



THE COLOR OF HEALTH

JUNE 2013

A REPORT FROM THE HEALTH EQUITY ALLIANCE AND THE
CALHOUN COUNTY PUBLIC HEALTH DEPARTMENT



CALHOUN COUNTY
PUBLIC HEALTH DEPARTMENT



Health Equity Alliance
CALHOUN COUNTY, MICHIGAN

TABLE OF CONTENTS

Letter from the Health Equity Alliance Coordinator	1
Acknowledgments	2
Preface	3
Health Disparities Defined	4
A Profile of Diversity in Calhoun County	
African American Profile	5
Hispanic and Latino Profile	6
Asian Profile	7
Native American Profile	8
Calhoun County's Health Disparities	
Life Expectancy	9
Infant Mortality	10
Chronic Diseases	11
HIV	12
Violence	13
Underlying Causes of Health Disparities	
Place Matters	14-15
Health Care Access	16-17
Health Care Workforce	18-19
Social, Economic, and Educational Disparities	20-22
Recommendations	23
Data Sources and Technical Information	24-25

Dear Calhoun County Residents,

Calhoun County is quickly becoming a more diverse community, with growing Hispanic, African American, and Burmese populations, and our community's overall health depends on their health. Health disparities are among the most complex and obstinate public health problems threatening the United States. The elimination of health disparities requires a multi-faceted approach. The Health Equity Alliance (HEA) is meeting this challenge through community education, policy and environmental change, strengthening skills and knowledge, and the development of a community health advocate program. A few highlights of our efforts during 2012 included:



- HEA conducted an assessment in local churches of color that examined barriers to health care, compliance with health recommendations, and heart disease risk factors. Our results underscored the importance of addressing health needs among people of color in a trusted environment — the church.
- HEA piloted a program with five churches of color which facilitated training for a parishioner in each church to become a Certified Nurse Assistant (CNA) so that they may provide health education and routine health screenings to members of the congregation.
- HEA facilitated immunization clinics in communities of color during which 232 people received an influenza vaccine.
- HEA collaborated with First Salem Missionary Baptist Church to host a neighborhood block party for more than 500 individuals, including many Hispanic residents. Healthy food was distributed, health screenings and immunizations were conducted, and relationships between the church and the surrounding community were developed.
- HEA teamed up with the YMCA Adult Basic Education program to create a soft-skills training program to address educational barriers for CNA students of color.
- HEA published the second annual Health Disparities section in The Coordinating Council's (TCC) Annual Report Card.



In 2013, the HEA will continue to be an advocate and representative link to communities of color, build knowledge and expertise on minority health, increase awareness of barriers facing minorities, promote opportunities for change, and create strategic alliances with health organization partners to influence policy and practice.

Thank you for taking time to review the 2013 Color of Health Report. By framing the critical issues and defining our opportunities, we can begin to work collaboratively to develop strategies for eliminating health disparities. Our intention is to leverage the data in this report to inspire advocacy and action that will result in measurable improvement in health status for Calhoun County.

Victoria Reese, MPA
Coordinator, Health Equity Alliance

Erick Stewart
Chairman, Health Equity Alliance Advisory Council

ACKNOWLEDGMENTS

This report was developed through the leadership of the Health Equity Alliance in collaboration with the Calhoun County Public Health Department. We thank the following individuals for their tireless efforts in the research and development of this report.

Patricia Adams
Bronson Battle Creek
Assistant Director of Community
Development

Adam Dingwall
Battle Creek Family YMCA
Chief Executive Officer

Marcus Glass
Regional Medical Lab
Manager, Patient & Outreach Services

Jill Hinde
Battle Creek Family YMCA
Internal Coach

Bethany Moody
Nottawaseppi Huron Band of
the Potawatomi
Community Health Nurse

Jennifer Nottingham
United Way of the Battle Creek &
Kalamazoo Region
Assistant Director of Community Impact

Ken Ponds
Starr Commonwealth
Chaplain

Paulette Porter
Regional Health Alliance/
Battle Creek Community Foundation
Director

Sarah Rockhill
Calhoun County Public Health Department
Epidemiologist

James Rutherford
Calhoun County Public Health Department
Health Officer

Erick Stewart
Stewart Industries
President

Jennifer Thuahzathang
Burma Center
Program Manager

Lynn Ward-Gray
Better Together Wellness Ministry
Battle Creek City Commissioner

Nidia Wolf
Albion Health Care Alliance
Executive Director

I am a person through other people. My humanity is tied to yours.

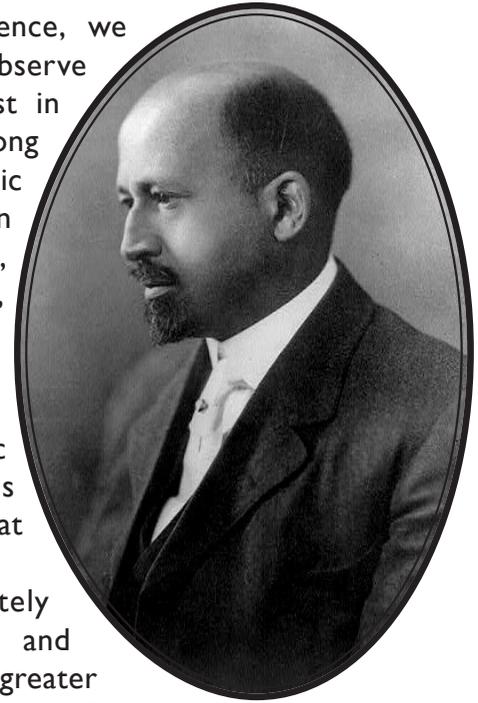
- Zulu proverb

The study of racial and ethnic-based health disparities has become a central component of modern public health in recent years; however, it is hardly a new science. In 1906, W.E.B. Du Bois, one of the most prolific sociologists and scholars of the twentieth century laid the framework for the study of the social determinants of health in his seminal work, *The Health and Physique of the Negro American*. This work largely challenged the way many viewed the distribution of health and health disparities in America at the time.

Du Bois dismantled the popularly espoused theory that the increased frequency of death and disease among African Americans was due to racial inferiority. Conversely, he observed that many of the leading causes of death among African Americans at the time, such as tuberculosis, pneumonia, and infantile diseases, were more closely associated with poverty, poor living conditions, and social deprivation than with race, an idea that was considered revolutionary during the early twentieth century. In fact, Du Bois hypothesized at the time that, "If the population were divided as to social and economic condition, the matter of race would be almost entirely eliminated."¹ Du Bois strongly advocated for improved sanitary conditions, improved education, and better economic opportunities for minorities and cautioned that, "The health of the whole country depends in no little degree upon the health of Negroes."¹

Although written over 107 years ago, Du Bois' work remains startlingly relevant today. Many of the institutionalized disadvantages and injustices Du Bois observed in 1906 remain persistent in contemporary America.

As a consequence, we continue to observe a stark contrast in health status along racial and ethnic lines. African Americans, Hispanics, American Indians, and other racial and ethnic minorities continue to die at



disproportionately higher rates and experience a greater burden of disease than whites.

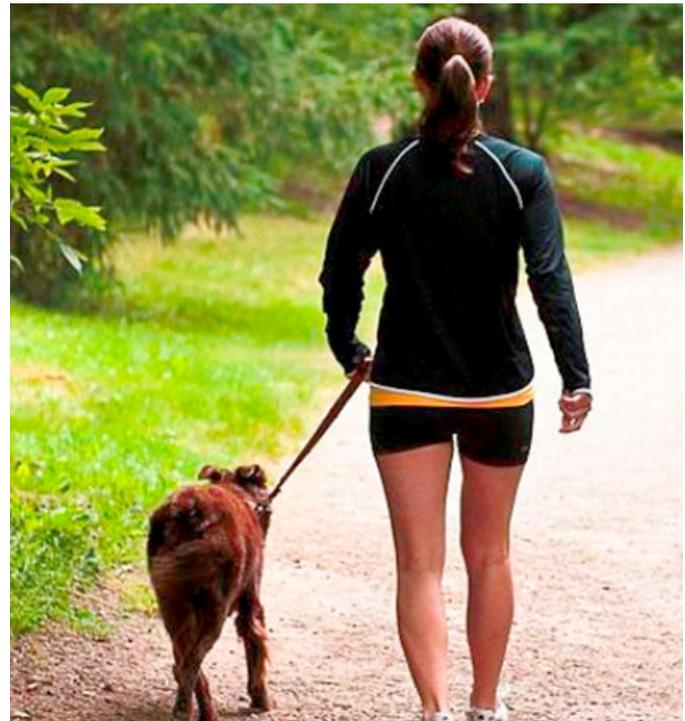
This report highlights many of the major health disparities that people of color face today and the root causes of health disparities including, social, economic, environmental, and institutional injustices. Although this report specifically focuses on health among people of color, it is important to understand that health disparities affect everyone in our community. This spirit of collective responsibility is reflected in the Zulu principle of Ubuntu which states that we express our humanity through the way we care for each other. The HEA strives to promote this concept throughout our community and hopes that this report will serve as a springboard for individuals and organizations working to promote health equity in Calhoun County.

HEALTH DISPARITIES DEFINED

What are health disparities and inequities?

Health disparities are differences in health status across distinct segments of the population. These segments may be defined by social, demographic, or geographic attributes. Health disparities may exist between people of different genders, races, ethnicities, income and education levels, disability status, immigration status, sexual orientations, or geographic locations, although this report will only focus on racial and ethnic health disparities.

A **health inequity** is a health disparity that is considered both unjust and unnecessary. Health inequities are often the result of systemic social disadvantages. Both health disparities and health inequities are important indicators of overall community health.



What causes health disparities?

Health disparities may be caused by an interaction of many factors influencing the environment in which we live, work, and play. Collectively, these factors are known as the **social determinants of health**. Social determinants may include economic opportunities, education level, ability to access health care services, availability of a clean and safe environment, and health behaviors.

How are health disparities measured?

This report uses a wide variety of data sources, including vital statistics, crime statistics, census data, public health surveys, and geographic data in order to provide a holistic picture of health disparities in Calhoun County. Pair-wise comparisons are made between each minority racial or ethnic group and a referent category, in this case non-Hispanic whites.



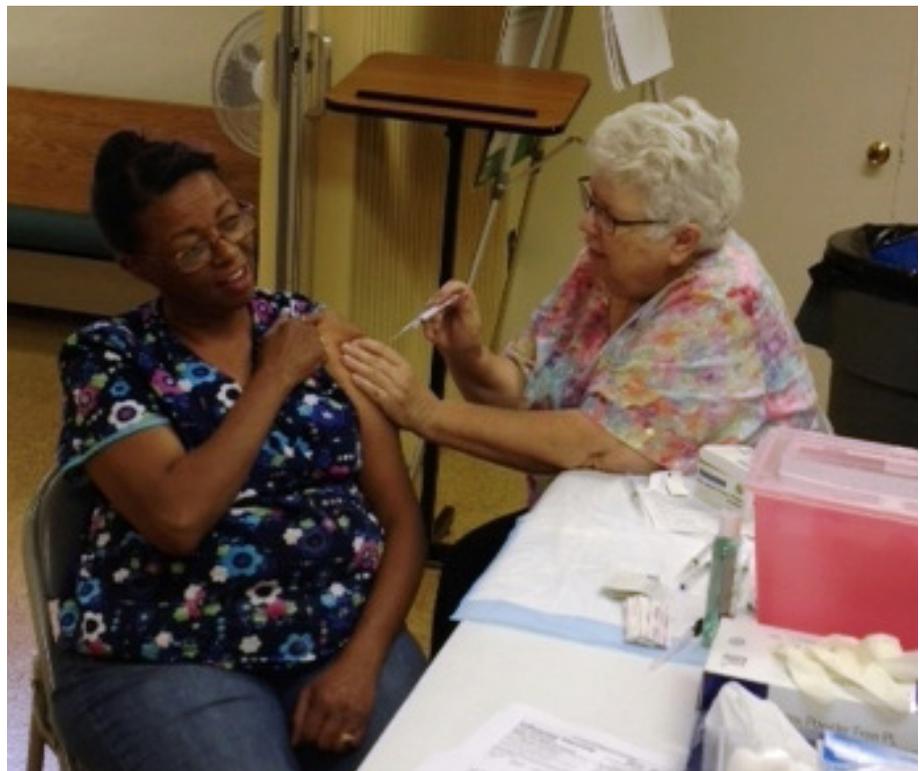
AFRICAN AMERICAN PROFILE

African Americans represent the largest minority group in Calhoun County, comprising about 12.3% of the total population in 2011.² The African American community tends to be younger, on average, with 51.3% of the population being below 35 years of age compared to 45.7% among all Calhoun County residents.² The areas within the county with the largest African American populations include the cities of Albion (29.9% African American) and Battle Creek (18.2% African American).

Two community members, Melvin Tate and Ronda Swift, agreed to speak with the HEA about common health issues faced by African Americans in Calhoun County today. Both Tate and Swift highlighted the lack of transportation and health insurance as major barriers to accessing health care among African Americans. According to the 2006-2010 American Community Survey, 14.5% of African Americans in Calhoun County lack any type of health insurance compared to 13.0% of non-Hispanic whites.³ They also pointed out that dental care is especially difficult to access because very few providers will accept new patients with Medicaid. Additionally, many patients must travel all the way to Ann Arbor, MI (80.4 miles from Battle Creek) to receive specialized dental care. As a result, many individuals, particularly young people, are forced to wait too long to receive needed dental care and end up having avoidable extractions.

Tate and Swift also spoke about the difficulties often

encountered in establishing a positive doctor-patient relationship. They explained that African Americans may perceive a lack of empathy from their doctors and feel that their doctors do not take the time to fully listen to and understand their medical histories before prescribing medications. Health care providers should be sensitive to the fact that it may take considerable time for the patient to develop rapport with and trust in their provider. Being assigned a new provider each time a patient seeks care will impede the development of a positive doctor-patient relationship. The lack of coordinated care between health care providers will also serve to undermine the patient's trust. Tate urged providers to improve communication when a patient has complex medical needs that necessitate coordination among a team of health care providers.



HISPANIC AND LATINO PROFILE

The Hispanic and Latino community is one of the fastest growing groups in Calhoun County. Over the past decade the Hispanic/Latino population grew by 32.6%.² As of 2011, there were 6,259 individuals who identified as Hispanic/Latino living in Calhoun County or about 4.6% of our total population.² About 71% of Hispanic/Latinos in Calhoun County are native-born and 29% are foreign-born.³ About 73% of the Hispanic/Latino (over the age of 5 years) population speak only English or are fluent in English; however, 27% have limited English proficiency.³

In an interview with the operations manager for Community HealthCare Connections, Oralia Garcia, she indicated that one of the most common misconceptions about the Hispanic/Latino community is that most members are in the United States illegally. In fact the majority of Calhoun County's Hispanic residents are natural-born citizens. However, the population of undocumented Hispanics/Latinos may feel threatened when asked to provide proof of residency, discouraging some from seeking needed medical care. Garcia suggested that health care providers should be more tactful if they need to request proof of residency and that making an effort to empathize helps build trust between patients and their health care providers.

When asked about the major health challenges facing Hispanics and Latinos in Calhoun County, Garcia spoke about the increasing prevalence of diabetes and the limitations



Hispanics experience when dealing with the diagnosis. For example, Garcia pointed out that Hispanics may feel intimidated about asking their doctor questions. Additionally, although organizations like Community HealthCare Connections and the Family Health Center of Battle Creek (FHC) are great resources for the Hispanic community, due to the availability of Spanish translational services, patients with limited English language skills may have a difficult time following-up on their doctor's referral if they need to see a specialist outside these organizations.

Garcia also spoke about the importance of food in Hispanic and Latino culture. Food brings friends and family members together and connects individuals to their historical traditions. Meals are shared together with family members, even if that means waiting until late at night to eat together. Health care providers should pursue an understanding of Hispanic culinary traditions when counseling their patients on dietary changes needed to improve their health. