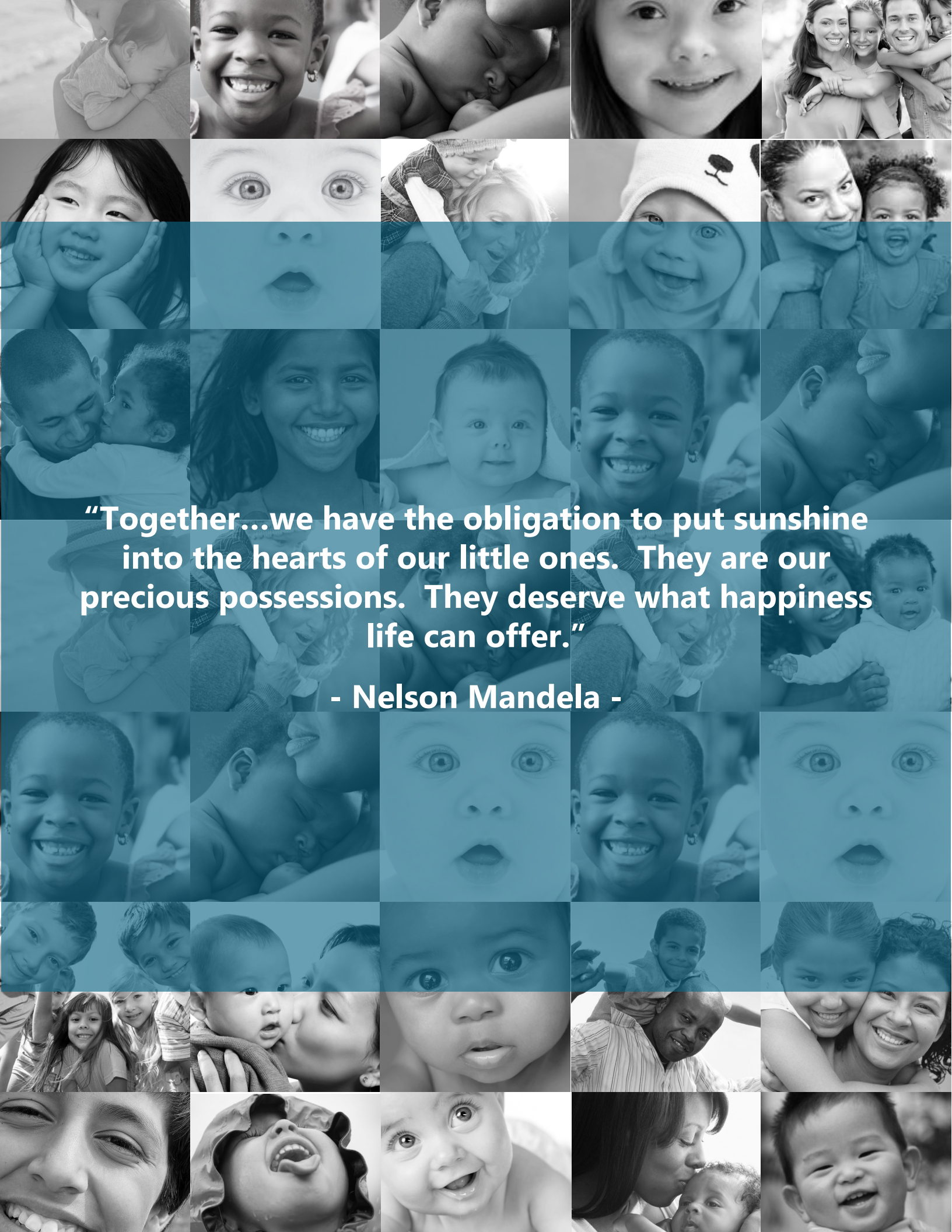
BUTLER COUNTY
COMMUNITY HEALTH ASSESSMENT:
Infant Mortality, Child and Family Health Services
2015

The Butler County Partnership to Reduce infant Mortality

Reaching More First Birthdays

Butler County Health Department



“Together…we have the obligation to put sunshine into the hearts of our little ones. They are our precious possessions. They deserve what happiness life can offer.”

- Nelson Mandela -

ACKNOWLEDGMENTS

The Butler County Partnership to Reduce Infant Mortality (PRIM) and the Butler County Health Department appreciate the numerous partner agencies, organizations, institutions, and individuals that have attended community meetings and supported this effort in many ways. We value your interest in working with us to impact this important health issue, and we look forward to further collaboration in the future!

-The Lead Team -

We are grateful to CityMatCH and the Ohio Department of Health for assisting us in developing strategies for addressing our community's needs, and to Hamilton County Public Health, Division of Epidemiology and Assessment who assisted us in understanding and interpreting our community's data especially Thomas Boeshart, MPH, Epidemiologist.

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Five Founding Organizations of the Butler County Partnership to Reduce Infant Mortality (PRIM)

Butler County Health Department
Butler County Educational Service Center
Primary Health Solutions
Butler County WIC (Women, Infants, and Children)
High Hopes Program/Butler County Health Department

'First Wave Supporting Partners'

Butler County Families and Children First Council
City of Hamilton Health Department
City of Middletown Health Department
Sojourner Recovery Service
Cindy Carpenter, Butler County Commissioner
McCullough-Hyde Memorial Hospital
Atrium Medical Center
Abilities First
Butler County Board of Developmental Disabilities
Planned Parenthood
Miami University, Department of Nursing
Cincinnati Children's Hospital Medical Center

Additional Supporting Partners

Envision Partnerships, Center for Women's Health, Health Now

Medicaid Support Received From

CareSource, Buckeye, Paramount
United Health Care Community Plan

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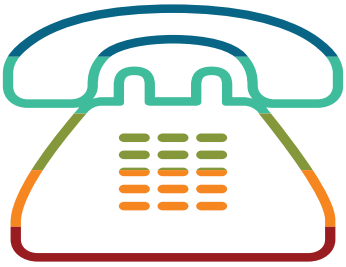

CONTACT INFORMATION

Do you want to get involved with Butler County's Partnership to Reduce Infant Mortality?

Do you have questions about the Community Assessment Chart Book: Infant Mortality, Child and Family Health Service or the Ohio Equity Initiative?

We would love for you to join in our work!
Get in touch with us by male, email or phone!

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INTRODUCTION

The Butler County Community Health Assessment: Infant Mortality, Child and Family Health Services, is an important step in the process to improve child and family health outcomes in our community. The purpose of this report is to:

- Identify the current status of Butler County in child and family health indicators;
- Identify trends in child and family health indicators in Butler County;
- Track progress in improving child and family health;
- Inform community planning and policy making;

By tracking health indicators, we can identify areas that can be targeted for intervention, increase the health of the Butler County community, and decrease infant mortality in Butler County--our ultimate goal.

The Butler County Community Health Assessment: Infant Mortality, Child and Family Health Services is based on multiple data sources, and includes information obtained from:

- Centers for Disease Control and Prevention (CDC) National Vital Statistics System (NVSS);
- Guttmacher Institute;
- Ohio Department of Health (ODH);
- Ohio Department of Job and Family Services (ODJFS);
- Ohio Department of Education (ODE);
- United States Census Bureau;
- United States Department of Labor and Labor Statistics;

This report includes indicators from the traditional health field, along with various social indicators that contribute to the health of communities. All data obtained is summarized in four sections within this report: population characteristics; economic well-being; access to health care; and health outcomes. Towards the end of the report is a status update from the Butler County PRIM. Finally, data tables are presented displaying the raw numbers/rates/percentages for each health indicator displayed throughout this report. Where available, Ohio comparisons will be made (for Ohio comparisons please see the corresponding data tables at the end of this report).

About this report

The Butler County Community Health Assessment: Infant Mortality, Child and Family Health Services presents data from various sources, in different formats and from different time periods. The data was obtained, and presented in various ways that are useful and meaningful to community members, stakeholders, and policy makers. Data indicators were selected based on availability of current and/or finalized datasets, along with the comparability of Butler County to the State of Ohio.

The Butler County Community Health Assessment: Infant Mortality, Child, and Family Health Services is divided into four major sections, with various health indicators comprising each section. Each section contains descriptive information to accompany the indicators, illustrating the importance of the indicator on the health of Butler County residents.

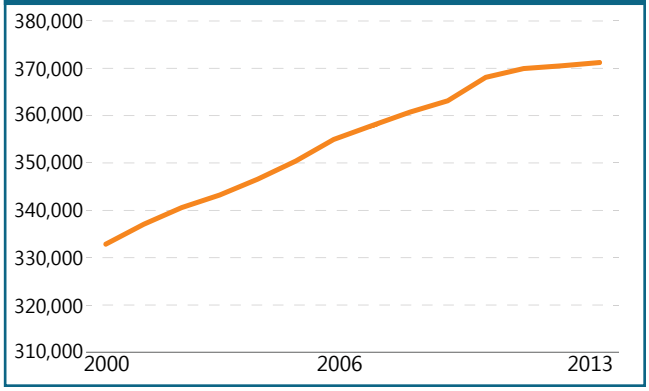
"Some data in this report were provided by the Ohio Department of Health. The Department specifically disclaims responsibility for any analyses, interpretations or conclusions."

POPULATION CHARACTERISTICS

Understanding the population can help us successfully implement programs or interventions that serve the local community. Demographic understanding is important from program planning to program implementation[1]. Information about the population is key to "identifying and anticipating problems and community needs, establishing short- and long-range program goals, developing action plans, identifying fiscal and human resources and evaluating the impact of the given effort[1]." Understanding the population not only helps with successful programs, but also helps in understanding the health of a community. Characteristics of a population in a community can help to determine the possible impact of health patterns and disease trends over time[2].

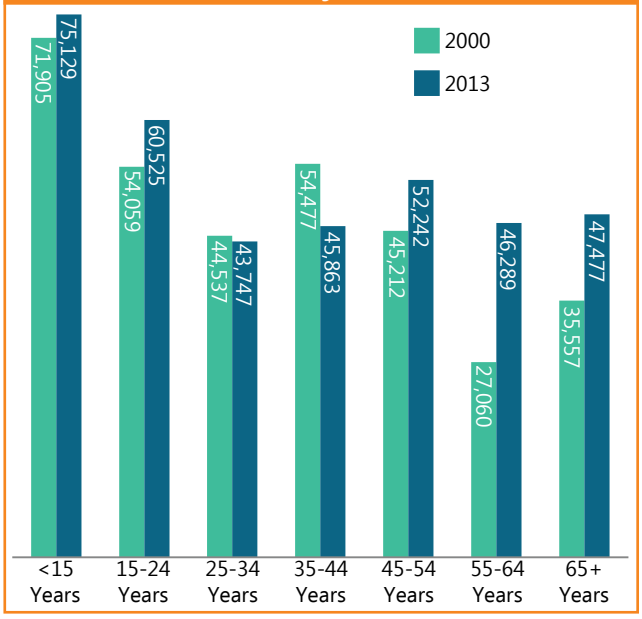
POPULATION TRENDS IN BUTLER COUNTY

Figure 1: Population Trends in Butler County, 2000-2013



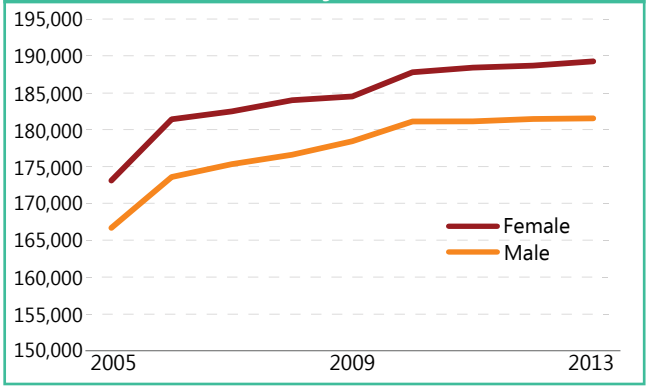
Butler County has experienced a 12 percent increase in its population from 2000 to 2013. The largest increase in the Butler County population was those individuals who were 55-64 years of age, whose population increased by 71 percent from 2000 to 2013. The second largest increase in population was those individuals who were 65 years of age and older, whose population increased by 34 percent. However, not all age groups in Butler County witnessed an increase. Individuals who were 35-44 years of age saw their population decrease by 16 percent. This could be a result of individuals moving out of Butler County. The increase in the older population suggests that Butler County is experiencing an aging population. Butler County is not alone in experiencing an aging population; the State of Ohio is also experiencing an aging population. This trend is largely due to the baby boomer generation, who began to turn 65 years of age in 2011[3]. As the population in Butler County grew,

Figure 2: Population Trends by Age Group in Butler County, 2000 & 2013



both male and female populations grew. There was nearly equal growth for both females and males in Butler County. Females in Butler County saw a 10 percent increase in their population from 2005 to 2013, while males saw a nine percent increase. While this growth is nearly equal, females still slightly outnumber males in Butler County.

Figure 3: Population Trends by Gender in Butler County, 2005-2013



Butler County is not only witnessing the growth of an aging population, but also cultural diversification. The largest changes in race/ethnicity in Butler County are occurring among the Hispanic population. From 2000 to 2013, the Hispanic population in Butler County grew by 233 percent. The portion of individuals who are non-Hispanic and identify as multiracial (2 or more races) grew 210 percent from 2000 to 2013. While these groups experienced the largest growth within Butler County's population, non-Hispanic white (83 percent) and non-Hispanic Black (7 percent) still constitute the largest percentage of the population. As a population becomes increasingly diverse, new cultures and languages are introduced to the community. This can introduce barriers that diminish the quality and accessibility of healthcare. In 2013, seven percent of Butler County residents, 5 years of age and older, spoke a language other than English at home. Three percent of Butler County residents reported speaking English less than very well.

Figure 4: Population Trends by Race/Ethnicity in Butler County, 2000 & 2013

	2010	2013	% Change
non-Hispanic White	301,078	308,912	**2.6%**
non-Hispanic Black	17,398	26,424	**51.9%**
non-Hispanic Other Race	6,182	9,566	**54.7%**
non-Hispanic 2+ Races	3,378	10,466	**209.8%**
Hispanic any Race	4,771	15,904	**233.3%**

Figure 5: Language Spoken at Home in Butler County Residents*, 2013

7.1%
Speak a language other than English

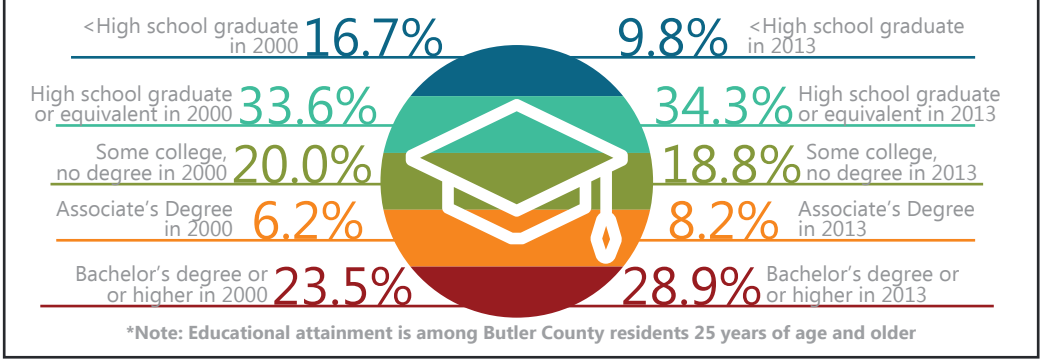
2.9%
Speak English less than "Very Well"

*Note: Language spoken at home is to Butler County residents who are 5 years of age and older.

EDUCATIONAL ATTAINMENT IN BUTLER COUNTY

Educational attainment is defined as the highest level of education that an individual has completed[4]. Higher educational attainment, such as a Bachelor's degree or higher, is often associated with better health outcomes[5]. From 2000 to 2013, the percent of Butler County residents 25 years of age and older that had an educational attainment of less than a high school graduate decreased nearly seven percent. The percent of females with an educational attainment of less than a high school education decreased by nearly four percent from 2005 to 2013. Butler County male residents who are 25 years of age and older with

Figure 6: Educational Attainment* in Butler County, 2000 & 2013



*Note: Educational attainment is among Butler County residents 25 years of age and older

an educational attainment of less than a high school education decreased by four percent from 2005 to 2013. Graduation from high school (or the equivalent) is required for any individual who seeks to obtain a college degree. The percent of Butler County residents 25 years of age and older who graduated from high school increased less than one percent from 33.6 percent in 2000 to 34.3 percent in 2013. While the rate of individuals who were a high school graduate (or the equivalent) only slightly increased, female residents saw a nearly six percent decrease from 2005 to 2013 in the percent of Butler County females who were a high school graduate (or the equivalent). Butler County male residents who were 25 years of age and older only witnessed a one percent decline in the percent of Butler County male residents who were a high school graduate (or equivalent). This decline could be attributed to the overall increase in the percent of Butler County residents who completed some form of higher education. Butler County residents who obtained an Associate's degree increased by two percent from 2000 to 2013. The percent of Butler County females with an Associate's degree increased by four percent from 2005 to 2013, four times higher than the percent of Butler County males with an Associate's degree. Over a quarter (28.9 percent) of Butler County residents 25 years of age and older, had a Bachelor's degree or higher (i.e. Master's degree, or PhD), an increase of five percent from 2000. The percent of female residents in Butler County who had a Bachelor's degree or higher increased by nearly six percent from 2005 to 2013. The percent of male residents in Butler County who had a Bachelor's degree or higher also increased by five percent from 2005 to 2013.

Figure 7: Educational Attainment in Butler County Females, 2005 & 2013

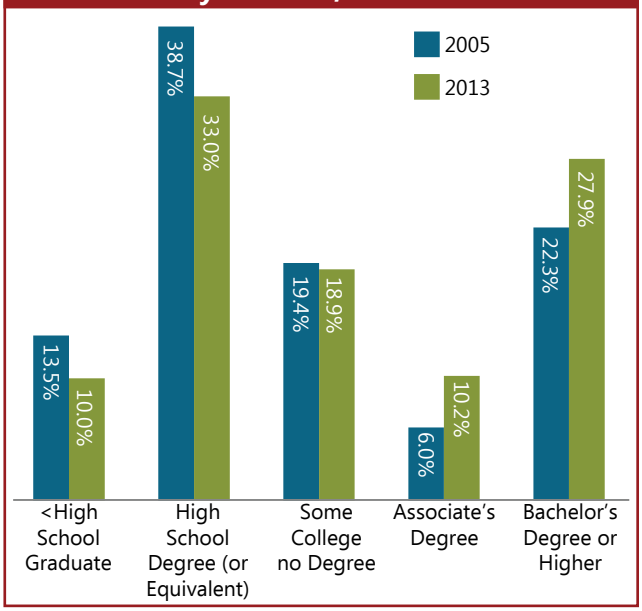
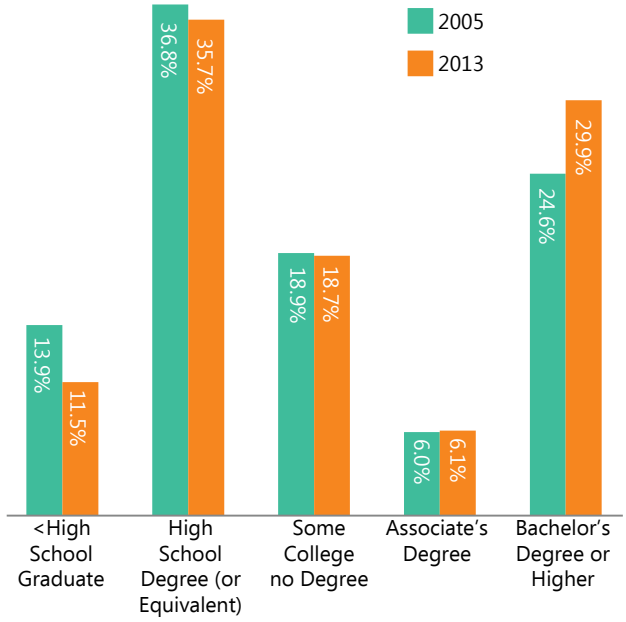


Figure 8: Educational Attainment in Butler County Males, 2005 & 2013



MARITAL STATUS IN BUTLER COUNTY

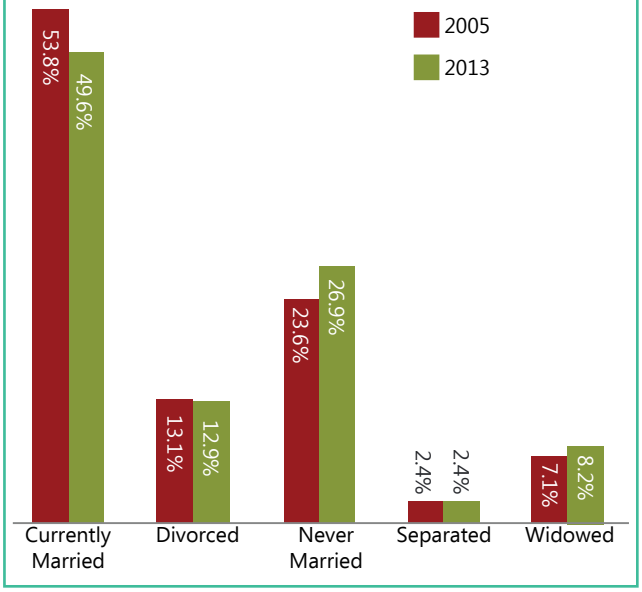
Marital status, much like educational attainment, is often associated with better health outcomes of not only adults but children as well. Adults who are married are generally found to be healthier adults than individuals who are divorced, widowed or separated[6]. While the population in Butler county has been increasing since 2000, the marital status of Butler County residents has been decreasing. From 2000 to 2013, the percentage of Butler County residents who are

Figure 9: Marital Status in Butler County, 2000 & 2013

	2010	2013	% Change
Currently Married	57.5%	51.1%	**-6.4%**
Divorced	9.8%	11.9%	**2.1%**
Never Married	25.7%	29.6%	**3.9%**
Separated	1.4%	1.7%	**0.3%**
Widowed	5.7%	5.8%	**0.1%**

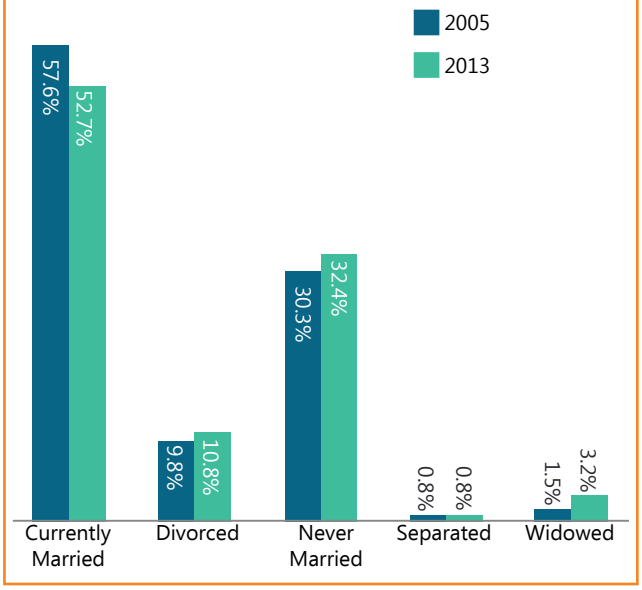
*Note: Marital status is among Butler County Residents 15 years of age and older

Figure 10: Marital Status* in Butler County Females, 2005 & 2013



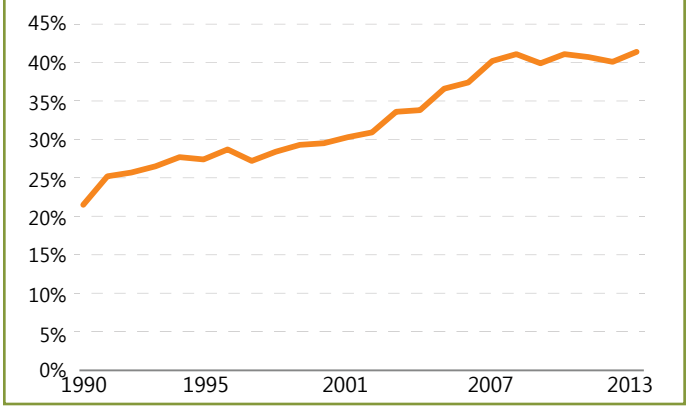
currently married decreased by six percent from 58 percent (2000) to 51 percent (2013). The percent of female residents in Butler County who are currently married decreased by four percent from 2005 (53.8 percent) to 2013 (49.6 percent). Butler County male residents who are currently married decreased by five percent from 2005 to 2013. Individuals who reported they were divorced has remained relatively the same from 2000 to 2013, increasing by two percent. The percent of Butler County males who are divorced increased by one percent from 2005 to 2013, while the percent of females who are divorced decreased by less than one percent. While the percent of Butler County residents who are currently married is decreasing, and percent divorced increasing, the percent of individuals who were never married has also been increasing. From 2000 to 2013, the percent of Butler County residents who were never married increased by nearly four percent. Over a quarter of all Butler County residents in 2013 were never married. Females in Butler County witnessed the largest increase in the percent of residents who were never married. From 2005 to 2013, the percent of Butler County females who were never married increased by over three percent from 24 percent in 2005 to 27 percent in 2013. The percent of males in Butler County who were never married also saw an increase by two percent from 2005 to 2013.

Figure 11: Marital Status in Butler County Males, 2005 & 2013



Children who are born to unmarried parents are at risk for poor developmental outcomes later in life[8]. Since 1990, the percentage of births to unmarried mothers in Butler County has slowly risen. In 2013, 41 percent of all births in Butler county were to unmarried mothers; a 20 percent overall increase from 1990. This increase may not be surprising, as the percent of the population in Butler County who are currently married decreases and those who were never married increases. However, while a mother may have been unmarried when she gave birth, a partner/significant other may be supportive of both mom and child.

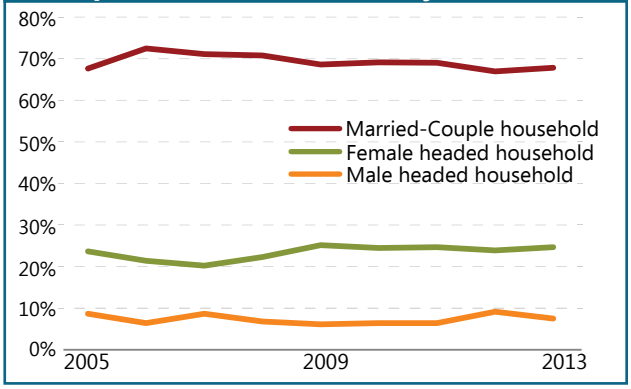
Figure 12: Percent of Births to Unmarried Mothers in Butler County, 1990-2013



HOUSEHOLD COMPOSITION IN BUTLER COUNTY

Families headed by a female, with no husband present are five times more likely to be living in poverty than married-couple families[7]. Families headed by a male, with no wife present are three times more likely to be living in poverty than married-couple families[7]. In 2013, 35 percent of children in Butler County lived in a household headed by a female with no husband present, while 68 percent lived in a household with a married couple. Eight percent of children in Butler County lived in a household headed by a male with no wife present. In Butler County the percent of children living in households headed by females, with no husband, has remained relatively stagnant, increasing one percent from 2005 to 2013. On average, the percent of children living in households with married couples is three times higher than that of female-headed households with no husband present and male-headed households with no wife present.

Figure 13: Percent of Children by Household Composition in Butler County, 2005-2013



ECONOMIC WELL-BEING

The economic well-being of individuals within a community can have a lasting impact on the overall health of a community.

POVERTY IN BUTLER COUNTY

Poverty has been shown to act cumulatively over a lifetime to impact the health of individuals[9]. Individuals who are in poverty, generally have fewer resources to receive adequate health care, and often forgo preventive care. The poverty rate in Butler County has remained relatively stable from 2005 to 2013. The poverty rate in Butler County increased by approximately one percent from 2005 to 2013. Both male and female residents in Butler County experienced increases in the percent of individuals living in poverty. From 2005 to 2013, the percent of female residents in Butler County living in poverty increased by one percent. However, the percent of females living in poverty saw an increase from 2005 to 2011, from 13 percent to 16 percent. Since 2011, the percent of females living in poverty in Butler County has begun to decrease. The percent of male residents in Butler County living in poverty saw less than a one percent increase between 2005 and 2013. The largest group to experience a decrease in the percent of individuals living in poverty is black Butler County residents. From 2005 to 2013, the percent of black residents living in poverty in Butler County decreased by over five percent. The percent of white residents in Butler County living in pov-

Figure 14: Percent of Butler County Population Living in Poverty, 2005-2013

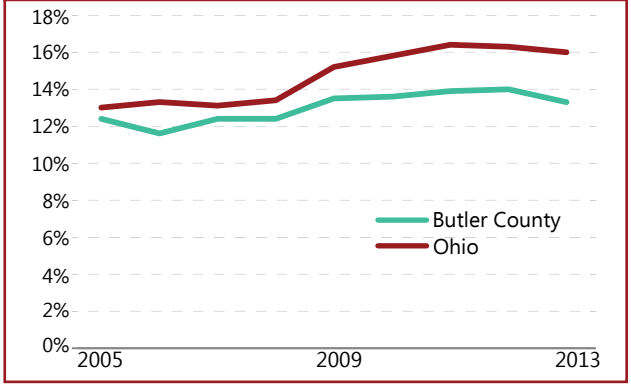


Figure 15: Percent of Butler County Population Living in Poverty by Gender, 2005-2013

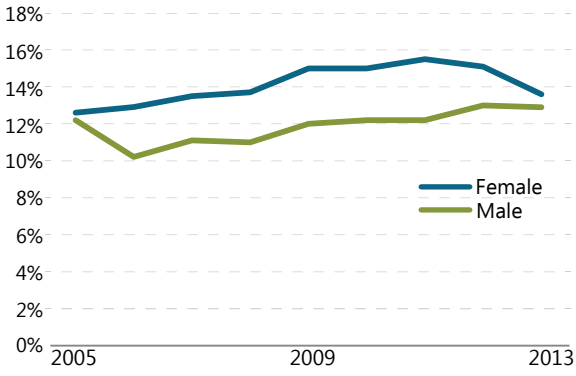
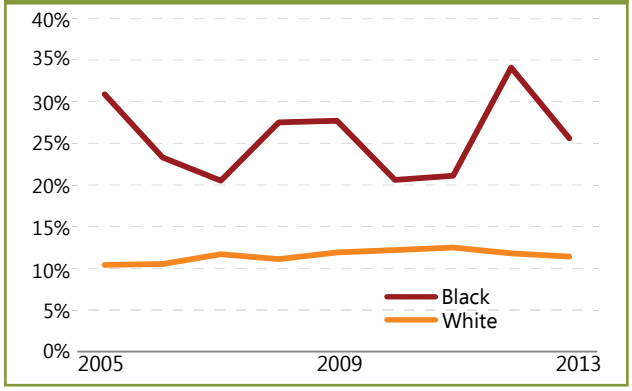
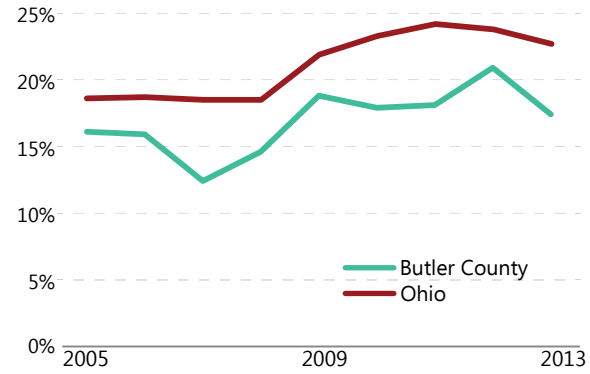


Figure 16: Percent of Butler County Population Living in Poverty by Race, 2005-2013



erty increased by one percent from 2005 to 2013. However, while the percent of black residents living in poverty decreased, there are still two times more black residents in Butler County living in poverty than white residents.

Figure 17: Percent of Butler County Children* Living in Poverty, 2005-2013

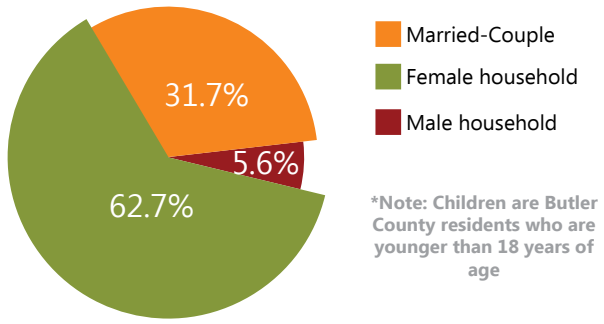


*Note: Children are Butler County residents who are younger than 18 years of age.

Living in poverty not only affects the access to health care, but can also greatly impact the overall health of children. When experienced at a young age, poverty sets the child on a path of exposure to increased levels of physical, emotional, and mental stress, poor health behaviors and unequal access to a variety of services and support that accumulate over his/her life[9]. From 2005 to 2013, the poverty rate for children in Butler County has increased a little over one percent. The poverty rate for children less than 18 years of age in Butler County is starting to decrease after increasing during the period of 2007-2011.

A child may be at increased risk for poverty depending on the type of household in which they live. Children who are living in female headed households, with no spouse present, are more likely to be living in poverty that children living in married-couple households. In 2013, 63 percent of Butler County children who were living in poverty, were living in female headed households with no husband present. In contrast, only 32 percent of Butler County children who were living in poverty were living in households with married couples.

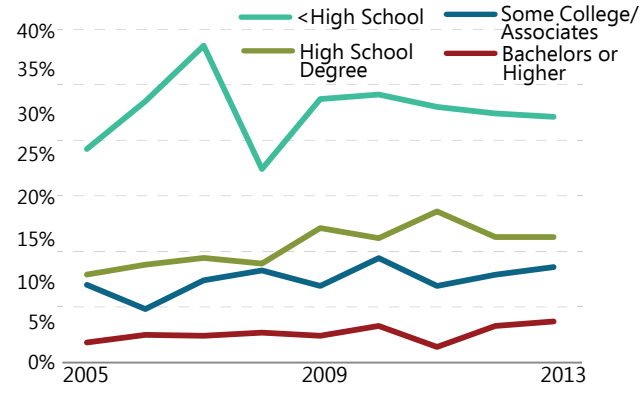
Figure 18: Percent of Butler County Children* Living in Poverty by Household Composition, 2013



*Note: Children are Butler County residents who are younger than 18 years of age

Living in poverty not only has been shown to impact the overall health of individuals but has been shown to increase high school drop-out rates.

Figure 19: Percent of Butler County Population Living in Poverty by Educational Attainment, 2005-2013



The percent of Butler County residents with an educational attainment of less than a high school degree, living in poverty, increased by three percent from 2005 to 2013. The percent of Butler County residents who were high school graduates living in poverty has steadily increased from 2005 to 2013. Individuals who seek higher education have lower rates of individuals living in poverty. The percent of Butler County residents who had some college education but no degree, or had an Associate's degree living in poverty increased by two percent from 2005 to 2013. The percent of Butler County residents with a Bachelor's degree or higher living in poverty also witnessed an increase from 2005 to 2013, by two percent. However, while the percent of individuals living in poverty has increased across all education levels, there are still six times as many individuals with an educational attainment of less than a high school degree living in poverty in Butler County as compared with individuals with a Bachelor's degree or higher.

GRADUATION RATES IN BUTLER COUNTY

Figure 20: 2013, 4-Year Graduation Rate in Butler County Public School Districts

	Percent	Grade
Ross School District	97.1%	A
Talwanda School District	96.0%	A
Mason School District	**95.6%**	**A**
Monroe School District	95.0%	A
Lakota School District	94.7%	A
Fairfield City School District	93.7%	A
Preble Shawnee School District	**93.5%**	**A**
Edgewood School District	91.2%	B
Madison School District	90.6%	B
Southwest School District	**89.0%**	**B**
Northwest School District	**88.7%**	**C**
New Miami School District	88.1%	C
Princeton School District	**86.4%**	**C**
Middletown School District	84.9%	C
Hamilton City School District	82.4%	D
College Corner School District	N/A	N/A

Grades are assigned by the Ohio Department of Education
A=100.0-93.0% B=92.9-89.0% C=88.9-84.0%
D=83.9-79.0% F=89.9-0.0%

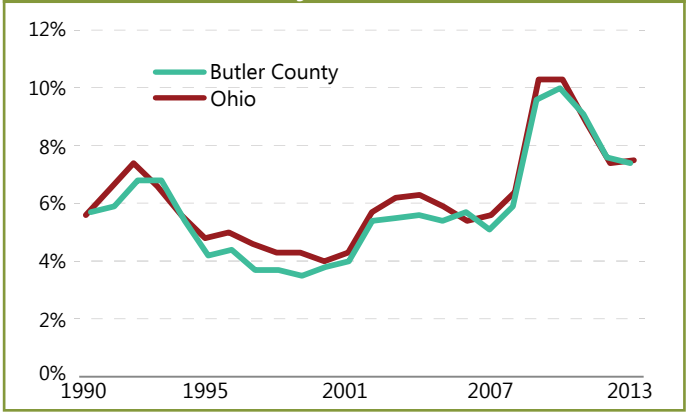
Note: School districts that are bold and underlined are school districts in Butler County that are shared with neighboring Hamilton or Warren County. College Corner School District is not collected by the Ohio Department of Education because it is based in Union, Indiana and shared with Butler County.

