use (1%), depression (1%), risky behaviors (1%), eating disorders (<1%), child crawling/walking/running (<1%), and child talking (<1%).
- ◆ Parents believed that reproductive system education should be covered in the following grades: K-2 (4%), 3-5 (43%), 6-8 (45%), 9-12 (7%), and not at all (1%).
- ◆ Parents believed that abstinence and refusal skills education should be covered in the following grades: K-2 (3%), 3-5 (19%), 6-8 (63%), 9-12 (12%), and not at all (3%).
- ◆ Parents believed that birth control and condom use education should be covered in the following grades: K-2 (0%), 3-5 (3%), 6-8 (54%), 9-12 (32%), and not at all (11%).

Child Comparisons	Lenawee County 2011 6-11 Years	Michigan 2007 6-11 Years	U.S. 2007 6-11 Years
Child participated in 1 or more activities	87%	84%	79%
Child did not miss any days of school because of illness or injury	18%	20%	22%
Child missed school 11 days or more because of illness or injury	2%	6%	5%
Child spent some time home alone with out an adult	9%	8%	9%
Parent felt child was usually/always safe at school	96%	91%	92%

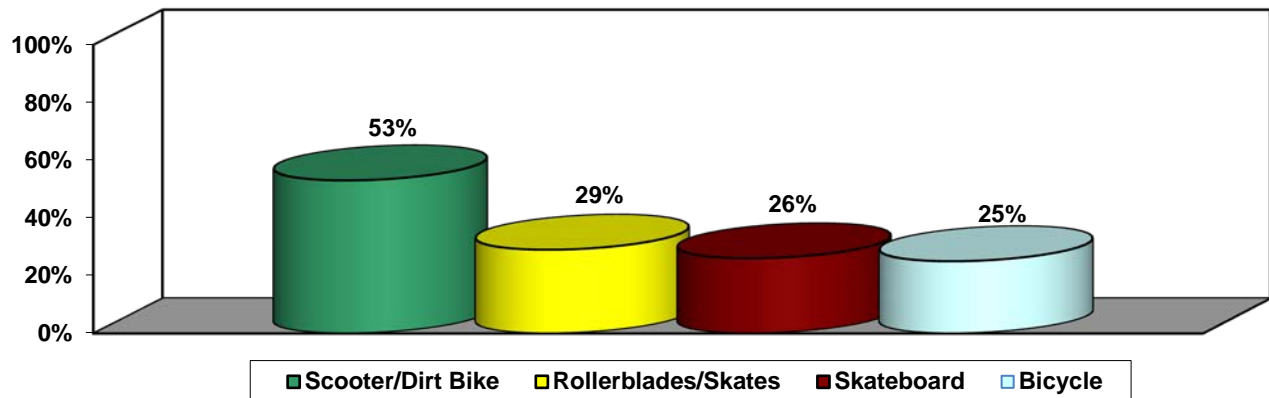


## Middle Childhood (6-11 years old)

### Helmet Use

The following graph shows how often Lenawee children wore a helmet. Lenawee County children always wore their helmet when riding on a scooter or dirt bike more often than when riding a bicycle.

**Lenawee County Children Always Wore a Helmet**



### Helmet Safety

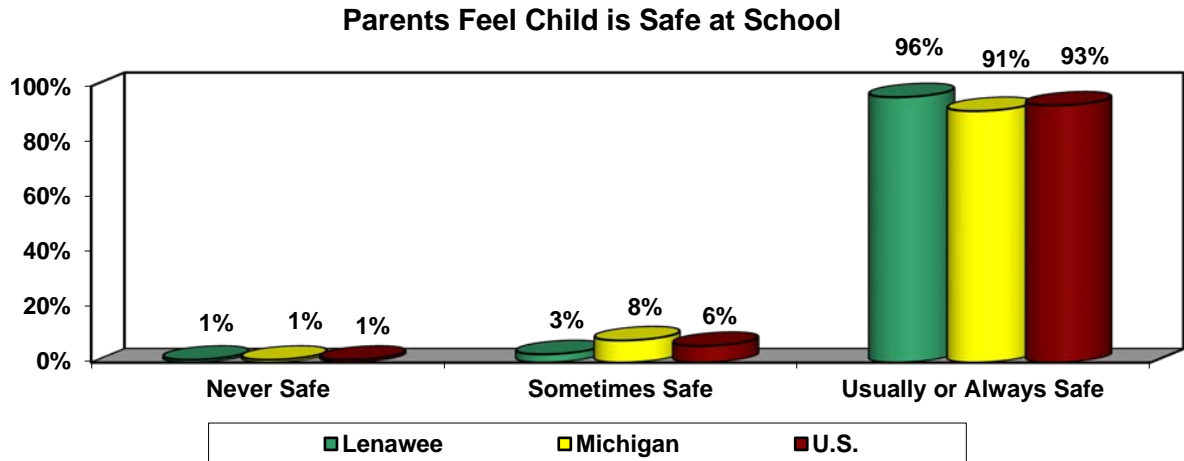
- ❖ More than 70% of children ages 5-14 regularly ride a bicycle.
- ❖ Each year, approximately 140 children are killed as bicyclists, and sustain more than 275,000 nonfatal bicycle injuries. An estimated 75% of fatal head injuries could have been prevented with a helmet.
- ❖ National usage of bicycle helmets ranges from 15 to 25%.
- ❖ More children ages 5-14 are seen in hospital emergency rooms for injuries related to biking than any other sport.
- ❖ For motor vehicle-related bicycle crashes, 69% of deaths occur between May and October, 58% of deaths occur at non-intersection locations, and 70% of deaths occur between 2 and 8 pm.

*(Source: Safe Kids USA)*

## Middle Childhood (6-11 years old)

### Safe Schools

The following graph shows whether Lenawee parents, Michigan parents, and U.S. parents feel their child's school is never, sometimes, or usually/always safe. Lenawee County has the highest percent for usually or always, the lowest percent for sometimes safe, and all three have the same for never safe.



*(Source: National Survey Children's Health, Data Resource Center)*

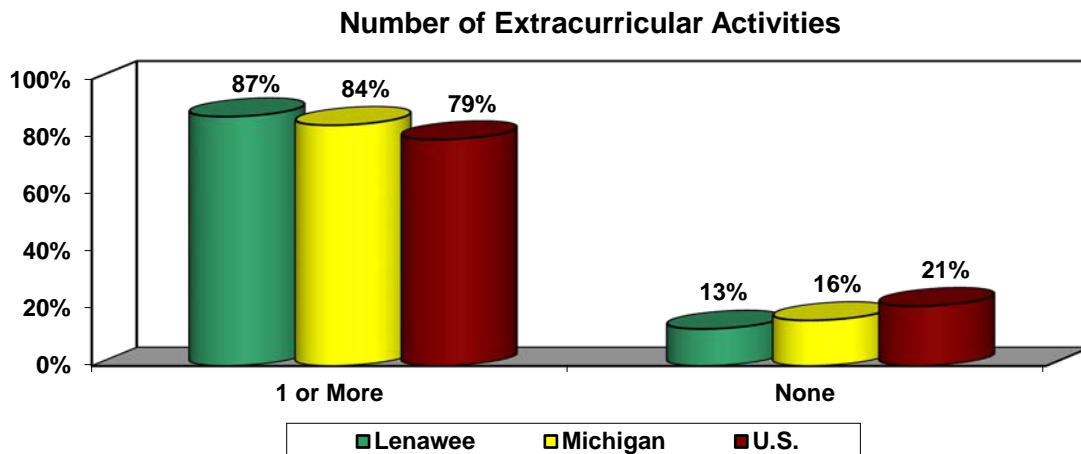
### Unhappy, Sad, and Depressed Children

- ❖ U.S. parents reported their child being unhappy, sad, or depressed. 52% reported never, 31% reported rarely, 16% reported sometimes, and 2% reported usually/always. Michigan parents also reported their child being unhappy, sad, or depressed. 45% reported never, 35% reported rarely, 18% reported sometimes, and 2% reported usually/always.

*(Source: National Survey of Children's Health, Data Resource Center)*

### Extracurricular Activities

The following graph shows the percent of children in Lenawee County, Michigan, and U.S. children that participate in at least one or more extracurricular activities and those that do not participate in any. Lenawee County has more participants than the U.S. and Michigan.



*(Source: Nation Survey of Children's Health, Data Resource Center)*

## Middle Childhood (6-11 years old)

### MySpace and Facebook

- ❖ 55% of teens have profiles on a social networking website. Of 10-17 years old with social profiles, 34% posted their real names, telephone numbers, home addresses, or the names of their schools. 45% had posted their date of birth or ages, and 18% had posted pictures of themselves.
- ❖ When signing up for MySpace, you are asked for your date of birth, if you are not over the age of 13 it will come up and say “We’re sorry. Based on the information you have submitted to us, you are ineligible to register on MySpace.” Also, when you click “signup free” you are agreeing to the Terms of Use, which under the first section states “By using the MySpace Services, you represent and warrant that ... you are 13 years of age or older... Your profile may be deleted and your Membership may be terminated without warning, if we believe that you are under 13 years of age...”
- ❖ Facebook will also asks for your date of birth, if you are not over the age of 13 it will come up and say “Sorry, you are ineligible to sign up for Facebook.” Also when you click “sign up” you are agreeing that you have read and agree to the Terms of Use, which under section 4 states “You will not use Facebook if you are under 13.”

*(Source: U.S. Department of Education, Facebook, MySpace)*

## Family Functioning, Neighborhood & Community Characteristics

### Key Findings

*In 2011, 24% of Lenawee County parents reported they read to their child every day. 97% of parents reported their neighborhood was always or usually safe.*

### Family Functioning

- ◆ 6% of parents reported that they were very concerned about their relationship with their child, and 84% reported they were not concerned at all.
- ◆ Lenawee County parents reported they were coping with the following day-to-day demands of parenthood: demands of multiple children (37%), financial burdens (33%), being a single parent (8%), child has special needs (5%), difficulty with lifestyle changes (5%), loss of freedom (4%), isolation (2%), postpartum depression (1%), alcohol and/or drug abuse (1%), and other demands (9%).
- ◆ Parents reported they read to their child: every day (24%), almost every day (26%), a few times a week (21%), a few times a month (8%) and a few times a year (2%). 16% reported their child reads to him/herself.
- ◆ 3% of parents reported their child went to bed hungry at least one day per week because they did not have enough food. 1% reported their child went to bed hungry every night.
- ◆ 40% of parents reported that every family member that lived in their household ate a meal together every day of the week. The average number of meals eaten together per week was 5.8.
- ◆ Parents reported the average number of times their child attended religious services was 2.6 times per month. 38% reported they attended religious services at least once per week. 40% reported their child has never attended a religious service.
- ◆ Parents used the following forms of discipline with their child: took away privileges (80%), time out (69%), grounding (31%), yelling (30%), spanking (27%), washing mouth out (4%), and other (6%).
- ◆ Parents reported the average time their child woke up was 6:46 a.m. and the average time they went to bed was 10:37 p.m. The average child slept 10 hours and 5 minutes per night. 2007 NSCH results showed 70% of Michigan and 72% of U.S. children ages 6-11 got enough sleep in the past week.

### National Survey of Children's Health, 2007

- ◆ 45% of Michigan and 58% of U.S. parents of 0-5 year olds reported their family ate a meal together every night of the week.
- ◆ 29% of 0-5 year old and 31% of 6-11 year old Michigan children lived in a household with someone who smokes.

*(Source: National Survey of Children's Health, 2007 <http://nschdata.org>)*

### Neighborhood and Community Characteristics

- ◆ Parents reported their neighborhood was: always safe (67%), usually safe (30%), sometimes safe (2%) and never safe (1%). 56% of those with incomes less than \$25,000 reported their neighborhood as always safe, compared to 70% of those with higher incomes.
- ◆ Parents reported they had the following safety items in their home: working smoke alarm (98%), fire extinguisher (74%), carbon monoxide detector (66%), and poison control number by the phone (34%).
- ◆ Parents reported the following sources of information about current health issues in their community: doctor/health care provider (71%), local newspaper (46%), websites (29%), neighbor/friend (29%), local radio station (28%), cable channel announcements (13%), health department (12%), church bulletin (2%), and other sources (19%).

## Family Functioning, Neighborhood & Community Characteristics

- ◆ Lenawee County parents had the following rules about smoking in their home: no one is allowed to smoke in their home at any time (83%), smoking is allowed only in certain rooms of their home (6%), smoking is allowed inside their home if children are not present (5%), and smoking is allowed anywhere inside their home (3%).
- ◆ Lenawee County parents had the following rules about smoking in their car: no one is allowed to smoke in their car at any time (75%), smoking is allowed in their car if children are not present (10%), smoking is allowed only with one or more windows open in their car (5%), and smoking is allowed anywhere in their car (1%).

Child Comparisons	Lenawee County 2011 0-5 Years	Michigan 2007 0-5 Years	U.S. 2007 0-5 Years	Lenawee County 2011 6-11 Years	Michigan 2007 6-11 Years	U.S. 2007 6-11 Years
Family eats a meal together every day of the week	47%	57%	58%	36%	47%	47%
Child never attends religious services	45%	35%	32%	37%	15%	15%
Neighborhood is usually or always safe	96%	89%	85%	98%	86%	86%

### Child and Parent Relationships

- ❖ 70% of U.S. children ages 6-17 have parents with whom they can share ideas very well or talk with them about things that matter.
- ❖ 60% of U.S. parents of children ages 0-17 are coping very well with the demands of parenting.
- ❖ 87% of U.S. parents of children ages 0-17 have someone to go to for emotional help with parenting.
- ❖ 10 % of U.S. children live with parents who experience high levels of stress from parenting. High stress is reported more often by the parents of children living in single-mother households. Also, children with special health care needs have parents who are twice as likely to report high levels of stress.

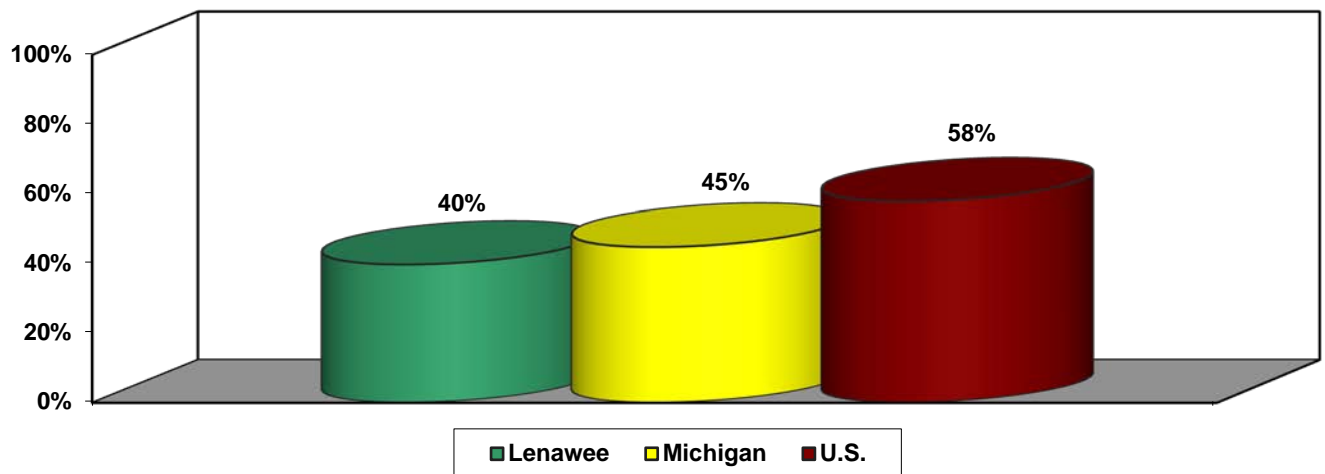
(Source: [childhealthdata.org](http://childhealthdata.org), Data Resource Center for Child & Adolescent Health)

## Family Functioning, Neighborhood & Community Characteristics

### Family Dinners

The following graph shows the percent of Lenawee County families that eat a meal together every day of the week along with the percent of Michigan families and the percent of U.S. families. U.S. families as a whole have the largest percent, followed by Michigan families. Lenawee County families have the lowest percent for eating a meal together every day of the week.

**Families that Eat Together Every Day of the Week**



(Source: National Survey of Children's Health, Data Resource Center)

### Families that Read to Children Everyday

- ❖ 55% of children ages 3-5 in the United States get read to everyday by a family member.
- ❖ Race affects the percent that read to their child every day. 67 % for White, non-Hispanic, 60% for Asian and Pacific Islander, non-Hispanic, 35% for Black, non-Hispanic, and 37% for Hispanic.
- ❖ The parents' marital status also has a large effect. Two parent families that are married have 61.9%, while two parent families that are unmarried is 24 %. One parent families have 43%.
- ❖ Mothers that have a bachelor's degree or higher are more likely to read to their children than mothers with any other amount of education.
- ❖ Children that have mothers that work less than 35 hours a week are the most likely to get read to everyday with 63%. While mothers that are not in the labor force are the next with 58%. 51% of mothers that work more than 35 hours per week, and mothers that are looking for work have the lowest percentage for reading to their children everyday with only 40%.

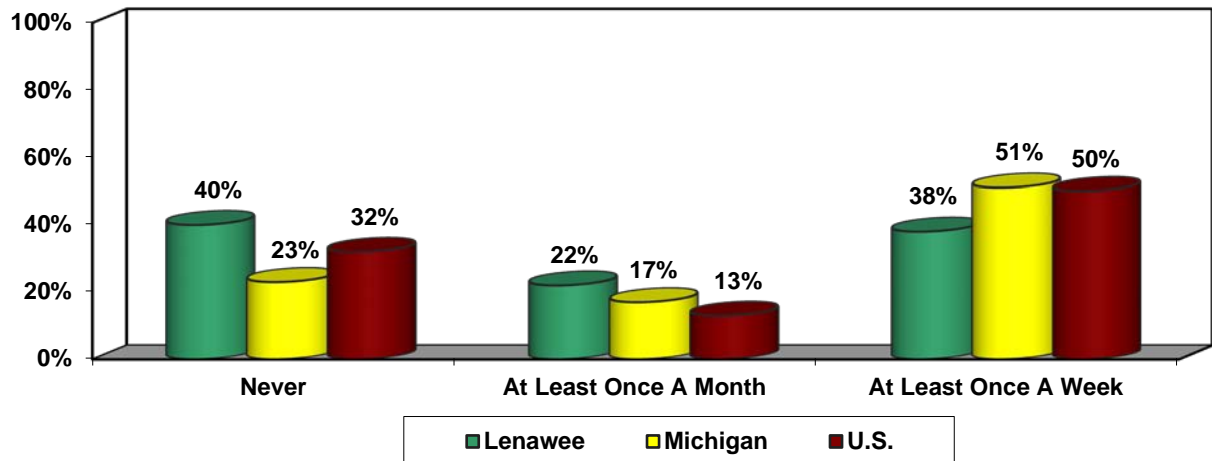
(Source: *childstats.gov*)

## Family Functioning, Neighborhood & Community Characteristics

### Religious Service Attendance

The following chart shows the percent of Lenawee County, Michigan, and U.S. children ages 0-5 that attend religious services at least once a week, once a month, and those that have never attended a religious service or don't attend religious services. Lenawee County has a much larger percent that attends religious services at least once a month than both Michigan and the U.S., and a smaller percent that attends religious services at least once a week. Lenawee County is higher than Michigan and the U.S. in percent of children who had never attended a religious service or do not attend religious services.

**Attend Religious Services**

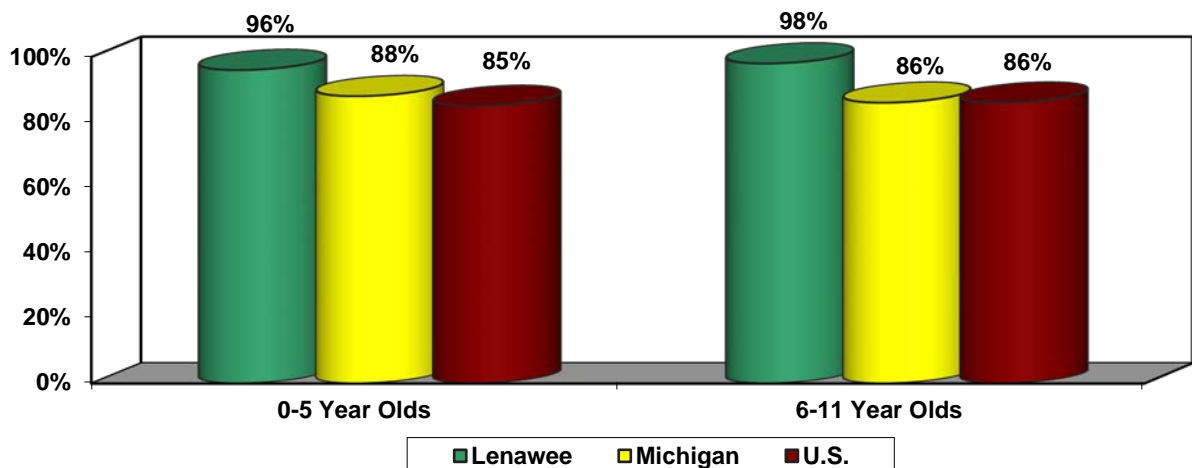


(Source: National Survey of Children's Health, Data Resource Center)

### Neighborhood Safety

The following graph shows the percent of Lenawee County, Michigan, and U.S. parents that feel their neighborhood is always or usually safe. Lenawee County had a larger portion of parents of children ages 0-5 and 6-11 feel that their neighborhood is always/usually safe, compared to Michigan and the U.S. Michigan has a larger percent of parents who feel their neighborhood is always/usually safe for children ages 0-5 than all parents in the U.S., but an equal percent of Michigan parents feel their neighborhood is always/usually safe for children ages 6-11 and U.S. parents of children ages 6-11.

**Feel Neighborhood is Always/Usually Safe**



(Source: National Survey of Children's Health, Data Resource Center)

## Family Functioning, Neighborhood & Community Characteristics

### Smoke Alarms

- ❖ 96% of American homes have at least one smoke alarm; however, no smoke alarms were present or non-operated in 41% of the reported fires between 2003 and 2006.
- ❖ In fires considered large enough to activate the alarm, hardwired smoke alarms operated 91% of the time, while battery-powered smoke alarms operated in 75%.
- ❖ Over half of the reasons that a smoke alarm failed to go off for fires between 2003 and 2006 was because the battery was disconnected or missing. 22% failed because the battery was dead, and only 8% failed because the hardwired power failed, shut-off or was disconnected.

*(Source: National Fire Protection Association)*

### Firearm Safety

- ❖ In 2004, 2% of children that died as a result of a home injury were killed by unintentional shootings in the home. 75% of these children were between the ages 5 and 14.

*(Source: Safe Kids USA)*

### Children and Smoking

- ❖ 71% of Michigan children ages 0-5 do not have anyone that smokes in their household. 24% has someone in their household that smokes, but does not smoke inside the child's house. 5% have someone that smokes in their household and smokes inside the child's house.
- ❖ 69% of Michigan children ages 6-11 do not have anyone that smokes in their household. 23% have someone that smokes in their household, but doesn't smoke inside the child's home. 8% have someone that smokes in the household, and smokes inside the home of the child.
- ❖ For U.S. children ages 0-5, 74% have no one that smokes in their household. 21% have someone that smokes in their household, but does not smoke inside the house. 5% have someone that smokes in the household, and smokes inside the child's home
- ❖ For U.S. children ages 6-11, 75% have no one that smokes in their household. 18% have someone that smokes in their household, but does not smoke inside the house. 8% have someone that smokes in the household, and smokes inside the child's house.

*(Source: National Survey of Children's Health, Data Resource Center)*

### Smoking Rules

- ❖ 30% of people that live in households with no smoking rules have smoked at some point in their lives. While for people that have some smoking rules in their household 24% have smoked at some point in their lives. For people that live in houses where no smoking was allowed at all only 12% have smoked at some point.
- ❖ 27% of people that live in households without smoking rules currently smoke. 19% of people that live in houses with some smoking rules currently smoke. While only 9% of people that live in houses where smoking is not allowed currently smoke.

*(Source: CDC, Impact of Home Smoking Rules on Smoking Patterns Among Adolescents and Young Adults)*



## Parent Health

### Key Findings

*In 2011, 33% of Lenawee County parents were overweight and 34% were obese. Parents missed work an average of 2.0 days per year due to their child being ill or injured.*

### Parent Health

- ◆ Those filling out the survey had the following relationship to the child: mother (75%), father (23%), grandparent (2%) and aunt or uncle (<1%).
- ◆ More than three-fourths (77%) of parents rated their health as excellent or very good, decreasing to 53% of parents with incomes less than \$25,000. 5% of parents had rated their health as fair or poor.
- ◆ 79% of parents rated their mental and emotional health as excellent or very good.
- ◆ 5% of parents of 0-5 year olds rated their mental and emotional health as fair or poor. 4% of parents of 6-11 year olds rated their mental and emotional health as fair or poor.
- ◆ 81% of parents reported having health care coverage, decreasing to 66% of those with incomes less than \$25,000.
- ◆ 9% of parents were physically active for at least 30 minutes every day of the week. 52% were physically active 3 or more days a week, and 23% were not physically active at all, including 2% who were unable to exercise.
- ◆ Parents reported the following rules about smoking inside their home and car: no one is allowed to smoke in their home at any time (83%), no one is allowed to smoke in their car at any time (75%), smoking is allowed in their car if children are not present (10%), smoking is allowed only in certain rooms of their home (6%), smoking is allowed inside their home if children are not present (5%), smoking is allowed only with one or more windows open in their car (5%), smoking is allowed anywhere inside their home (3%), and smoking is allowed anywhere in their car (1%).
- ◆ 67% of parents were either overweight (33%) or obese (34%). 32% were at a normal weight, and 1% were underweight.
- ◆ Parents missed work an average of 2.0 days per year due to their child being ill or injured, 0.8 days per year due to their child's medical appointments, 0.4 days due to child's asthma, and 0.1 days per year due to their child's behavioral or emotional problems.
- ◆ 6% of parents reported that they or someone in their family had to quit a job, not take a job, or greatly change their job because of problems with child care for their child, increasing to 14% of those with incomes less than \$25,000.

### National Survey of Children's Health, 2007

- ◆ 29% of mothers of 0-5 year olds and 19% of mothers of 6-11 year olds in Michigan were sedentary (not exercising in the past week).
- ◆ 25% of fathers of 0-5 year olds and 17% of fathers of 6-11 year olds in Michigan were sedentary (not exercising in the past week).

*(Source: National Survey of Children's Health, 2007 <http://nschdata.org>)*

Child Comparisons	Lenawee County 2011 Ages 0-5	Michigan 2007 Ages 0-5	U.S. 2007 Ages 0-5	Lenawee County 2011 Ages 6-11	Michigan 2007 Ages 6-11	U.S. 2007 Ages 6-11
Mother's mental or emotional health is fair/poor	7%	8%	6%	5%	6%	8%
Father's mental or emotional health is fair/poor	2%	2%	4%	1%	2%	5%

## Parent Health

### Parent's Health

- ❖ 58% of children have mothers who are in excellent or very good physical and mental health (of children with a living mother in their household).
- ❖ 64% of children have fathers who are in excellent or very good physical and mental health (of children with a living father in their household).
- ❖ A child who lives with a mother or father who exercises for at least 20 minutes on four or more days per week is more likely to also exercise at least four days per week. Of children who live with their mothers, 33% have mothers who exercise four or more days per week. Of children who live with their fathers, 45% have fathers who exercise four or more days per week.
- ❖ Higher household income increases the likelihood that a child will exercise regularly. For children living with their mother that does not exercise four or more days a week and that are between 0-99% FPL, 46% exercise regularly, while for children living with their mother that does not exercise four or more days a week and are 400% FPL, 66% exercise regularly. For children between 0-99% FPL and have mothers that exercise regularly 69% also exercise regularly, and for children at 400% FPL and have mothers that exercise regularly 80% also exercise regularly.

*(Source: [childhealthdata.org](http://childhealthdata.org), Data Resource Center for Child & Adolescent Health)*

# Lenawee County Health Assessment

## Information Sources

Source	Data Used	Website
American Association of Suicidology	◆ Protective factors for youth suicide	<a href="http://www.suicidology.org/c/document_library/get_file?folderId=248&amp;name=DLFE-484.pdf">http://www.suicidology.org/c/document_library/get_file?folderId=248&amp;name=DLFE-484.pdf</a>
American Cancer Society, Cancer Facts and Figures 2011. Atlanta: ACS, 2011	<ul style="list-style-type: none"> <li>◆ 2011 Cancer facts, figures, and estimates</li> <li>◆ 2009 Cancer rates</li> <li>◆ ACS cancer detection guidelines</li> <li>◆ Cancer risk factors</li> <li>◆ Nutrition recommendations</li> <li>◆ Tobacco Use and Health</li> </ul>	<a href="http://www.cancer.org">www.cancer.org</a>
American Diabetes Association	<ul style="list-style-type: none"> <li>◆ All about Diabetes: Type 2 Diabetes</li> <li>◆ Diabetes Complications</li> <li>◆ Diabetes Care: Screening Standards</li> <li>◆ Risk factors for diabetes</li> </ul>	<a href="http://www.diabetes.org">www.diabetes.org</a>
American Foundation for Suicide Prevention	◆ When You Fear Someone May Take Their Life	<a href="http://www.afsp.org/index.cfm?fuseaction=home.viewpage&amp;page_id=F2F25092-7E90-9BD4-C4658F1D2B5D19A0">http://www.afsp.org/index.cfm?fuseaction=home.viewpage&amp;page_id=F2F25092-7E90-9BD4-C4658F1D2B5D19A0</a>
American Heart Association. <i>Risk Factors for Coronary Heart Disease</i> , 2011.	◆ Risk Factors for Cardiovascular Disease That Can Be Modified or Treated	<a href="http://www.americanheart.org">www.americanheart.org</a>
Annals of Emergency Medicine, v. 57, issue 6, 2011, p. 691	◆ Firearm Injury Prevention	<a href="http://journals.ohiolink.edu/ejc/pdf.cgi/EJC_Article.pdf?issn=01960644&amp;issue=v57i0006&amp;article=691_fip">http://journals.ohiolink.edu/ejc/pdf.cgi/EJC_Article.pdf?issn=01960644&amp;issue=v57i0006&amp;article=691_fip</a>
American Pregnancy Association	◆ Overview of birth control methods	<a href="http://www.americanpregnancy.org/preventingpregnancy/overviewtypesbirthcontrol.html">http://www.americanpregnancy.org/preventingpregnancy/overviewtypesbirthcontrol.html</a>
<i>Arthritis at a Glance</i> , 2011, Centers for Disease Control & Prevention, <i>Morbidity and Mortality Weekly Report</i> 2010; 59(39):999-1003	<ul style="list-style-type: none"> <li>◆ What Can Be Done to Target Arthritis?</li> <li>◆ Arthritis statistics</li> </ul>	<a href="http://www.cdc.gov/chronicdisease/resources/publications/AAG/arthritis.htm">http://www.cdc.gov/chronicdisease/resources/publications/AAG/arthritis.htm</a>
Behavioral Risk Factor Surveillance System (BRFSS), National Center for Chronic Disease Prevention and Health Promotion, Behavioral Surveillance Branch, Centers for Disease Control	◆ 2009 - 2010 adult Michigan and U.S. correlating statistics	<a href="http://www.cdc.gov">www.cdc.gov</a>
Center for Medicare and Medicaid Services	◆ Michigan residents enrolled in Medicaid	<a href="http://www.cms.gov/">http://www.cms.gov/</a>
CDC, Alcohol and Public Health	◆ Caffeinated Alcoholic Beverages	<a href="http://www.cdc.gov/alcohol/fact-sheets/cab.htm">http://www.cdc.gov/alcohol/fact-sheets/cab.htm</a>
CDC, Healthy Youth, 2011	◆ Tobacco Sales and Promoting to Youth	<a href="http://www.cdc.gov/healthyouth/tobacco/facts.htm">http://www.cdc.gov/healthyouth/tobacco/facts.htm</a>
CDC, Impact of Home Smoking Rules on Smoking Patterns Among Adolescents and Young Adults	◆ Smoking Rules	N/A
CDC, National Health Interview Survey, 2008	◆ Children's Prescriptions	<a href="http://www.cdc.gov/nchs/nhis.htm">www.cdc.gov/nchs/nhis.htm</a>
CDC, Physical Activity for Everyone	◆ Physical activity recommendations	<a href="http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html">http://www.cdc.gov/physicalactivity/everyone/guidelines/adults.html</a>
CDC, Sexually Transmitted Diseases Surveillance, 2010	◆ U.S. Chlamydia and Gonorrhea rates	<a href="http://www.cdc.gov/std/stats09/adol.htm#foot">http://www.cdc.gov/std/stats09/adol.htm#foot</a>

## Lenawee County Health Assessment Information Sources

Source	Data Used	Website
CDC, Youth Violence & Suicide Prevention	◆ Youth Violence Fact Sheet, 2010	<a href="http://www.cdc.gov/ncipc/dvp/dvp.htm">http://www.cdc.gov/ncipc/dvp/dvp.htm</a>
Children's Defense Fund	◆ Health Insurance	<a href="http://www.childrensdefense.org/">www.childrensdefense.org/</a>
Dairy Council of California, Meals Matter	◆ Benefits of Breakfast for Children	<a href="http://www.mealsmatter.org/Articles-And-Resources/Healthy-Living-Articles/Benefits-Breakfast-Children.aspx">http://www.mealsmatter.org/Articles-And-Resources/Healthy-Living-Articles/Benefits-Breakfast-Children.aspx</a>
Data Resource Center for Child & Adolescent Health	◆ Child Care	<a href="http://www.childhealthdata.org/">www.childhealthdata.org/</a>
Deadly Games Children Play	◆ The Choking Game	<a href="http://www.deadlygameschildrenplay.com">www.deadlygameschildrenplay.com</a>
Federal Emergency Management Agency (FEMA)	◆ Emergency Preparedness ◆ Basic emergency kit recommendations	<a href="http://www.ready.gov/america/_downloads/checklist3.pdf">http://www.ready.gov/america/_downloads/checklist3.pdf</a>
Healthy People 2020: Data 2020, U.S. Department of Health & Human Services	◆ All Healthy People 2020 target data points ◆ Some U.S. baseline statistics	<a href="http://www.health.gov/healthypeople">www.health.gov/healthypeople</a>
Kaiser Family Foundation	◆ Michigan and U.S. Health Insurance Statistics ◆ Michigan Medicaid, FY 2008	<a href="http://www.statehealthfacts.org/index.jsp">http://www.statehealthfacts.org/index.jsp</a>
Learning Disabilities Association of America	◆ Children's Health	<a href="http://www.ldanatl.org">www.ldanatl.org</a>
Mayo Foundation for Medical Education and Research, 2011	◆ Risk Factors for Contracting Sexually Transmitted Diseases/Infections	<a href="http://www.mayoclinic.com/health/sexually-transmitted-diseases-stds/DS01123">http://www.mayoclinic.com/health/sexually-transmitted-diseases-stds/DS01123</a>
Michigan Department of Community Health, Vital Statistics	◆ Cancer Trends and Mortality ◆ Diabetes Statistics ◆ Health Care Statistics ◆ Leading Causes of Death ◆ Medicaid Statistics ◆ Mortality Rates ◆ Motor-vehicle mortality rates ◆ Natality and Pregnancy	<a href="http://www.michigan.gov/mdch/">http://www.michigan.gov/mdch/</a>
Michigan Department of Community Health	◆ <i>A Guide to Michigan Medicaid Health Plans</i> , January 2012	<a href="http://www.michigan.gov/documents/QualityCheckupJan03_59423_7.pdf">http://www.michigan.gov/documents/QualityCheckupJan03_59423_7.pdf</a>
Michigan Department of Health Vital Statistics	◆ Lenawee County and Michigan mortality statistics	<a href="http://www.michigan.gov/vitalrecords">www.michigan.gov/vitalrecords</a>
Michigan Labor Market Information	◆ Lenawee County and Michigan employment statistics	<a href="http://www.milmi.org/">http://www.milmi.org/</a>
Michigan Office of Highway Safety Planning	◆ 2010 Michigan Traffic Crash Facts for County/Communities ◆ Lenawee County Report ◆ 2010 Traffic Crash Facts Sheet	<a href="http://www.michigantrafficcrashfacts.org/">http://www.michigantrafficcrashfacts.org/</a>

# Lenawee County Health Assessment

## Information Sources

Source	Data Used	Website
Michigan Oral Health Coalition, 2011	◆ Lenawee County Oral Health Facts	<a href="http://www.mohc.org">www.mohc.org</a>
Michigan Sexually Transmitted Diseases Database	◆ STD facts ◆ Lenawee and Michigan Chlamydia and Gonorrhea rates	<a href="http://www.mdch.state.mi.us/pha/osr/Index.asp?Id=12">http://www.mdch.state.mi.us/pha/osr/Index.asp?Id=12</a>
National Asthma Control Program, CDC, <i>Strategies for Addressing Asthma within a Coordinated School Health Program, 2006</i>	◆ Asthma Control	<a href="http://www.cdc.gov/asthma/default.htm">http://www.cdc.gov/asthma/default.htm</a>
National Birth Defects Prevention Network	◆ Children's Health	<a href="http://www.nbdpn.org">www.nbdpn.org</a>
The National Campaign	◆ Facts about "Sexting"	<a href="http://www.thenationalcampaign.org/sextech/PDF/SexTech_PressReleaseFIN.pdf">http://www.thenationalcampaign.org/sextech/PDF/SexTech_PressReleaseFIN.pdf</a> , 2011
National Center for Children in Poverty, 2009	◆ Basic Facts about Low Income Children	<a href="http://www.nccp.org/">www.nccp.org/</a>
National Center for Chronic Disease Prevention and Health Promotion, CDC	◆ Alcohol and Binge Drinking Dangers ◆ Arthritis ◆ BMI definition ◆ Breast Cancer Screening Methods ◆ Facts on Smoking and Tobacco Use ◆ Nutrition and physical activity ◆ Preventing seasonal flu ◆ Suicide and Self-inflicted Injury ◆ Ways to have safer sex	<a href="http://www.cdc.gov/">http://www.cdc.gov/</a>
National Center for Environmental Health, CDC, 2011	◆ Asthma Triggers ◆ Health effects about mold	<a href="http://www.cdc.gov/nceh/">http://www.cdc.gov/nceh/</a>
National Center for Health Statistics, CDC	◆ US Fertility rate 2010 ◆ Natality Statistics	<a href="http://www.cdc.gov/nchs/">http://www.cdc.gov/nchs/</a>
National Center for Immunizations and Respiratory Diseases (NCIRD), CDC	◆ Ways to prevent seasonal flu	
National Center for Injury Prevention and Control	◆ Prescription pain killer overdoses in the U.S.	<a href="http://www.cdc.gov/VitalSigns/pdf/2011-11-vitalsigns.pdf">http://www.cdc.gov/VitalSigns/pdf/2011-11-vitalsigns.pdf</a>
National Depressive & Manic Depressive Association, CDC	◆ Risk Factors of Suicide	N/A
National Fire Prevention Association	◆ Smoke Alarms	<a href="http://www.nfpa.org">www.nfpa.org</a>
National Heart, Lung, and Blood Institute, 2011	◆ Chronic respiratory conditions	<a href="http://www.nhlbi.nih.gov/">http://www.nhlbi.nih.gov/</a>
National Institutes of Health, National Institute of Arthritis and Musculoskeletal and Skin Diseases	◆ Preventing Back Pain	<a href="http://www.niams.nih.gov/Health_Info/Back_Pain/back_pain_ff.asp">http://www.niams.nih.gov/Health_Info/Back_Pain/back_pain_ff.asp</a>
National Institute of Health, Underage Drinking	◆ Underage Drinking Facts	<a href="http://report.nih.gov/NIH/factsheets/ViewFactSheet.aspx?csid=21&amp;key=U#U">http://report.nih.gov/NIH/factsheets/ViewFactSheet.aspx?csid=21&amp;key=U#U</a>
National Survey of Children's Health	◆ 2007 statistics on Michigan children	<a href="http://nschdata.org">http://nschdata.org</a>
National Sleep Foundation	◆ Sleep & SIDS	<a href="http://www.sleepfoundation.org">www.sleepfoundation.org</a>
National Vital Statistics System, CDC 2011	◆ U.S. Infant Mortality Rate	<a href="http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_04.pdf">http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_04.pdf</a>

## Lenawee County Health Assessment Information Sources

Source	Data Used	Website
Planned Parenthood Federation of America, Inc.	<ul style="list-style-type: none"> <li>◆ STI facts</li> <li>◆ Ways to Have Safer Sex</li> </ul>	<a href="http://www.plannedparenthood.org">www.plannedparenthood.org</a>
Safe Kids USA	<ul style="list-style-type: none"> <li>◆ Helmet Safety</li> </ul>	<a href="http://www.safekids.org">www.safekids.org</a>
Sexually Transmitted Disease Surveillance, Centers for Disease Control and Prevention	<ul style="list-style-type: none"> <li>◆ STIs/STDs in young adults and adolescents</li> </ul>	<a href="http://www.cdc.gov">www.cdc.gov</a>
Surgeon General's Call to Action	<ul style="list-style-type: none"> <li>◆ Obese Adolescents</li> </ul>	<a href="http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.html">http://www.surgeongeneral.gov/topics/obesity/calltoaction/fact_adolescents.html</a>
U. S. Department of Agriculture	<ul style="list-style-type: none"> <li>◆ Food Security in the U.S., 2010</li> </ul>	<a href="http://www.usda.gov/wps/portal/usdahome">http://www.usda.gov/wps/portal/usdahome</a>
U. S. Department of Commerce, Census Bureau; Bureau of Economic Analysis	<ul style="list-style-type: none"> <li>◆ American Community Survey, 5 year poverty estimates. 2006-2010</li> <li>◆ Federal Poverty Thresholds</li> <li>◆ Michigan and U.S. health insurance sources</li> <li>◆ Small Area Income and Poverty Estimates</li> </ul>	<a href="http://www.census.gov">www.census.gov</a>
U.S. Department of Education	<ul style="list-style-type: none"> <li>◆ MySpace &amp; Facebook</li> </ul>	<a href="http://www.ed.gov/">www.ed.gov/</a>
U. S. Department of Health and Human Services, SAMHSA, 2010	<ul style="list-style-type: none"> <li>◆ Drug Abuse Warning Network Report, December 28, 2010</li> </ul>	<a href="http://www.oas.samhsa.gov/NSDUH/2k7NSDUH/2k7results.cfm">http://www.oas.samhsa.gov/NSDUH/2k7NSDUH/2k7results.cfm</a>
Youth Risk Behavior Surveillance System, National Center for Chronic Disease Prevention and Health Promotion, Division of Adolescent and School Health, Centers for Disease Control	<ul style="list-style-type: none"> <li>◆ 2005 - 2009 youth Michigan and U.S. correlating statistics</li> </ul>	<a href="http://www.cdc.gov">www.cdc.gov</a>

## List of Acronyms and Terms

<b>Adult</b>	Defined as 19 years of age and older.
<b>Age-Adjusted Mortality Rates</b>	Death rate per 100,000 adjusted for the age distribution of the population.
<b>Binge drinking</b>	Consumption of five alcoholic beverages or more (for males) or four or more drinks (for females) on one occasion
<b>BMI</b>	Body Mass Index is defined as the contrasting measurement/relationship of weight to height
<b>BRFSS</b>	Behavior Risk Factor Surveillance System, an adult survey conducted by the CDC.
<b>CDC</b>	Centers for Disease Control and Prevention.
<b>Current Smoker</b>	Individual who has smoked at least 100 cigarettes in their lifetime and now smokes daily or on some days.
<b>Crude Mortality Rates</b>	Number of deaths/estimated mid-year population times 100,000.
<b>FPL</b>	Federal Poverty Level
<b>HCF</b>	Healthy Communities Foundation of the Hospital Council of Northwest Ohio.
<b>HP 2020</b>	Healthy People 2020, a comprehensive set of health objectives published by the Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services.
<b>Health Indicator</b>	A measure of the health of people in a community, such as cancer mortality rates, rates of obesity, or incidence of cigarette smoking.
<b>High Blood Cholesterol</b>	240 mg/dL and above
<b>High Blood Pressure</b>	Systolic $\geq 140$ and Diastolic $\geq 90$
<b>MDCH</b>	Michigan Department of Community Health
<b>N/A</b>	Data not available.

## List of Acronyms and Terms

<b>Race/Ethnicity</b>	<b>Census 2010:</b> U.S. Census data consider race and Hispanic origin separately. Census 2010 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” Data are presented as “Hispanic or Latino” and “Not Hispanic or Latino.” Census 2000 reported five race categories including: White, Black or African American, American Indian & Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. Data reported, “White alone” or “Black alone”, means the respondents reported only one race.
<b>Weapon</b>	Defined in the YRBSS as “a weapon such as a gun, knife, or club”
<b>Youth</b>	Defined as 12 through 18 years of age
<b>YPLL/65</b>	<b>Years of Potential Life Lost</b> before age 65. Indicator of premature death.
<b>Youth BMI Classifications</b>	<b>Underweight</b> is defined as BMI-for-age $\leq 5^{\text{th}}$ percentile. <b>Overweight</b> is defined as BMI-for-age $85^{\text{th}}$ percentile to $< 95^{\text{th}}$ percentile. <b>Obese</b> is defined as $\geq 95^{\text{th}}$ percentile.
<b>YRBSS</b>	<b>Youth Risk Behavior Surveillance System</b> , a youth survey conducted by the CDC



## Methods for Weighting the 2011 Lenawee County Assessment Data

Data from sample surveys have the potential for bias if there are different rates of response for different segments of the population. In other words, some subgroups of the population may be more represented in the completed surveys than they are in the population from which those surveys are sampled. If a sample has 25% of its respondents being male and 75% being female, then the sample is biased towards the views of females (if females respond differently than males). This same phenomenon holds true for any possible characteristic that may alter how an individual responds to the survey items.

In some cases, the procedures of the survey methods may purposefully over-sample a segment of the population in order to gain an appropriate number of responses from that subgroup for appropriate data analysis when investigating them separately (this is often done for minority groups). Whether the over-sampling is done inadvertently or purposefully, the data needs to be weighted so that the proportioned characteristics of the sample accurately reflect the proportioned characteristics of the population. In the 2011 Lenawee County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Lenawee County based on age, sex, race, and income.

Weightings were created for each category within sex (male, female), race (White, Non-White), Age (7 different age categories), and income (7 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Lenawee County within the specific category and dividing that by the percent of the sample within that same specific category. Using sex as an example, the following represents the data from the 2011 Lenawee County Survey and 2010 Lenawee County Census.

<u>Sex</u>	<u>2011 Lenawee Survey</u>		<u>2010 Lenawee Census</u>		<u>Weight</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	
Male	145	46.774194%	50,458	50.512554%	1.07992356
Female	165	53.225806%	49,434	49.487446%	0.92976415

In this example, it shows that there was a slightly smaller portion of males in the sample compared to the actual portion in Lenawee County. The weighting for males was calculated by taking the percent of males in Lenawee County (based on Census information) (50.512554%) and dividing that by the percent found in the 2011 Lenawee County sample (46.774194%) [ $50.512554 / 46.774194 =$  weighting of 1.07992356 for males]. The same was done for females [ $49.487446 / 53.225806 =$  weighting of 0.92976415 for females]. Thus males' responses are weighted heavier by a factor of 1.07992356 and females' responses weighted heavier by a factor of 0.92976415.

## Methods for Weighting the 2011 Lenawee County Assessment Data

This same thing was done for each of the 18 specific categories as described above. For example, a respondent who was female, White, in the age category 45-54, and with a household income in the \$50-\$75k category would have an individual weighting of 1.181755 [ $0.9297641$  (weight for females)  $\times$   $0.9796282$  (weight for White)  $\times$   $1.2006936$  (weight for age 45-54)  $\times$   $1.0805906$  (weight for income \$50-\$75k)]. Thus, each individual in the 2011 Lenawee County sample has their own individual weighting based on their combination of age, race, sex, and income. See next page for each specific weighting and the numbers from which they were calculated.

Multiple sets of weightings were created and used in the statistical software package (SPSS 14.0) when calculating frequencies. For analyses done for the entire sample and analyses done based on subgroups other than age, race, sex, or income – the weightings that were calculated based on the product of the four weighting variables (age, race, sex, income) for each individual. When analyses were done comparing groups within one of the four weighting variables (e.g., smoking status by race/ethnicity), that specific variable was not used in the weighting score that was applied in the software package. In the example smoking status by race, the weighting score that was applied during analysis included only age, sex, and income. Thus a total of eight weighting scores for each individual were created and applied depending on the analysis conducted. The weight categories were as follows:

- 1) **Total weight** (product of 4 weights) – for all analyses that did not separate age, race, sex, or income.
- 2) **Weight without sex** (product of age, race, and income weights) – used when analyzing by sex.
- 3) **Weight without age** (product of sex, race, and income weights) – used when analyzing by age.
- 4) **Weight without race** (product of age, sex, and income weights) – used when analyzing by race.
- 5) **Weight without income** (product of age, race, and sex weights) – used when analyzing by income.
- 6) **Weight without sex or age** (product of race and income weights) – used when analyzing by sex and age.
- 7) **Weight without sex or race** (product of age and income weights) – used when analyzing by sex and race.
- 8) **Weight without sex or income** (product of age and race weights) – used when analyzing by sex and income.

## Methods for Weighting the 2011 Lenawee County Assessment Data

Category	Lenawee Sample	%	2010 Census *	%		Weighting Value
<b>Sex:</b>						
Male	145	46.774194%	50,458	50.512554%		1.079924
Female	165	53.225806%	49,434	49.487446%		0.929764
<b>Age:</b>						
20-24	79	25.816993%	3,324	4.706749%		0.182312
25-34	19	6.209150%	11,036	15.626858%		2.516747
35-44	24	7.843137%	12,985	18.386622%		2.344294
45-54	55	17.973856%	15,241	21.581094%		1.200694
55-59	32	10.457516%	7,189	10.179547%		0.973419
60-64	29	9.477124%	6,267	8.874005%		0.936361
65-74	55	17.973856%	7,847	11.111268%		0.618191
75-84	13	4.248366%	4,767	6.750021%		1.588851
85+	0	0.000000%	1,966	2.783835%		1.000000
<b>Race:</b>						
White	292	94.193548%	92,175	92.274657%		0.979628
Other	18	5.806452%	7,717	7.725343%		1.330476
<b>Household Income</b>						
Less than \$10,000	20	7.299270%	2,410	6.370437%		0.872750
\$10k-\$15k	14	5.109489%	2,154	5.693743%		1.114347
\$15k-\$25k	37	13.503650%	4,029	10.649996%		0.788675
\$25k-\$35k	52	18.978102%	4,229	11.178663%		0.589030
\$35k-\$50	38	13.868613%	6,634	17.535883%		1.264429
\$50k-\$75k	56	20.437956%	8,355	22.085063%		1.080591
\$75k or more	57	20.802920%	10,020	26.486215%		1.273197
<p>Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Lenawee County in each subcategory by the proportion of the sample in the Lenawee County survey for that same category.</p> <p>* Lenawee County population figures taken from the 2010 Lenawee County Census.</p>						

## **Lenawee County Schools**

The following schools were randomly chosen and agreed to participate in the 2011 Lenawee County Health Assessment:

### **Addison Community**

Addison Junior/Senior High School

### **Adrian City**

Adrian Middle School 5/6

Adrian Middle School 7/8

Adrian High School

### **Blissfield Community**

Blissfield Middle School

Blissfield High School

### **Britton-Deerfield**

Britton-Deerfield High School

### **Clinton Community**

Clinton Middle School

Clinton High School

### **Hudson Area**

Hudson Middle School

Hudson High School

### **Madison Local**

Madison Middle School

Madison High School

### **Morenci Local**

Morenci Middle School

Morenci High School

### **Onsted Local**

Onsted Middle School

Onsted High School

### **Sand Creek Community**

Sand Creek High School

### **Tecumseh Public**

Tecumseh Middle School

Tecumseh High School

## Lenawee County Sample Demographic Profile\*

Variable	2011 Survey Sample	Lenawee County Census 2010	Michigan Census 2010
<b>Age</b>			
20-29	8.4%	11.6%	12.7%
30-39	18.2%	11.9%	12.0%
40-49	22.4%	14.2%	14.3%
50-59	21.4%	15.0%	14.7%
60 plus	23.5%	20.9%	19.5%
<b>Race / Ethnicity</b>			
White	87.4%	92.3%	78.9%
Black or African American	0.9%	2.5%	14.2%
American Indian and Alaska Native	0.3%	0.5%	0.6%
Asian	0%	0.5%	2.4%
Other	6.2%	2.0%	1.5%
Hispanic Origin (may be of any race)	5.2%	7.6%	4.4%
<b>Marital Status†</b>			
Married Couple	68.3%	50.8%	48.9%
Never been married/member of an unmarried couple	15.2%	28.6%	31.9%
Divorced/Separated	10.0%	14.1%	13.0%
Widowed	1.9%	6.5%	1.5%
<b>Education†</b>			
Less than High School Diploma	5.9%	5.4%	7.8%
High School Diploma	21.5%	38.5%	30.9%
Some college/ College graduate	67.8%	52.3%	57.8%
<b>Income</b>			
\$14,999 and less	7.9%	11.7%	14.6%
\$15,000 to \$24,999	8.7%	12.4%	12.9%
\$25,000 to \$49,999	22.2%	31.0%	26.8%
\$50,000 to \$74,999	18.4%	21.6%	18.9%
\$75,000 or more	30.5%	23.3%	26.8%

\* The percents reported are the actual percent within each category who responded to the survey. The data contained within the report however are based on weighted data (weighted by age, race, sex, and income). Percents may not add to 100% due to missing data (non-responses).

† The Michigan and Lenawee County Census percentages are slightly different than the percent who responded to the survey. Marital status is calculated for those individuals 15 years and older. Education is calculated for those 25 years and older.

## Demographics

### Lenawee County Population by Age Groups and Gender U.S. Census 2010

Category	Total	Males	Females
<b>Lenawee County</b>	<b>99,892</b>	<b>50,458</b>	<b>49,434</b>
<b>0-4 years</b>	<b>5,689</b>	<b>2,958</b>	<b>2,731</b>
1-4 years	4,619	2,398	2,221
< 1 year	1,070	560	510
1-2 years	2,216	1,142	1,074
3-4 years	2,403	1,256	1,147
<b>5-9 years</b>	<b>6,227</b>	<b>3,182</b>	<b>3,045</b>
5-6 years	2,413	1,228	1,185
7-9 years	3,814	1,954	1,860
<b>10-14 years</b>	<b>6,785</b>	<b>3,458</b>	<b>3,327</b>
10-12 years	4,065	2,116	1,949
13-14 years	2,720	1,342	1,378
12-18 years	10,163	5,326	4,837
<b>15-19 years</b>	<b>7,676</b>	<b>4,088</b>	<b>3,588</b>
15-17 years	4,427	2,370	2,057
18-19 years	3,249	1,718	1,531
20-24 years	6217	3324	2893
25-29 years	5,391	2,935	2,456
30-34 years	5,645	3,016	2,629
35-39 years	6,248	3,240	3,008
40-44 years	6,737	3,513	3,224
45-49 years	7,468	3,787	3,681
50-54 years	7,773	3,989	3,784
55-59 years	7,189	3,557	3,632
60-64 years	6,267	3,100	3,167
65-69 years	4,605	2,212	2,393
70-74 years	3,242	1,541	1,701
75-79 years	2,592	1,094	1,498
80-84 years	2,175	840	1,335
85-89 years	1,331	459	872
90-94 years	502	140	362
95-99 years	116	23	93
100-104 years	15	2	13
105-109 years	1	0	1
110 years & over	1	0	1
<b>Total 85 years and over</b>	<b>1,966</b>	<b>624</b>	<b>1,342</b>
<b>Total 65 years and over</b>	<b>14,580</b>	<b>6,311</b>	<b>8,269</b>
<b>Total 19 years and over</b>	<b>75,137</b>	<b>37,602</b>	<b>37,535</b>

## Lenawee County Profile

### *General Demographic Characteristics*

*(Source: U.S. Census Bureau 2010)*

#### ***Total Population***

2010 Total Population	99,892
2000 Total Population	98,890
Population, Percent Change, 2000-2010	1.0%

#### **Largest City-Adrian**

2010 Total Population	21,133	100%
2000 Total Population	21,574	100%

#### ***Population By Race/Ethnicity***

Total Population	99,892	100%
White Alone	92,174	92.3%
Hispanic or Latino (of any race)	7,614	7.6%
Two or more races	2,192	2.2%
Asian	519	0.5%
African American	2,539	2.5%
Other	1,967	2.0%
American Indian and Alaska Native	475	0.5%

#### ***Population By Age***

Under 5 years	5,689	5.7%
5 to 17 years	17,439	17.5%
18 to 24 years	9,466	9.5%
25 to 44 years	24,021	24.0%
45 to 64 years	28,697	28.7%
65 years and more	14,580	14.6%
<b>Median age (years)</b>	40.0	

#### ***Household By Type***

Total Households	36,341	100%
Family Households (families)	24,732	68.1%
With own children <18 years	10,701	29.4%
Married-Couple Family Households	18,496	50.9%
With own children <18 years	6,584	18.1%
Female Householder, No Husband Present	4,617	12.7%
With own children <18 years	3,112	8.6%
Non-family Households	11,609	31.9%
Householder living alone	9,802	27.0%
Householder 65 years and >	3,521	9.7%
Households With Individuals < 18 years	11,621	32.0%
Households With Individuals 65 years and >	9,936	27.3%

Average Household Size	2.63 people
Average Family Size	3.19 people

## Lenawee County Profile

### *General Demographic Characteristics, Continued*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

Median Value of Owner-Occupied Units	\$118,000
Median Monthly Owner Costs (With Mortgage)	\$1,205
Median Monthly Owner Costs (Not Mortgaged)	\$408
Median Gross Rent for Renter-Occupied Units	\$638
Median Rooms Per Housing Unit	6.0

### *Selected Social Characteristics*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

#### ***School Enrollment***

Population 3 Years and Over Enrolled In School	25,075	100%
Nursery & Preschool	985	3.9%
Kindergarten	1,462	5.8%
Elementary School (Grades 1-8)	10,628	42.4%
High School (Grades 9-12)	5,696	22.7%
College or Graduate School	6,304	25.1%

#### ***Educational Attainment***

Population 25 Years and Over	67,668	100%
< 9 <sup>th</sup> Grade Education	2,626	3.9%
9 <sup>th</sup> to 12 <sup>th</sup> Grade, No Diploma	3,658	5.4%
High School Graduate (Includes Equivalency)	26,055	38.5%
Some College, No Degree	16,299	24.1%
Associate Degree	5,457	8.1%
Bachelor's Degree	8,592	12.7%
Graduate Or Professional Degree	4,981	7.4%

Percent High School Graduate or Higher	90.7%
Percent Bachelor's Degree or Higher	20.1%



## Lenawee County Profile

### *Selected Social Characteristics, Continued*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

#### ***Marital Status***

Population 15 Years and Over	80,552	100%
Never Married	23,057	28.6%
Now Married, Excluding Separated	40,951	50.8%
Separated	986	1.2%
Widowed	5,194	6.4%
Female	4,395	5.4%
Divorced	10,364	12.8%
Female	5,332	6.6%

#### ***Veteran Status***

Civilian Veterans	8,068	10.5%
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#### ***Disability Status of the Civilian Non-institutionalized Population***

Total Civilian Noninstitutionalized Population	97,267	100%
With a Disability	13,035	13.4%
Under 18 years	23,190	100%
With a Disability	1,335	5.8%
18 to 64 years	59,635	100%
With a Disability	6,435	10.8%
65 Years and Over	14,442	100%
With a Disability	5,265	36.5%

### *Selected Economic Characteristics*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

#### ***Employment Status***

Population 16 Years and Over	79,217	100%
In Labor Force	49,543	62.5%
Not In Labor Force	29,674	37.5%
Females 16 Years and Over	39,537	100%
In Labor Force	23,752	60.1%
Population Living With Own Children <6 Years	6,792	100%
All Parents In Family In Labor Force	4,916	72.4%

## Lenawee County Profile

### *Selected Economic Characteristics, Continued*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

#### **Occupations**

Employed Civilian Population 16 Years and Over	42,432	100%
Management, Professional, and Related Occupations	13,338	31.4%
Production, Transportation, and Material Moving Occupation	6,961	16.4%
Sales and Office Occupations	9,407	22.2%
Service Occupations	9,123	21.5%
Natural Resources, Construction, and Maintenance Occupations	3,603	8.5%

#### ***Leading Industries***

Employed Civilian Population 16 Years and Over	42,432	100%
Manufacturing	7,156	16.9%
Educational services and health care and social assistance	11,396	26.9%
Trade (retail and wholesale)	5,074	12.0%
Arts, entertainment, recreation, accommodation, and food services	3,626	8.5%
Professional, scientific, management, administrative, and waste management services	2,599	6.1%
Construction	1,692	4.0%
Finance, insurance, real estate and rental and leasing	1,661	3.9%
Other services (except public administration)	3,133	7.4%
Transportation and warehousing, and utilities	1,885	4.4%
Public administration	1,698	4.0%
Agriculture, forestry, fishing and hunting, and mining	1,157	2.7%
Information	838	2.0%

#### ***Class of Worker***

Employed Civilian Population 16 Years and Over	42,432	100%
Private Wage and Salary Workers	34,934	82.3%
Government Workers	4,983	11.7%
Self-Employed Workers in Own Not Incorporated Business	2,474	5.8%
Unpaid Family Workers	41	0.1%

#### ***Median Earnings***

Male, Full-time, Year-Round Workers	\$45,334
Female, Full-time, Year-Round Workers	\$33,720

## Lenawee County Profile

### *Selected Economic Characteristics, Continued*

*(Source: U.S. Census Bureau, American Community Survey 2010 - 1 Year Estimates)*

#### *Income In 2010 (Inflation-Adjusted Dollars)*

Households	36,341	100%
< \$10,000	2,331	6.4%
\$10,000 to \$14,999	1,922	5.3%
\$15,000 to \$24,999	4,498	12.4%
\$25,000 to \$34,999	4,887	13.4%
\$35,000 to \$49,999	6,380	17.6%
\$50,000 to \$74,999	7,841	21.6%
\$75,000 to \$99,999	4,799	13.2%
\$100,000 to \$149,999	2,764	7.6%
\$150,000 or \$199,999	449	1.2%
\$200,000 or more	470	1.3%

#### *Median Household Income*

***\$45,563***

#### *Income In 2010 (Inflation-Adjusted Dollars)*

Families	24,732	100%
< \$10,000	971	3.6%
\$10,000 to \$14,999	598	2.2%
\$15,000 to \$24,999	2,361	6.5%
\$25,000 to \$34,999	3,595	9.8%
\$35,000 to \$49,999	4,163	17.0%
\$50,000 to \$74,999	5,622	31.0%
\$75,000 to \$99,999	4,004	13.2%
\$100,000 to \$149,999	2,628	11.5%
\$150,000 or \$199,999	392	3.0%
\$200,000 or more	398	2.3%

#### *Median Household Income*

***\$53,171***

#### *Per Capita Income In 2010*

***\$20,698***

#### *Poverty Status in 2010*

#### *% Below Poverty Level*

Families	9.9%
Individuals	14.4%

# Lenawee County Profile

*(Source: U.S. Bureau of Economic Analysis)*

## *Bureau of Economic Analysis (BEA) Per Capita Personal Income Figures*

	Income	Rank of Michigan counties
BEA Per Capita Personal Income 2009	\$29,572	40 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2008	\$30,459	34 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2007	\$29,714	31 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2006	\$29,263	27 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 2000	\$25,796	25 <sup>th</sup> of 88 counties
BEA Per Capita Personal Income 1999	\$24,510	27 <sup>th</sup> of 88 counties

(BEA PCPI figures are greater than Census figures for comparable years due to deductions for retirement, Medicaid, Medicare payments, and the value of food stamps, among other things)

## Employment Statistics

Category	Lenawee	Michigan
Labor Force	42,666	4,594,000
Employed	38,472	4,146,000
Unemployed	4,194	447,000
Unemployment Rate* in January 2012	9.8	9.7
Unemployment Rate* in December 2011	9.3	8.9
Unemployment Rate* in January 2011	12.9	11.6

*\*Rate equals unemployment divided by labor force.*

*(Source: Michigan Labor Market Information, January 2012)*

## Lenawee County Profile

### Estimated Poverty Status in 2010

Age Groups	Number	90% Confidence Interval	Percent	90% Confidence Interval
<b>Lenawee County</b>				
All ages in poverty	13,445	11,442 to 15,448	14.2%	12.1 to 16.3
Ages 0-17 in poverty	4,330	3,481 to 5,179	19.3%	15.5 to 23.1
Ages 5-17 in families in poverty	2,821	2,233 to 3,409	16.9%	13.4 to 20.4
Median household income	\$45,887	43,663 to 48,111		
<b>Michigan</b>				
All ages in poverty	1,614,110	1,591,644 to 1,636,576	16.7%	16.5 to 16.9
Ages 0-17 in poverty	537,003	524,201 to 549,805	23.4%	22.8 to 24.0
Ages 5-17 in families in poverty	360,763	349,617 to 371,909	21.1%	20.5 to 21.9
Median household income	\$ 45,354	45,052 to 45,656		
<b>United States</b>				
All ages in poverty	46,215,956	45,975,650 to 46,456,262	15.3%	15.2 to 15.4
Ages 0-17 in poverty	15,749,129	15,621,395 to 15,876,863	21.6%	21.4 to 21.8
Ages 5-17 in families in poverty	10,484,513	10,394,015 to 10,575,011	19.8%	19.6 to 20.0
Median household income	\$ 50,046	49,982 to 50,110		

(Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, <http://www.census.gov/hhes/www/saipe/county.html>)

### Federal Poverty Thresholds in 2010 by Size of Family and Number of Related Children Under 18 Years of Age

Size of Family Unit	No Children	One Child	Two Children	Three Children	Four Children	Five Children
1 Person <65 years	\$11,344					
1 Person 65 and >	\$10,458					
2 people Householder < 65 years	\$14,602	\$15,030				
2 People Householder 65 and >	\$13,180	\$14,973				
3 People	\$17,057	\$17,552	\$17,568			
4 People	\$22,491	\$22,859	\$22,113	\$22,190		
5 People	\$27,123	\$27,518	\$26,675	\$26,023	\$25,625	
6 People	\$31,197	\$31,320	\$30,675	\$30,056	\$29,137	\$28,591
7 People	\$35,896	\$36,120	\$35,347	\$34,809	\$33,805	\$32,635
8 People	\$40,146	\$40,501	\$39,772	\$39,133	\$38,227	\$37,076
9 People or >	\$48,293	\$48,527	\$47,882	\$47,340	\$46,451	\$45,227

(Source: U. S. Census Bureau, Poverty Thresholds 2010, <http://www.census.gov/hhes/www/poverty/data/inctpovhlth/2010/tables.html>)

## Questionnaire Information

Four survey instruments were designed and pilot tested for the Lenawee County Health Assessment: one for adults ages 19 and over, one for adolescents ages 12 to 18, one for parents of children ages 0-5, and one for parents of children ages 6-11. These survey instruments are available for download on ProMedica Bixby Hospital's website at: [www.promedica.org/bixby](http://www.promedica.org/bixby).