



Shelby County Community Needs Assessment

Shelby County, Ohio
2013

Prepared by:
Center for Urban & Public Affairs
Wright State University
3640 Colonel Glenn Hwy.
Dayton, OH 45435
(937) 775-2941

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Community support organizations and health care providers in Shelby County have been committed to understanding, analyzing, and assessing the social and health needs of the community. A group of community leaders has been guiding and developing the community needs assessment for Shelby County for over a year, with Wright State University providing research support. Deep appreciation is expressed to these community leaders and their staff members:

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In turn, the community leaders would like to express their appreciation to 30 additional community members who completed phone interviews which formed the foundation of this community needs assessment. Besides having access to information from multiple existing sources, researchers relied upon data collected from the first-hand experience of 400 adult residents and 1,914 8th, 9th, and 10th graders in Shelby County. Their contributions were essential to this assessment.

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Introduction

In Shelby County, Wilson Memorial Hospital, the Shelby County Family and Children First Council, the United Way, the Tri-County Board of Recovery and Mental Health Services, and the Sidney-Shelby County Health Department, among others, have invested resources and significant time in gathering information to inform this Community Needs Assessment.

After a year of research and evaluation, the results of this assessment are complete. The assessment identifies key issues within the Shelby County community in the areas of economy, family stability, health, mental health, substance abuse, and community image. The research effort included: interviews with community leaders; a demographic analysis; a survey of middle and high school students; and a survey of adult residents. Beyond that, Wilson Memorial collaborated with the Greater Dayton Area Hospital Association and Wright State University to study secondary data such as vital statistics, cancer trends, and hospital and emergency department discharge data.

A community health assessment engages community members and partners to collect and analyze health-related data from many sources. The findings of the assessment inform community decision-making, the prioritization of health problems, and community health improvement planning. To this end, community forums are an important part of the planning process.

How to Read the Report

Data in this report are organized into topic areas which can be located by referring to the table of contents. The report begins with a description of Shelby County, providing a basic overview of the County's geographic location as well as its demographic makeup. After that, a more in-depth analysis of the County's socioeconomic status and health status are presented. The assessment defines the term "health" broadly to include health care access, maternal and infant health, behavioral health, clinical care, diseases, mental health, and substance abuse.

This report compiles primary and secondary data in order to paint a detailed picture of Shelby County. Primary data are data collected from first-hand experience, commonly through surveys. Leadership, adult and youth surveys were conducted. Secondary data on the other hand is reprocessing and reusing information that has already been collected such as institutional records from sources such as hospitals and the Ohio Department of Health. The framework for the report was based on key areas of need identified in a community leadership survey. The report integrates primary and secondary data for the County and also compares the County's status to state and national data where possible, drawing out critical areas of concern. Narrative and graphics are used to highlight key findings; for additional data see the appendices following the report. The report culminates in the presentation of priority needs for Shelby County.

Description of Shelby County

Shelby County is located in West Central Ohio, and lies just north of the Dayton Metropolitan Statistical Area. Nearly three-fourths of the County's land is cropland, another 15% is considered forest, and 8% is pastureland, with 3.4% of land used by residential, commercial, industrial, or transportation uses.¹ In short, Shelby County is rural. The County has one major city, the City of Sidney, which represents over 40% of the County's population.



Interstate 75 cuts the region and the County north to south, which enabled this part of Ohio to be a critical supplier of Detroit's automotive industry, and contributed to the County's manufacturing industry base and dependence. Manufacturing employment contributes 49% of the total wages generated in the County in a given year; and it accounts for 42% of the County's non-agricultural jobs (Economic Modeling Specialists, Inc., 2013).

According to the US Bureau of the Census, there were 49,423 people living in Shelby County in 2010, with 6.9% of the population under 5 years of age, 26.9% under 18 years of age and 13.2% age 65 and over. Compared to the State of Ohio, Shelby County has a higher proportion of children (26.9% versus 23.3%) and a smaller proportion of persons 65 and over (13.2% versus 14.3%).

In comparison to each of its adjacent counties, Shelby County has the youngest population as measured by median age. Shelby County's median age is 37.7, whereas Miami County's is 40.4 as one example. The median age in Ohio is 39.3 and in the U.S. is 37.4.

Comparative to Ohio and the U.S., Shelby County has a higher proportion of children living in married couple households and therefore a smaller percentage of single parent households. The percentage of people living in poverty in the County is less than Ohio's percentage (12% vs. 15%). Yet, there is a substantially smaller percentage of the County's adult population with a college degree (22.6% in the County vs. 33.4% and 37.1% for Ohio and the U.S.).

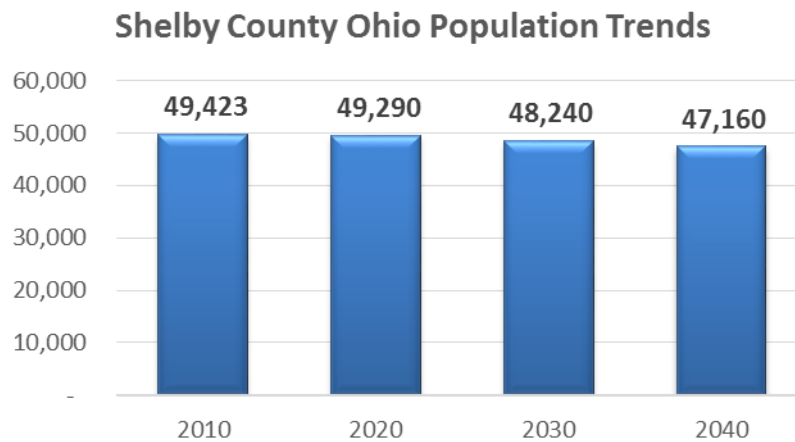
¹ Ohio Development Services Agency, 2012

The County reached its highest population count in 2010, with a population of 49,423; however, the population is expected to decline slightly in the coming decades.

Socioeconomic Status and Demographics

Population

According to the US Bureau of the Census, there were 49,423 people living in Shelby County in 2010, with 6.9% of the population under 5 years of age, 26.9% under 18 years of age and 13.2% age 65 and over. Compared to the State of Ohio, Shelby County has a higher proportion of children (26.9% versus 23.3%) and a smaller proportion of persons 65 and over (13.2% versus 14.3%). The County reached its highest population count in 2010, with a population of 49,423; however, the population is expected to decline slightly in the coming decades.



Source: Ohio Development Services Agency, 2012

Figure 1: Shelby County Population, 2010-2040

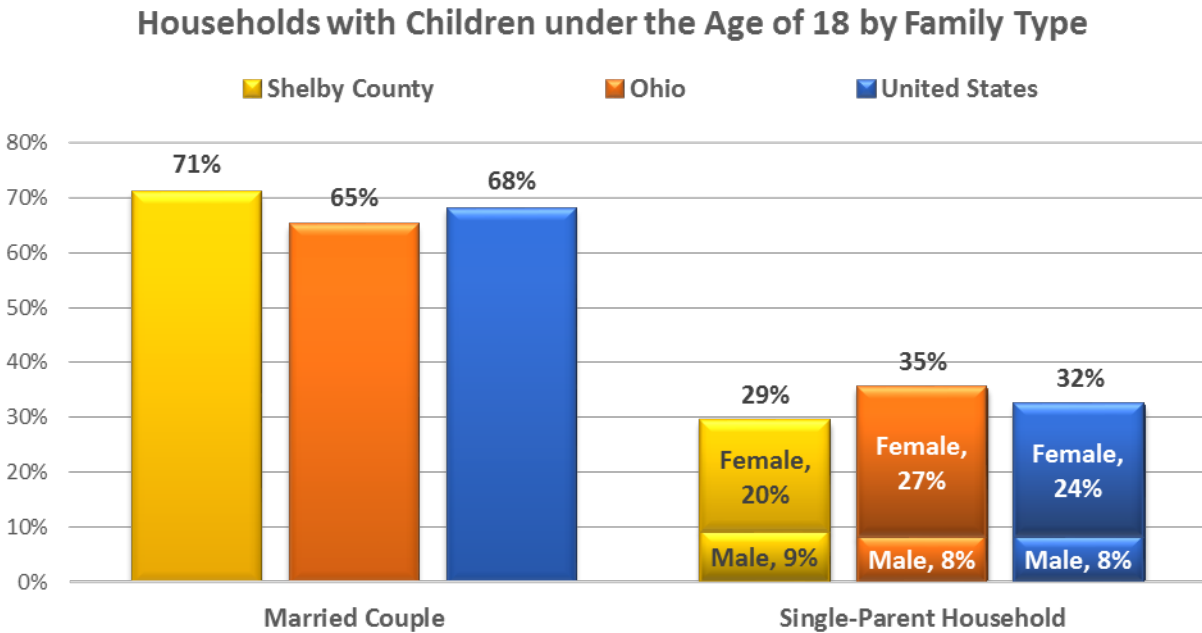
Households with Children

The U.S. Census provides information on three types of family households: married-couple families, male householder families and female householder families. A male householder family is one in which a wife is not present and a female householder family is one in which a husband is not present.

Of the 18,467 households in Shelby County in 2010, 6,026 (33%) were family households with children under the age of 18. In 2010, over 70 percent (70.8%) of the County's households with Children under the age 18 are married couple households, which is higher than the State (64.8%) and the nation (67.9%).

The remaining 29 percent of households with children in Shelby County are single parent households. This statistic is lower than the State (35.2%) and the nation (32.1%). Of the single parent households in Shelby County, 68 percent (1,188 households) are female householders

and 32 percent (571 households) are male householders. Both of these figures are somewhat comparable to the State and national rates.

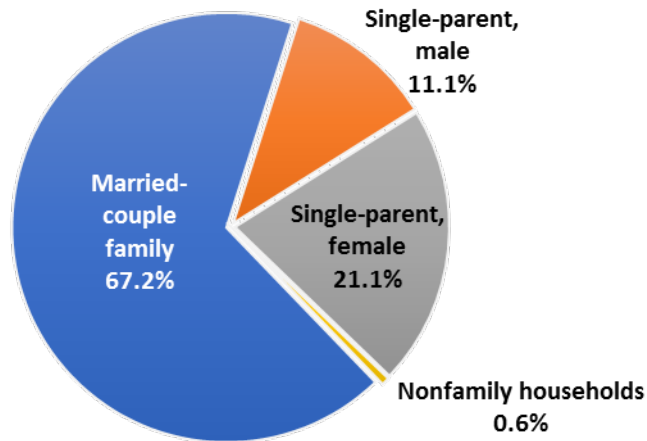


Source: U.S. Census 2010
 Figure 2: Households with Children, 2010

Children Under 18 Years of Age

The Census Bureau’s American Community Survey estimates that there are 13,562 children under the age of 18 in Shelby County. An estimated 13,487 (99.4%) of these children are in family households. The remaining 75 children are in nonfamily households, which are defined as a group of unrelated people living together. Over 67 percent (67.2%) of children under the age of 18 are in married couple households. Slightly less than one-third (32.2%) of children are in single parent households, the majority of which are female householder families (21.1%).

Percentage of Children by Household Type

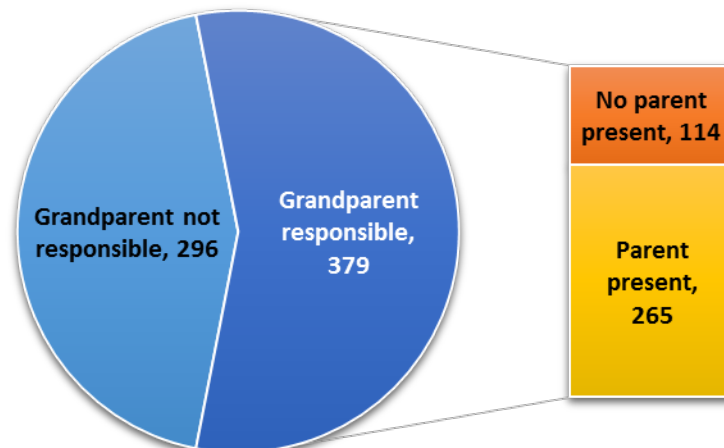


Source: U.S. Census 2010, 2006-2010 American Community Survey
 Figure 3: Percentage of Children by Household Type, 2010

Grandparent Householders

An estimated 675 children in Shelby County are living with a grandparent. More than half (379 children, or 56.1%) of these children are living with a grandparent who is responsible for them, while the remainder (296 children, or 43.9%) are living with a grandparent who is not responsible for them. Of the 379 children who are living with a grandparent who has parental responsibilities, 265 of them (69.9%) have a parent present while the remaining 114 children (30.1%) do not have a parent present.

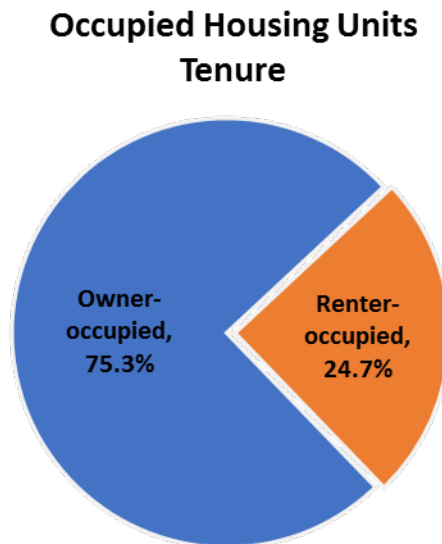
Grandparent households with responsibility for own grandchildren under 18 years of age



Source: U.S. Census 2010
 Figure 4: Grandparents Households, 2010

Housing

According to Census data, there were 18,488 occupied housing units in Shelby County in 2010. Three-fourths of these units were owner occupied (75.3%), with an average household size of 2.69. The remaining 24.7 percent of housing units were renter-occupied, with an average household size of 2.46.



Source: American Community Survey, 2006-2010

Figure 5: Occupied Housing Units, 2010

Typical qualifying ratios applied by mortgage lenders indicate that no more than 28% of a borrower's gross monthly income should be spent on the mortgage payment including principal, interest, property taxes and insurance. In Shelby County, of the 13,918 owner occupied housing units, 1,218 are occupied by owners having a household income of \$20,000 or less. In 69.5% of those cases, 30% or more of the household income goes toward the mortgage housing costs. There are 4,570 renter occupied housing units in Shelby County, and 1,402 are occupied by renters having a household income of \$20,000 or less. Nearly 90% of "low-income" renters pay 30% or more on rent.

Poverty

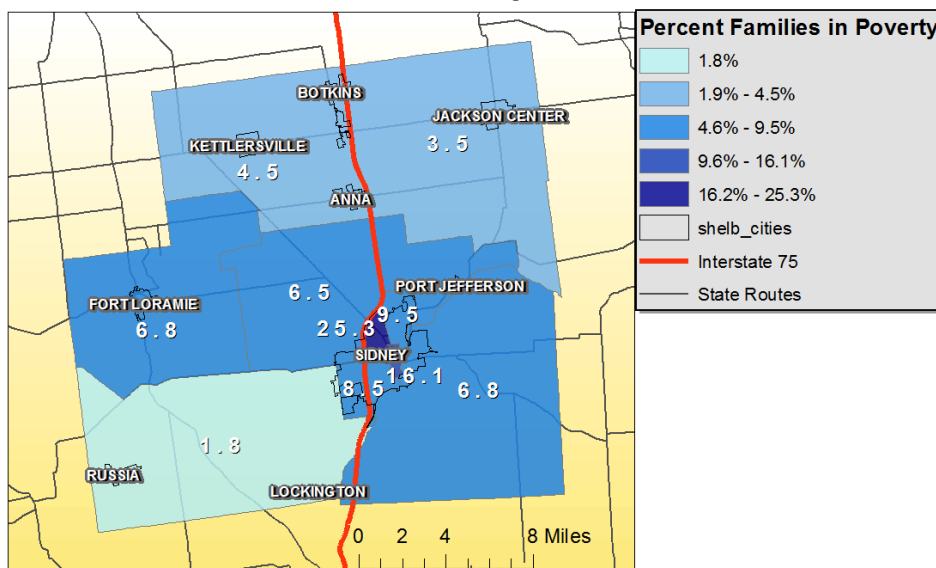
According to the American Community Survey for 2006-2010, about 12% of Shelby County's population is below the poverty level versus 14% for the State overall. The rate for Shelby County was virtually unchanged in 2011. The percentage of children living in poverty in the County is also lower than the overall State percentage; in Shelby County, 18% of children under the age of 18 live in poverty, while the rate is 20% for the State. On the other hand, the percentage of people age 65 and over living in poverty is higher in the County when compared to the State.

Table 1: Poverty, 2010

	Ohio	Shelby County	
	2011	2011	2010
Related children <18 years	20.8%	17.1%	18.1%
18-64 years (people)	13.7%	10.4%	10.0%
65 years and over (people)	8.1%	8.8%	7.5%
All People	14.8%	12.0%	11.9%

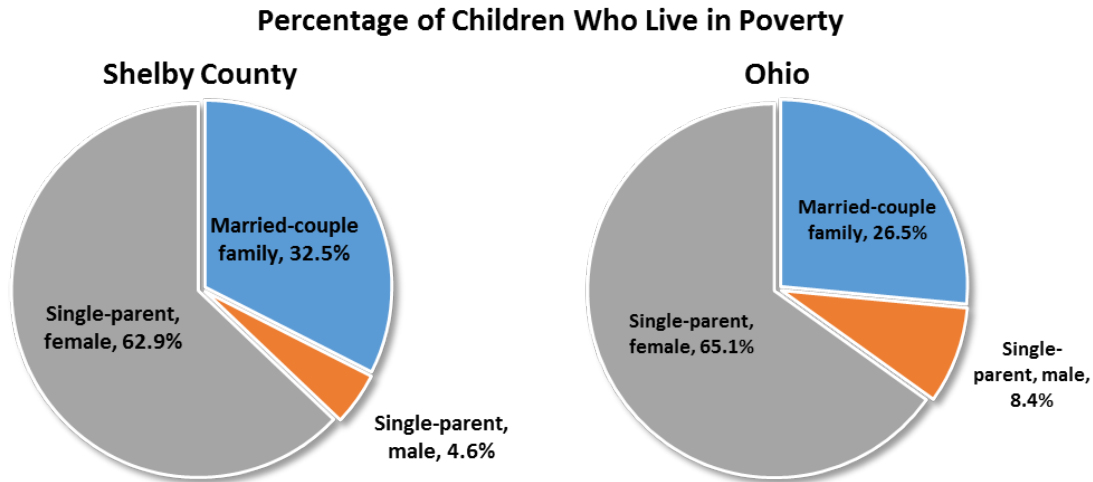
Source: American Community Survey, 2006-2010 and 2007-2011

The percentage of families in poverty is most concentrated in the City of Sidney where 25.3% of all families live in poverty.



Map 1: Families in Poverty, 2010

Most of the County’s children who live in poverty live in female headed households where no husband is present (1,478 of 2,351 children or 62.9%). Two-thirds of the children living in poverty are 6 to 17 years of age. However, the trend is different in male headed households. Children living in poverty in male households with no wife present are typically ages 5 years or less (99 of 109 children or 90.9%).



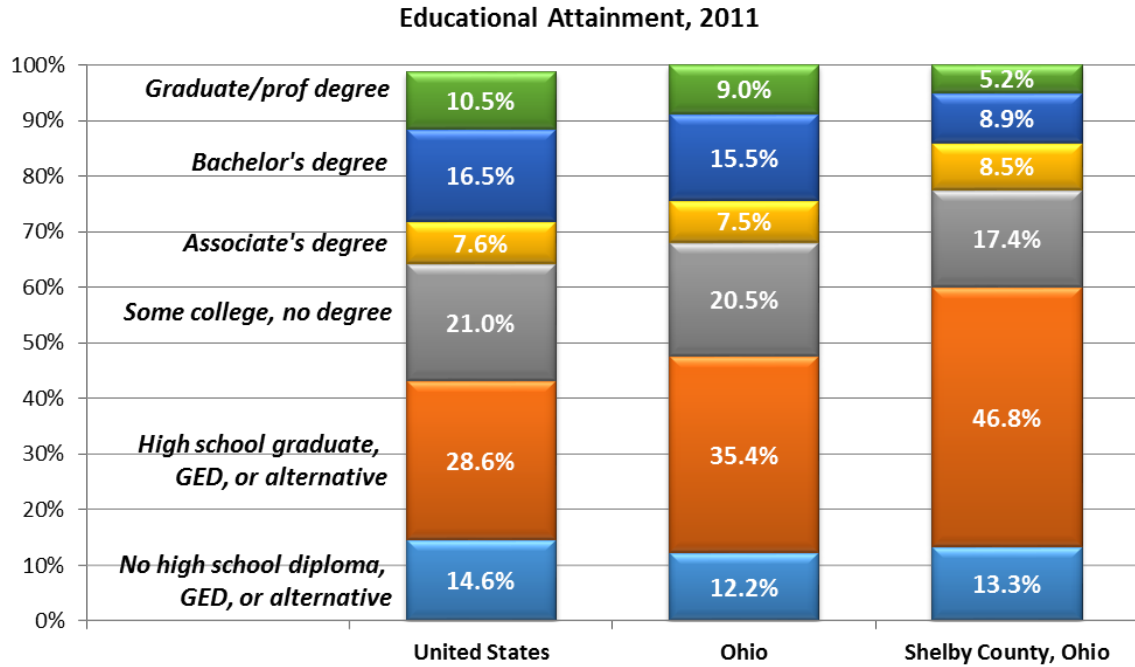
Source: American Community Survey, 2006-2010

Figure 6: Children in Poverty by Family Type, 2010

When studying free and reduced-price lunch data, it appears that much of the County's child poverty is centralized in the City of Sidney where the percentage of elementary school-aged children qualifying for free and reduced price lunches is between 58% and 80%. At the middle and high school levels in Sidney, the number of students qualifying for free and reduced price lunches is 55% and 50%, respectively.

Educational Attainment

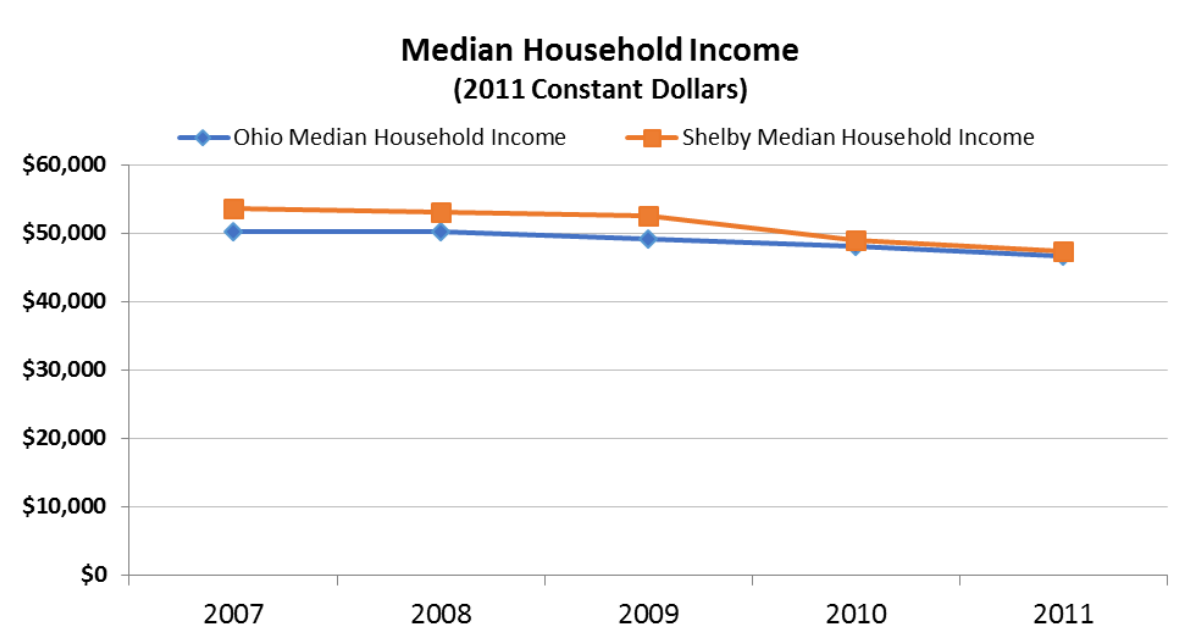
According to the 2007-2011 American Community Survey, there were an estimated 32,081 people ages 25 and older in Shelby County. The largest single category for educational attainment was high school graduate or equivalency (46.8%), followed by some college, no degree (17.4%). Combining bachelor's degree with advanced degrees comprises 14.1%. The percentage of the population with *less than a high school diploma* is 13.3%. Shelby County's percentage of residents obtaining a Bachelor's degree or higher (14.1%) is a little more than half the State (24.5%) and national (27.0%) rates.



Source: American Community Survey, 2007-2011
 Figure 7: Educational Attainment, 2011

Jobs and the Economy

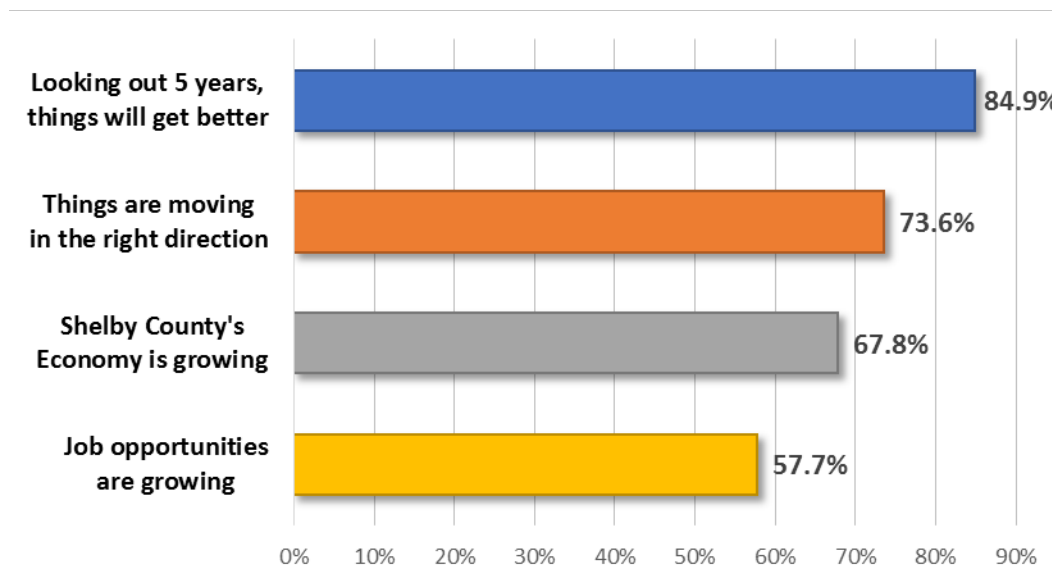
Average Income



Source: U.S. Census
 Figure 8: Median Household Income, 2011

Economic Perceptions

To add the human context behind the economic and demographic trends, Wright State University conducted telephone surveys of 392 County residents. The majority of respondents felt favorably about the County economy in many ways. Two-thirds (67.8%) believe the County's economy is growing; and nearly three-fourths (73.6%) think "things are moving in the right direction." Looking out five years from now, 69.5% of respondents think the County will get a little better, and 15.4% think the County will get much better. One area where respondents were more cautious is in their opinion of job opportunities in the County where 57.7% think job opportunities are growing.

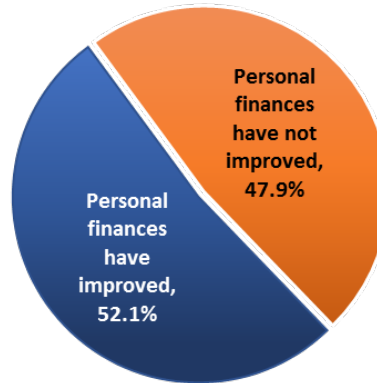


Source: Shelby County Community Needs Assessment, 2012

Figure 9: Economic Perceptions

As regards their personal financial circumstances, 52.1% of respondents reported that their personal finances have improved over the last five years, but for 47.9% personal finances have not improved.

Personal Financial Situation over the Past 5 Years



Source: Shelby County Community Needs Assessment, 2012

Figure 10: Personal Financial Situation over the Past Five Years

A more in-depth analysis shows that the educational attainment level, age, and employment status of the respondent are statistically significantly related to responses pertaining to unimproved personal financial circumstances. Specifically, those with a high school education or less, the middle aged (especially among 55-64 year olds), and those who are retired or those not working outside the home are more likely to have personal financial situations that have not improved over the last five years.

Furthermore, 15.2% of all respondents were “worried or stressed about having enough money to pay the rent or mortgage” *sometimes* in the past 12 months, 9.5% *always* felt worried or stressed and 5.7% *usually* felt that way. Therefore, the combined percentage for sometimes, usually and always worrying about finances is 30.2%. For nearly 9% of respondents, there was a time in the past 12 months that they were not able to pay their mortgage, rent, or utility bill. Half of those respondents received financial help when they faced that challenge. Respondents were also asked how long they could continue to live at their current address and standard of living if they lost all current sources of household income, and 7.8% said they could do so for less than one month.

Detailed analysis identified the most vulnerable populations for being able to sustain themselves if they lost their household income. As might be expected, younger respondents, female respondents, those with less than a high school education, and those not employed are the most vulnerable. Among those who are not working outside the home, nearly 1 in 5 could remain in their homes less than a month if they lost their income and an additional 43% of those not working could maintain their home only 1 to 2 months.

Employment

The County is expected to retain a relatively flat total number of jobs from 2012 to 2021, according to Economic Modeling Specialists, Inc. Nearly all job openings are expected to come

from replacing workers who retire or leave for other reasons—a growth of 550 new jobs is forecasted to 2021, but 7,886 job openings are forecasted due to replacement needs.

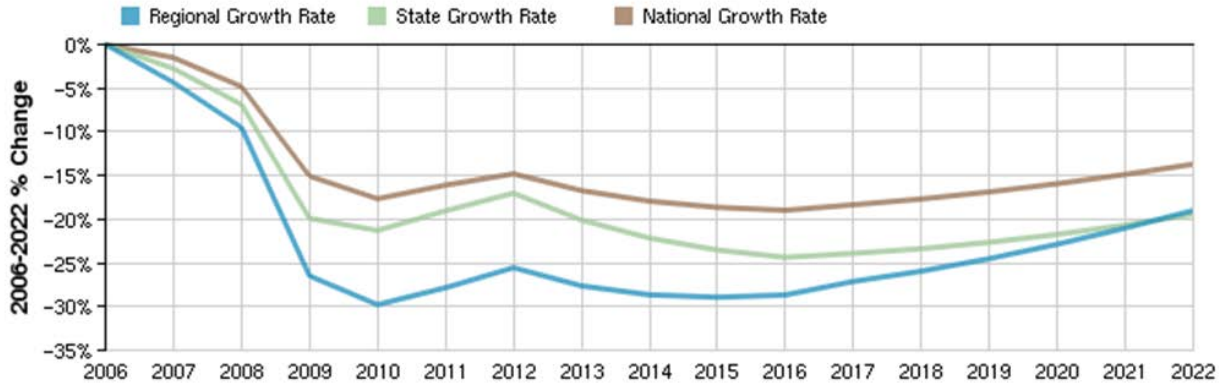
Occupations expected to gain employment are in sales and related occupations, where 400 jobs are forecasted to be added. Another 398 jobs will be added in construction and extraction occupations. Conversely, 926 jobs are expected to be lost in production occupations (i.e., manufacturing jobs).

Table 2: Forecasted Job Growth by Occupation, 2012-2021

Selected Occupations	2012 Jobs	2021 Jobs	Change	Openings	Annual Openings	2011 Median Hourly Wage
Production Occupations	6,828	5,902	-926	1,337	149	\$16.88
Sales and Related Occupations	3,059	3,459	400	1,156	128	\$14.59
Office and Administrative Support	3,478	3,618	140	930	103	\$14.52
Transportation and Material Moving	3,080	3,005	-75	739	82	\$14.15
Construction and Extraction	1,509	1,907	398	672	75	\$17.44
Food Preparation and Serving Related	1,617	1,658	41	579	64	\$8.62
Management Occupations	2,020	1,974	-46	458	51	\$23.72
Business and Financial Operations	934	1,143	209	377	42	\$22.57
Installation, Maintenance, and Repair	1,430	1,409	-21	296	33	\$19.01
Personal Care and Service	730	860	130	287	32	\$9.60

Source: Economic Modeling Specialists, Inc., 2012

The manufacturing industry in Shelby County accounts for 42% of jobs and 49% of total wages in 2013. Ten-year forecasts of manufacturing employment indicate an upward climb beginning in 2015. But the projected number of manufacturing jobs is not expected to reach pre-recession levels.



Source: Economic Modeling Specialists, Inc., 2012

Figure 11: Total Job Growth, 2006-2022

The top ten employers in Shelby County indicate the importance of the manufacturing sector to the economy.

Table 3: Top Ten Employers in Shelby County

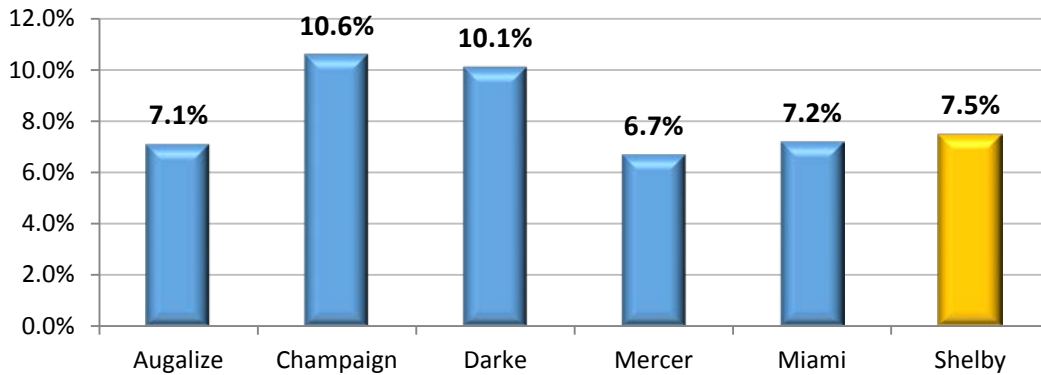
Rank	# Employees	Name
1	2600	Honda of America Manufacturing, Inc.
2	1575	Emerson Climate Technologies, Inc.
3	850	Plastipak Packaging, Inc.
4	734	Wilson Memorial Hospital
5	571	NK Parts Industries, Inc.
6	426	Cargill, Inc.
7	357	Freshway Foods
8	335	American Trim, LLC
9	296	Airstream
10	283	Wal-Mart

Source: Western Ohio Development Council, 2012

Unemployment

According to the American Community Survey, the percentage of the population in the labor force who is not employed in Shelby County was 7.5% in 2011. Shelby County’s percentage is presented below in comparison to its neighboring counties, indicating Shelby County falling in the middle of the range.

Percentage of population in the labor force, ages 16 or more, not employed



Source: American Community Survey, 2007-2011

Figure 12: Percentage of the Population in the Labor Force

Household Employment Status

For Shelby County, in three-fourths of all households (74.8%) where there are children under the age of 6, the parent or parents are working versus two-thirds of all such households in the State. Compared to Ohio, Shelby County has a higher percentage of married couple families where both parents are working (47.9% vs. 39.5%).

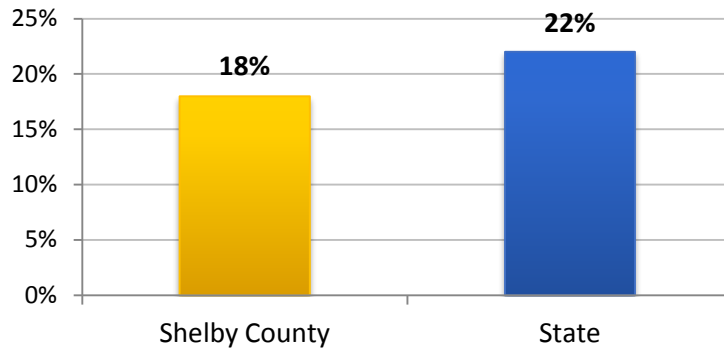
Table 4: Household Employment Status

	Living in Married Couple Family				Living w/Father		Living w/Mother		Total
	Both in Work Force	Father in Work Force	Mother in Work Force	Neither in Work Force	Father in Work Force	Father not in Work Force	Mother in Work Force	Mother not in Work Force	
Shelby	1,995	582	85	98	388	70	735	213	4,166
Ohio	331,880	182,533	16,040	7,790	52,465	6,670	182,218	60,211	839,807
Shelby	47.9%	14.0%	2.0%	2.4%	9.3%	1.7%	17.6%	5.1%	74.8%
Ohio	39.5%	21.7%	1.9%	0.9%	6.2%	0.8%	21.7%	7.2%	67.4%

Source: American Community Survey, 2006-2010

On the other hand, a smaller percentage of Shelby’s female headed households with young children is employed when compared to the State.

Percentage of Employed Female Heads of Household



Source: American Community Survey, 2006-2010

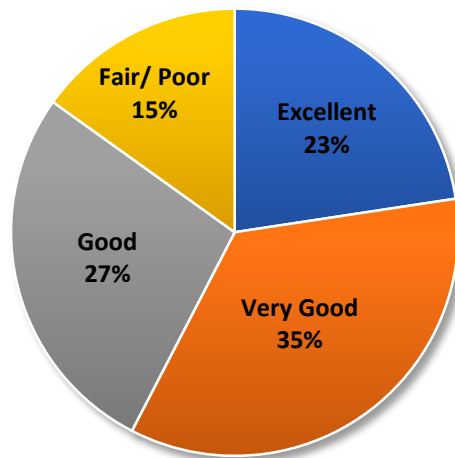
Figure 13: Percentage of Employed Female Heads of Household, 2010

Health and Well-being

Health Status

Overall, 22.6% of respondents rate their health as excellent, another 35.0% rate it as very good, and an additional 27.3% rate it as good. That leaves about 15% who rate their health as fair or poor. The County percentage for fair or poor health is similar to the State and national CDC 2010 percentages of 16.1% and 14.7%, respectively.

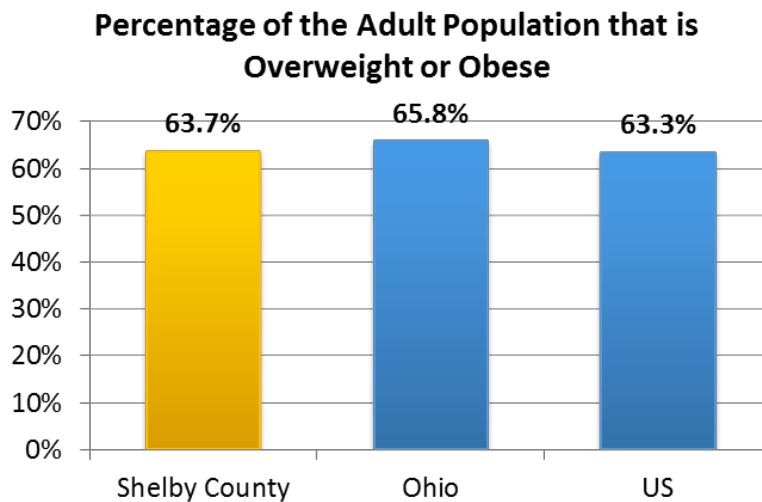
Health Status



Source: Shelby County Community Needs Assessment, 2012

Figure 14: Health Status

Two-thirds, 63.7%, of all Shelby County adults who reported their height and weight are either obese or overweight. This percent is comparable to Ohio (65.8%) and the U.S. (63.3%).



Source: Shelby County Community Needs Assessment, 2012

Figure 15: Percentage of the Adult Population that is Overweight or Obese

Health Care Resources

The County's health care infrastructure is comprised of one hospital, a free health clinic, three nursing homes, a hospice care, an eye institute, and a renal care facility. The chart below presents information about the hospital's capacity.

Table 5: Health Care Resources in Shelby County

Short-term Care	
Special Care	7 beds
Med/Surg-Gen	40 beds
Psych	10 beds
OB Level I	14 beds
<i>Subtotal</i>	<i>71 beds</i>
Newborn Care	
Neo Level I	19 beds
<i>Subtotal</i>	<i>19 beds</i>
Total	90 beds

Compassionate Care of Shelby County is a faith-based clinic that provides free health care services to uninsured and under-insured residents of Shelby County, Ohio. The clinic is staffed with licensed professionals who volunteer their time to support the health of the community. Their services include:

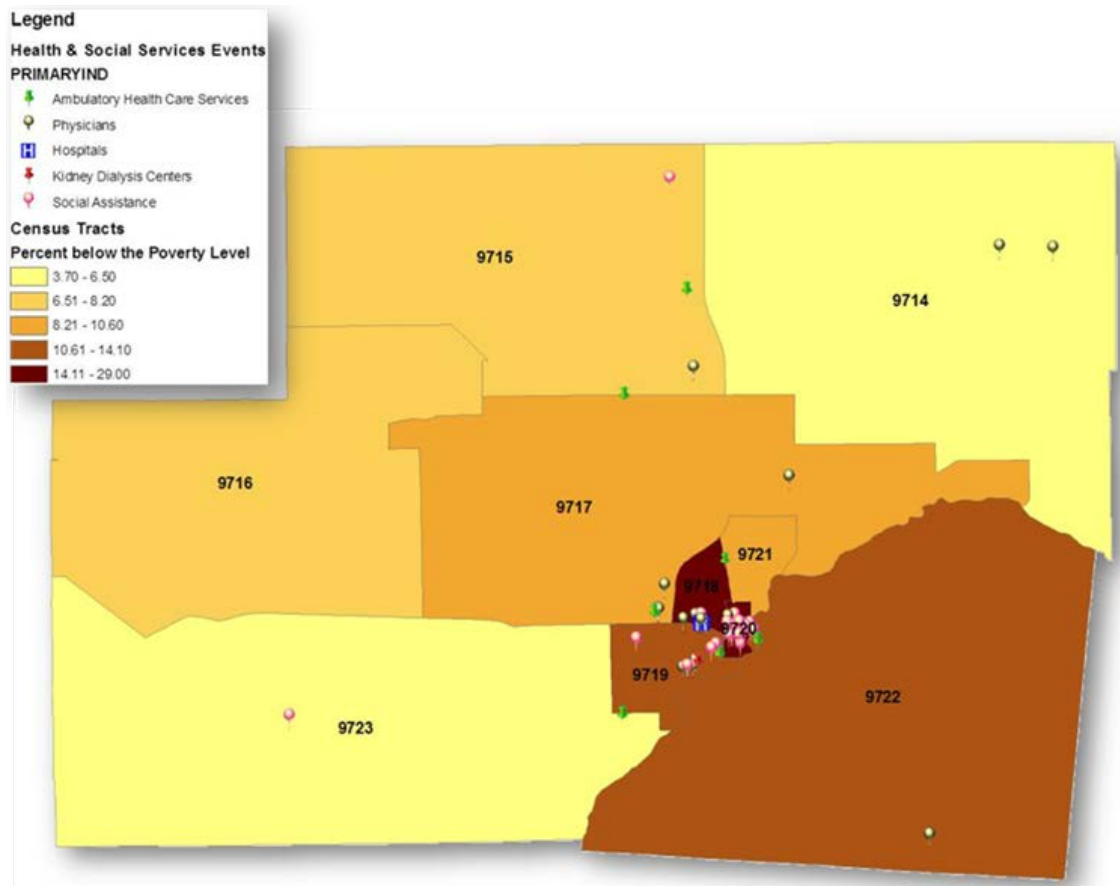
- A primary care clinic that is open once a week
- A GYN clinic

- Medical visits with a Clinical Nurse Specialist offered through the week; these visits include blood draws for lab work and blood pressure checks
- Dental clinics that are available twice a week
- Referrals to collaborating specialists available at no cost to patients
- Bridging the GAP (Granting Access to Prescriptions) which provides free, essential prescription medication to patients

The Public Health Department has 31.5 FTE who provide the following services: emergency preparedness, environmental health, general public health, nursing, and Women and Infant Care (WIC).

Shelby County is considered to be a Health Professionals Shortage Area (HPSA) for mental health services; there are 5 FTE professionals in the region, which is considered to be 2 short according to the U.S. Department of Health and Human Services.

Geographic locations for existing health care facilities and those resources available to respond to the health needs of the community are presented as flags on the poverty base map below. The intent of the map is to determine the spatial association of services and high-need populations. In Shelby County, health care facilities and resources are generally located in the geographic areas that are most impoverished.



Map 2: Health Care Facilities on Shelby County

Health Outcomes

As a backdrop, the County Health Rankings data provided by the Robert Wood Johnson Foundation are presented below. The table covers many aspects of health. Among all the topics, health risk behaviors should attract attention given that Shelby County, relative to other Ohio counties, is ranked 48th of 88 counties. More detailed information, organized by the subtopics in this table, are presented after this table.

Table 6: Health Outcomes

	Shelby County	Ohio	National Benchmark	National Median	Rank of 88
HEALTH OUTCOMES					25
Maternal and Infant Health					
Low Birth Weight	8.1%	8.6%	6.0%		
Percentage of pregnant mothers who smoked	21.4%	17.8%	1.4%		
Percent of Mothers without 1 st trimester care	16.7%	27.0%	22.1%		
Health Behaviors					48
Adult smoking	23%	22%	13%		
Adult overweight/obesity*	63.7%	65.7%		64.5%	
Physical inactivity	30%	27%	21%		
Excessive drinking	18%	18%	7%		
Motor vehicle crash death rate	12	11	10		
Chlamydia Rate	294.9	461.7	10% reduction		
Gonorrhea Rate	73.2	143.4	10% reduction		
Clinical Care					38
Uninsured	14%	14%	11%		
Primary care physicians	2,057:1	1,348:1	1,067:1		
Dentists	4,541:1	1,928:1	1,516:1		
Mental health providers	24,681:1	2,553:1	Not available		
Preventable hospital stays	69	79	47		
Diabetic screening	84%	83%	90%		
Mammography screening	61%	63%	73%		
Morbidity					21
Poor or fair health	16%	15%	10%		
Poor physical health days	2.9	3.6	2.6		
Poor mental health days	3.6	3.8	2.3		
High blood pressure*	33.6%	31.7%		28.7%	
Blood cholesterol*	35.7%	39.6%		37.5%	
Heart Attack (myocardial infarction)*	4.4%	4.3%		4.2%	
Coronary heart disease*	4.0%	4.3%		4.1%	
Mortality					28
Premature Death	6,737	7,457	5,317		

Maternal and Infant Health

First Trimester Prenatal Care

The percentage of mothers not receiving prenatal care during the first trimester steadily rose to its peak in 2007, and since then it has sharply declined. The County's rate has remained lower than the State's percentage.

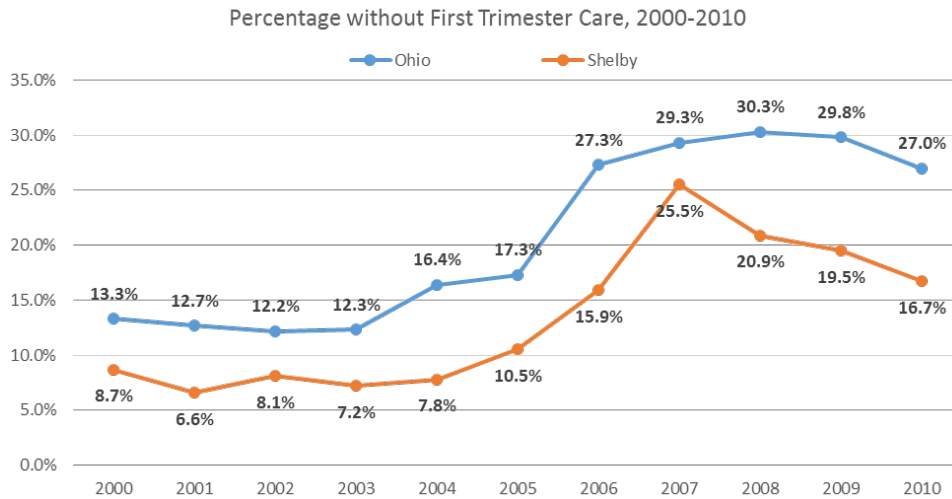
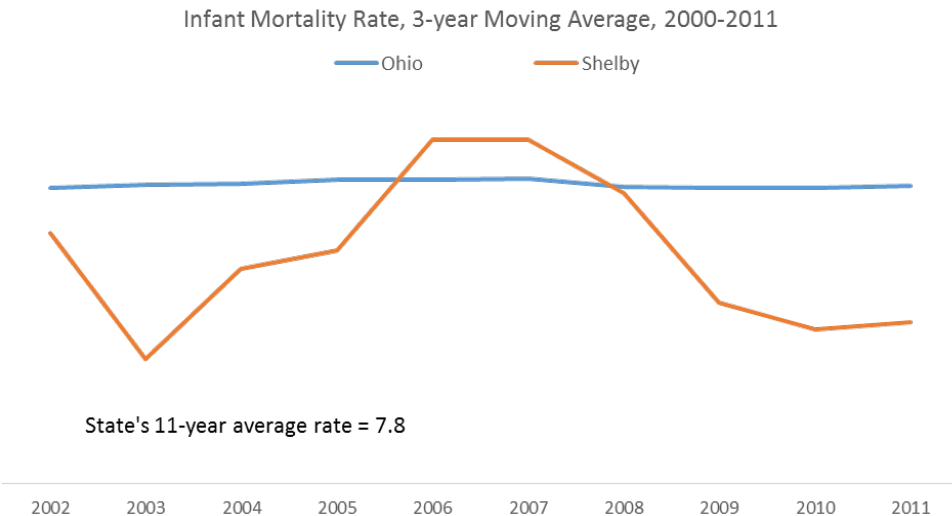


Figure 16: Percent of Mothers Receiving First Trimester Prenatal Care

Infant Mortality Rate

The chart below presents the general trend of infant mortality in the County and the State using a three-year rolling average. The number of infant deaths is below the threshold for reporting, therefore specific numbers have been removed from the chart, but the impression indicates a substantially lower rate in the County over most of the study period.



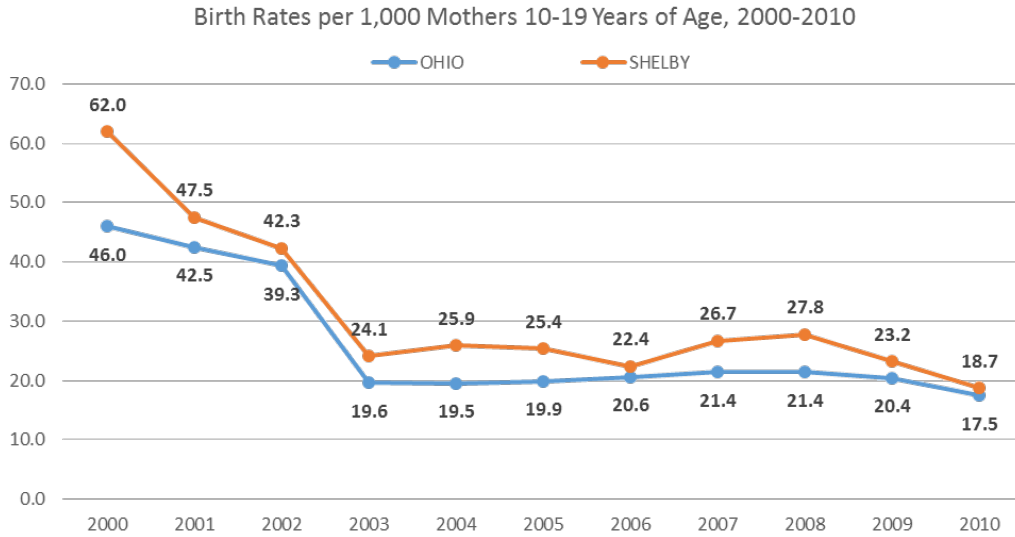
Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.

Note: Small numbers are unstable and should be interpreted with caution.

Figure 17: Infant Mortality Rate

Teen Birth Rates

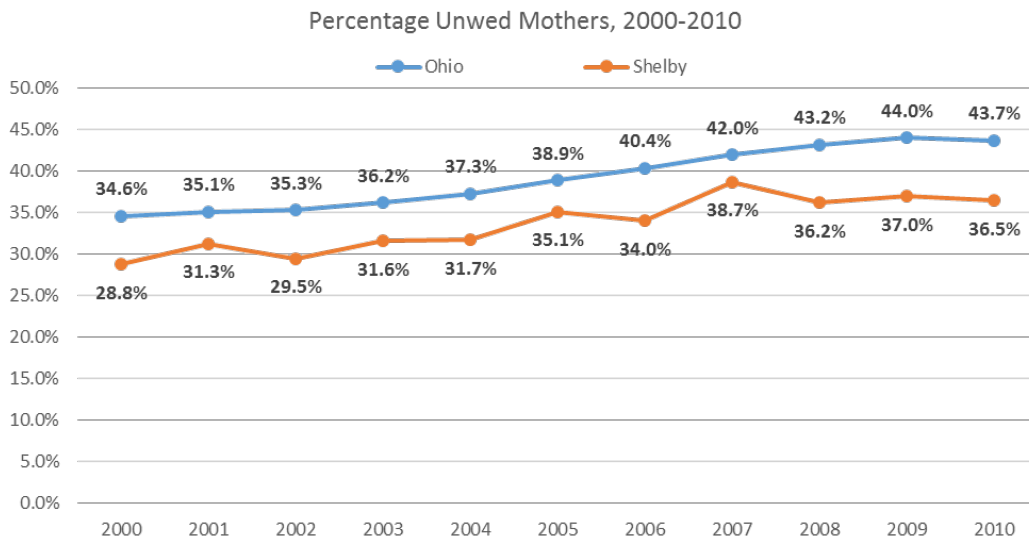
Consistent with the State’s trend, Shelby County’s teen birth rate is on the decline but still remains higher than that of the State.



Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.
Figure 18: Teen Birth Rate

Births to Unwed Mothers

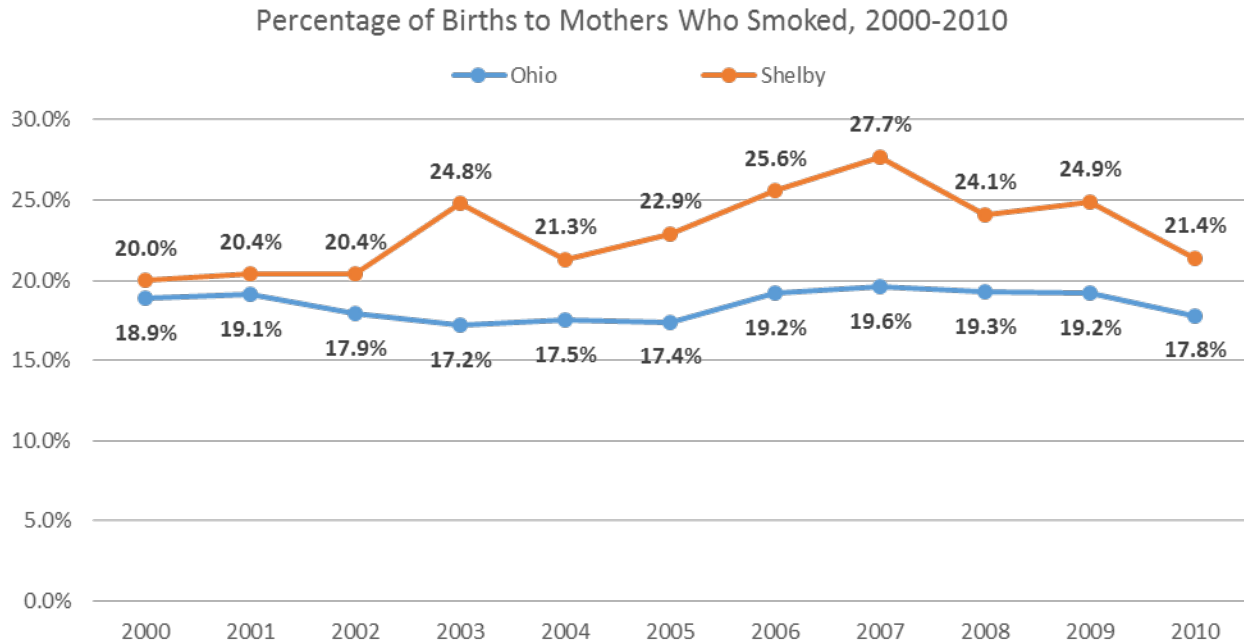
Shelby County’s percentage of births to unwed mothers also follows the State trend and has slowly risen over the past ten years. However, the County’s percentage still remains lower than that of the State.



Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.
Figure 19: Births to Unwed Mothers

Births to Mothers Who Smoke

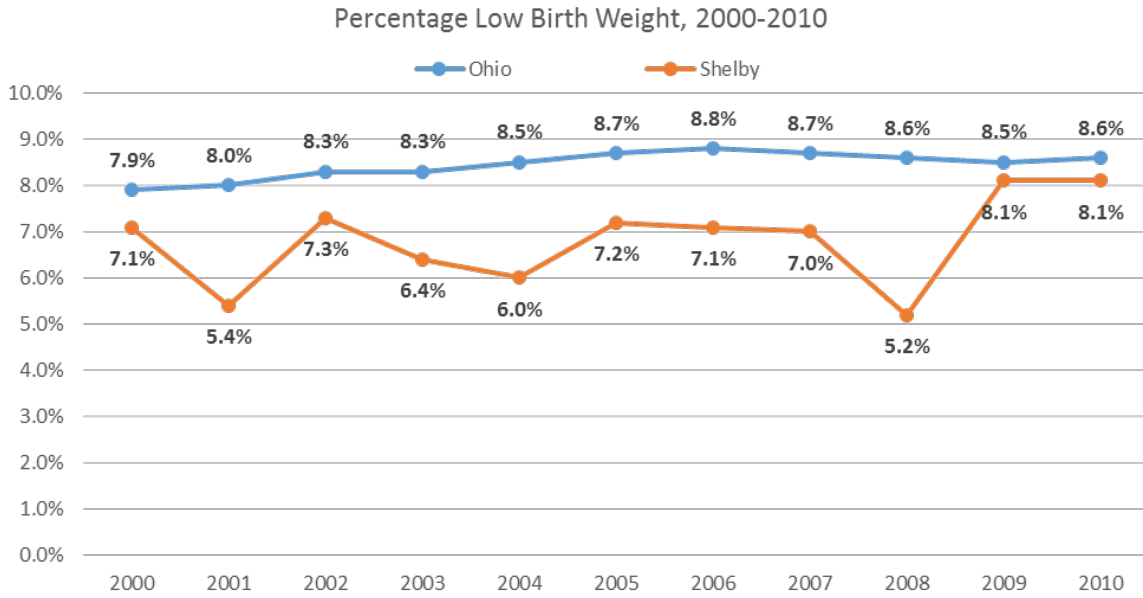
The percentage of mothers who smoked while pregnant is substantially higher in Shelby County (21.4%) than in both the State (17.8%) and nation (10.4%). The Healthy People 2020 goal is to reduce the percentage to 1.4%.



Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.
Figure 20: Births to Mothers Who Smoke

Low Birth Weight Rate

Smoking during pregnancy causes low birth-weight in at least 1 in 5 infants, and in recent years the County’s percentage of low birth rate (8.1%) shows a marked increase, with the rate approaching that of the State (8.6%). The national rate is 8.2% with a national target for reduction to 7.8%.



Source: 2000-2010, Ohio Department of Health, Vital statistics annual birth summaries. Last updated 05/24/2013.
 Figure 21: Percentage of Low Birth Weight Babies

Health Behaviors

Sexually Transmitted Diseases

The number of Chlamydia cases in Shelby County has been on the rise during the last six years; however, the County rate remains much lower than the State's.

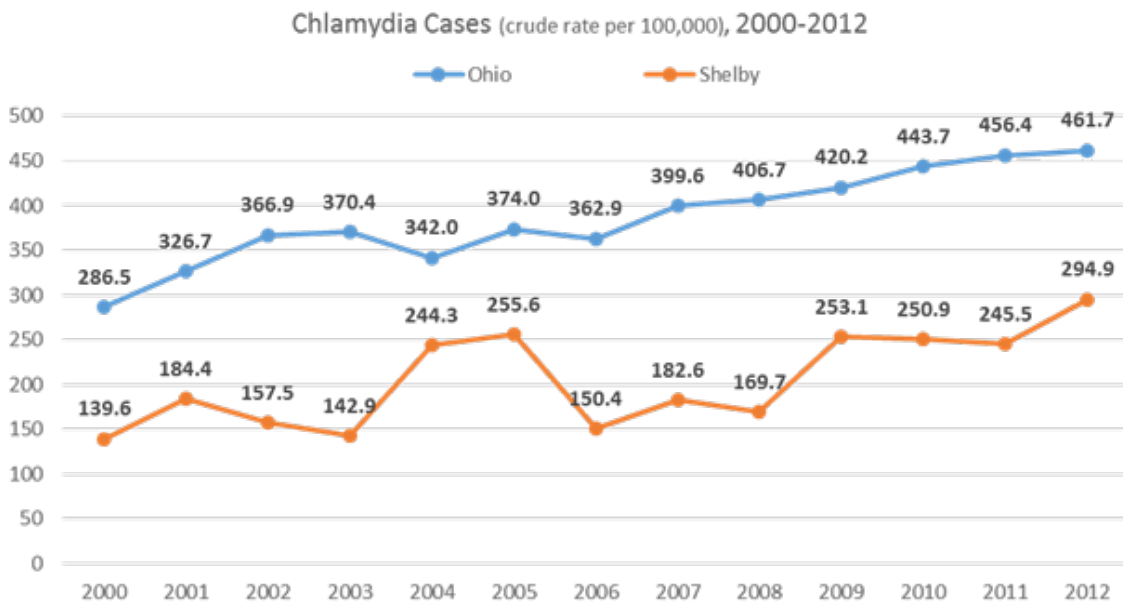
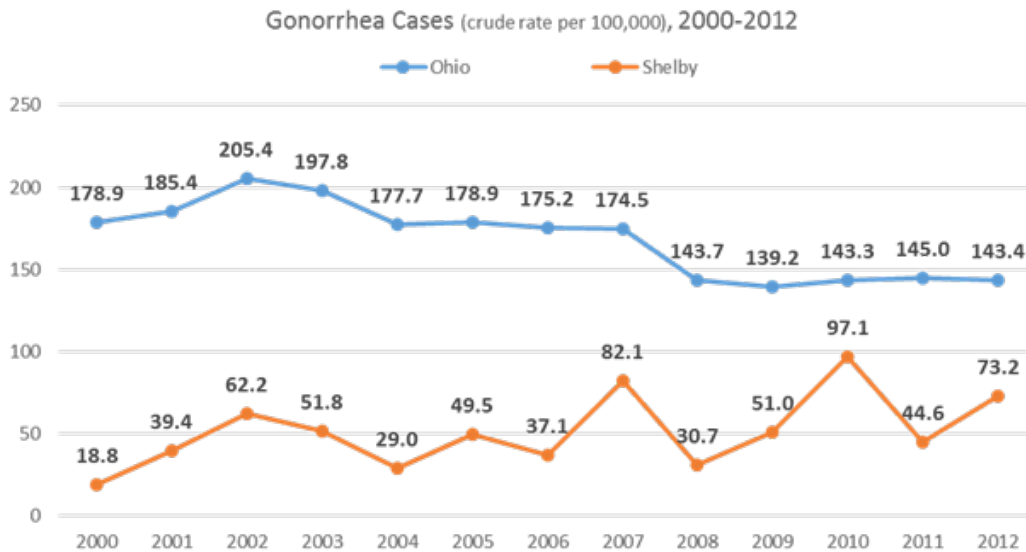


Figure 22: Chlamydia Cases

The County's incidence of Gonorrhea has fluctuated over the last six years, but still remains much lower than that of the State.



Source:
 2006-2012, Ohio Department of Health, STD Surveillance Program. Data reported through 05/05/2013.
 2000-2005, Ohio Department of Health, Information Warehouse, Vital Statistics Birth and Death Data - Last updated: March 1, 2007.

Notes:
 1) Data is presented by date of diagnosis, which is defined as the date the specimen was collected.
 2) Rates are shown per 100,000 persons and were calculated using census estimates for that year.

Figure 23: Gonorrhea Cases

Adult Sedentary Lifestyle

According to the World Health Organization, sedentary lifestyle contributes to an increase in all causes of mortality, it creates two times the risk of cardiovascular disease, diabetes, obesity, causes an increased risk of colon cancer, hypertension, osteoporosis, lipid disorders, depression, and anxiety.

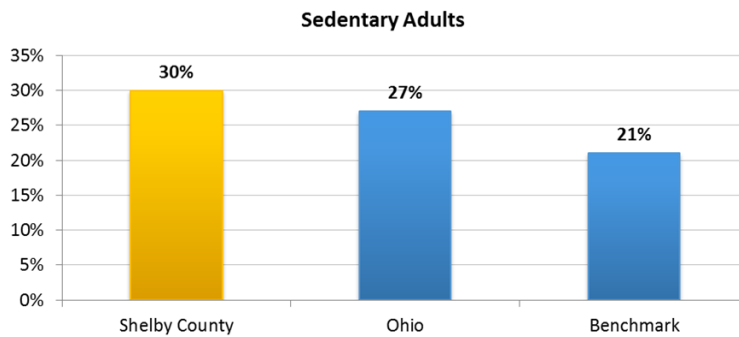


Figure 24: Percentage of Sedentary Adults

Adult Obesity

In a countywide survey, adults reported their height and weight (without shoes) for the body mass index calculation. Results show that 64% of Shelby County adults are either overweight or obese.

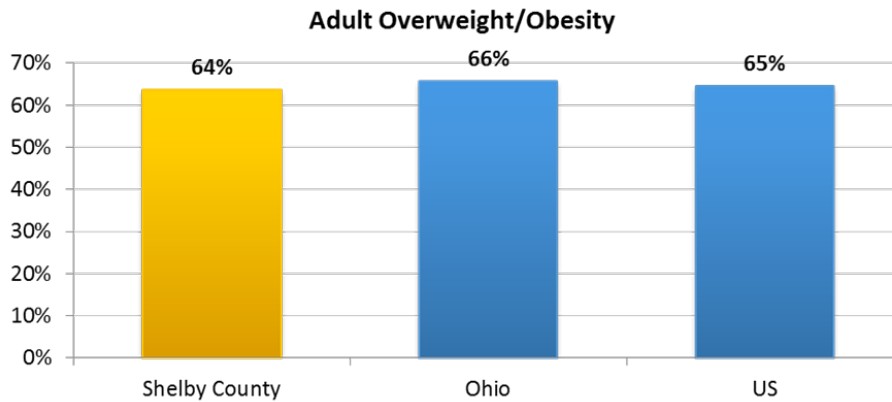


Figure 25: Percentage of Overweight or Obese Adults

Youth BMI Calculations

Students in 8th, 9th, and 10th grade were asked to provide their height and weight from which researchers were able to calculate the Body Mass Index of students in Shelby County. The BMI calculations for all students revealed that close to three quarters of students (72.0 percent) are at a healthy weight. Of the remaining students, 5.5 percent are underweight, 13.3 percent are overweight, and 9.2 percent are obese according to BMI calculations.

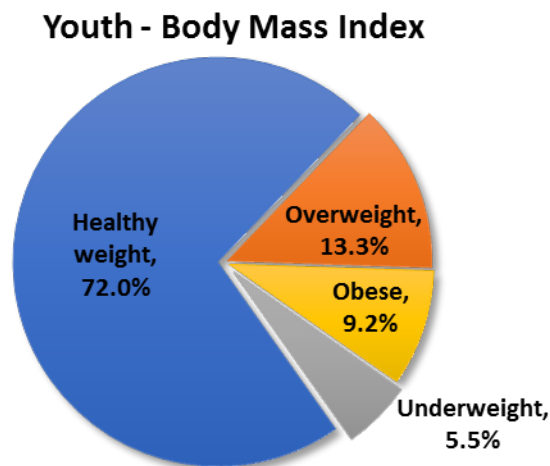


Figure 26: Youth - Percentage by Body Mass Index Classification

Female students were more likely than males to be at a normal weight with about three-quarters of females (76.7 percent) compared to two-thirds of males (67.7 percent) in the normal weight range. Males were more likely to be overweight (14.6 percent) and obese (11.6 percent) than

rates of females in the same categories (11.8 percent and 6.6 percent, respectively). Males were slightly more likely to be underweight with six percent of males (6.1 percent) compared to five percent of females (4.9 percent) in this category.

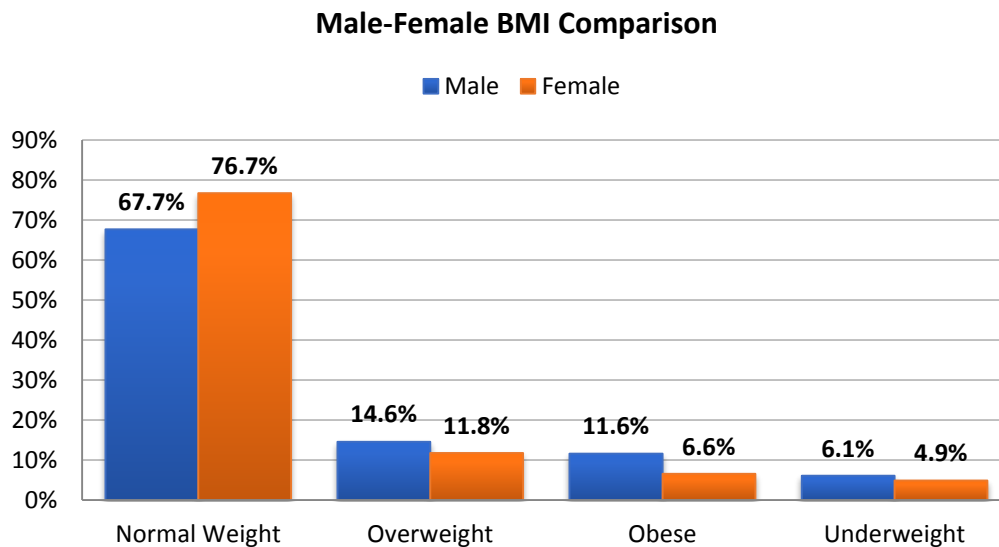


Figure 27: Youth - Comparison of BMI by Gender

Youth Physical Activity

Students were asked how many days in the past week they had participated in a physical activity that made them breathe hard and sweat for at least 20 minutes (activities such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or aerobic activity). The majority of students (89.1 percent) were active at least one day or more for at least 20 minutes. About one-fifth of students (19.1 percent) reported being physically active all 7 days for at least 20 minutes.

Youth BMI and Physical Activity

Crosstabs by BMI calculations and days of physical activity shows a significant relationship between physical activity and body weight. Students that were overweight or obese were less likely to exercise any day of the week.

BMI and Student Participation in Team, Club or Program

Over half of students (54.0 percent) regularly engaged in extracurricular activities and about twenty percent (20.5 percent) did not participate at all in the past ninety days. Students with BMIs suggesting being overweight and obese were less likely to participate in these programs.

Youth Diets

Students were asked to identify how many times during the past seven days they ate or drank dairy, grains, fruits, vegetables, meat, soda and fast food. The percentage of respondents consuming each of these products is displayed in the chart below.

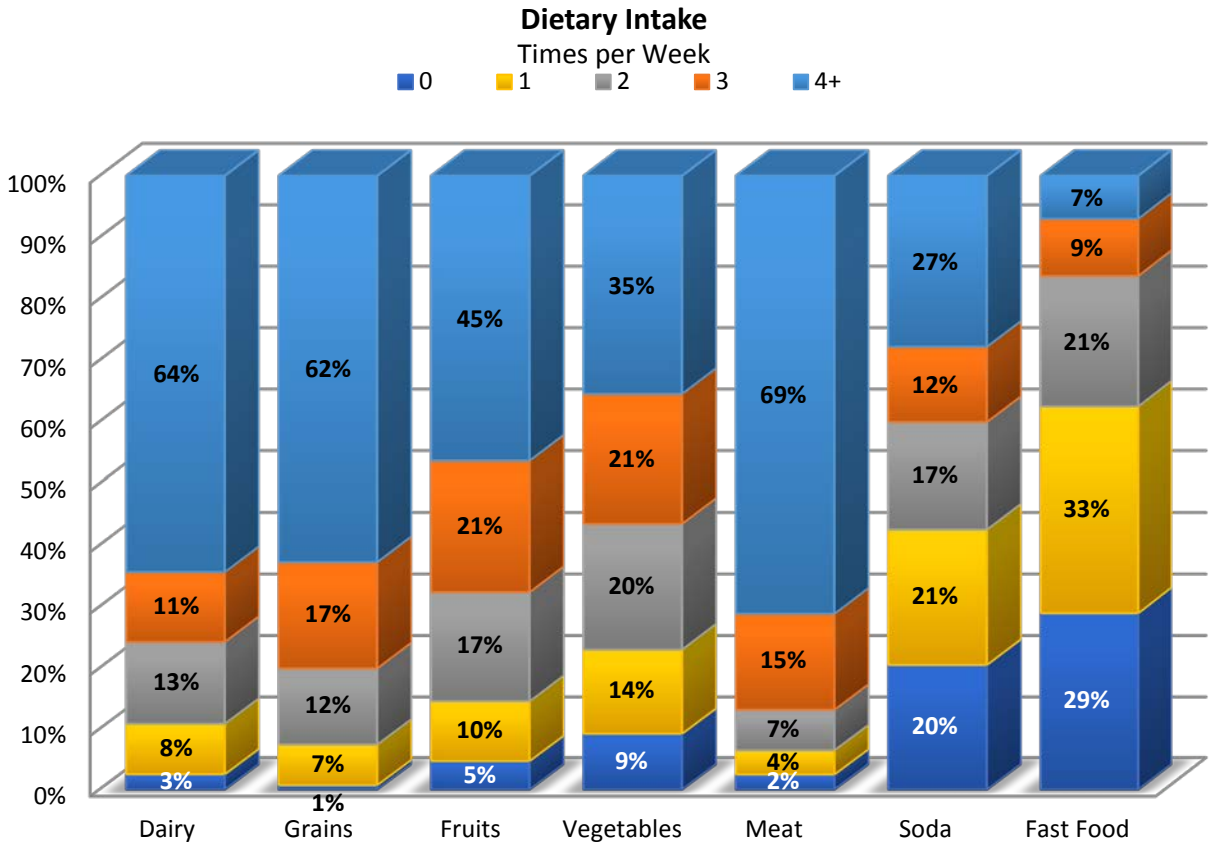


Figure 28: Dietary Intake by Food Type

Youth BMI and Soda/ Fast Food Consumption

Statistical tests of BMI and soda and fast food consumption identified no relationship between soda consumption and BMI. All weight categories drank soda at similar rates and followed similar trends of fast food consumption.

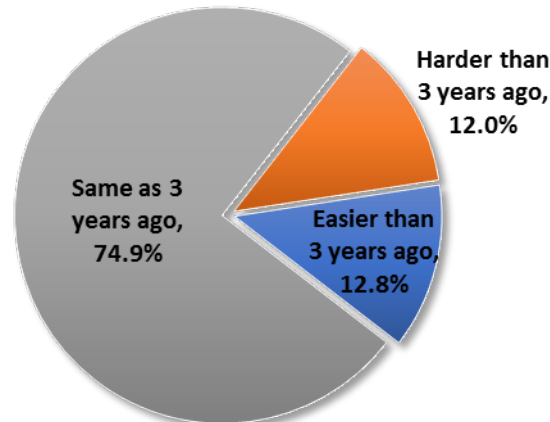
Clinical Care

Access to Health Care

According to estimates provided by the Robert Wood Johnson Foundation, 14% of County adults do not have health care. When comparing current health care access to that of three years ago, over 12% say that it is becoming harder to access health care, and nearly the same

percentage, or 12.8%, says that it is becoming easier, while the rest (74.9%) say it has stayed the same.

Perception of Access to Health Care



Source: Shelby County Community Needs Assessment, 2012

Figure 29: Perception of Access to Health Care

All in all, 14.5% of respondents said they could not access all the health care they needed in the past year. Personal financial losses are cited as the leading problem in obtaining health care, and residents between the ages of 45 and 64 are most likely to report financial difficulty as a barrier to health care. Also, those who are married and those not employed outside the home say that it is becoming harder to get the medical care they need.

Five percent of County adults say the ER is their usual source of medical care, and 8.4% have used the ER in the past year because they could not get a needed appointment with their health care provider. Statistical tests demonstrate that those who have a problem accessing health care can be of either gender, of any education level, and any employment status.

Nine percent of adults needed to see a doctor last year but could not because of cost, and an even higher percentage, 10.6%, has not filled a prescription in the past year due to cost. Among multiple services, more Shelby County adults report a lack of access to health services such as vision care, medications, and appointments or referrals to a specialist.

According to the Robert Wood Johnson Foundation, the ratio of the population to primary care physicians in Shelby County is 2,057 people to one physician. This ratio is two times as high as the national benchmark which is 1,067 people to one physician, and it is 1.5 times greater than the State's ratio. The ratio of dentists in the County is 4,541 people to one dentist whereas less than half that many people are served by one dentist in Ohio on average and one-third that number are served by one dentist in the U.S. on average. And, as stated earlier in this report, Shelby County is a Health Professionals Shortage Area (HPSA) for mental health services, where the ratio is 24,681 people to one mental health care provider. The ratio for Ohio on average is 2,553.

Preventive Screenings

According to County Health Rankings, Shelby County is ranked 38th of 88 counties in terms of residents obtaining appropriate clinical care. Areas for particular attention pertain to preventive screenings. In one example, mammography screening, the County's percentage of those obtaining this screening is substantially below the national goal—61% versus 73%. Breast cancer is the most common form of cancer affecting Shelby County, with a rate of 145.8 (per 100,000 females) in 2011.

The percentage of County residents obtaining diabetic screenings is also well below the national goal—84% versus 90%. Diabetes screening should be important to County residents where the percentage of people with a sedentary lifestyle exceeds the average for the State and nation.

Disease

This section covers a range of diseases and chronic diseases, recognizing that diseases such as high blood pressure are commonly known risk factors for chronic ailments such as heart disease and stroke.

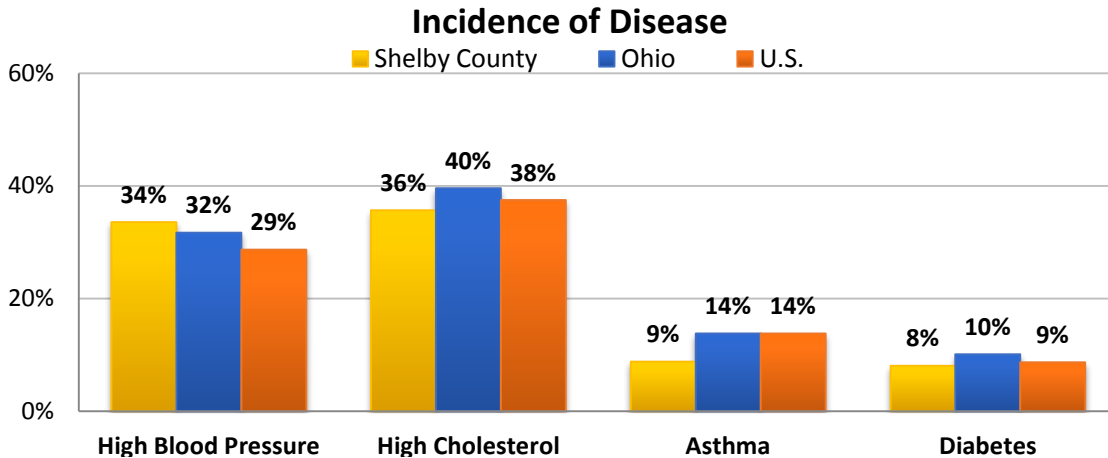
Hypertension is the number one inpatient diagnosis among Shelby County residents, and the number five ER diagnosis. In Shelby County, 33.6% of adults have been told by a health professional that they have high blood pressure (or hypertension), and 74% take medicine for the condition. The percentage of County adults with high blood pressure is higher than both the State and national percentages, which are 31.7% and 28.7%, respectively. About 84% of Shelby County adults have had their blood pressure checked at some point, and 68% of them have had it checked within the past year.

In addition to that, 35.7% of adults have been told by a health professional that they have high blood cholesterol, with the State and national CDC percentages being 39.6% and 37.5%, respectively.

Asthma affects 8.8% of County adults versus 13.8% for the State and 13.8% for the nation. The Centers for Disease Control and Prevention says that asthma contributes to Chronic Lower Respiratory Disease (CLRD), which is the third leading cause of death in Shelby County. Asthma also contributes to days of work or school lost.

Studies show a direct correlation between severity of asthma as a child and the incidence of Chronic Obstructive Pulmonary Disease (COPD). Children who suffer from severe, persistent asthma are nearly 32 times more likely to develop COPD in adulthood. COPD is the sixth most common reason for inpatient diagnosis among adults in Shelby County and the 11th most common reason for ER diagnosis at discharge.

The needs assessment survey found that 8.1% of County adults say that they have diabetes with another 1.1% having borderline diabetes. However, the Robert Wood Johnson Foundation estimates that the rate of diabetes in Shelby County is 11%.



Source: Robert Wood Johnson Foundation and Shelby Community Needs Survey, 2012

Figure 30: Incidence of Disease

Approximately twenty percent of County adults have arthritis, which is comparable to the Arthritis Foundation’s estimate that one in five adults in the U.S. has arthritis.

Hospital Inpatient Diagnoses

The chart and table below present hospital inpatient services by discharge diagnosis, presenting the crude rate per 1,000. Of note, hypertension tops the list and was identified as substantially higher in the County than in the State or nation in self-reported survey results. While heart disease still tops the list, its trend is downward and that finding is corroborated in sharp declines in mortality for this disease.

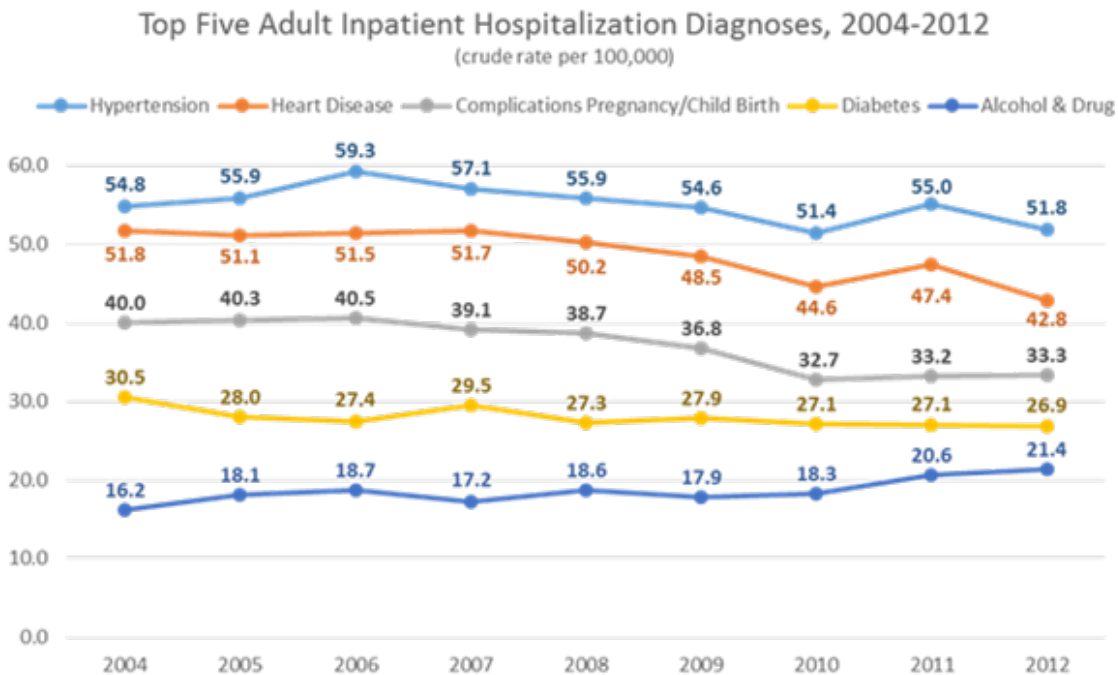


Figure 31: Top Five Inpatient Hospitalization Diagnoses, 2004-2012

Table 7: Hospital Inpatient Diagnoses

Diagnosis	2004	2005	2006	2007	2008	2009	2010	2011	2012
Hypertension	54.8	55.9	59.3	57.1	55.9	54.6	51.4	55.0	51.8
Heart Disease	51.8	51.1	51.5	51.7	50.2	48.5	44.6	47.4	42.8
Pregnancy Complications /Child Birth	40.0	40.3	40.5	39.1	38.7	36.8	32.7	33.2	33.3
Diabetes	30.5	28.0	27.4	29.5	27.3	27.9	27.1	27.1	26.9
Alcohol & Drug	16.2	18.1	18.7	17.2	18.6	17.9	18.3	20.6	21.4
COPD	7.4	8.6	7.3	8.4	9.7	8.5	18.4	19.2	19.4
Urinary Tract Infection	8.5	9.9	11.2	12.3	12.3	10.1	9.1	9.8	10.1
Accidental Injury	10.3	9.1	10.5	10.5	10.2	9.3	8.4	10.7	9.7
Pneumonia	51.8	51.1	51.5	51.7	50.2	48.5	8.6	9.1	8.6
Adverse Effects Medical Treatment	9.3	9.5	10.9	11.3	11.4	12.7	11.1	10.0	6.9
Stroke	8.1	8.5	7.8	8.2	7.7	8.1	5.7	6.7	6.3
Asthma	4.9	4.8	4.8	4.1	5.6	5.9	5.3	5.0	4.3
Cellulitis Abscess	3.6	3.3	4.2	4.0	3.9	3.5	4.4	3.8	3.1
Chest Pain (ill defined)	5.7	5.8	5.5	5.0	4.2	4.6	3.5	2.4	2.4
Headache	2.4	2.7	2.2	2.7	2.2	3.1	2.4	2.4	2.1
Unintentional Injury	1.9	2.1	2.1	2.0	1.5	1.7	1.2	1.6	1.4
Upper Respiratory Infection	1.3	2.0	1.3	1.0	1.0	1.2	0.8	0.9	1.4
Abdominal Pain (ill defined)	3.8	3.6	3.4	3.3	2.2	2.2	2.0	1.2	1.3
Migraine	0.9	1.4	1.4	1.2	1.5	1.3	1.3	0.9	1.0

Emergency Room Discharge Diagnoses

The table below presents leading diagnoses for emergency room discharges using the crude rate per 1,000.

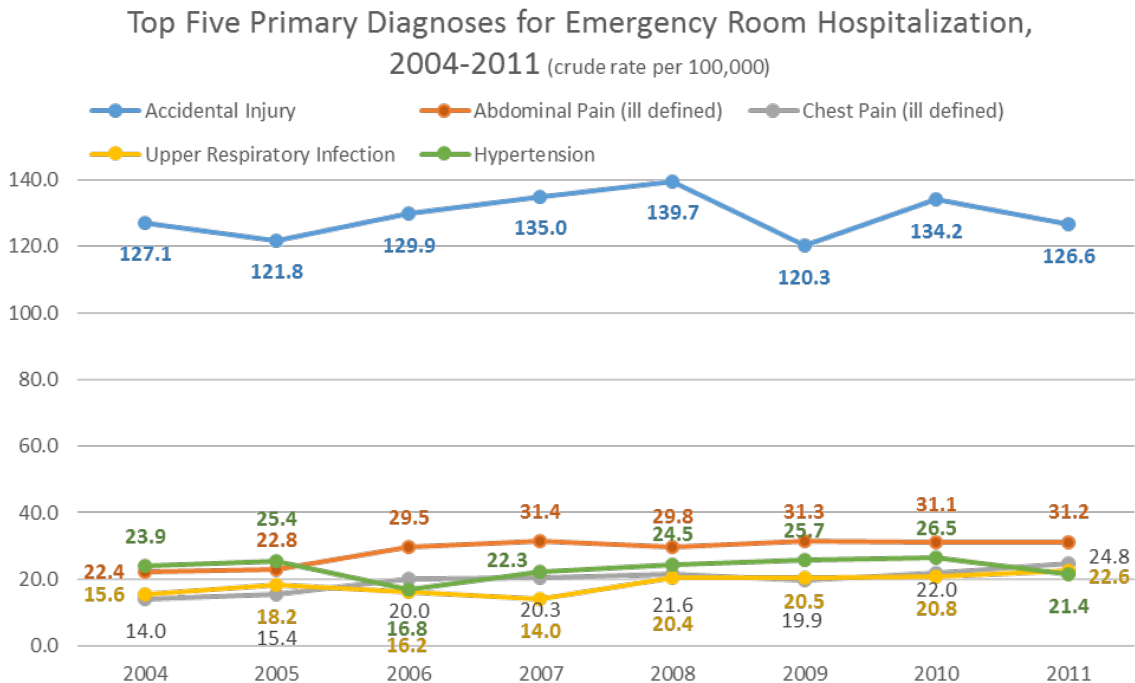


Figure 32: Top Five Primary ER Diagnoses

Table 8: Primary ER Diagnoses

Diagnosis	2004	2005	2006	2007	2008	2009	2010	2011
Accidental Injury	127.1	121.8	129.9	135.0	139.7	120.3	134.2	126.6
Abdominal Pain (ill defined)	22.4	22.8	29.5	31.4	29.8	31.3	31.1	31.2
Chest Pain (ill defined)	14.0	15.4	20.0	20.3	21.6	19.9	22.0	24.8
Upper Respiratory Infection	15.6	18.2	16.2	14.0	20.4	20.5	20.8	22.6
Hypertension	23.9	25.4	16.8	22.3	24.5	25.7	26.5	21.4
Headache	14.2	16.0	18.2	19.9	19.3	19.1	20.8	20.6
Complications Pregnancy/Child Birth	18.2	14.9	21.1	26.6	22.6	20.1	15.2	20.4
Alcohol & Drug	12.9	14.7	15.2	11.5	15.6	13.0	14.4	18.6
Heart Disease	8.5	10.8	13.0	17.2	15.3	14.5	18.2	17.6
UTI	10.3	12.5	14.4	15.9	16.5	17.8	14.8	17.3
COPD	8.3	12.1	11.7	14.3	15.6	16.1	16.7	16.9
Unintentional Injury	10.8	10.8	10.2	9.7	10.0	9.6	12.1	10.6
Cellulitis Abscess	4.3	6.3	6.8	6.9	7.7	8.7	10.4	10.5
Diabetes	12.2	11.8	8.8	10.1	9.9	8.4	10.6	9.4
Adverse Effects Medical Treatment	4.0	5.0	7.2	7.3	7.8	6.9	6.7	6.9
Asthma	10.9	10.0	5.6	6.4	6.5	4.3	5.7	5.2
Pneumonia	8.5	10.8	13.0	17.2	15.3	14.5	3.4	3.1
Migraine	5.1	4.9	3.4	3.4	4.5	3.2	2.7	3.0
Stroke	0.6	0.8	1.1	1.2	1.4	1.9	1.5	1.8
Homicide	0.3	0.7	0.6	0.6	0.5	0.5	0.9	0.4

Cancer Rates

Except for melanoma of the skin, the overall rate of cancer diagnoses in Shelby County is on the decline. Breast cancer is consistently the most prevalent form of cancer in the county; the rate was declining from 2008 to 2010, but in 2011 a rise occurred. As noted earlier, the rate of mammography screenings in Shelby County is well below the national target rate (61% versus 73%).

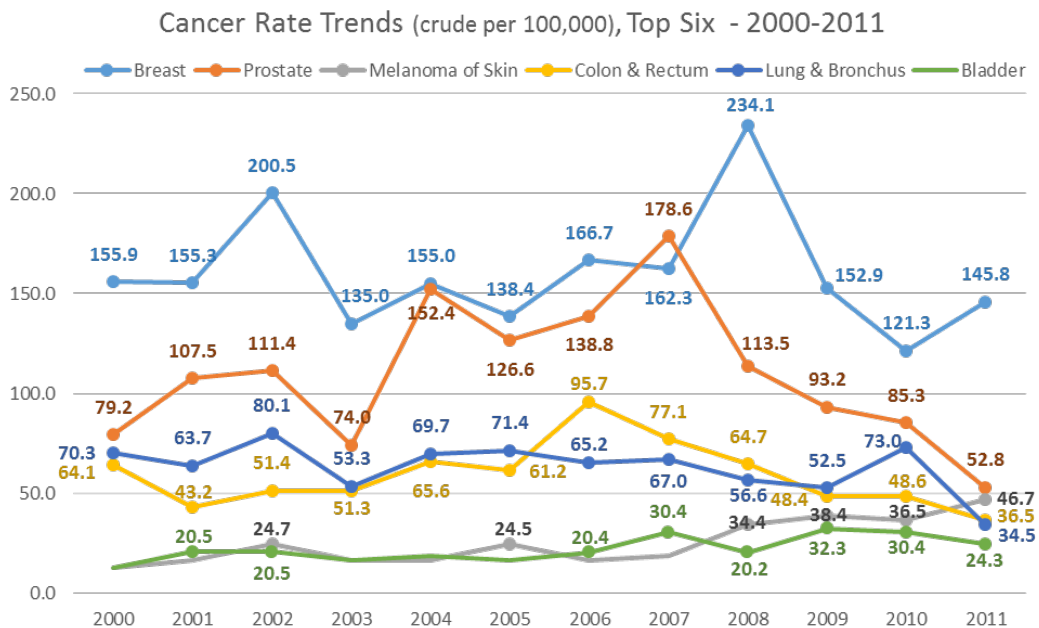


Figure 33: Cancer Rates

Table 9: Cancer Rates

Cancer Diagnosis	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Breast	155.9	155.3	200.5	135.0	155.0	138.4	166.7	162.3	234.1	152.9	121.3	145.8
Prostate	79.2	107.5	111.4	74.0	152.4	126.6	138.8	178.6	113.5	93.2	85.3	52.8
Melanoma of Skin	*	*	24.7	*	*	24.5	*	*	34.4	38.4	36.5	46.7
Colon & Rectum	64.1	43.2	51.4	51.3	65.6	61.2	95.7	77.1	64.7	48.4	48.6	36.5
Lung & Bronchus	70.3	63.7	80.1	53.3	69.7	71.4	65.2	67.0	56.6	52.5	73.0	34.5
Bladder	*	20.5	20.5	*	*	*	20.4	30.4	20.2	32.3	30.4	24.3

Mortality

Consistent with the top reason for hospitalization and ER admittance, the most common cause of death in the county is cardiovascular disease. The incidence of deaths caused by cardiovascular disease has steadily declined over the last ten years, while deaths due to diabetes and chronic lower respiratory diseases are generally trending up.

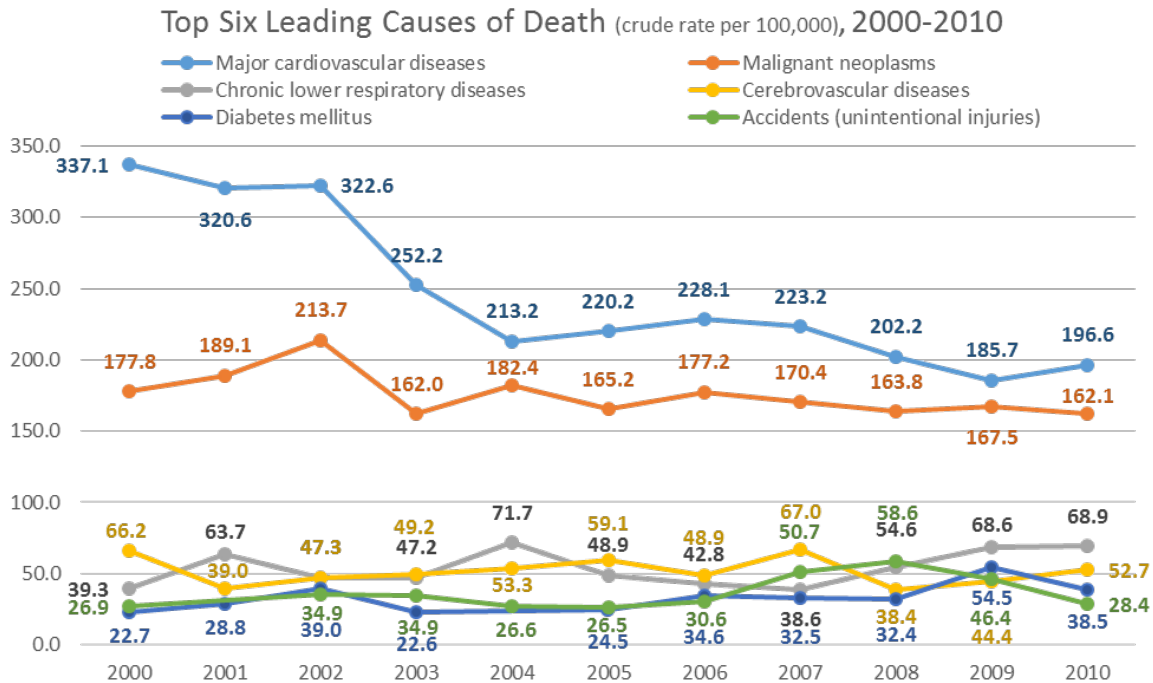


Figure 34: Top Six Leading Causes of Death

Table 10: Leading Causes of Death

Leading Cause of Death	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Major cardiovascular diseases	337.1	320.6	322.6	252.2	213.2	220.2	228.1	223.2	202.2	185.7	196.6
Malignant neoplasms	177.8	189.1	213.7	162.0	182.4	165.2	177.2	170.4	163.8	167.5	162.1
Chronic lower respiratory diseases	39.3	63.7	47.3	47.2	71.7	48.9	42.8	38.6	54.6	68.6	68.9
Cerebrovascular diseases	66.2	39.0	47.3	49.2	53.3	59.1	48.9	67.0	38.4	44.4	52.7
Diabetes mellitus	22.7	28.8	39.0	22.6	*	24.5	34.6	32.5	32.4	54.5	38.5
Accidents (unintentional injuries)	26.9	*	34.9	34.9	26.6	26.5	30.6	50.7	58.6	46.4	28.4

Mental Health

Adult Mental Health

In the Needs Assessment Survey, adults were queried about feelings that might indicate anxiety or depression. By far, the most common feeling is nervousness, with more than one in five respondents reporting feeling nervous all, most, or some of the time. Nearly 8% felt hopeless all, most or some of the time over the past 30 days. And almost 6% felt worthless all, most, or some of the time. Six percent also had some days out of the last 30 where a mental health condition or emotional problem kept them from doing their work or other usual activities.

Frequency of Emotional Distress in Adults

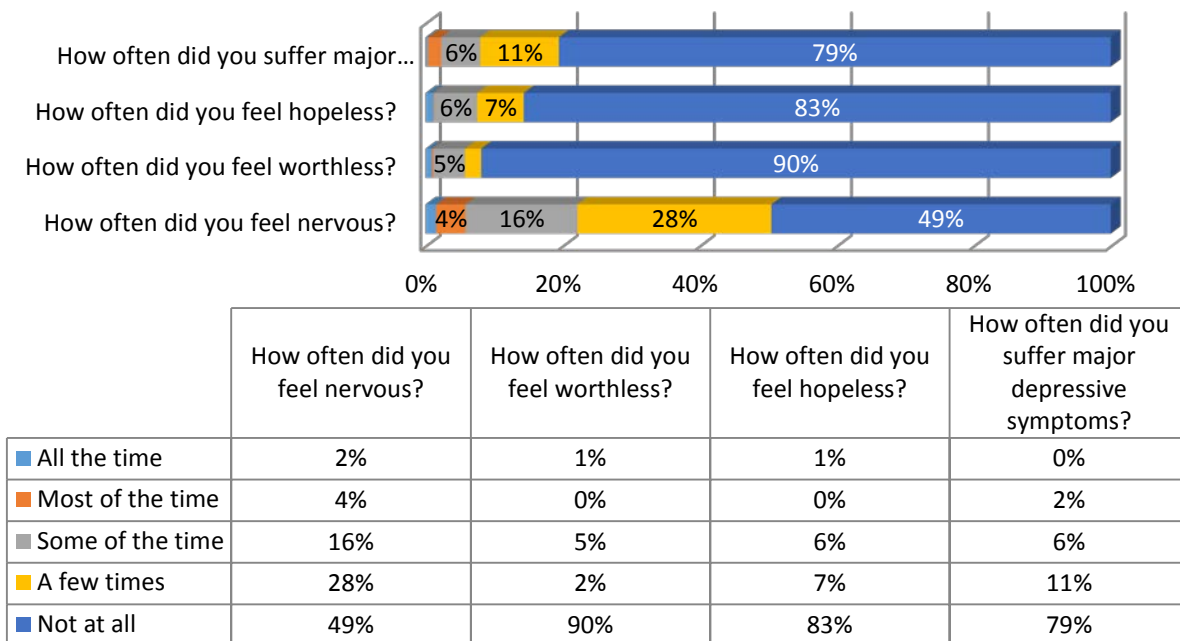


Figure 35: Emotional Distress in Adults

Respondents were asked how many days, if any, did a mental health condition or emotional problem keep them from working or completing activities. The vast majority of respondents (91.2%) say that there was no day in the last month during which they were unable to complete tasks because of mental distress. However, that still leaves 8.8% of County adults that experience at least one day per month in which their mental health keeps them from accomplishing everyday tasks.

To address feelings of poor mental health, 9.1% of respondents take medicine or receive treatment from a doctor or other health professional.

All respondents were then asked two basic mental health stigma questions. The first statement read: “Treatment can help people with mental illness lead normal lives”; 65.6% of respondents agree with that statement and 30.4% strongly agree, leaving 4% who disagree. The second statement read: “People are generally caring and sympathetic to people with mental illness”: 63.1% agreed with that statement and 6.1% strongly agreed with that statement, leaving 30.7% who disagree.

Youth Mental Health

In the survey of 8th, 9th, and 10th grade students, youth were asked how often in the last week they felt a certain way, relevant to their mental health, and the following graph presents an overview of all responses.

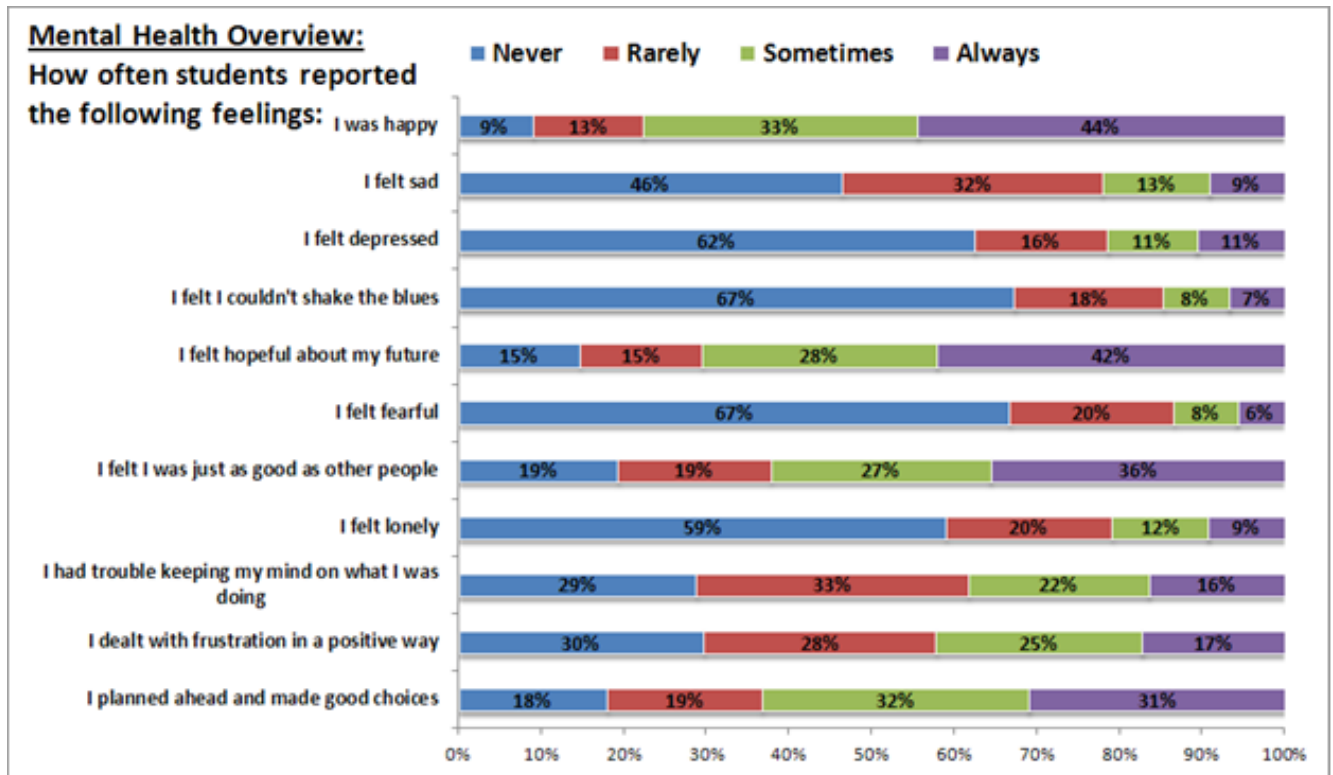


Figure 36: Youth Mental Health

Feeling Sad and Happy

One-third of students (33.3 percent) felt happy 3-4 days in the past week, or a moderate amount of time, and about one-third (31.5 percent) felt sad 1-2 days, or a little of the time, in the past week. About one-hundred-sixty-six students or nine-percent of students felt happy rarely (9.0 percent) and nine-percent felt sad all of the time (9.0 percent).

Crosstabs by gender revealed significant differences where females responded feeling sad more frequently than their male peers.

Feeling Depressed and “Shaking the blues”

Most students (62.4%) did not feel depressed or felt so less than one day in the past week. The remaining students most often reported feeling depressed a little of the time, or 1-2 days (16.2%). Nearly two-hundred students or eleven percent felt depressed 3-4 days (10.8 percent) and eleven percent (10.6 percent) felt depressed all of the time or 5-7 days in the past week.

How Often Students Felt Depressed in the Last Week

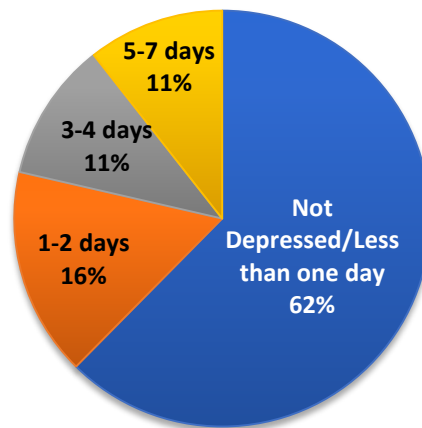


Figure 37: Youth - Feelings of Depression

Over two-thirds of students (67.3 percent) rarely or none of the time felt they “couldn’t shake the blues even with the help of family and friends.” Conversely, about seven percent of students (6.7 percent) felt that way all of the time in the past week.

Outlook on Life

Students were asked how often in the past week they felt hopeful for their future and how often they felt fearful. Many students reported feeling hopeful about their future all of the time with over forty percent of students in this category (42.1 percent). About thirty percent of students (29.5 percent) were split evenly between feeling hopeful either a little of the time (14.8 percent) or rarely to none of the time (14.7 percent).

Crosstabs by gender revealed significant differences between male and female responses for feeling hopeful about the future. About seventeen percent of males (16.9 percent) and twelve percent of females (12.4 percent) did not feel hopeful about their future in the past week.

When asked how often they felt fearful in the previous seven days, most students felt fearful rarely or none of the time in the past week with about two-thirds of students in this category (66.7 percent). About one-hundred students or about six percent (5.7 percent) reported feeling fearful all of the time or 5-7 days in the past week.

Crosstabs by gender showed significant differences between male and female responses for feeling fearful. Sixty-six females (7.4 percent) and forty males (4.2 percent) felt fearful all of the time.

Connectivity to Others

The following paragraphs detail how often in the past week students felt they were just as good as other people, how often they felt lonely, and how often they felt close to others in their school.

When asked how often they felt just as good as other people, nearly one in five students said none of the time (19.3 percent). Crosstabs by gender for feeling as good as other people revealed no significant difference between male and female responses.

Respondents were also asked how often they felt lonely in the past week. About nine percent of students (9.3 percent) indicated feeling lonely all of the time or 5-7 days in the past week. Crosstabs by gender showed significant differences between male and female responses for loneliness. Females indicated feeling lonely all of the time, 5-7 days (12.7 percent) at over twice the rate of males (6.0 percent).

Students were asked how often they felt close to people in their school with options of never, rarely, sometimes, or always. About seven percent of respondents (6.6 percent) reported never feeling close to others in school. Connectivity to others is an important measure of mental well-being.

Decision Making

Students were also asked how often they planned ahead and made good choices. About one-third of students (31.0 percent) indicated they planned ahead and made good choices all of the time in the past week. Another third of students (32.4 percent) felt they planned ahead and made good choices a moderate amount of the time or 3-4 days in the past week. The remaining students were split evenly between a little of the time (18.7 percent) and planning and making good choices rarely or none of the time (18.0 percent).

Violence

Students were asked how often they had a positive attitude towards school. Over one quarter of students (25.1 percent) indicated always feeling positive about school. About thirteen

percent of students (13.1 percent) rarely felt positive and about nine percent (9.0 percent) never felt positive towards school.

Students' Attitude Towards School

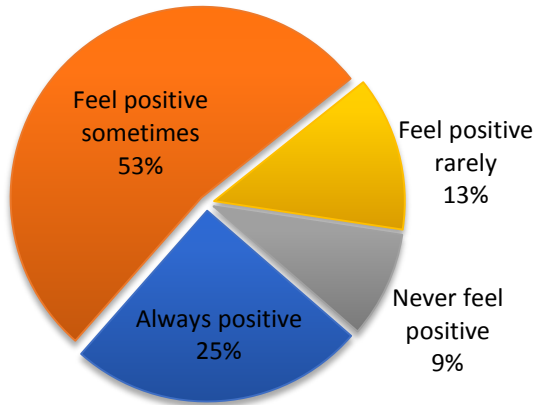


Figure 38: Student's Attitude Towards School

Students were also asked if they liked the challenge of learning new things. Over one-quarter of students (27.1 percent) indicated always liking the challenge of learning new things and about half felt this way sometimes (47.4 percent). Eight percent of students (8.0 percent) expressed never having liked the challenge of learning new things.

Students were asked to indicate how often they had a trusted adult they could go to with their problems. A majority of students (56.5 percent) indicated they always had a trusted adult they could go to with their problems. About twenty percent of students (19.0 percent) felt they had access to this contact sometimes. More students reported they never had a trusted adult to go to with problems (13.8 percent) than rarely having this resource (10.7 percent).

How often Students Have an Adult for Support

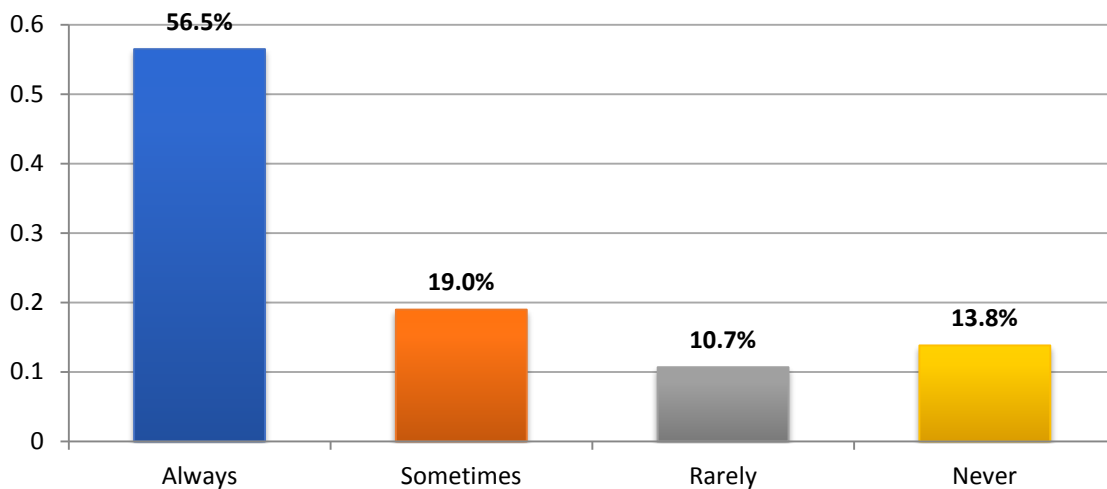


Figure 39: How Often Students Have an Adult for Support

Feeling Safe in School

When asked how often they felt safe in their school, the majority of students (57.9 percent) reported always feeling safe in school. About one quarter of students (26.3) indicated feeling safe sometimes. About sixteen percent (15.9 percent) of students felt safe in their school rarely (7.5 percent), or never (8.4 percent).

How Often Students Feel Safe in School

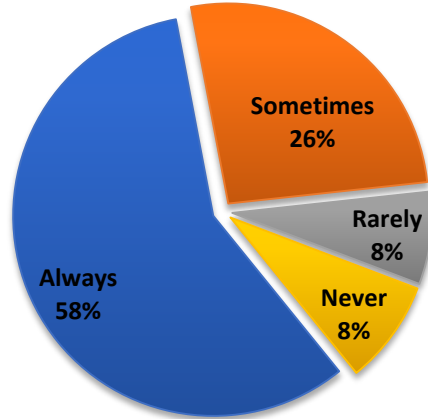


Figure 40: How Often Students Feel Safe in School

Behavior in School

Students were asked how often they perform to the best of their ability. About half of students (44.9 percent) always perform to the best of their ability. Most remaining respondents (43.8 percent) reported sometimes performing to their best capabilities. About eleven percent of students (11.2 percent) reported they rarely (7.3 percent) or never (3.9 percent) perform to the best of their ability.

How Often Students Perform to the Best of Their Ability

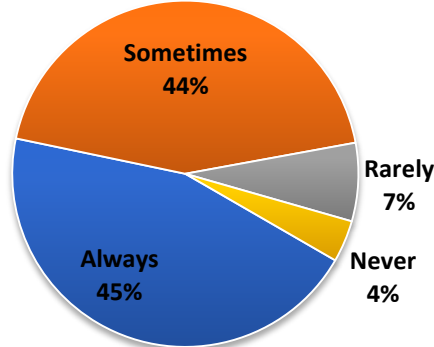


Figure 41: How Often Students Perform to the Best of Their Ability

The following graph summarizes how often students had skipped school, skipped a homework assignment or been suspended from school.

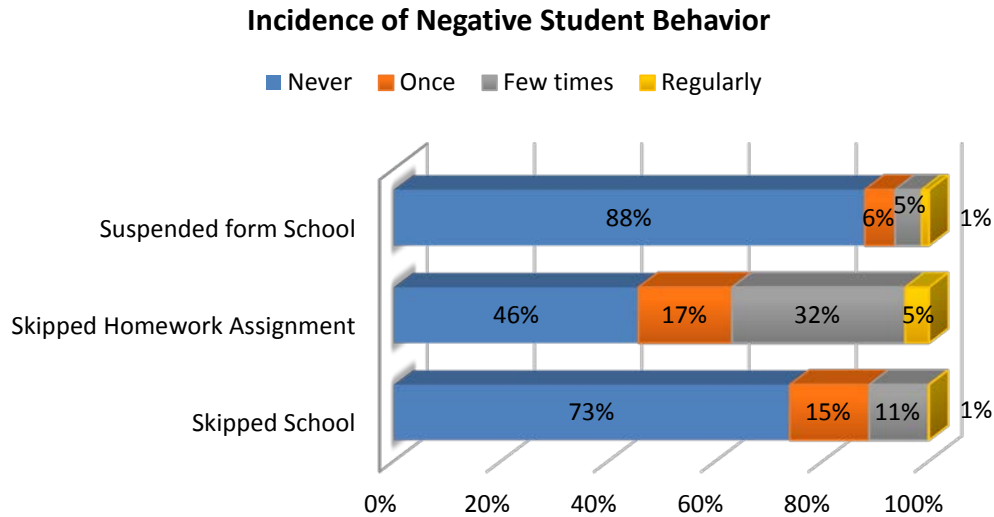


Figure 42: Incidence of Negative Student Behavior

Violence

Been in a Fight

Most students had not been in a fight in the past ninety days (73.2 percent) and of those who had, most indicated this had occurred only once (12.7 percent). Remaining students indicate being in a fight a few times (11.8 percent) and about two percent (2.3 percent) reported being in fights regularly.

Students Who Have Been in a Fight in the Last 90 Days

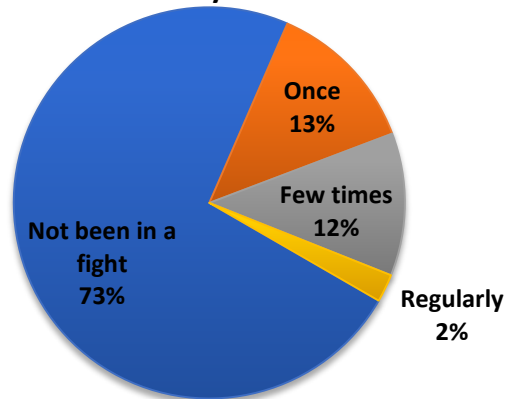


Figure 43: Students Who Have Been in a Fight in the Last 90 Days

Crosstabs by gender for all students indicated a significant difference between the percentage of males and females who have been in a physical fight in the past ninety days with about one-third of males (31.9 percent) and one-fifth of females (21.2 percent) reporting being in a fight at least once. Among students who had been in a fight, females most commonly reported being in a fight once (11.0 percent) while males most commonly reported this occurred a few times (14.8 percent).

Bullying

The National Center for Education Statistics estimates that 32 percent of youth in the United States are either active bullies or are targeted by bullies. Shelby County middle school and high school students were asked if they had been victims of bullying, at school and/or via electronic bullying, in the past ninety days. Over forty percent (42.6 percent) of Shelby County students indicated that they had been picked on or bullied. Most victims of bullying indicated this occurred a few times (21.1 percent) rather than once (15.1 percent) or regularly (6.4 percent).

Shelby County Youth - In the last 90 days, have you been picked on or bullied at school?

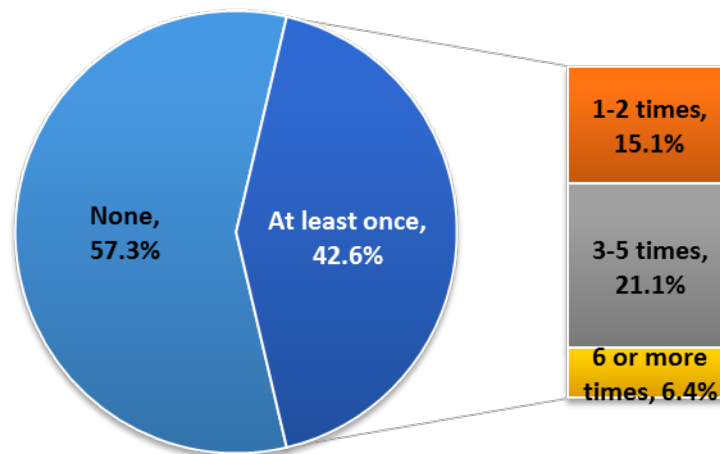


Figure 44: Youth Bullied at School

Crosstabs by gender revealed females were bullied more frequently in school than their male counterparts. Specifically, about half of females (48.5 percent) reported being bullied at least once in the past ninety days compared to about one-third of males (37.3 percent). Females indicated bullying occurred at higher percentages for each category of “once,” (16.4 percent), “a few times,” (25.5 percent) and, “regularly,” (6.6 percent).

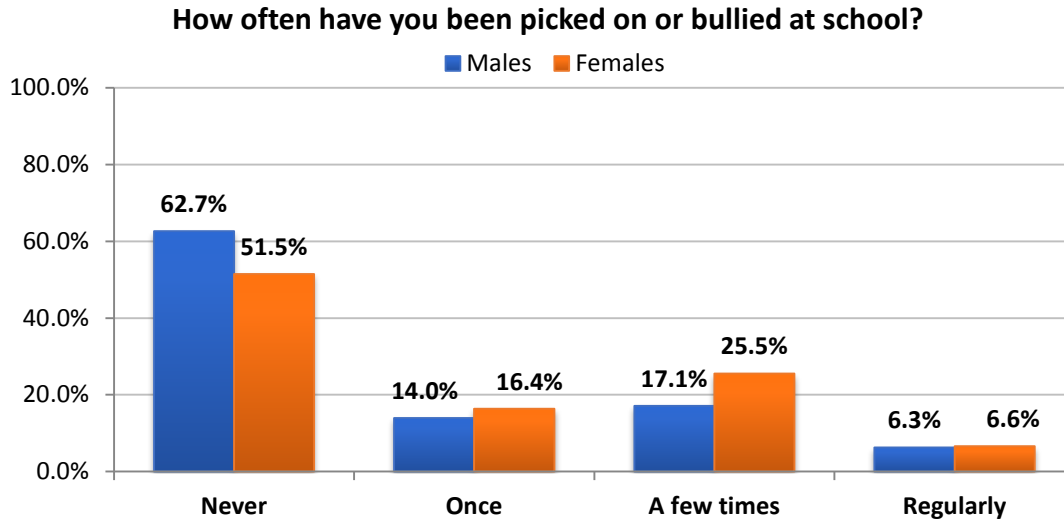


Figure 45: Bullying at School

Cyber Bullying

New technologies including social networking sites such as Facebook and Twitter have caused a notable shift from in-person bullying to on-line bullying. Middle school and high school students were asked to indicate how many times during the past ninety days they had been electronically bullied through email, text message, Facebook, etc. Shelby County students less frequently indicated being electronically bullied (21.8 percent) than being bullied in school (42.6 percent). Of those bullied through email, text messaging, or social networks, most indicated this occurred a few times (9.6 percent) or once (9.5) in the previous ninety days. About three percent of students (2.7 percent) reported being electronically bullied regularly.

Shelby County Youth - In the last 90 days, have you been picked on or bullied at school?

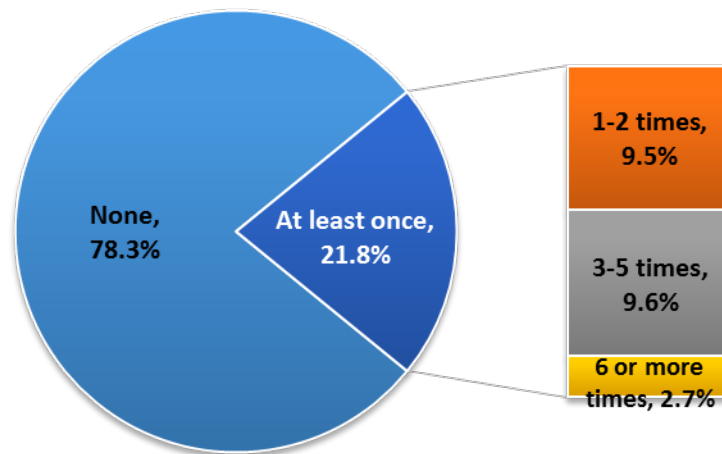


Figure 46: Youth - Frequency Students Were Picked on or Bullied at School in the Past 90 days

Crosstabs by gender revealed significant differences for likelihood of students to be victims of cyber-bullying. Females reported being electronically bullied (30.7 percent) at over twice the rate of males (13.6 percent). Female victims were also twice as likely to indicate this occurred a few times (13.3 percent) as compared to males (6.2 percent).

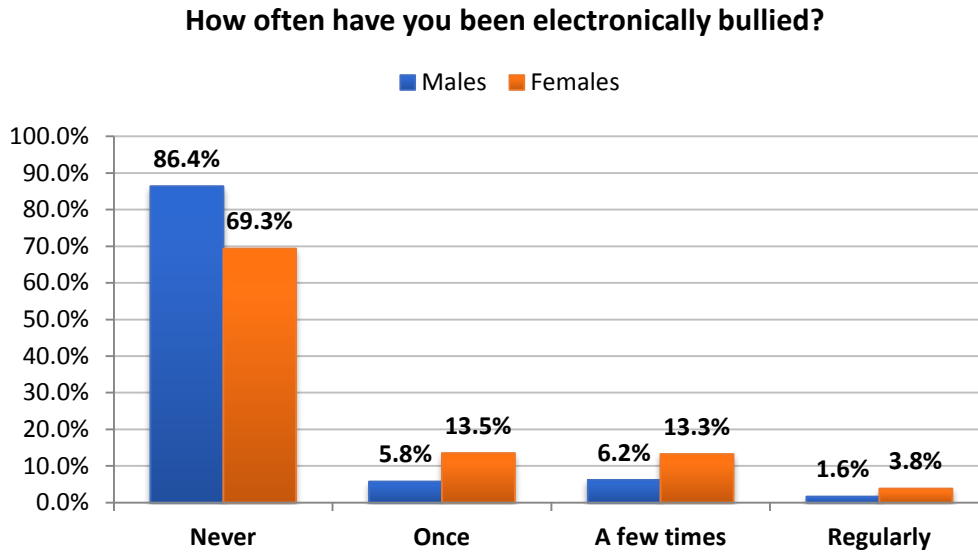


Figure 47: Electronic Bullying

Substance Abuse

Adult Tobacco Use

The percentage of Shelby County adults who smoke (23%) outpaces the State rate, and is far off the national goal of 13%.

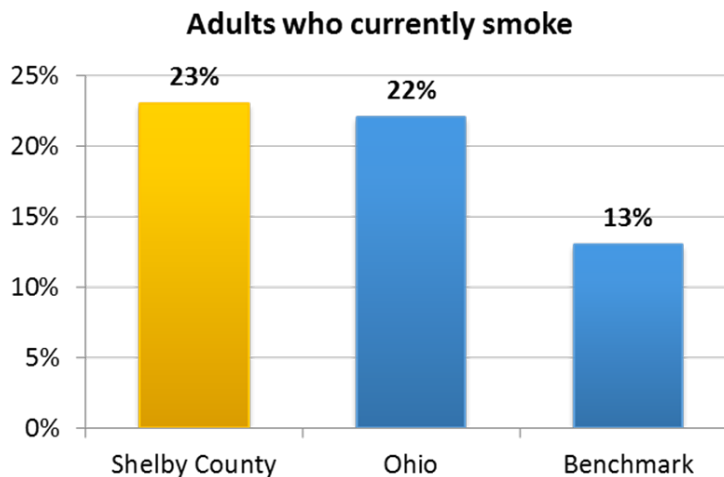


Figure 48: Percentage of Adults Who Currently Smoke

Teen Tobacco Use

A majority (75.9 percent) of students reported never having smoked tobacco, leaving 24.1% who have smoked. Interestingly that percentage is nearly identical to the adult rate.

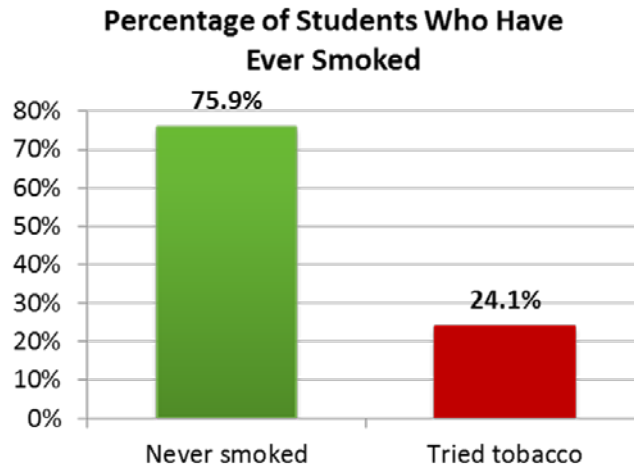


Figure 49: Percentage of Students Who Have Ever Smoked

Most students indicate that they first tried tobacco when they were 10 or less years of age (6.7 percent). The second most common age of first use was 13 years with 4.5 percent of students in this category.

Table 11: Youth - Age at First Tobacco Use

Age	Number of Students	Percentage of Students
Never Used	1426	75.9%
10 or less	125	6.7%
11	59	3.2%
12	53	2.8%
13	85	4.5%
14	45	2.4%
15	51	2.7%
16	20	1.0%
17	14	0.7%

Social Climate for Smoking Tobacco: Friends and Parents

When asked if they had friends who smoked tobacco, over half of students did not (57.4 percent) and about forty percent of students (42.6 percent) indicated they had friends who smoked tobacco.

Students were asked how wrong their parents would feel about the student smoking cigarettes. Responses available were, “not at all wrong,” “a little bit wrong,” “wrong,” and “very wrong.”

Almost all students (89.8 percent) reported their parents would feel it was either very wrong (77.2 percent) or wrong (12.6 percent) for the respondent to smoke cigarettes.

Parents' Feelings about Students Smoking Tobacco

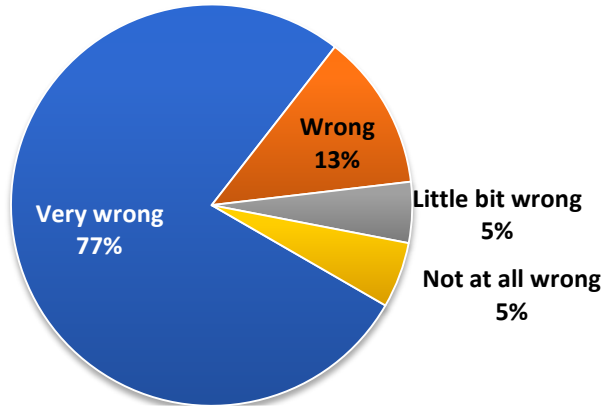


Figure 50: Parent's Feelings about Students Smoking Tobacco

Additionally, students were asked how often in the past thirty days they had been in a home where parents permitted students to smoke tobacco. Most students (88.9 percent) had not been in a home where parents permitted students to smoke tobacco in the past month. About four percent (3.7 percent) of students indicated this occurred on 1-2 days in the past month. Seventy-nine students (4.2 percent) reported being in a home “almost every day,” where parents allowed students to smoke.

Adult Alcohol/Drug Abuse

Fifty-one percent of surveyed adults said they did not drink alcohol in the past 30 days; this is higher than the rate for Ohio (46.8%) and for the US (45.4%). However, for adults who drink alcohol, their binge drinking rate is substantially higher than for the State and nation (18.5%, 17.2%, and 15.1%, respectively). Binge drinking constitutes five alcoholic drinks in one occasion for males and four for women.

Alcohol Use among Adults - Binge Drinking

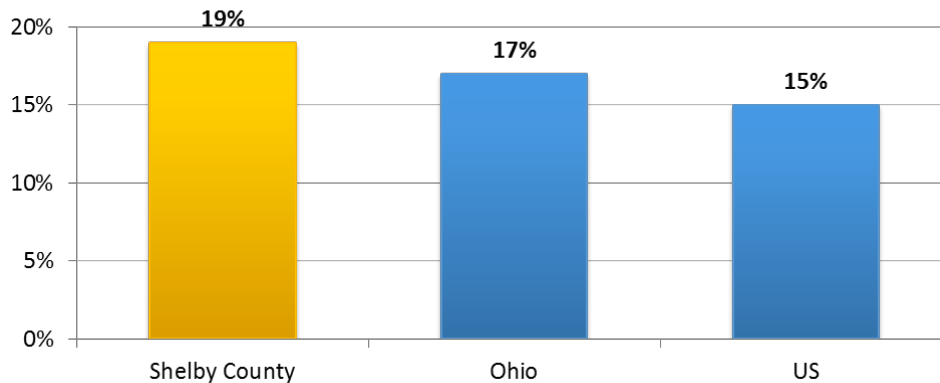


Figure 51: Alcohol Use among Adults - Binge Drinking

“Alcohol and drug abuse disorders” is among the top five hospitalization inpatient diagnoses; the rate has increased by 32% over the study period. And alcohol and/or drug abuse disorder is in the top ten ER diagnoses. From 2004 to 2011 the rate of adults with an alcohol and/or drug abuse disorder discharge diagnosis from the ER increased by 44%.

Seeking to gain insight about alcohol dependency, the Needs Assessment Survey asked adults if they regularly fail to fulfill obligations at work or home, or placed themselves in dangerous situations, or had legal problems due to alcohol consumption. Less than 4% of respondents who drink alcohol report that.

Another question on the survey attempted to assess drug use; however, there was minimal response. Only three respondents said they use marijuana or hashish; no other prescription or non-prescription drug use was self-reported.

All respondents were asked whether they have ever received treatment or counseling for their use of alcohol or drugs, not counting cigarettes, and 4% of respondents answered affirmatively and nearly all of those had received such support more than 12 months ago.

Teen Alcohol Use

Over three quarters of students (76.1 percent) indicated they had not had any alcohol in the past thirty days. Among students who had consumed alcohol, a wide majority indicated this had occurred 1-2 times (14.8 percent). Less than five percent (4.2 percent) reported drinking 3-5 times in the past month and the remaining five percent of students (4.9 percent) reported drinking 6 or more times in the past month.

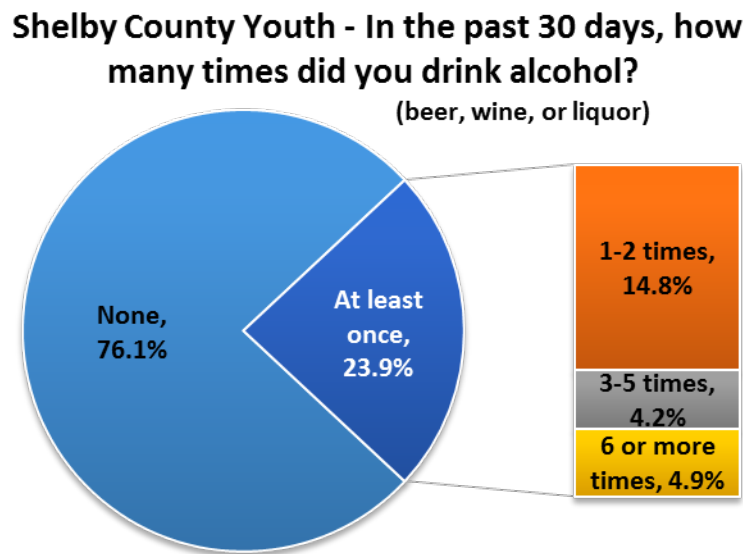


Figure 52: Youth - Frequency of Alcohol Use in the Past 30 days

Students were also asked if they thought they would drink alcohol in the next thirty days. More students did not expect to drink (83.3 percent) in the next month as compared to the percentage of drinking reported in the previous month (76.1 percent).

Students Expecting to Drink Alcohol in the Next 30 Days

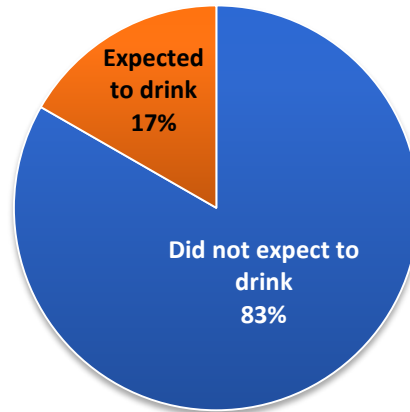


Figure 53: Students Expecting to Drink Alcohol in the Next 30 Days

Students were asked the age at which they first had more than one or two sips of alcohol. About half of students (47.5 percent) reported having never used alcohol.

Shelby County Youth - Percentage of Students Who Have Ever Used Marijuana

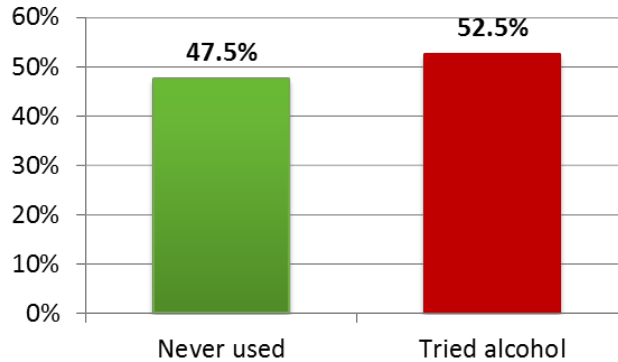


Figure 54: Percentage of Students Who Have Ever Used Marijuana

Among students who tried alcohol, the highest percentage (16.3 percent) indicated they were 10 or less years of age when the first drank more than one or two sips of alcohol. The table below profiles all responses.

Table 12: Youth - Age of First Alcohol Use

Age	Number of Students	Percentage of Students
Never Used	885	47.5%
10 or less	304	16.3%
11	109	5.8%
12	104	5.6%
13	170	9.1%
14	133	7.1%
15	126	6.8%
16	20	1.1%
17	12	0.7%

Social Climate of Alcohol Use: Friends and Parents

When asked if they had friends who drank alcohol, a slight majority of students (53.6 percent) indicated having friends who drank.

Students were asked how wrong their parents would feel about the student drinking alcohol. Responses available were, “not at all wrong,” “a little bit wrong,” “wrong,” and “very wrong.” About three quarters of students (74.6 percent) reported their parents would think it either very wrong (50.7 percent) or wrong (23.9 percent) for them to drink alcohol. About eighteen percent of students (17.7 percent) indicated parents would feel it a little bit wrong and about eight percent (7.7 percent) reported parents would feel it not at all wrong for the student to drink alcohol. A strong disapproval of alcohol drinking by parents (as reported by students) was not as frequently reported as feelings of strong disapproval of tobacco and marijuana usage.

Parents' Feelings about Students Drinking Alcohol

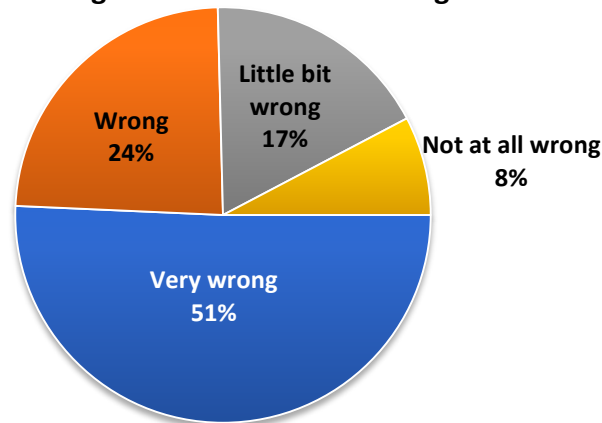


Figure 55: Parents' Feelings about Students Drinking Alcohol

Students in 8th, 9th, and 10th grades were asked how often in the past thirty days they had been at a home where parents permitted students to drink alcohol (beer, wine, liquor). A majority of students (82.3 percent) indicated not being in a home where parents had permitted students

to drink in the past thirty days. Of those students who had observed this behavior by parents, most indicated this occurred on 1-2 occasions (10.6 percent). About three percent (3.0 percent) reported this occurred on 3-5 days and twenty-nine students (1.6 percent) reported being in such a home almost every day.

Teen Drug Abuse

Marijuana

Over ninety percent of students (93.0 percent) indicated not using marijuana in the past thirty days. Of the seven percent of students (7.0 percent) who had recently used marijuana, most reported using 1-2 times in the past month (2.2 percent) while 1.8% said 40 or more times. The following illustration profiles responses for marijuana use in the past thirty days.

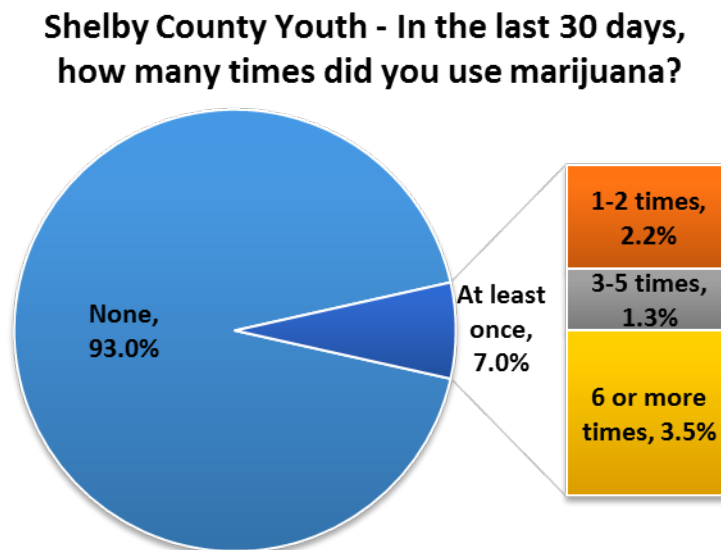


Figure 56: Youth – Marijuana Use in the last 30 Days

Students were asked about expected future use of marijuana in the next thirty days. Responses nearly matched previous usage with 93.7 percent of students reporting they would not use marijuana in the next thirty days.

Most students (86.6 percent) reported having never used marijuana and about thirteen percent (13.4 percent) of students had tried marijuana at least once. The illustration below shows the percentage of students who have ever tried marijuana.

Shelby County Youth - Percentage of Students Who Have Ever Used Marijuana

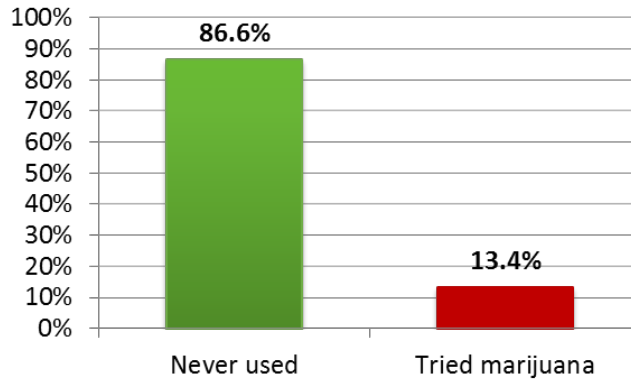


Figure 57: Percentage of Youth Who Have Ever Used Marijuana

Among the two-hundred fifty-two students who had tried marijuana (53 did not respond to this question at all), the highest percentage indicated they tried it first when they were 14 (3.2 percent) or 13 (2.7 percent) years of age. The table below profiles all responses for age of first use of marijuana.

Table 13: Youth, Age of First Marijuana Use

Age	Number of Students	Percentage of Students
Never Used	1610	86.6%
10 or less	29	1.6%
11	26	1.4%
12	31	1.7%
13	50	2.7%
14	59	3.2%
15	36	1.9%
16	12	0.6%
17	9	0.5%

Social Climate of Marijuana Use: Friends and Parents

As with alcohol, students reported having friends who used marijuana (30.7 percent) at far higher rates than the percentage of students who reported actually using the drug in the past month (7.0 percent).

Students were asked how wrong their parents would feel about the student using marijuana. A large majority of students reported their parents would feel it was very wrong (85.6 percent) or wrong (6.2 percent) for the student to use marijuana. About five percent of students (4.9 percent) reported parents would not think it wrong at all for them to use marijuana.

Parents' Feelings about Students Smoking Marijuana

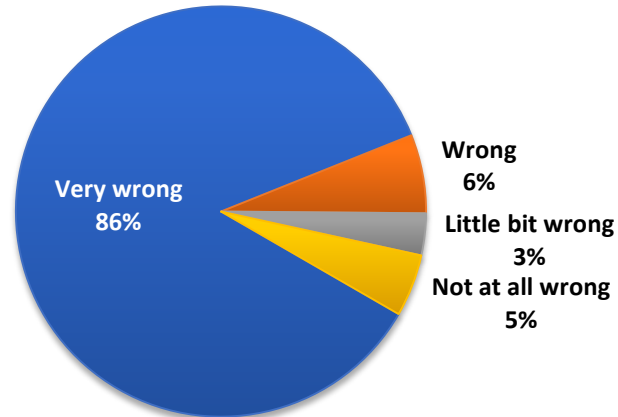


Figure 58: Parents' Feelings about Students Smoking Marijuana

Students in 8th, 9th, and 10th grades were also asked how often they had been in a home where parents had permitted smoking marijuana. Nearly all students (94.7 percent) reported they had not been in a home where parents permitted students to smoke marijuana. Of those that had, most reported this happened 1-2 days (2.1 percent) followed by twenty-nine students (1.5 percent) reporting being in one of these homes almost every day.

Other Drugs

Respondents were also asked questions pertaining to the misuse of legal substances and other illegal drugs. The most commonly used other drug in the past month among those discussed was sniffing glue or inhaling something to get high (2.2 percent of students).

Other responses included:

- Sniffed glue or inhale (something to get high)
 - Used by 2.2 percent (44 students) in previous thirty days
 - Most frequently used 1-2 times in previous month (1.1 percent; 21 students)
- Heroin or any illegal drug
 - Used by 1.6 percent of students (30 students) in previous thirty days
 - Most frequently used 1-2 times in past thirty days (0.8 percent; 15 students)
- Misuse prescription drug (to get high)
 - Used by 1.2 percent of students (22 students) in previous thirty days
 - Most frequently used 1-2 times (0.4 percent; 8 students).
- Misuse over the counter drug (to get high)
 - Use by 1.0 percent of students (19 students) in previous thirty days.

Youth Injuries

Seatbelt Usage

The figure below shows that about sixty percent of students (60.2 percent) always wear a seatbelt when riding in a car. Of the students surveyed, about thirty percent (28.1 percent) sometimes wear a seatbelt. About ten percent of students rarely (8.7 percent), or never (3.0 percent) wear a seatbelt while riding in a car.

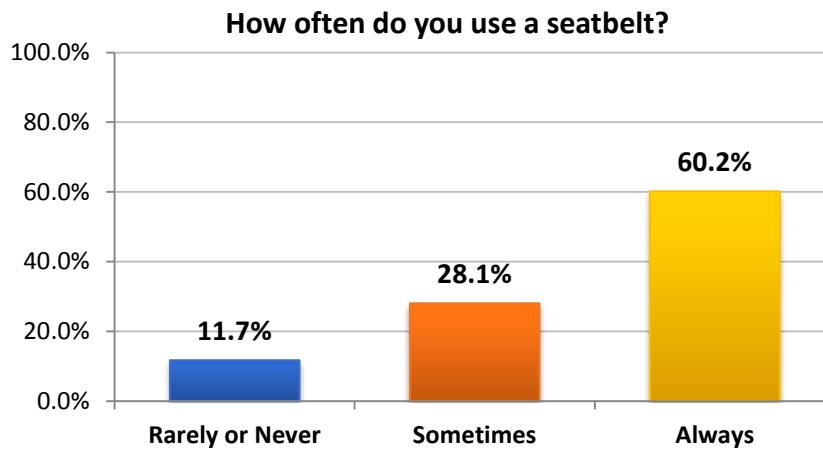


Figure 59: Youth - Frequency of Seatbelt Usage

Ridden with Someone Who Had Been Drinking

A majority of middle school and high school students (65.1 percent) report never riding in a vehicle with someone who has been drinking alcohol. Among respondents who had been in a vehicle with someone who drank alcohol, about one quarter of students indicated this had occurred rarely (23.2 percent) and about ten percent (10.7 percent) indicated this occurred sometimes.

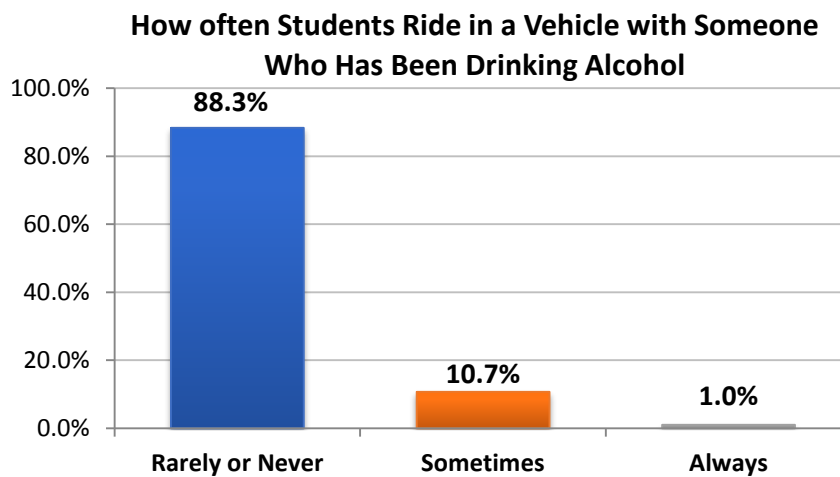


Figure 60: How often Students Ride in a Vehicle with Someone Who Has Been Drinking Alcohol

Bicycle Safety

Students were asked how often they wear a helmet when riding a bicycle, four-wheeler (ATV), or skateboard. Student responses indicated that a majority of students (61.5 percent) never wear a helmet and less than ten percent (6.8 percent) always wear a helmet. Remaining responses were split between sometimes (15.4 percent) and rarely (16.2 percent) wearing a helmet in these recreational activities. The figure below profiles responses.

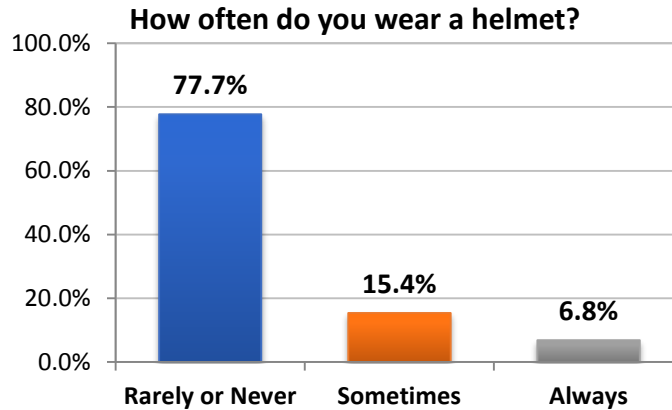


Figure 61: Youth - Frequency of Helmet Usage

Strategic Issues Identification

The identification of strategic issues began with a comprehensive review of all primary and secondary data. Next, criteria were applied to aid in the selection of cross-cutting issues that are not trending in a favorable way. The criteria used were:

- Prevalence
- Seriousness (hospitalization or death)
- Impacts on other health issues
- Urgency—what are the consequences of not addressing this issue?
- Prevention—is the strategy preventative in nature?
- Economics — is the strategy financially feasible? Does it make economic sense to apply this strategy?
- Acceptability – Will the stakeholders and the community accept the strategy?
- Resources — is funding likely to be available to apply this strategy? Are organizations able to offer personnel time and expertise or space needed to implement this strategy?

By applying these criteria, the broad-based community group identified four priority areas to focus. These priority areas are not presented in a ranked order.

1. Family Instability
2. Physical Health including Maternal and Infant Health, Preventive Screenings, and Physician Access
3. Mental Health
4. Substance Abuse

Family Instability

Family instability has many causes, and in many ways, addressing physical and mental health care issues as well as substance abuse issues, will contribute to greater family stability in the County.

Data show that 18% of children in Shelby County live in poverty; however, poverty is not limited to the very young. In Shelby County 7.5% of people age 65+ were living in poverty in 2010. That percentage rose to 8.8% in 2011, resulting in a County percentage that outpaces the state's percentage of 8.1%. Best practice programs such as *Bridges out of Poverty* provide guidance on how to tackle this difficult issue in a comprehensive way.

Physical Health

Maternal and Infant Health

The percentage of mothers who smoked while pregnant is higher in Shelby County than for the State overall and is significantly higher than the national goal. Smoking during pregnancy causes low birth-weight in at least 1 in 5 infants. Low birth weight babies are more likely than babies with normal weight

to have health problems as a newborn such as respiratory and heart complications. Beyond that, babies born with low birth weight may be more likely to have certain medical conditions later in life including high blood pressure, diabetes, and heart disease.

Preventive Screenings

Shelby County is ranked 38th of 88 counties in terms of residents obtaining appropriate clinical care. The County's percentage of those obtaining mammography screening is substantially below the national goal, although breast cancer is the most common form of cancer affecting Shelby County. The percentage of County residents obtaining diabetic screenings is also well below the national goal. At the same time, diabetes is the fourth most common hospitalization discharge diagnoses in the County.

Access to Physicians

The ratio of the population to primary care physicians in Shelby County is 2,057 people to one physician. This ratio is two times as high as the national benchmark which is 1,067 people to one physician, and it is 1.5 times greater than the State's ratio. Many County adults use the ER as their usual source of medical care because they could not get a needed appointment from their health care provider. All in all, 14.5% of County adults could not access all the health care they needed last year.

Substance Abuse

Alcohol and drug abuse disorders is in the top five hospitalization inpatient diagnoses and the rate has increased over the study period by 32%. Such disorders are also in the top ten reasons for ER diagnoses. Nearly one in five adults binge drinks in Shelby County; this is a rate that outpaces the State and nation. The percentage of 8th, 9th, and 10th graders who drank alcohol in the last 30 days is slightly higher at 23.9%. The percentage of Shelby County adults who smoke (23%) also outpaces State and national rates. Interestingly, nearly the same percentage of youth (24%) has smoked.

Mental Health

Depression

The percentage of adults and youth that report that they have depression is similar. To address feelings of mental unwellness, 9.1% of adults take medicine or receive treatment from a doctor or other health professional. Eleven percent of youth feel depressed all or the majority of the time.

Bullying

According to experts, bullying prevention and intervention is one of five strategies that form the basis of youth mental health and wellness. Over 40% of 8th, 9th, and 10th graders said they had been bullied in the 90 days previous to the survey, with 123 8th, 9th, and 10th graders saying that they are bullied regularly. New technologies including social networking sites such as Facebook and Twitter have created the opportunity for online or "cyber bullying." More than one in five students has been cyber bullied.