Educational attainment, as discussed previously in this report, has an impact on the health of an individual. Higher educational attainment, such as a Bachelor's degree or higher, is often associated with better health[10]. To measure high school graduation rates, the 4-year graduation rate of public school districts in Butler County is monitored. The 4-year graduation rate for 2013 was the percentage of students who entered the 9th grade in 2010 and graduated by 2013. Based on the percentage of students who graduated within 4-years, the Ohio Department of Education assigns a letter grade to each school district. There are 16 school districts that service Butler County children; five of these school districts are shared with neighboring Hamilton or Warren Counties, and one school district is shared with Union County Indiana. Some school districts in Butler County witnessed more of their students dropping out than others. Individuals who drop out from high school are less likely to find a job and earn a living wage, and more likely to be poor and suffer from a variety of adverse health outcomes[11]. High school dropouts are also more likely to "rely on public assistance, engage in crime and generate other social costs borne by taxpayers[11]."

UNEMPLOYMENT RATES IN BUTLER COUNTY

Graduation from high school and achieving a higher degree can impact employment opportunities. Unemployment may lead to "reduced material and psychosocial resources for an individual and their family, including access to health care and financial resources[10]." From 1990 to 2013, the unemployment rate in Butler County both increased and decreased. In the early 1990s (1990-1993), the unemployment rate slowly increased before witnessing a decline to the lowest it has been at 3.5 percent in 1999. From 2000 to 2008, the unemployment rate had been steadily increasing until 2009, when the unemployment rate witnessed a sharp and sudden increase. Butler County witnessed the highest rate of unemployment in 2010, with a 10 percent unemployment rate. Since 2010, the unemployment rate in Butler County has been decreasing. However,

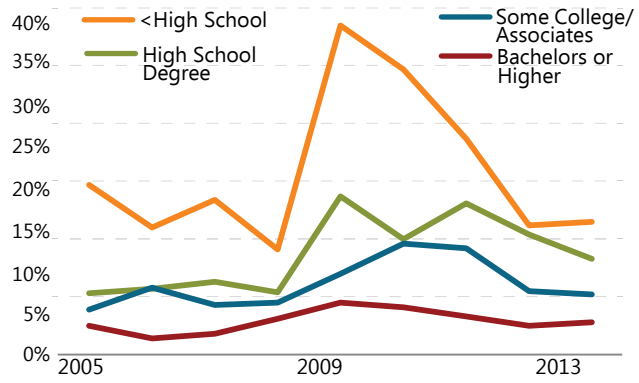
Figure 21: Unemployment Rates in Butler County, 1990-2013



while the rate is dropping, the unemployment rate in 2013 was four percent higher than it was at its lowest rate in 1999.

Individuals who have an educational attainment of less than a high school degree have the highest rates of unemployment in Butler County. From 2005 to 2013, the percent of individuals who are unemployed with less than a high school degree has decreased by three percent. However, in 2009 the unemployment rate for Butler County residents with less than a high school degree was nearly 30 percent. Since 2009, the unemployment rate for individuals with less than a high school degree has decreased, however, it is still higher than those individuals who were a high school graduate or had a higher level of education.

Figure 22: Unemployment Rates in Butler County by Educational Attainment, 2005-2013



The unemployment rate for Butler County residents who were a high school graduate increased by three percent from 2005 to 2013. In 2009, the unemployment rate for individuals who were a high school graduate increased to nearly 14 percent. However, the unemployment rate for individuals who were a high school graduate was nearly the same as that of individuals who had an educational attainment of less than a high school degree in 2013. Individuals who seek higher education have lower rates of unemployment in Butler County. The unemployment rate of Butler County residents who had some college education but no degree, or had an Associates degree increased by nearly two percent from 2005 to 2013, however, that number increased to nearly 10 percent in 2010. Individuals who have a Bachelor's degree or higher have the lowest unemployment rates in Butler County. From 2005 to 2013, the unemployment rate for individuals with a Bachelor's degree or higher increased by less than 1 percent. However, while the unemployment rates increased across all education levels, there are still 4 times more individuals with an educational attainment of less than a high school degree who are unemployed in Butler County than those individuals with a Bachelor's degree or higher. Unemployment can cause a family or individual to become financially burdened and unable to afford healthy foods, adequate housing, transportation or adequate healthcare.

INCOME IN BUTLER COUNTY

Per capita income, or more commonly known as income per person, is the average income received in the past 12 months for every man, woman, and child[12]. From 2005 to 2013, the per capita income in Butler County increased by 12 percent, from $24,177 in 2005 to $27,041 in 2013. The increase in the per capita income was likely due to the mean or average household income in Butler County increasing. From 2005 to 2013, the average household income in Butler County increased by 20 percent, from $60,679 in 2005 to $72,736 in 2013. The largest percentage of households (32 percent) in Butler County had an income between $50,000 and $100,000 in 2013. This was a 2 percent decrease from 2005, where 34 percent of Butler County households had an income between $50,000 and $100,000. However, nearly 50 percent of Butler County households had an income

Figure 23: Per Capita Income in Butler County, 2005 & 2013

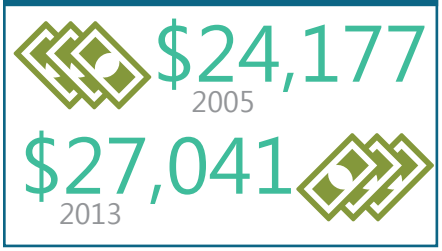


Figure 24: Average Household Income in Butler County, 2005 & 2013

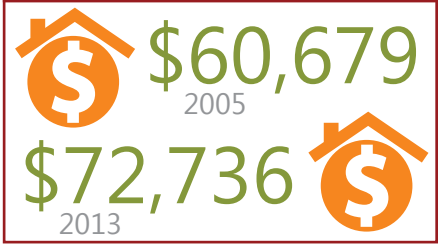
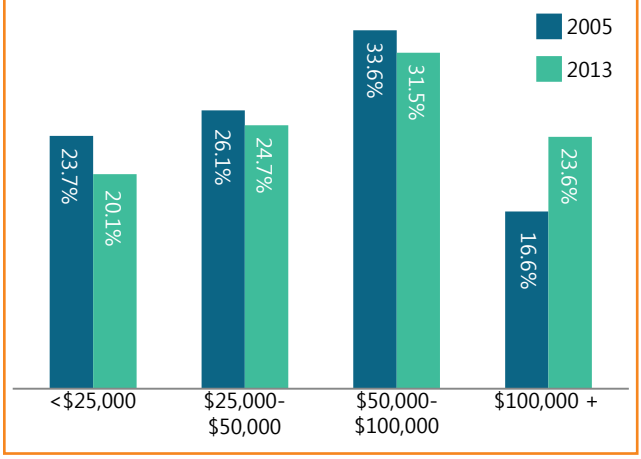


Figure 25: Percent of Households in Butler County by Income Level, 2005 & 2013



of less than $50,000. In 2013, 25 percent of Butler County households had an income that was between $25,000 and $50,000. The percent of Butler County households with an income between $25,000 and $50,000 decreased by nearly 1.5 percent from 2005 to 2013. Twenty percent of Butler County households had an income less than $25,000 in 2013, nearly a 4 percent decrease from 2005. The percent of Butler County households with an income greater then $100,000 witnessed a 7 percent increase from 2005 to 2013. Twenty-four percent of Butler County households in 2013 had an income greater than $100,000. However, there are still households in Butler County with limited income, which can place restraints on their ability to afford essential items such as healthy food.

FOOD ACCESS IN BUTLER COUNTY

A lack of access to healthy food can contribute to poor diets, higher levels of obesity, and many other diet-related diseases[13]. To assist low-income families in accessing food, the U.S. Department of Agriculture administers the Supplemental Nutrition Assistance Program (SNAP), which was previously known as Food Stamps. The percentage of households receiving SNAP in Butler County nearly doubled from 2005 to 2013. In Butler County, there were 273 retailers that accepted SNAP as a form of payment in 2014.

Figure 26: Percent of Households Receiving Food Stamps in Butler County, 2005-2013

Figure 27: Number of Retailers in Butler County who Accept SNAP as a Form of Payment, 2014

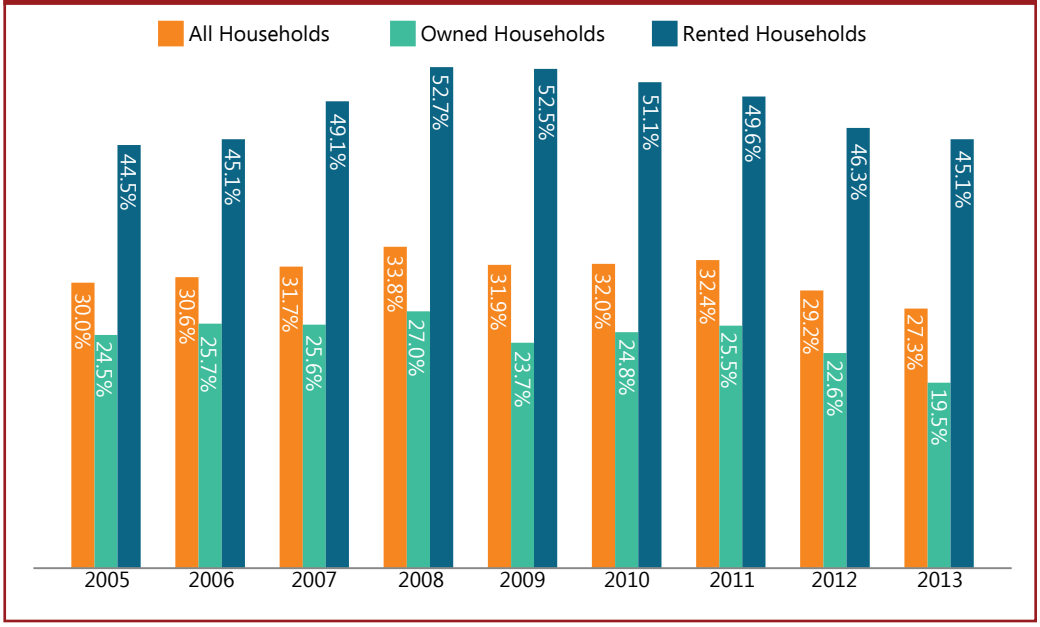
273

HOUSING IN BUTLER COUNTY

Low income also impacts the ability of an individual to afford housing. "Families who pay more than 30 percent of their income for housing are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation and medical care[14]." In 2013, over a quarter of all households (27 percent) in Butler County, spent 30 percent or more of their monthly income on hous-

ing. Typically renters in Butler County spend a higher percentage of their monthly income on housing than those who own their home. In 2013, 45 percent of households who rented in Butler County spent 30 percent or more of their income on housing, while 20 percent of households who owned their home spent 30 percent or more of their income on housing. From 2005 to 2008, Butler County witnessed the percent of households who spent 30 percent or more of their monthly income on housing increase by nearly 4 percent (30 percent in 2005 and 33.8 percent in 2013). The percent of households who owned and rented who spent 30 percent or more of their monthly income on housing witnessed an increase from 2005 to 2008. However, the percent of households who rented and spent 30 percent or more on housing was double that of households who owned their own (52.7 percent, 27.0 percent respectively). Since 2008, the percent of households who spent 30 percent or more on housing has deceased. However, there are still households in Butler County who are spending more than 30 percent of their monthly income on housing, limiting the financial resources they have for things such as healthcare access.

Figure 28: Percent of Households who Spend 30 Percent or More of Monthly Income on Housing in Butler County by Housing Type, 2005-2013



ACCESS TO HEALTH CARE

"Access to comprehensive, quality healthcare services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone.[15]" Limited access to health care impacts an individual's ability to reach their full potential, negatively affecting their quality of life[15].

UNINSURED RATES IN BUTLER COUNTY

Oftentimes when an individual is uninsured they will postpone or forgo any preventive and/or necessary care[15]. Individuals who are uninsured are more likely to be hospitalized for health conditions that could have been prevented because they usually do not have regular doctor visits[16]. Between 2008 to 2013, Butler County witnessed a slight decrease (0.4 percent) in the number of residents who are uninsured. The percentage of Butler County children who are uninsured also witnessed a decreased. From 2008 to 2013, the percent of Butler County children who were uninsured decreased by 3 percent. The percentage of uninsured individuals and uninsured children in Butler County may continue to decrease with the full implementation of the Affordable Care Act.

Figure 29: Uninsured Rates in Butler County, 2008-2013

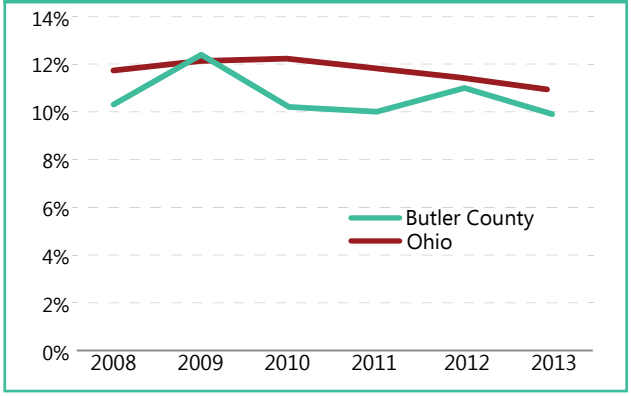
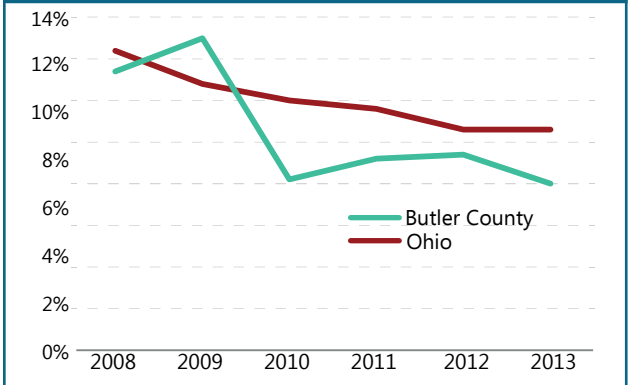


Figure 30: Uninsured Rates in Butler County Children*, 2008-2013

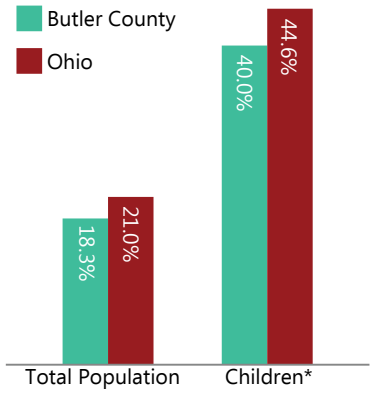


*Note: Children are Butler County residents who are younger than 18 years of age.

MEDICAID IN BUTLER COUNTY

While the uninsured rates in Butler County are declining, families and individuals may still find it difficult to afford health insurance because of constraints due to low income. Individuals with low-income, or pregnant women may qualify for Medicaid, which assists with medical costs. In 2009, 18 percent of all Butler County residents were enrolled in Medicaid, while 40 percent of all children younger than 18

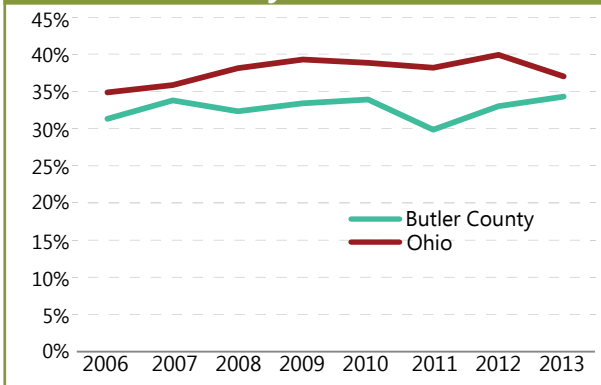
Figure 31: Butler County Population Enrolled in Medicaid, 2009



*Note: Children are Butler County residents who are younger than 18 years of age.

years of age were enrolled in Medicaid. Medicaid can also benefit pregnant women with low-income and limited resources. Pregnant mothers who are enrolled in Medicaid gain access to the prenatal care needed to ensure a healthy pregnancy. After a decrease from 2010 to 2011, the percent of births paid by Medicaid in Butler County has begun to increase. From 2006 to 2013, the percent of births paid by Medicaid has increased by 3 percent.

Figure 32: Births Paid by Medicaid in Butler County, 2006-2013



HEALTH CARE PROFESSIONALS AND CLINICS IN BUTLER COUNTY

While the uninsured rate in Butler County decreases, this does not guarantee that an individual will be able to access health care. Butler County is considered to be a health professional shortage area by the Health Resources and Services Administration (HRSA). A health professional shortage area is designated or defined by HRSA as having shortages of primary care, dental care, or mental health providers[17]. In 2013, there were 499 physicians practicing in Butler County. This means there was 1 physician for every 744 residents in Butler County. Butler County had an even larger number of residents for every dentist; 1 dentist for every 2,302 residents in 2012. There were a total of 161 licensed dentists in Butler County in 2012.

Figure 33: Number of Physicians in Butler County, 2013

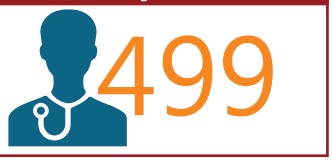


Figure 34: Number of Licensed Dentists in Butler County, 2012

Healthcare centers and hospitals are often times considered the cornerstones of our modern health system. In Butler County, there are five hospitals that provide obstetric services to pregnant mothers. However, not all individuals can access preventive services at hospitals or private physician practices due to lack of insurance or because private practices do not accept Medicaid. In Butler County, there are two free clinics (for adult patients only) and one Federally Qualified Health Center (with three locations, including a prenatal care location). There are two additional prenatal clinics in Butler County where pregnant mothers who are uninsured or on Medicaid can access services. Other prenatal providers in private practices are available to Butler County residents, however, these practices accept only a limited number of Medicaid clients. Pregnant mothers who are on Medicaid or uninsured have limited options to access prenatal care.

Figure 35: Number of Hospitals and Health Clinics in Butler County, 2014

5
Hospitals with OB services

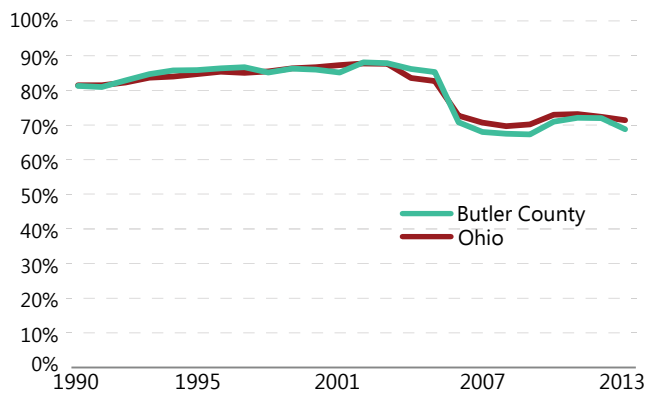
3
Prenatal clinics for uninsured or mothers on Medicaid

PRENATAL CARE ACCESS AND FAMILY PLANNING IN BUTLER COUNTY

Accessing early and regular prenatal care improves the chances of a healthy pregnancy, and having a healthy pregnancy is one of the best ways to promote a healthy birth[18]. Early prenatal care access is

the percent of mothers who began prenatal care within the first trimester of pregnancy. Since 1990, the percentage of Butler County mothers who began prenatal care in the first trimester has been steadily decreasing. Over the 23 years during 1990 to 2013, Butler County witnessed a 13 percent decrease in the percent of mothers who began prenatal care in the first trimester.

Figure 36: Percent of Births to Mothers who Began Prenatal Care in the 1st trimester in Butler County, 1990-2013



Early entry into prenatal care is not the only way a mother can ensure a healthy pregnancy. Family planning can also contribute to a healthy pregnancy. Family planning allows each pregnancy to be planned and gives the mother time to reduce or abstain from unhealthy habits, recover from a previous pregnancy, and help the mother achieve a healthy pregnancy[19]. Unintended or unplanned pregnancies are often associated with many negative health and economic consequences[20]. One of the best ways to reduce the risk of unintended pregnancies is through the use of contraception[21]. While contraception is important in the family planning process, not all women are afforded the opportunity to access contraception. In 2010, 30 percent (24,570) of Butler County women ages 13-44 were in need of publicly funded contraception because they had either an income that was below 250 percent of the federal poverty level, or were younger than 20 years of age[22].

Figure 37: Number of Butler County Women in Need of Publicly Funded Contraception, 2010

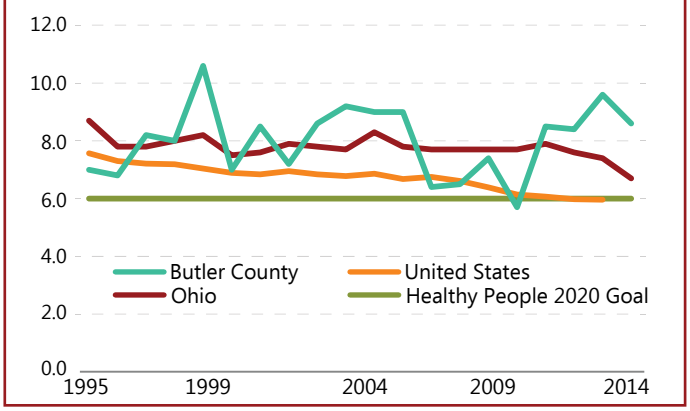
24,570

HEALTH OUTCOMES

"Resources that enhance the quality of life can have a significant influence on population health outcomes[23]." Without the resources to access health care, an individual's health can suffer, ultimately impacting the overall health of the community.

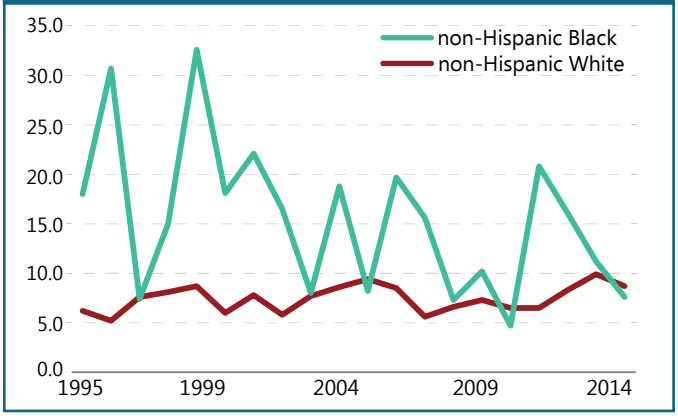
INFANT MORTALITY IN BUTLER COUNTY

Figure 38: Infant Mortality Rate in Butler County, 1995-2014



One of the best indicators of the health of a community is its infant mortality rate. The death of a child before his or her first birth day is known as infant mortality. The infant mortality rate is the number of infant deaths for every 1,000 live births. Infant mortality is often associated with factors such as maternal health, access to and quality of health care, socioeconomic conditions and health policies. In 2014, the infant mortality rate in Butler County was 8.6. The infant mortality rate in 2014 was nearly 1.3 times higher than it was in 1995. However, the infant mortality rate in Butler county has seen periods in time where the rate increased and then decreased. This can be attributed to work being done to reduce infant mortality in Butler County, and the fact that the infant mortality rate is highly sensitive to changes in the number of live births within a community. An increase or decrease in the number of infant deaths may not be surprising if there is an increase or decrease in the overall number of babies born in a year.

Figure 39: Infant Mortality Rate by Race in Butler County, 1995-2014



Large disparities in health outcomes can be seen when race/ethnicity is taken into account. The infant mortality rate in 2014 for non-Hispanic black infants (7.6) was slightly lower than that of non-Hispanic white infants (8.7). The annual infant mortality rate for non-Hispanic black babies in Butler County has fluctuated dramatically each year from 1995 to 2013. This is largely due to two major factors: births to non-Hispanic black babies account for only 10 percent of all births in Butler County each year, and

there are fewer than 20 non-Hispanic black infant deaths each year, compared to an average of 25 non-Hispanic white infant deaths each year. When the typical number of infant deaths in a population is small (less than 20 deaths), it may be difficult to distinguish between random changes in the number of deaths and true changes in the underlying risk for the community. Small changes in the number of deaths may result in large changes in the corresponding infant mortality rate.

PRETERM & VERY-PRETERM BIRTH IN BUTLER COUNTY

Infant mortality is a complex a multifaceted health issue and is influenced by many other health outcomes. One risk factor for infant mortality that is preterm birth. Preterm birth is defined as an infant born prior to 37 weeks gestation[25]. The preterm birth rate in Butler County has steadily increased from 1995 (9.5 percent) to 2013 (13.0 percent). Between 2007 and 2011, the preterm birth rate in Butler County decreased by two percent, however since 2011, the rate has slowly started to increase. The earlier a baby is born the higher risk for serious disability and even infant death[25]. Babies born earlier than 32 weeks gestation are considered to be very-preterm births. The 2013 very-preterm birth rate (2.7 percent) is the highest annual rate for Butler County during 1995 to 2013. On average, the preterm birth rate to mother's who were on Medicaid was higher than Butler County as a whole. From 2006 to 2013, the preterm birth rate to mothers on Medicaid has fluctuated between 11 and 15 percent of births. The preterm birth rate to mothers on Medicaid increased by two percent from 2006 to 2006. The very-preterm birth rate to mothers on Medicaid in Butler County has slowly been increasing from 2006 to 2011. However, since 2011 the very-preterm birth rate to mothers on Medicaid has begun to trend downwards.

Figure 40: Preterm & Very-Preterm Birth Rate in Butler County, 1995-2013

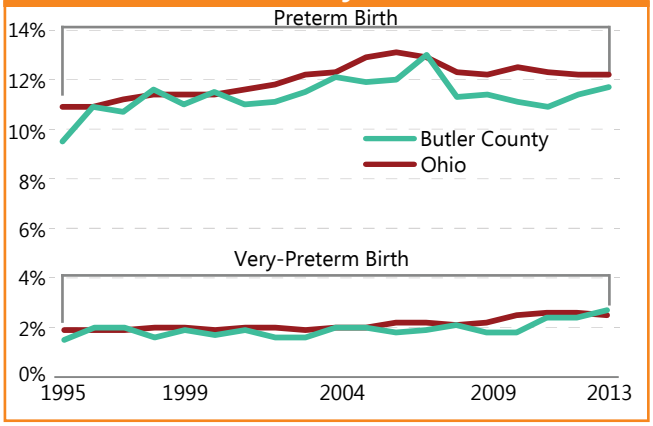
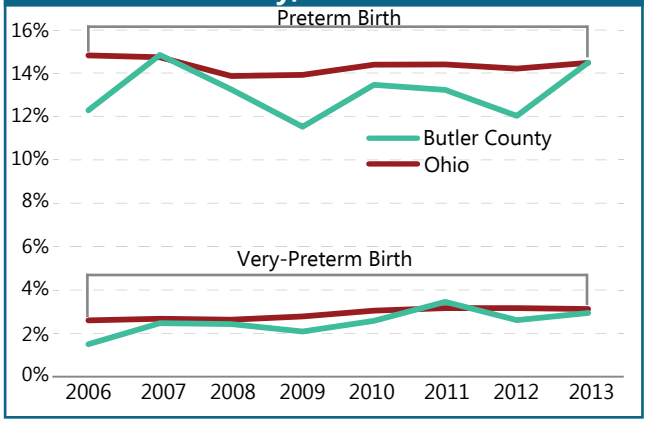


Figure 41: Preterm & Very-Preterm Birth Rate to Medicaid Paid Births in Butler County, 2006-2013



LOW BIRTH-WEIGHT & VERY-LOW BIRTH-WEIGHT IN BUTLER COUNTY

Low birth-weight can also cause serious health problems for babies. Low birth-weight is defined as a baby born weighting less than 2,500 grams or approximately 5 pounds, 8 ounces[26]. Very-low birth-weight is when a baby is born weighing less than 1,500 grams or approximately 3 pounds, 5 ounces. Babies who are born with low birth-weight are at increased risk of health problems as a newborn, some of which will be lifelong issues. Some babies require a stay in the newborn intensive care unit (NICU) to treat their medical problems[26]. In Butler County, the rate at which babies are being born with low birth-weight has been steadily increasing since 1990. From 1990 to 2013, the percent of babies born

Figure 42: Low Birth-Weight Birth Rate in Butler County, 1990-2013

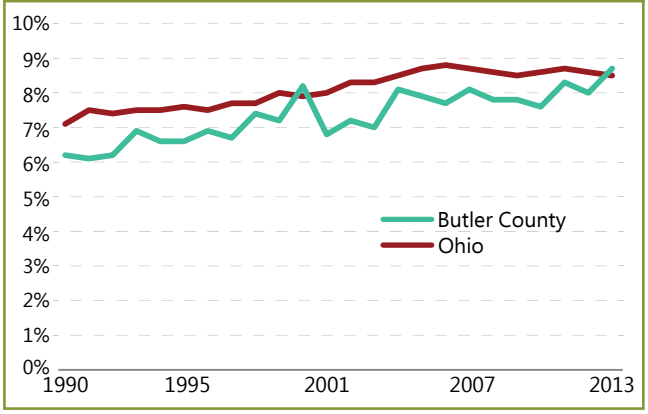
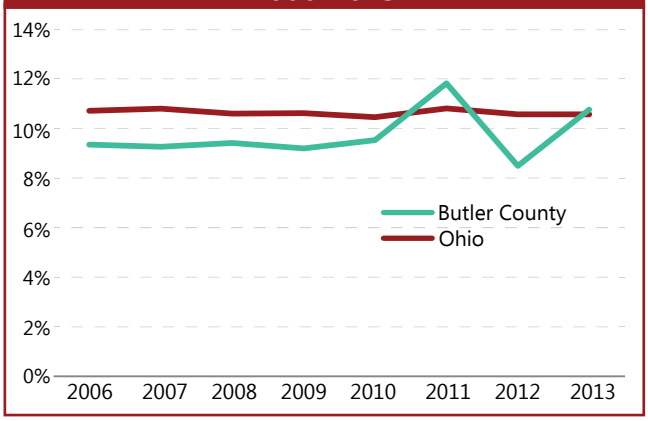
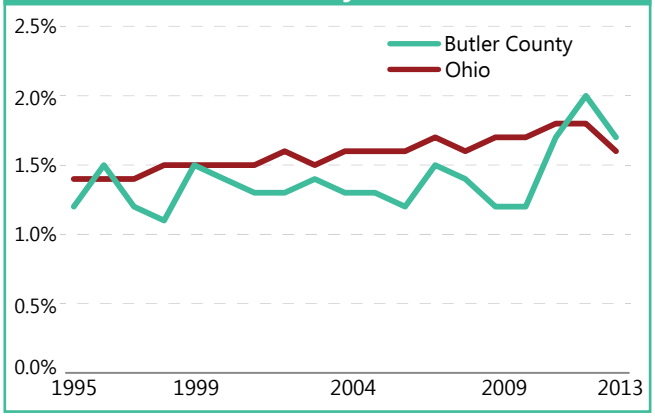


Figure 43: Low Birth-Weight Birth Rate to Births Paid by Medicaid in Butler County, 2006-2013



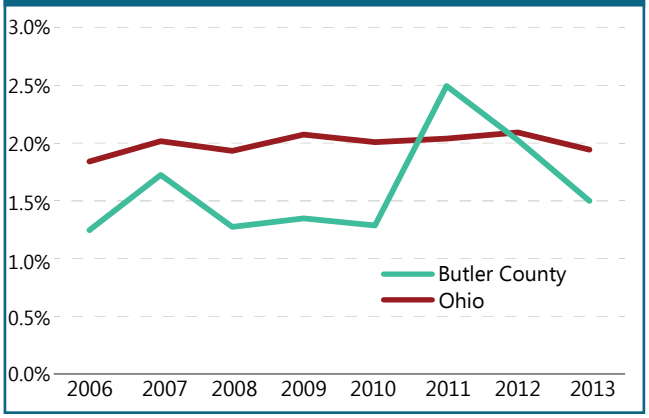
with low birth-weight in Butler county has increased by nearly three percent. In 2013, the low birth-weight birth rate (8.7 percent) was the highest level since 1990. From 2006 to 2010, the low-birth weight birth rate for Butler County mothers on Medicaid remained relatively stable. In 2011, however, the low birth-weight birth rate to Butler County mothers on Medicaid dramatically increased to the highest annual rate (11.8 percent) during 2006 to 2013. In 2012, the low birth-weight birth rate to mothers on Medicaid in Butler County decreased to the lowest annual rate (8.54 percent) before increasing to 10.8 percent in 2013.

Figure 44:Very- Low Birth-Weight Birth Rate in Butler County, 1995-2013



From 1995 to2013, the very-low birth-weight birth rate in Butler County increased less than one percent. From 1995 to 2010, the very-low birth-weight birth rate in Butler County remained relatively stable with between 1 percent and 1.5 percent of births born with very-low birth-weights. In 2011, the very-low birth-weight began to increase, with the highest rate of two percent occurring in 2012. From 2006 to 2010, the very-low birth-weight birth rate to mothers on Medicaid in Butler County remained relatively stable with between one percent and 1.7 percent of births born with very-low birth-weight. In 2011, the very-low birth-weight birth rate to Butler County mothers on Medicaid increased to the highest annual rate of 2.5 percent. However, since 2011 the very-low birth-weight birth to Butler County mothers on Medicaid has been decreasing. Low birth-weight births and preterm births can be impacted by the health of a mother throughout her pregnancy.

Figure 45: Very-Low Birth-Weight Birth Rate to Births Paid by Medicaid in Butler County, 2006-2013



MATERNAL SMOKING IN BUTLER COUNTY

Smoking during pregnancy can increase the risk of a preterm or low birth-weight birth[27]. Mothers who smoke during pregnancy are more likely to suffer from a miscarriage and increase the risk of Sudden Unexplained Infant Death Syndrome (SUIDS)[27]. In Butler County, the percent of mothers who reported smoking during pregnancy has been steadily decreasing. From 1990 to 2013, the percent of mothers who reported smoking during pregnancy decreased nine percent from 26.4 percent in 1990 to 17.4 percent in 2013. However, while the percentage of mothers who smoked while pregnant has been decreasing in Butler County, the infant mortality rate to mothers who smoked while pregnant has been increasing. From 2007 to 2013, the infant mortality rate to Butler County mothers who smoked while pregnant increased from 9.9 (2007) to 15.5 (2013). The infant mortality rate for mothers who smoked during pregnancy in Butler County in 2013, was two times higher than the infant mortality rate of mothers who didn't smoke while pregnant (7.9 per 1,000 live births). Butler County mothers who smoked during

pregnancy and were on Medicaid have a higher infant mortality than those Butler County mothers who were on Medicaid and did not smoke during pregnancy. In 2013, the infant mortality rate for Butler County mothers who smoked during pregnancy and were on Medicaid was 13.1 which is over 1.5 times higher than the infant mortality rate for Butler County mothers who were on Medicaid and did not smoke during pregnancy (8.0 per 1,000 live births). From 2007 to 2013, the infant mortality rate for mothers who smoked during pregnancy and were on Medicaid was the highest in 2009, with an infant mortality rate of 19.0.

Figure 46: Infant Mortality by Maternal Smoking Status in Butler County, 2007-2013

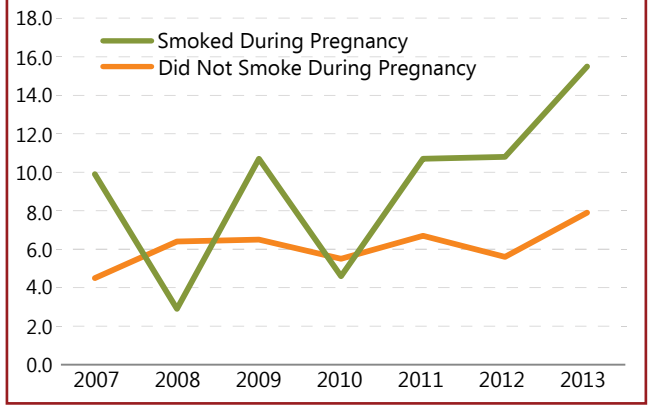


Figure 47: Maternal Smoking Rate in Butler County, 1990-2013

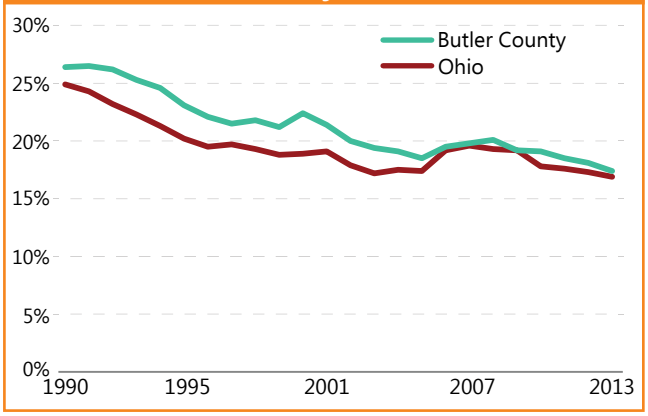
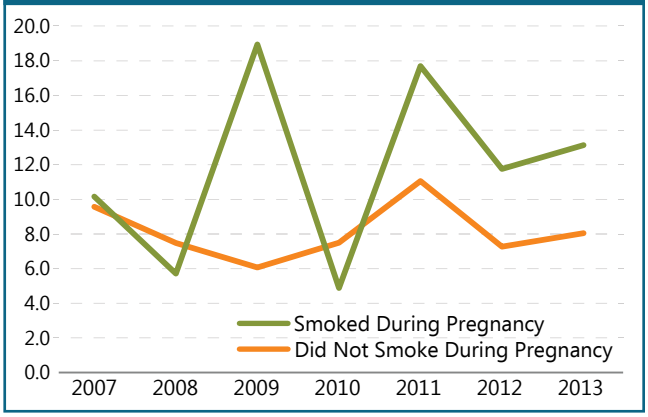


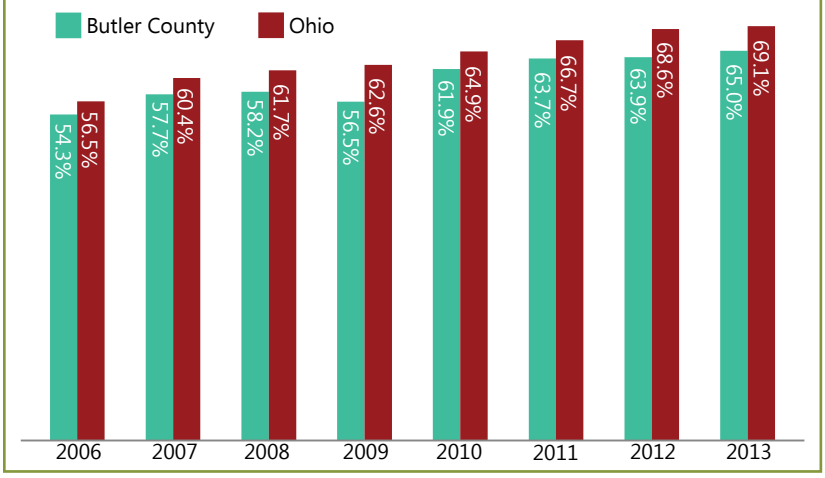
Figure 48: Infant Mortality to Medicaid Paid Births by Maternal Smoking Status in Butler County, 2007-2013



BREASTFEEDING IN BUTLER COUNTY

While smoking impacts both the mother and infant, breastfeeding also impacts infants and mothers in the immediate postpartum period and during infancy[28]. Infants who are exclusively breastfed, or have been breastfed for any extent of time experience significantly fewer infections and diseases than infants who were never breastfed or were formula-fed[28]. Breastfeeding has also been found to lower the risk for infant mortality and Sudden Unexplained Infant Death[29]. Breastfeeding initiation rates, or mothers who reported breastfeeding their infant at discharge from the hospital, has been steadily increasing in Butler County. From 2006 to 2013, the breastfeeding initiation rate in Butler County increased by nearly 11

Figure 49: Breastfeeding Initiation Rates in Butler County, 2006-2013

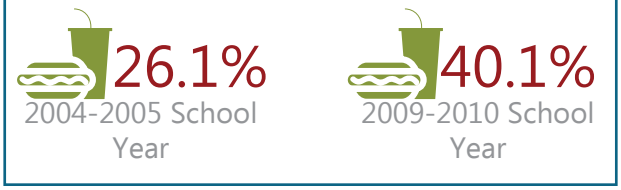


percent. Breastfeeding provides infants the nutrients they need for healthy development and contains antibodies that can help protect infants from common childhood illnesses[30].

CHILDHOOD OBESITY IN BUTLER COUNTY

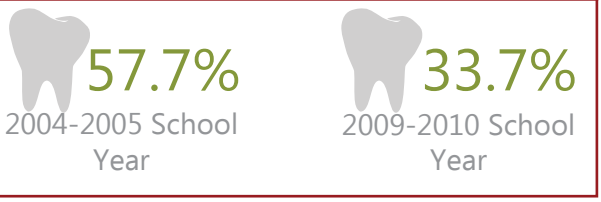
Healthy birth outcomes and early identification and treatment of health conditions among infants can prevent death or disability and enable children to reach their full potential. Childhood obesity has both immediate and long-term effects on the health and well-being, limiting the full potential of a child. Children who are obese are more likely to have risk factors for cardiovascular disease, such as high blood pressure or high cholesterol[31]. Children and adolescents who are obese are likely to be obese as adults[30]. The prevalence of overweight and obese third graders in Butler County rose from 26 percent in the 2004-2005 school year to 40 percent in the 2009-2010 school year. Childhood obesity is mainly associated with low levels of physical activity and unhealthy eating[31]. Eating unhealthy can also impact the oral health of a child.

Figure 50: Percent of 3rd Graders Overweight/Obese in Butler County, 2004-2005 & 2009-2010



ORAL HEALTH IN BUTLER COUNTY

Figure 51: Percent of 3rd Graders with 1 or More Dental Sealants in Butler County, 2004-2005 & 2009-2010



Oral health is essential to general health and quality of life of an individual[33]. The most common oral diseases are dental cavities[33]. Untreated dental cavities can lead to tooth aches and tooth decay. Dental sealants can prevent some cavities from forming, and are often applied on the teeth of children shortly after the molars come in[34]. The percent of Butler County third graders with one or more dental sealant has decreased. In the 2004-2005 school year, approximately 58 percent of third graders in Butler County had 1 or more dental sealant. In the 2009-2010 school year, the percent of third graders with 1 or more sealants in Butler County decreased to 34 percent. While the percent of third graders with dental sealants has decreased, the percent of third graders with toothaches has increased. In the 2004-2005 school year, 10 percent of third graders in Butler County reported having toothaches. A toothache could be a sign of a cavity or tooth decay. The percent of Butler County third graders with untreated tooth decay decreased by 63 percent from the 2004-2005 school year to the 2009-2010 school year. By accessing regular dental visits, and maintaining proper oral hygiene, dental cavities can be prevented.

Figure 52: Percent of 3rd Graders With Toothaches in Butler County, 2004-2005 & 2009-2010

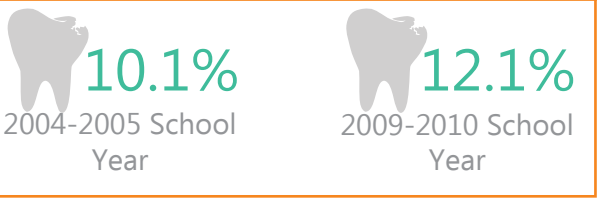
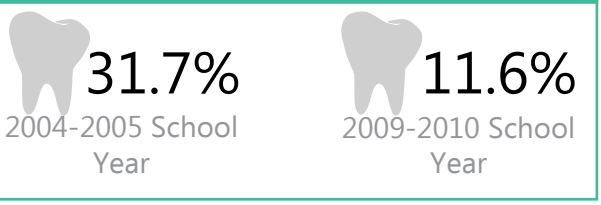


Figure 53: Percent of 3rd Graders with Untreated Tooth Decay in Butler County, 2004-2005 & 2009-2010



CHILDHOOD LEAD EXPOSURE IN BUTLER COUNTY

Not all dental cavities are a result of poor oral hygiene,. Exposure to environmental lead can also increase the risk of cavities in children[35]. Lead poisoning can affect nearly every system in the body and can lead to learning disabilities and behavioral problems[36]. If a child has very high levels of lead exposure he

or she can suffer from seizure, coma and even death[36]. The major sources of lead exposure that children would come in contact with are lead based paint and lead-contaminated dust or soil[36]. To measure a child's exposure to lead, blood lead levels are measured. No safe blood lead levels in children have been identified, and oftentimes exposure to lead goes unreported because there are no obvious symptoms[37]. The number of children (0-72 months of age) who are screened for lead exposure in Butler County has been increasing since 2006. Early screening for increased blood lead levels is important as it allows for a child with lead poisoning to be identified and early treatment strategies to be implemented. As the number of children screened for lead exposure increases, the percent of children with elevated blood lead levels in Butler County has been declining. From 2006 to 2013, the percent of children with elevated blood lead levels decreased from 0.6 percent to 0.19 percent.

Figure 54: Number of Children (0-72 Months) Screened for Lead Exposure in Butler County, 2006-2013

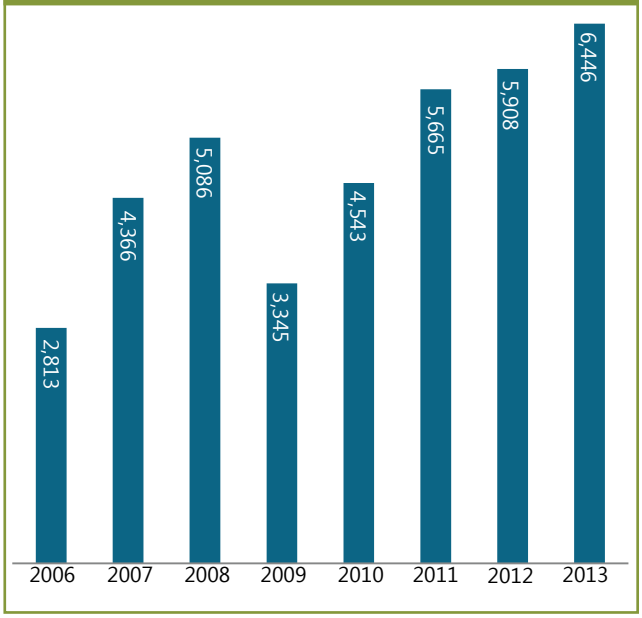
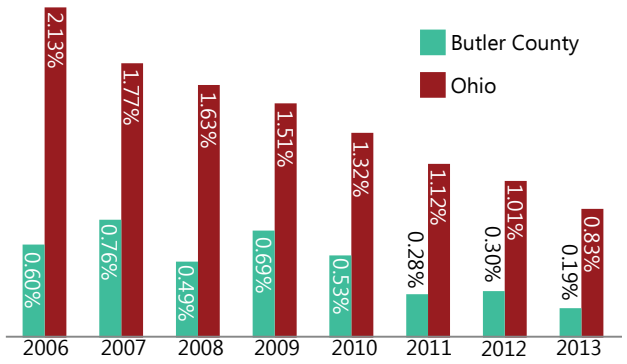


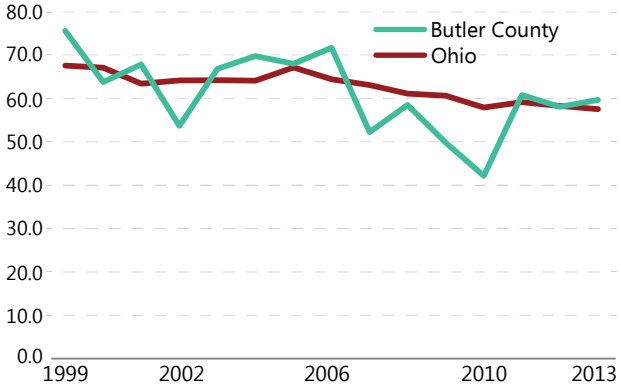
Figure 55: Percent of Children with Elevated Blood Lead Levels in Butler County, 2006-2013



MORTALITY IN BUTLER COUNTY

Mortality rates are a powerful measure that can be used to assess the overall health of a community. Mortality rates provide a snapshot of health problems, identify potential patterns of risk within a community, and show trends in death over time[38]. Mortality rates can provide the opportunity to identify areas where premature death could have been prevented[38]. From 1999 to 2013, the rate of child deaths, or child fatality rate, in Butler County has steadily been decreasing. However, in the 15-year time frame from 1999 to 2013, the child fatality rate in Butler County has fluctuated. The child fatality rate was the highest in Butler County in 1999, with a rate of 75.6 per 100,000 children. The lowest child fatality rate in Butler County (42.1 per 100,000) was seen in 2010. However, in 2011, the child fatality rate dramatically increased to 60.8 per 100,000. In 2013, the child fatality rate in Butler County decreased to 59.7 per 100,000.

Figure 56: Child* Fatality Rate in Butler County, 1999-2013

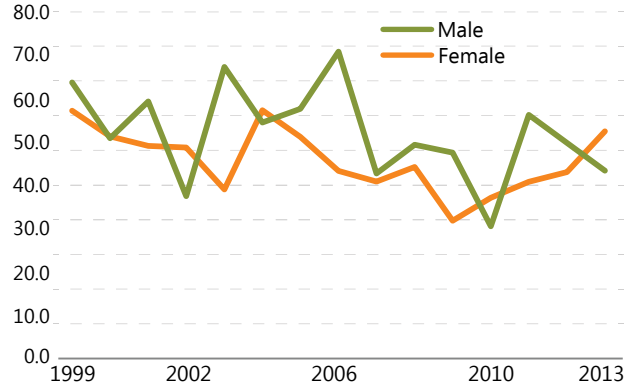


*Note: Children are Butler County residents who are younger than 18 years of age.

Butler County male children have historically had higher rates of child deaths than female children in Butler County. However, the 2013 child fatality rate for female children in Butler County is higher than that of male children. In 2013, the female child fatality rate in Butler County was 65.4 per 100,000, compared

to 54.1 per 100,000 for male children. From 1999 to 2003, the child fatality rate for both female and male children in Butler County has fluctuated. The child fatality rate for females in Butler County was the highest in 2004 at 71.5 per 100,000 and lowest in 2009 at 39.7 per 100,000. The child fatality rate for male children in Butler County witnessed more dramatic changes in the rate from 1999 to 2013. The highest child fatality rate for male children in Butler County was 88.4 per 100,000 in 2006, while the lowest rate was 38.1 per 100,000 witnessed in 2010.

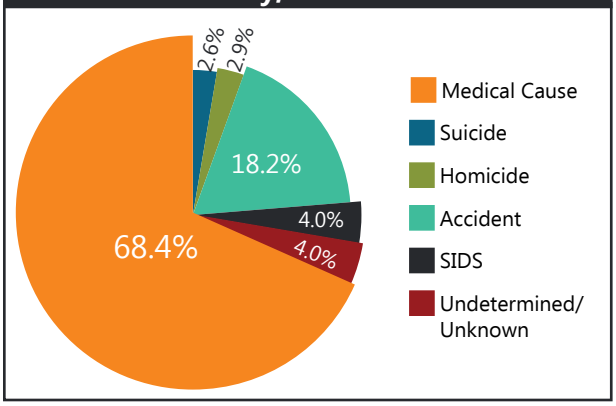
Figure 57: Child* Fatality Rate in Butler County, 1999-2013



*Note: Children are Butler County residents who are younger than 18 years of age.

The majority of child deaths in Butler County are due to medical conditions, such as cancer, congenital anomalies and prematurity. From 1999 to 2013, 68 percent of all child deaths were due to a medical condition. Accidents accounted for 18 percent of child deaths in Butler County from 1999 to 2013. Accident related deaths are deaths that include motor vehicle accidents, falls, drownings, and pedestrians being hit by a car. Sudden Infant Death Syndrome (SIDS), is an infant death which is sudden, and remains unexplained after a thorough case investigation, including a complete autopsy, examination of the death scene, and review of the clinical history of the infant. In these cases, there is no explanation found for the death. From 1999 to 2013, SIDS deaths represented 4 percent of all child deaths in Butler County. Another 4 percent of child deaths were deaths that were a cause was unknown or undetermined. A death is classified as unknown or undetermined when information surrounding the death, that was available at the time was insufficient to determine the manner of death. Homicides and suicides each accounted for 3 percent of child deaths in Butler County, in 1999 to 2013.

Figure 58: Causes of Child Death in Butler County, 1999-2013



The Butler County Partnership to Reduce infant Mortality

Reaching More First Birthdays

PRIM STATUS REPORT

Wouldn't it be amazing if, in a county like Butler County, Ohio with large urban areas of Hamilton, Middletown, and Fairfield, with 13% of its residents living in poverty (11.7% non-Hispanic white, 27.7% black), where 67% of its Medicaid births are to unmarried women, and 38% of Medicaid births are to women who smoke[38],—all babies could celebrate their first birthdays?

In 2013, Butler County joined the Ohio Institute for Equity in Birth Outcomes, a state-wide initiative to advance equity in birth outcomes. The initiative calls on the Butler County Partnership to Reduce Infant Mortality (PRIM), a county-wide coalition, to select, implement, and evaluate data-informed birth outcome equity projects.

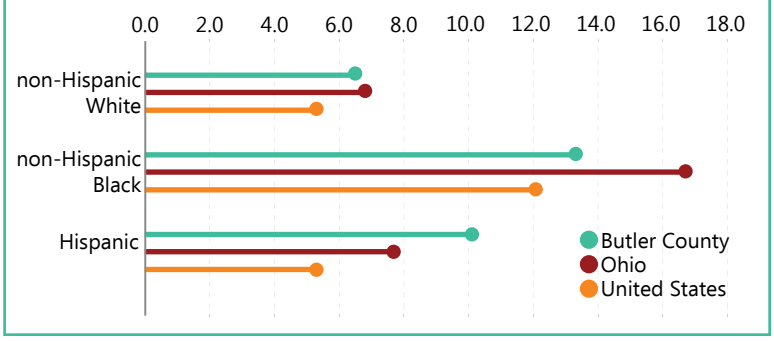
The Big Picture and Our Own County Data: How Do We Stack Up?

An infant mortality rate is the number of deaths among infants less than one year of age per 1,000 live births. Ohio currently has the worst black infant mortality rate in the US, and is 5th from the bottom for white infant mortality. Butler County is among the ten worst urban areas in Ohio for infant deaths[40].

From 2007-2012, Butler County's overall infant mortality rate was 7.1 per 1,000 live births; compared to Ohio at 7.7 and the United States at 6.3[38]. The Healthy People 2020 goal for the United States is an infant mortality rate of 6.0 per 1,000 live births[43].

If we were to look at this alone, we might think that Butler County does not have a large infant mortality issue; but that would not be correct. When the infant mortality rate is broken out by race and socioeconomic status (SES), a different pattern emerges; a pattern that highlights significant health disparities in Butler County.

Infant Mortality Rate in Butler County by Race/Ethnicity, 2007-2012

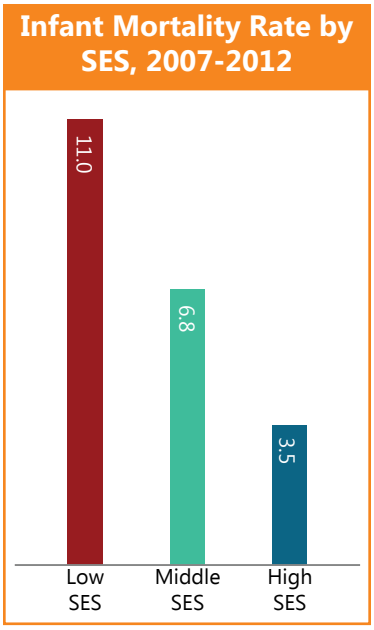


The infant mortality rate, 2007-2012, for non-Hispanic black babies (13.3) is 2 times higher than the rate for non-Hispanic white babies (6.5) in Butler County. The infant mortality rate for Hispanic babies in Butler County (10.1) is 1.5 times higher than that of their non-Hispanic white counterparts[38].

When income level is broken out, the infant mortality rate, 2007-2012 for the low SES group (11.0) is 1.5 times higher than that of the middle SES

group (6.8), and 3 times higher than the high SES group (3.5)[38].

Clearly, racial and income disparities exist in Butler County, Ohio.



The root causes of infant mortality are complex and multi-factorial. Further data analysis was conducted to find out what specific factors impact minority and low SES pregnant women in Butler County.

Hospitals, clinics, neonatal intensive care units, and obstetricians (prenatal care) play a central role in ensuring healthy infants. Butler County's medical assets are of high quality and are plentiful. They include: five hospitals delivering babies (four Level 2, one Level 1). There are six Level 3 Neonatal Intensive Care Units within a 1 hour drive in counties surrounding Butler County. There are two Medicaid OB clinics, one Federally Qualified Health Center (FQHC) providing OB services, and numerous obstetric practices. A nationally recognized children's hospital is within one hour, and its satellite hospital is located within Butler County. Lack of available medical care for pregnant women is not a major problem in Butler County, therefore, our team looked to the social determinants of health to explain the poor birth outcomes that our infants experience.

For births where Medicaid was the payer in Butler County, the following areas of need and disparities were identified:

	Butler County Low SES New Mothers	Ohio Reference New Mothers*
Not Married	78%	5%
Smoked During Pregnancy	68%	21%
Overweight/Obese	5%	43%
No/Late Prenatal Care	16%	43%

*The Ohio reference group is made up of non-Hispanic White mothers, who are 20 years of age and older, with 16 years of education or higher (Bachelor's degree+), who were Ohio residents at the time of birth.

The majority of low SES pregnant women in Butler County were single mothers (78%), while only 5% of mothers with high SES were single mothers. Sixty-eight percent of low SES pregnant women smoked during pregnancy, while only 21% of the reference group smoke[38].

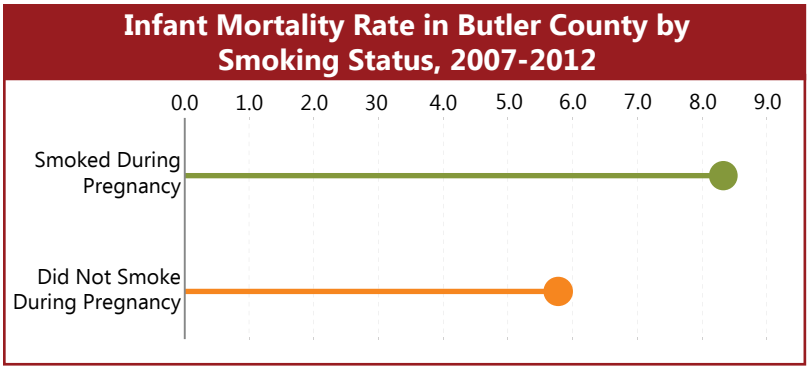
In addition, this analysis showed that, the following were NOT major issues in Butler County: Short Birth Interval (<18 mos.), Previous Poor Birth Outcome/Preterm Birth, Hypertension, STDs, Diabetes.

The Interventions

Based on input from our community, data analysis of Butler County's most pressing needs and issues, our community capacity, and a review of infant mortality literature, we chose to focus on the following evidence-based interventions: Smoking Cessation and Centering Pregnancy®.

Smoking Cessation

A smoking cessation intervention was chosen in order to reduce the well-known harmful effects of smoking on pregnant women and their babies and, ultimately, reduce infant deaths. Research shows that smoking during pregnancy places women at a higher risk of premature labor, miscarriages, stillbirths, low birth weight babies, and birth defects such as cleft lip/palate and heart anomalies[42].



The infant mortality rate for mothers who reported smoking in Butler County (8.2) was almost 1.5 times the rate of Butler County mothers who did not smoke during pregnancy (5.9). Approximately 70% of Butler County women who reported smoking during pregnancy were single mothers, and 68% were Medicaid recipients (i.e. low SES)[38].

How Will We Make this Impact?

Our Smoking Cessation Intervention aims to improve Butler County infant mortality rates through evidenced-based smoking cessation education and programs that target low SES women who smoke, and their children who are exposed to secondhand and third hand smoke.

After training of staff in the evidenced-based 5A's of Smoking Cessation motivational interviewing technique, all clients of Women, Infants, & Children (WIC), and the Ohio Infant Mortality Reduction Initiative(OIMRI)/High Hopes (a program targeting African American pregnant women) will receive this intervention. In Phase 2, additional staff will be trained so that all clients of Help Me Grow and Early Intervention will also receive the 5A's of Smoking Cessation intervention. In Phase 3, all clients enrolled in Sojourner, a prenatal drug rehabilitation program, and in our Centering Pregnancy® practice will be included.

Additionally, a public education campaign will take place including billboards and other promotional materials announcing:

- Baby and Me Tobacco Free™ and Ohio Quit Line programs.

How We Will Measure Success

We will measure the following goals:

- Number of staff trained in the 5A's
- Number of pregnant women who receive the 5A's intervention
- Number of pregnant women referred to and following through Baby and Me Tobacco Free programs
- Number of participants who sign pledges to make their comes and cars smoke-free (decreasing secondhand smoke)
- 30% increase in smoking cessation for pregnant WIC participants
- 30% increase in the rate of pregnant WIC participants who report they have stopped smoking in the last year
- Reduce the racial and income disparities related to infant mortality
- Reduce infant mortality, low birth

Centering Pregnancy

Centering Pregnancy, a group prenatal care model, is a trademarked, evidence based, prenatal program that incorporates healthcare assessment, education, and support while promoting greater patient engagement, personal empowerment, and community building. It has been shown to have a positive impact on birth outcomes for babies of mothers who follow the program. Our analysis of Butler County data identified many issues that Centering Pregnancy is designed to address: social

isolation, stress of low SES, unmarried status, smoking, and countless other factors. This type of model is particularly important for single women who may lack a social support system.

No Centering Pregnancy programs currently exist in Butler County

How Will We Make this Impact?

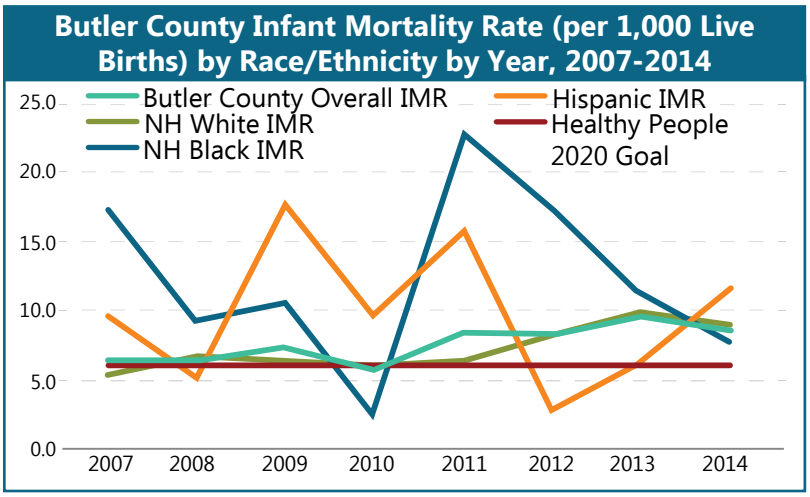
The Butler County Partnership to Reduce Infant Mortality (PRIM) will assist in the implementation of at least 1-3 new Centering Pregnancy programs in the county by providing educational 'Lunch and Learn' sessions, technical assistance, and start-up funds to prenatal practices who will implement Centering for our target population of low income and minority women..

How We Will Measure Success

We will measure the following goals:

- Establish 1-3 Centering Practice sites in Butler County
- Enroll 120-150 participants per year in each Centering Pregnancy practice
- 80% of participants are Medicaid recipients, and/or minorities
- Increase social support, knowledge in particular areas, satisfaction with prenatal care, and self-efficacy of mothers
- Breastfeeding initiated by 82% of participants
- Improve maternal health: control hypertension, gestational diabetes, adequate weight gain in 90% of participants
- 98% of participants attend a postpartum visit
- 98% of participants initiate effective contraceptive use in postpartum period
- 90% of participants achieve appropriate birth spacing (>18mos.)
- Reduce the racial and income disparities related to infant mortality
- Reduce the rates of infant mortality, low birth weight, and prematurity by 10%

What is Butler County's Infant Mortality Rate Now?



After nearly three years of work, preliminary data for infant mortality shows that after an increase in rates since 2010, Butler County experienced a decline in the number of infant deaths from 2013 to 2014. While it is best to look at trends over a longer period than just one year, we are pleased that we are on the downward slope at the moment, and we hope that through the continued hard work of our entire community we will see that trend continue!

Our work will not end with the completion of this three year project, indeed, it has only just begun!

We look forward to continuing this work to build a better Butler County, and help our babies reach their 1st birthdays... and beyond!

DATA TABLES

Table 1: Population Trends in Butler County and Ohio, 2000-2013

Year	Butler County	Ohio
2000	332,807	11,353,140
2001	337,013	11,373,541
2002	340,540	11,421,267
2003	343,207	11,435,798
2004	346,560	11,459,011
2005	350,412	11,464,042
2006	354,992	11,478,006
2007	357,888	11,466,917
2008	360,765	11,485,910
2009	363,184	11,542,645
2010	368,630	11,536,504
2011	369,999	11,544,951
2012	370,589	11,544,225
2013	371,272	11,570,808
% Change 2000-2013	**11.6%**	**1.9%**

Source: U.S. Census Bureau, 2000 Census, 2001-2005 Population Estimates, 2006-2013 American Community Survey 1-Year Estimates.

Table 2: Population Trends by Age Group in Butler County and Ohio, 2000-2013

	Age Group	2000	2013	% Change 2000-2013
Butler County	<15 Years	71,905	75,129	**4.5%**
	15-24 Years	54,059	60,525	**12.0%**
	25-34 Years	44,537	43,747	**-1.8%**
	35-44 Years	54,477	45,863	**-15.8%**
	45-54 Years	45,212	52,242	**15.5%**
	55-64 Years	27,060	46,289	**71.1%**
	64+ Years	35,557	47,477	**33.5%**
Ohio	<15 Years	2,399,087	2,184,455	**-8.9%**
	15-24 Years	1,545,796	1,581,099	**2.3%**
	25-34 Years	1,519,894	1,446,230	**-4.8%**
	35-44 Years	1,805,316	1,416,469	**-21.5%**
	45-54 Years	1,566,384	1,634,139	**4.3%**
	55-64 Years	1,008,906	1,556,453	**54.3%**
	64+ Years	1,507,757	1,055,343	**30.0%**

Source: U.S. Census Bureau, 2000 Census, 2013 American Community Survey 1-Year Estimates.

Table 3: Population Trends by Gender in Butler County and Ohio, 2005-2013

	Year	Male	Female
Butler County	2005	166442	172,867
	2006	173566	181,426
	2007	175361	182,527
	2008	176683	184,082
	2009	178579	184,605
	2010	181343	187,990
	2011	181360	188,639
	2012	181683	188,906
	2013	181766	189,506
	% Change 2005-2013	**9.2%**	**9.6%**
Ohio	2005	5,423,416	5,732,190
	2006	5,591,589	5,886,417
	2007	5,589,500	5,877,417
	2008	5,600,023	5,885,887
	2009	5,632,221	5,910,424
	2010	5,630,118	5,904,348
	2011	5,641,528	5,903,423
	2012	5,642,634	5,901,591
	2013	5,658,223	5,912,585
	% Change 2005-2013	**4.3%**	**3.1%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 4: Race/Ethnicity Trends in Butler County and Ohio, 2000 & 2013

	Race/Ethnicity Group	2000	2013	% Change 2000-2013
Butler County	White, non-Hispanic	301,078	308,912	**2.6%**
	Black, non-Hispanic	17,398	26,424	**51.9%**
	Other Race, non-Hispanic	6,182	9,566	**54.7%**
	2+ Races, non-Hispanic	3,378	10,466	**209.8%**
	Hispanic, Any Race	4,771	15,904	**233.3%**
Ohio	White, non-Hispanic	9,538,111	9,295,777	**-2.5%**
	Black, non-Hispanic	1,290,662	1,387,905	**7.5%**
	Other Race, non-Hispanic	169,474	242,575	**43.1%**
	2+ Races, non-Hispanic	137,770	261,438	**89.8%**
	Hispanic, Any Race	217,123	383,113	**76.4%**

Sources: U.S. Census Bureau, 2000 Census, 2013 American Community Survey 1-Year Estimates

Table 5: Language Spoken at Home, Residents 5 Year and Older in Butler County and Ohio, 2013

	Butler County	Ohio
Speaks a Language Other Than English	7.10%	6.60%
Speaks English Less than "Very Well"	2.90%	2.40%

Sources: U.S. Census Bureau, 2013 American Community Survey 1-Year Estimates

Table 6: Educational Attainment, Residents 35 Years and Older in Butler County and Ohio, 2000 & 2013

	Race/Ethnicity Group	2000	2013	% Change 2000-2013
Butler County	Less than a High School Graduate	16.7%	9.8%	**-6.9%**
	High School Degree (ore equivalent)	33.6%	34.3%	**0.7%**
	Some College, no Degree	20.0%	18.8%	**-1.2%**
	Associates Degree	6.2%	8.2%	**2.0%**
	Bachelor's Degree or Higher	23.5%	28.9%	**5.4%**
Ohio	Less than a High School Graduate	17.0%	11.0%	**-6.0%**
	High School Degree (ore equivalent)	36.1%	34.2%	**-1.9%**
	Some College, no Degree	19.9%	20.5%	**0.6%**
	Associates Degree	5.9%	8.2%	**2.3%**
	Bachelor's Degree or Higher	21.1%	26.1%	**5.0%**

Sources: U.S. Census Bureau, 2000 Census, 2013 American Community Survey 1-Year Estimates

Table 7: Educational Attainment by Gender, Residents 25 Years and Older in Butler County and Ohio, 2005-2013

		Less than a High School Graduate		High School Degree (or equivalent)		Some College, no Degree		Associates Degree		Bachelor's Degree or Higher	
	Year	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Butler County	2005	13.7%	13.5%	36.8%	38.7%	18.9%	19.4%	6.0%	6.0%	24.6%	22.3%
	2006	13.6%	13.4%	35.4%	36.2%	18.2%	18.8%	5.7%	7.9%	27.1%	23.6%
	2007	13.8%	13.9%	34.8%	37.4%	17.6%	18.2%	6.1%	7.4%	27.7%	23.1%
	2008	14.1%	13.3%	34.9%	35.8%	19.5%	18.9%	5.8%	7.6%	25.7%	24.4%
	2009	11.6%	12.6%	33.2%	35.5%	21.7%	21.3%	6.3%	6.4%	27.2%	24.1%
	2010	12.3%	11.5%	33.8%	33.9%	19.2%	20.3%	6.0%	7.5%	28.6%	26.9%
	2011	10.8%	10.8%	35.0%	33.8%	20.1%	21.3%	5.5%	8.7%	28.5%	25.3%
	2012	10.9%	10.0%	36.0%	33.7%	18.9%	20.8%	7.0%	9.0%	27.3%	26.4%
	2013	9.6%	10.0%	35.7%	33.0%	18.7%	18.9%	6.1%	10.2%	29.9%	27.9%
% Change 2005-2013		**-4.1%**	**-3.5%**	**-1.1%**	**-5.7%**	**-0.2%**	**-0.5%**	**0.1%**	**4.2%**	**5.3%**	**5.6%**
Ohio	2005	13.9%	13.5%	36.0%	37.2%	19.3%	19.4%	6.2%	7.8%	24.6%	22.1%
	2006	13.8%	13.7%	37.2%	36.9%	18.8%	19.4%	5.9%	8.2%	24.2%	21.9%
	2007	13.2%	12.7%	37.0%	36.6%	18.6%	19.4%	6.1%	8.1%	25.0%	23.2%
	2008	12.8%	11.9%	35.3%	35.5%	20.6%	20.8%	6.2%	8.5%	25.0%	23.3%
	2009	12.7%	12.0%	35.4%	35.1%	20.7%	21.2%	6.2%	8.3%	24.9%	23.4%
	2010	12.4%	11.3%	35.8%	34.7%	20.1%	20.8%	6.5%	9.0%	25.2%	24.1%
	2011	12.1%	11.3%	35.2%	34.4%	20.8%	21.3%	6.6%	8.9%	25.3%	24.1%
	2012	11.7%	10.7%	35.2%	34.0%	20.9%	21.0%	6.6%	9.4%	25.6%	24.9%
	2013	11.5%	10.5%	34.9%	33.6%	20.4%	20.5%	6.9%	9.4%	26.3%	26.0%
% Change 2005-2013		**-2.4%**	**-3.0%**	**-1.1%**	**-3.6%**	**1.1%**	**1.1%**	**0.7%**	**1.6%**	**1.7%**	**3.9%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 8: Marital Status, Residents 15 Years and Older in Butler County and Ohio, 2000 & 2013

	Race/Ethnicity Group	2000	2013	% Change 2000-2013
Butler County	Currently Married	57.5%	51.1%	**-6.4%**
	Widowed	5.7%	5.8%	**0.1%**
	Separated	1.4%	1.7%	**0.3%**
	Never married	25.7%	29.6%	**3.9%**
	Divorced	9.8%	11.9%	**2.1%**
Ohio	Currently Married	54.5%	47.8%	**-6.7%**
	Widowed	7.1%	6.4%	**-0.7%**
	Separated	1.6%	1.8%	**0.2%**
	Never married	26.2%	31.8%	**5.6%**
	Divorced	10.6%	12.1%	**1.5%**

Sources: U.S. Census Bureau, 2000 Census, 2013 American Community Survey 1-Year Estimates

Table 23: Percentage of Household by Income Level in Butler County and Ohio, 2005-2013

	Year	<$25,000	$25,000 - $49,999	$50,000 - $99,999	$100,000 +
Butler County	2005	23.7%	26.1%	33.6%	16.6%
	2006	22.3%	24.4%	34.4%	18.9%
	2007	21.9%	25.8%	33.2%	19.2%
	2008	22.2%	24.9%	33.3%	19.7%
	2009	22.0%	23.9%	34.9%	19.3%
	2010	21.4%	24.4%	32.5%	21.6%
	2011	22.0%	24.6%	31.8%	21.5%
	2012	22.6%	22.6%	32.8%	21.8%
	2013	20.1%	24.7%	31.5%	23.6%
	% Change 2005-2013	**-3.6%**	**-1.4%**	**-2.1%**	**7.0%**
Ohio	2005	28.3%	28.0%	30.7%	12.9%
	2006	27.4%	17.7%	31.0%	13.9%
	2007	26.1%	27.1%	31.6%	15.4%
	2008	25.4%	26.3%	31.9%	16.6%
	2009	27.4%	27.1%	30.4%	15.1%
	2010	27.4%	27.0%	30.3%	15.3%
	2011	27.4%	26.2%	30.1%	16.3%
	2012	27.0%	25.7%	30.3%	17.0%
	2013	25.8%	25.7%	30.0%	18.4%
	% Change 2005-2013	**-2.5%**	**-2.3%**	**-0.7%**	**5.5%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 24: Percent of Households Receiving Food Stamps in Butler County and Ohio, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2005-2013
Butler County	8.0%	8.3%	8.3%	8.3%	12.2%	12.6%	12.1%	10.8%	12.6%	**57.5%**
Ohio	8.8%	9.3%	9.4%	9.9%	12.6%	14.1%	15.2%	15.7%	15.4%	**75.0%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 25: Number of Retailers who Accept SNAP as a Form of Payment in Butler County and Ohio, 2014

	Butler County	Ohio
Retailers who Accept SNAP as a Form of Payment	273	9,485

Source: United States Department of Agriculture: Food and Nutrition Service

Table 9: Marital Status by Gender, Residents 15 Years and Older in Butler County and Ohio, 2005-2013

		Currently Married		Widowed		Separated		Never Married		Divorced	
	Year	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Butler County	2005	57.6%	53.8%	1.5%	7.1%	0.8%	2.4%	30.3%	23.6%	9.8%	13.1%
	2006	54.7%	49.7%	2.0%	8.5%	1.1%	2.2%	32.3%	27.4%	9.9%	12.2%
	2007	53.9%	49.3%	2.4%	6.8%	1.5%	2.1%	32.9%	28.3%	9.3%	13.5%
	2008	53.0%	48.5%	3.0%	8.4%	1.2%	2.4%	32.4%	27.7%	10.4%	13.1%
	2009	53.8%	48.7%	1.7%	7.9%	2.0%	3.1%	33.0%	27.1%	9.5%	13.1%
	2010	54.8%	50.8%	2.9%	8.5%	1.1%	2.2%	32.0%	25.7%	9.1%	12.9%
	2011	53.3%	48.7%	2.7%	8.9%	1.5%	2.0%	32.6%	27.5%	10.0%	12.9%
	2012	50.4%	48.4%	2.8%	8.5%	1.5%	2.2%	34.4%	28.2%	10.8%	12.6%
	2013	52.7%	49.6%	3.2%	8.2%	0.8%	2.4%	32.4%	26.9%	10.8%	12.9%
% Change 2005-2013		**-4.9%**	**-4.2%**	**1.7%**	**1.1%**	**0.0%**	**0.0%**	**2.1%**	**3.3%**	**1.0%**	**-0.2%**
Ohio	2005	56.1%	51.1%	2.7%	10.1%	1.5%	2.0%	29.7%	24.5%	10.0%	12.2%
	2006	52.7%	48.1%	2.8%	10.7%	1.5%	2.1%	32.4%	26.6%	10.5%	12.6%
	2007	52.6%	48.2%	2.8%	10.5%	1.6%	2.0%	32.4%	26.7%	10.5%	12.6%
	2008	52.0%	47.6%	2.7%	10.4%	1.6%	2.0%	33.1%	27.2%	10.7%	12.8%
	2009	50.9%	47.1%	2.7%	10.3%	1.7%	2.1%	34.0%	27.3%	10.7%	13.1%
	2010	51.2%	46.9%	2.9%	10.1%	1.7%	2.1%	33.5%	27.9%	10.8%	12.9%
	2011	50.2%	46.4%	3.0%	10.0%	1.6%	2.1%	34.1%	28.2%	11.1%	13.3%
	2012	50.0%	46.2%	2.8%	9.8%	1.5%	2.1%	34.3%	28.4%	11.4%	13.5%
	2013	49.6%	46.2%	3.0%	9.7%	1.7%	2.0%	34.8%	29.0%	10.9%	13.1%
% Change 2005-2013		**-6.5%**	**-4.9%**	**0.3%**	**-0.4%**	**0.2%**	**0.0%**	**5.1%**	**4.5%**	**0.9%**	**0.9%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 10: Percent of Births to Unmarried Mothers in Butler County and Ohio, 1990-2013

Year	Butler County	Ohio
1990	21.5%	28.9%
1991	25.2%	30.6%
1992	25.7%	31.6%
1993	26.5%	33.0%
1994	27.7%	32.9%
1995	27.4%	33.0%
1996	28.7%	33.1%
1997	27.2%	34.0%
1998	28.4%	34.0%
1999	29.3%	34.1%
2000	29.5%	34.6%
2001	30.3%	35.1%
2002	30.9%	35.3%
2003	33.6%	36.2%
2004	33.8%	37.3%
2005	36.6%	38.9%
2006	37.4%	40.4%
2007	40.2%	42.0%
2008	41.1%	43.2%
2009	39.9%	44.0%
2010	41.1%	43.7%
2011	40.7%	43.1%
2012	40.1%	43.2%
2013	41.4%	43.7%
% Change 1990-2013	**19.9%**	**14.8%**

Source: 1990-2005: ODH, Center for Public Health Statistics & Informatics, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set

Table 11: Percent of Population Living in Poverty in Butler County and Ohio, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2005-2013
Butler County	12.4%	11.6%	12.4%	12.4%	13.5%	13.6%	13.9%	14.0%	13.3%	**0.9%**
Ohio	13.0%	13.3%	13.1%	13.4%	15.2%	15.8%	16.4%	16.3%	16.0%	**3.0%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 12: Percent of Children by Household Composition in Butler County and Ohio, 2005-2013

	Year	Married-Couple Household	Female headed household, no husband present	Male headed household, no wife present
Butler County	2005	67.6%	8.7%	23.7%
	2006	72.5%	6.4%	21.4%
	2007	71.1%	8.7%	20.2%
	2008	70.8%	6.8%	22.3%
	2009	68.6%	6.1%	25.2%
	2010	69.1%	6.4%	24.5%
	2011	69.0%	6.4%	24.7%
	2012	66.9%	9.2%	23.9%
	2013	67.8%	7.5%	24.7%
	% Change 2005-2013	**0.2%**	**-1.2%**	**1.0%**
Ohio	2005	67.0%	7.4%	25.7%
	2006	66.7%	7.4%	25.9%
	2007	66.2%	7.9%	25.9%
	2008	66.1%	7.7%	26.2%
	2009	65.2%	7.7%	27.0%
	2010	65.2%	7.8%	27.0%
	2011	64.0%	7.7%	28.3%
	2012	64.0%	8.5%	27.6%
	2013	63.4%	8.7%	27.9%
	% Change 2005-2013	**-3.6%**	**1.3%**	**2.2%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 13: Percent of Population Living in Poverty by Gender in Butler County and Ohio, 2005-2013

		2005	2006	2007	2008	2009	2010	2011	2012	2013	**% Change 2005-2013**
Butler County	Male	12.2%	10.2%	11.1%	11.0%	12.0%	12.2%	12.2%	13.0%	12.9%	**0.7%**
	Female	12.6%	12.9%	13.5%	13.7%	15.0%	15.0%	15.5%	15.1%	13.6%	**1.0%**
Ohio	Male	11.6%	11.7%	11.5%	11.9%	14.0%	14.6%	15.1%	14.7%	14.8%	**3.2%**
	Female	14.4%	14.9%	14.7%	14.7%	16.4%	17.1%	17.7%	17.7%	17.1%	**2.7%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 14: Percent of Population Living in Poverty by Race in Butler County and Ohio, 2005-2013

		2005	2006	2007	2008	2009	2010	2011	2012	2013	**% Change 2005-2013**
Butler County	White	10.4%	10.5%	11.7%	11.1%	11.9%	12.2%	12.5%	11.8%	11.4%	**1.0%**
	Black	30.9%	23.3%	20.5%	27.5%	27.7%	20.6%	21.1%	34.1%	25.6%	**-5.3%**
Ohio	White	10.2%	10.7%	10.4%	10.8%	12.4%	12.9%	13.2%	12.9%	13.1%	**2.9%**
	Black	30.9%	30.2%	30.9%	29.3%	33.2%	32.9%	34.9%	35.6%	33.6%	**2.7%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 15: Percent of Children Living in Poverty in Butler County and Ohio, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2005-2013
Butler County	16.1%	15.9%	12.4%	14.6%	18.8%	17.9%	18.1%	20.9%	17.4%	**1.3%**
Ohio	18.6%	18.7%	18.5%	18.5%	21.9%	23.3%	24.2%	23.8%	22.7%	**4.1%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 16: Percent of Children Living in Poverty by Specific Household Composition in Butler County and Ohio, 2013

	Butler County	Ohio
Married-Couple Household	31.7%	26.4%
Female Headed Household, no Husband Present	62.7%	63.7%
Male Headed Household, no Wife Present	5.6%	9.9%

Sources: U.S. Census Bureau, 2013 American Community Survey 1-Year Estimates

Table 17: Percent of Population Living in Poverty by Educational Attainment in Butler County and Ohio, 2005-2013

	Year	Less than a High School Graduate	High School Degree (or equivalent)	Some College/ Associates Degree	Bachelor's Degree or Higher
Butler County	2005	19.2%	7.9%	7.0%	1.8%
	2006	23.5%	8.8%	4.8%	2.5%
	2007	28.5%	9.4%	7.4%	2.4%
	2008	17.4%	8.9%	8.3%	2.7%
	2009	23.7%	12.1%	6.9%	2.4%
	2010	24.1%	11.2%	9.4%	3.3%
	2011	23.0%	13.6%	6.9%	1.4%
	2012	22.4%	11.3%	7.9%	3.3%
	2013	22.1%	11.3%	8.6%	3.7%
	% Change 2005-2013	**2.9%**	**3.4%**	**1.6%**	**1.9%**
Ohio	2005	23.5%	10.3%	7.2%	3.3%
	2006	23.2%	11.0%	8.3%	3.4%
	2007	23.2%	10.8%	8.5%	3.4%
	2008	24.3%	11.3%	8.7%	3.5%
	2009	26.4%	12.6%	10.4%	3.8%
	2010	27.4%	12.7%	10.8%	4.0%
	2011	29.6%	12.9%	11.4%	4.0%
	2012	28.4%	13.5%	11.7%	4.0%
	2013	29.6%	13.5%	11.7%	4.2%
	% Change 2005-2013	**6.1%**	**3.2%**	**4.5%**	**0.9%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 18: Language Spoken at Home, Residents 5 Year and Older in Butler County and Ohio, 2013

	Butler County	Ohio
Speaks a Language Other Than English	7.1%	6.6%
Speaks English Less than "Very Well"	2.9%	2.4%

Sources: U.S. Census Bureau, 2013 American Community Survey 1-Year Estimates

Table 19: Unemployment Rates in Butler County and Ohio, 1990-2013

Year	Butler County	Ohio
1990	5.7%	5.6%
1991	5.9%	6.5%
1992	6.8%	7.4%
1993	6.8%	6.6%
1994	5.4%	5.6%
1995	4.2%	4.8%
1996	4.4%	5.0%
1997	3.7%	4.6%
1998	3.7%	4.3%
1999	3.5%	4.3%
2000	3.8%	4.0%
2001	4.0%	4.3%
2002	5.4%	5.7%
2003	5.5%	6.2%
2004	5.6%	6.3%
2005	5.4%	5.9%
2006	5.7%	5.4%
2007	5.1%	5.6%
2008	5.9%	6.4%
2009	9.6%	10.3%
2010	10.0%	10.3%
2011	9.1%	8.8%
2012	7.6%	7.4%
2013	7.4%	7.5%
% Change 1990-2013	**0.9%**	**3.0%**

Source; United States Department For Labor: Bureau of Labor Statistics Local Area Unemployment Statistics 1990-2013

Table 20: Unemployment Rates by Educational Attainment in Butler County and Ohio, 2005-2013

	Year	Less than a High School Graduate	High School Degree (or equivalent)	Some College/ Associates Degree	Bachelor's Degree or Higher
Butler County	2005	14.7%	5.3%	3.9%	2.5%
	2006	11.0%	5.7%	5.8%	1.4%
	2007	13.4%	6.3%	4.3%	1.8%
	2008	9.1%	5.4%	4.5%	3.1%
	2009	28.5%	13.7%	7.0%	4.5%
	2010	24.7%	10.0%	9.6%	4.1%
	2011	18.7%	13.1%	9.2%	3.3%
	2012	11.2%	10.4%	5.5%	2.5%
	2013	11.5%	8.3%	5.2%	2.8%
	% Change 2005-2013	**-3.2%**	**3.0%**	**1.3%**	**0.3%**
Ohio	2005	15.8%	6.7%	4.9%	2.8%
	2006	14.1%	6.8%	4.7%	2.4%
	2007	15.1%	6.8%	5.3%	2.4%
	2008	13.5%	6.7%	5.3%	2.7%
	2009	21.3%	12.2%	9.3%	3.9%
	2010	23.0%	12.0%	9.6%	4.2%
	2011	21.6%	10.6%	9.0%	3.8%
	2012	18.6%	9.3%	7.4%	3.4%
	2013	17.0%	8.1%	7.0%	3.1%
	% Change 2005-2013	**1.2%**	**1.4%**	**2.1%**	**0.3%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 21: Per Capita Income in Butler County and Ohio, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2005-2013
Butler County	$24,177	$24,720	$24,855	$25,113	$25,331	$25,469	$25,100	$25,978	$27,041	**111.8%**
Ohio	$23,322	$23,543	$24,581	$25,342	$24,178	$23,975	$24,750	$25,445	$26,354	**113.0%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 22: Average Household Income in Butler County and Ohio, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2005-2013
Butler County	$60,679	$65,262	$66,261	$66,297	$67,357	$68,666	$67,227	$69,896	$72,736	**119.9%**
Ohio	$55,937	$58,356	$60,917	$62,728	$59,894	$59,654	$61,204	$62,775	$65,129	**116.4%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 26: Percent of Households that Spend 30% or More of Monthly Income on Housing by Housing Type in Butler County and Ohio, 2005-2013

	Year	All Households	Owner Occupied Households	Renter Occupied Households
Butler County	2005	30.0%	24.5%	44.5%
	2006	30.6%	25.7%	45.1%
	2007	31.7%	25.6%	49.1%
	2008	33.8%	27.0%	52.7%
	2009	31.9%	23.7%	52.5%
	2010	32.0%	24.8%	51.1%
	2011	32.4%	25.5%	49.6%
	2012	29.2%	22.6%	46.3%
	2013	27.3%	19.5%	45.1%
	% Change 2005-2013	**-2.7%**	**-5.0%**	**0.6%**
Ohio	2005	31.1%	25.2%	44.1%
	2006	32.4%	26.9%	45.0%
	2007	31.6%	25.7%	45.2%
	2008	31.5%	25.9%	44.1%
	2009	32.3%	25.8%	46.0%
	2010	33.0%	26.0%	47.8%
	2011	32.5%	25.4%	47.5%
	2012	30.0%	22.1%	45.4%
	2013	29.1%	21.0%	44.5%
	% Change 2005-2013	**-2.0%**	**-4.2%**	**0.4%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates

Table 27: Uninsured Rates in Butler County and Ohio, 2008-2013

	2008	2009	2010	2011	2012	2013	% Change 2008-2013
Butler County	10.3%	12.4%	10.2%	10.0%	11.0%	9.9%	**-0.4%**
Ohio	11.8%	12.2%	12.3%	11.9%	11.5%	11.0%	**-0.8%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 28: Percent of Total Population and Population Under 18 Years of Age Enrolled in Medicaid in Butler County and Ohio, 2009

	Butler County	Ohio
Total Population	18.3%	21.0%
Population Under 18 Years of Age	40.0%	44.6%

Source: 2009 ODJFS Butler County Profile

Table 29: Percent of Births Paid by Medicaid in Butler County and Ohio, 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	31.3%	33.8%	32.3%	33.4%	33.9%	29.8%	33.0%	34.3%	**3.0%**
Ohio	34.8%	35.8%	38.1%	39.3%	38.8%	38.2%	39.9%	37.0%	**2.2%**

Source: U.S. Census Bureau, 2005-2013 American Community Survey 1-Year Estimates.

Table 30: Health Professionals in Butler County, 2013

	Butler County
Health Professional Shortage Area	Yes
Number of Physicians	499
Number of Licensed Dentists	161

Source: ODH CFHS & RHWP Health Status Profile: Butler County

Table 31: Number of Hospitals and Health Clinics in Butler County

	Butler County
Hospitals with OB Services	5
Prenatal Clinics for Uninsured or Mothers on Medicaid	3

Source: Butler County Health Department

Table 32: Number and Percent of Women, 13-44 Years of Age, in Need of Publicly Funded Contraception in Butler County and Ohio, 2010

	Butler County	Ohio
Number	24,570	710,200
Percent	30.3%	29.8%

Source: ODH CFHS & RHWP Health Status Profile: Butler County

Table 33: Percent of Births to Mothers who Began Prenatal Care in the 1st Trimester in Butler County and Ohio, 1990-2013

Year	Butler County	Ohio
1990	81.3%	81.5%
1991	81.0%	81.5%
1992	82.9%	82.3%
1993	84.7%	83.7%
1994	85.8%	84.0%
1995	85.9%	84.7%
1996	86.4%	85.4%
1997	86.7%	85.1%
1998	85.2%	85.5%
1999	86.3%	86.4%
2000	86.0%	86.7%
2001	85.2%	87.3%
2002	88.1%	87.8%
2003	87.9%	87.7%
2004	86.2%	83.6%
2005	85.3%	82.7%
2006	70.8%	72.7%
2007	68.0%	70.7%
2008	67.5%	69.7%
2009	67.3%	70.2%
2010	71.0%	73.0%
2011	72.1%	73.2%
2012	72.0%	72.4%
2013	68.8%	71.4%
% Change 1990-2013	**-12.5%**	**-10.1%**

Source: 1990-2005: CDC Wonder. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set

Table 34: Infant Mortality Rate in Butler County, Ohio, and the United States, 1995-2013

Year	Butler County	Ohio	United States
1995	7.0	8.7	7.6
1996	6.8	7.8	7.3
1997	8.2	7.8	7.2
1998	8.0	8.0	7.2
1999	10.6	8.2	7.0
2000	7.0	7.5	6.9
2001	8.5	7.6	6.8
2002	7.2	7.9	7.0
2003	8.6	7.8	6.8
2004	9.2	7.7	6.8
2005	9.0	8.3	6.9
2006	9.0	7.8	6.7
2007	6.4	7.7	6.8
2008	6.5	7.7	6.6
2009	7.4	7.7	6.4
2010	5.7	7.7	6.1
2011	8.5	7.9	6.1
2012	8.4	7.6	6.0
2013	9.6	7.4	6.0
2014	8.6	6.7	-
% Change 1995-2014	**22.9%**	**-23.0%**	**14.8%**

Source: 1995-2005: ODH, Center for Public Health Statistics & Informatics, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set. United States 1995-2013: CDC Wonder

Note: The 2014 Infant Mortality Rate for the United States has not yet been made available. The percent change for the United States is from 1995-2013. 2014 data is provisional; ODH reconciles (i.e. finalizes) data by the fall of the subsequent year.

Table 35: Infant Mortality Rate by Race in Butler County and Ohio, 1995-2013

	Butler County		Ohio	
	Black	White	Black	White
1995	18.0	6.2	17.5	7.2
1996	30.7	5.2	16.7	6.4
1997	7.4	7.6	15.4	6.6
1998	15.0	8.1	14.1	7.0
1999	32.6	8.7	17.3	6.7
2000	18.1	6.0	14.8	6.3
2001	22.1	7.8	16.1	6.1
2002	16.5	5.8	17.6	6.2
2003	8.0	7.7	15.2	6.6
2004	18.8	8.6	16.3	6.1
2005	8.2	9.4	16.9	6.7
2006	19.7	8.5	16.7	6.1
2007	15.6	5.6	14.8	6.3
2008	7.3	6.6	16.2	6.0
2009	10.2	7.3	14.2	6.4
2010	4.7	6.5	15.5	6.4
2011	20.8	6.5	16.0	6.4
2012	16.1	8.3	14.8	6.3
2013	11.2	9.9	14.7	6.0
2014	7.6	8.7	-	-
% Change 1995-2013	**-57.8%**	**40.9%**	**-16.0%**	**-16.7%**

Source: 1990-2005: ODH, Center for Public Health Statistics & Informatics, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Note: The 2014 Infant Mortality Rate by race for Ohio was not available at the time of this report. The percent change for the Ohio is from 1995-2013. 2014 data is provisional; ODH reconciles (i.e. finalizes) data by the fall of the subsequent year.

Table 36: Preterm Birth Rate in Butler County and Ohio, 1995-2013

Year	Butler County	Ohio
1995	9.5%	10.9%
1996	10.9%	10.9%
1997	10.7%	11.2%
1998	11.6%	11.4%
1999	11.0%	11.4%
2000	11.5%	11.4%
2001	11.0%	11.6%
2002	11.1%	11.8%
2003	11.5%	12.2%
2004	12.1%	12.3%
2005	11.9%	12.9%
2006	12.0%	13.1%
2007	13.0%	12.9%
2008	11.3%	12.3%
2009	11.4%	12.2%
2010	11.1%	12.5%
2011	10.9%	12.3%
2012	11.4%	12.2%
2013	11.7%	12.2%
% Change 1995-2013	**2.2%**	**1.3%**

Source: 1995-2005: ODH, Center for Public Health Statistics & Informatic, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 37: Preterm Birth Rate to Births Paid by Medicaid in Butler County and Ohio, 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	12.3%	14.8%	13.2%	11.5%	13.5%	13.2%	12.0%	14.5%	**2.2%**
Ohio	14.8%	14.7%	13.9%	13.9%	14.4%	14.4%	14.2%	14.5%	**-0.3%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 38: Very-Preterm Birth Rate in Butler County and Ohio, 1995-2013

Year	Butler County	Ohio
1995	1.5%	1.9%
1996	2.0%	1.9%
1997	2.0%	1.9%
1998	1.6%	2.0%
1999	1.9%	2.0%
2000	1.7%	1.9%
2001	1.9%	2.0%
2002	1.6%	2.0%
2003	1.6%	1.9%
2004	2.0%	2.0%
2005	2.0%	2.0%
2006	1.8%	2.2%
2007	1.9%	2.2%
2008	2.1%	2.1%
2009	1.8%	2.2%
2010	1.8%	2.5%
2011	2.4%	2.6%
2012	2.4%	2.6%
2013	2.7%	2.5%
% Change 1995-2013	**1.2%**	**0.6%**

Source: 1995-2005: ODH, Center for Public Health Statistics & Informatic, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 39: Very- Preterm Birth Rate to Births Paid by Medicaid in Butler County and Ohio, 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	1.5%	2.5%	2.4%	2.1%	2.6%	3.5%	2.6%	2.9%	**1.4%**
Ohio	2.6%	2.7%	2.6%	2.8%	3.0%	3.2%	3.2%	3.1%	**0.5%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 40: Low Birth-Weight Birth Rate in Butler County and Ohio, 1990-2013

Year	Butler County	Ohio
1990	6.2%	7.1%
1991	6.1%	7.5%
1992	6.2%	7.4%
1993	6.9%	7.5%
1994	6.6%	7.5%
1995	6.6%	7.6%
1996	6.9%	7.5%
1997	6.7%	7.7%
1998	7.4%	7.7%
1999	7.2%	8.0%
2000	8.2%	7.9%
2001	6.8%	8.0%
2002	7.2%	8.3%
2003	7.0%	8.3%
2004	8.1%	8.5%
2005	7.9%	8.7%
2006	7.7%	8.8%
2007	8.1%	8.7%
2008	7.8%	8.6%
2009	7.8%	8.5%
2010	7.6%	8.6%
2011	8.3%	8.7%
2012	8.0%	8.6%
2013	8.7%	8.5%
% Change 1990-2013	**2.5%**	**1.4%**

Source: 1990-2005: ODH, Center for Public Health Statistics & Informatic, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 41: Low Birth-Weight Rate to Births Paid by Medicaid in Butler County and Ohio, 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	12.3%	14.8%	13.2%	11.5%	13.5%	13.2%	12.0%	14.5%	**2.2%**
Ohio	14.8%	14.7%	13.9%	13.9%	14.4%	14.4%	14.2%	14.5%	**-0.3%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 42: Very-Low Birth-Weight Birth Rate in Butler County and Ohio, 1995-2013

Year	Butler County	Ohio
1995	1.2%	1.4%
1996	1.5%	1.4%
1997	1.2%	1.4%
1998	1.1%	1.5%
1999	1.5%	1.5%
2000	1.4%	1.5%
2001	1.3%	1.5%
2002	1.3%	1.6%
2003	1.4%	1.5%
2004	1.3%	1.6%
2005	1.3%	1.6%
2006	1.2%	1.6%
2007	1.5%	1.7%
2008	1.4%	1.6%
2009	1.2%	1.7%
2010	1.2%	1.7%
2011	1.7%	1.8%
2012	2.0%	1.8%
2013	1.7%	1.6%
% Change 1995-2013	**0.5%**	**0.2%**

Source: 1990-2005: CDC Wonder. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 43: Very-Low Birth-Weight Birth Rate to Births Paid by Medicaid in Butler County and Ohio, 2006-2013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	1.2%	1.7%	1.3%	1.3%	1.3%	2.5%	2.0%	1.5%	**0.3%**
Ohio	1.8%	2.0%	1.9%	2.1%	2.0%	2.0%	2.1%	1.9%	**0.1%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 44: Maternal Smoking Rate in Butler County and Ohio, 1990-2013

Year	Butler County	Ohio
1990	26.4%	24.9%
1991	26.5%	24.3%
1992	26.2%	23.2%
1993	25.3%	22.3%
1994	24.6%	21.3%
1995	23.1%	20.2%
1996	22.1%	19.5%
1997	21.5%	19.7%
1998	21.8%	19.3%
1999	21.2%	18.8%
2000	22.4%	18.9%
2001	21.4%	19.1%
2002	20.0%	17.9%
2003	19.4%	17.2%
2004	19.1%	17.5%
2005	18.5%	17.4%
2006	19.5%	19.2%
2007	19.8%	19.6%
2008	20.1%	19.3%
2009	19.2%	19.2%
2010	19.1%	17.8%
2011	18.5%	17.6%
2012	18.1%	17.3%
2013	17.4%	16.9%
% Change 1990-2013	**-9.0%**	**-8.0%**

Source: 1990-2005: CDC Wonder. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 45: Infant Mortality Rate by Maternal Smoking Status in Butler County and Ohio, 2007-2013

	Butler County		Ohio	
Year	Smoked During Pregnancy	Didn't Smoke During Pregnancy	Smoked During Pregnancy	Didn't Smoke During Pregnancy
2007	9.9	4.5	9.7	7.0
2008	2.9	6.4	10.7	6.7
2009	10.7	6.5	11.8	6.4
2010	4.6	5.5	10.8	7.1
2011	10.7	6.7	11.2	7.3
2012	10.8	5.6	9.9	6.1
2013	15.5	7.9	9.4	5.5
% Change 2007-2013	**56.6%**	**75.6%**	**-3.1%**	**21.4%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth and Death Data Set.

Table 46: Infant Mortality Rate by To Medicaid Paid Births by Maternal Smoking Status in Butler County and Ohio, 2007-2013

	Butler County		Ohio	
Year	Medicaid paid Birth and Smoked During Pregnancy	Medicaid Paid Birth and Didn't Smoked During Pregnancy	Medicaid paid Birth and Smoked During Pregnancy	Medicaid Paid Birth and Didn't Smoked During Pregnancy
2007	10.2	9.6	10.6	9.0
2008	5.7	7.5	9.9	7.9
2009	19.0	6.1	11.5	8.6
2010	4.9	7.5	11.3	9.1
2011	17.7	11.1	11.4	8.9
2012	11.8	7.3	10.8	7.9
2013	13.1	8.0	10.5	8.0
% Change 2007-2013	**29.2%**	**-15.9%**	**-1.2%**	**-11.2%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth and Death Data Set.

Table 47: Breastfeeding Initiation Rates in Butler County and Ohio, 2006-20013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	54.3%	57.7%	58.2%	56.5%	61.9%	63.7%	63.9%	65.0%	**10.7%**
Ohio	56.5%	60.4%	61.7%	62.6%	64.9%	66.7%	68.6%	69.1%	**12.6%**

Source: 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 48: Percent of 3rd Graders Overweight/Obese in Butler County and Ohio, 2004-2005 & 2009-2010

	Butler County	Ohio
2004-2005 School Year	26.1% (19.0-34.8%)	35.6% (33.9-37.3%)
2009-2010 School Year	40.1% (32.9-47.4%)	34.7% (32.9-36.5%)

Source: Ohio Department of Health - A Report on the Body mass Index of Ohio's Third Graders, 2004-2010

Table 49: Percent of 3rd Graders with 1 or More Dental Sealants in Butler County and Ohio, 2004-2005 & 2009-2010

	Butler County	Ohio
2004-2005 School Year	57.7%	43.3%
2009-2010 School Year	33.7%	50.4%

Source: ODH, Oral Health Surveillance System, 2007-2012

Table 50: Percent of 3rd Graders with Toothaches in Butler County and Ohio, 2004-2005 & 2009-2010

	Butler County	Ohio
2004-2005 School Year	10.1%	10.4%
2009-2010 School Year	12.1%	11.4%

Source: ODH, Oral Health Surveillance System, 2007-2012

Table 51: Percent of 3rd Graders with Untreated Tooth Decay in Butler County and Ohio, 2004-2005 & 2009-2010

	Butler County	Ohio
2004-2005 School Year	31.7%	25.7%
2009-2010 School Year	11.6%	18.7%

Source: ODH, Oral Health Surveillance System, 2007-2012

Table 52: Children (0-72 Months) Screed for Led Exposure in Butler County and Ohio, 2006-20013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	2,813	4,366	5,086	3,345	4,543	5,665	5,908	6,446	**129.2%**
Ohio	128,801	155,162	159,236	150,744	156,196	154,880	154,436	155,577	**20.8%**

Source: ODH, Ohio Healthy Homes & Lead Poisoning Prevention Program, Data & Statistics on Lead Poisoning-Children, updated October 1 2014

Table 53: Percent of Children with Elevated Blood Lead Levels in Butler County and Ohio, 2006-20013

	2006	2007	2008	2009	2010	2011	2012	2013	% Change 2006-2013
Butler County	0.60%	0.76%	0.49%	0.69%	0.53%	0.28%	0.30%	0.19%	**-0.4%**
Ohio	2.13%	1.77%	1.63%	1.51%	1.32%	1.12%	1.01%	0.83%	**-1.3%**

Source: ODH, Ohio Healthy Homes & Lead Poisoning Prevention Program, Data & Statistics on Lead Poisoning-Children, updated October 1 2014

Table 54: Child Fatality Rate in Butler County and Ohio, 1999-2013

Year	Butler County	Ohio
1999	75.6	67.5
2000	63.7	67.1
2001	67.8	63.4
2002	53.6	64.1
2003	66.8	64.1
2004	69.7	64.1
2005	68.0	67.1
2006	71.6	64.4
2007	52.2	63.1
2008	58.5	61.1
2009	49.7	60.6
2010	42.1	57.9
2011	60.8	59.1
2012	58.0	58.2
2013	59.7	57.5
% Change 1999-2013	**-21.0%**	**-14.8%**

Source: 1999-2005: CDC Wonder. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 55: Child Fatality Rate by Gender in Butler County and Ohio, 1999-2013

	Butler County		Ohio	
	Male	Female	Male	Female
1999	79.5	71.4	76.1	58.5
2000	63.5	64.0	76.5	57.2
2001	74.1	61.3	72.9	53.4
2002	46.8	60.8	71.5	56.4
2003	84.0	48.7	75.9	51.8
2004	68.0	71.5	73.7	54.0
2005	71.9	63.9	78.0	55.7
2006	88.4	54.1	73.8	54.5
2007	53.3	51.0	71.9	53.9
2008	61.6	55.2	68.5	53.1
2009	59.3	39.7	68.9	51.9
2010	38.1	46.3	63.0	52.4
2011	70.2	50.9	64.5	52.5
2012	62.1	53.7	64.3	51.5
2013	54.1	65.4	65.8	48.7
% Change 1999-2013	**-32.0%**	**-8.3%**	**-13.5%**	**-16.8%**

Source: 1990-2005: ODH, Center for Public Health Statistics & Informatic, Vital Statistics Annual Birth Summaries. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

Table 56: Causes of Child Death in Butler County, 1999-2013

	Butler County
Medical Cause	68.4%
Accident	18.2%
Undetermined/Unknown	4.0%
Sudden Infant Death Syndrome (SIDS)	4.0%
Homicide	2.9%
Suicide	2.6%

Source: 1990-2005: CDC Wonder. 2006-2013: ODH, Ohio Public Health Information Warehouse Birth Data Set.

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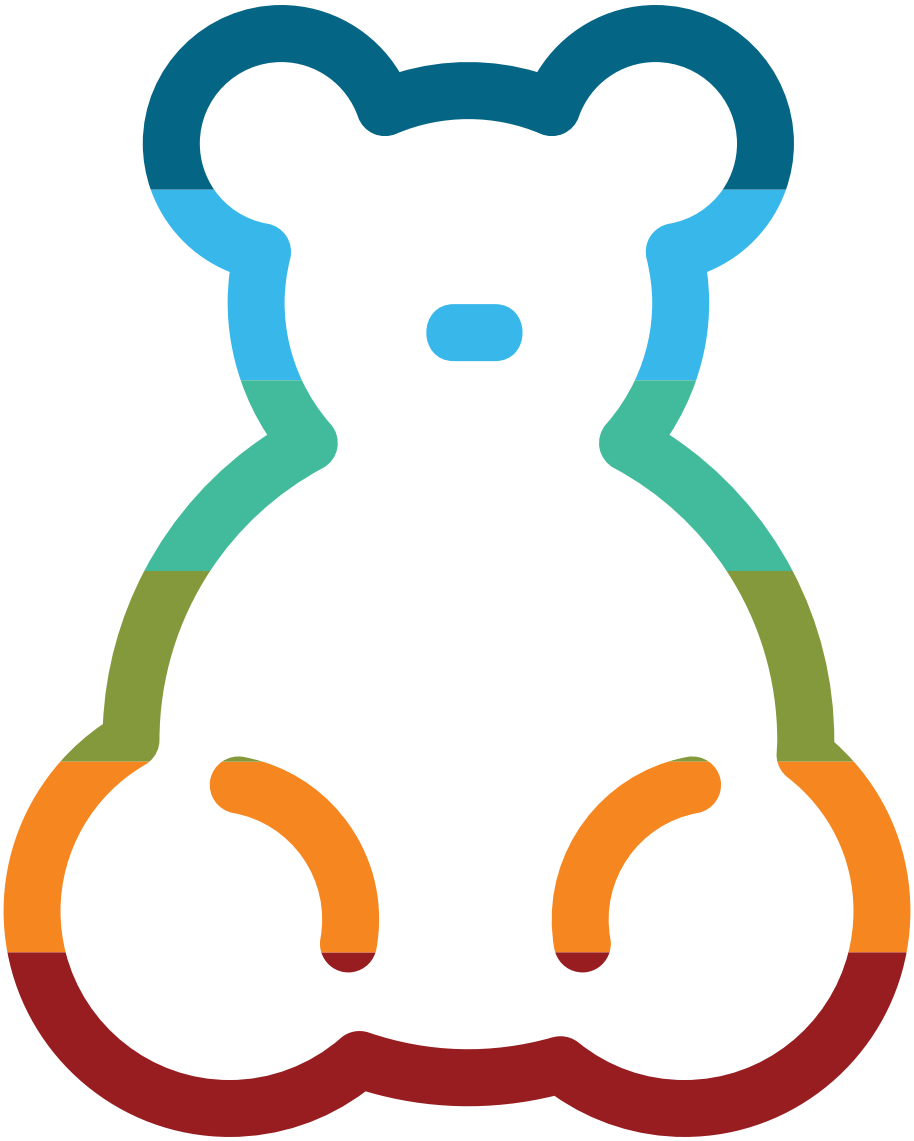
“It is health that is weath and not pieces of gold and silver.”
- Mahatma Gandhi -



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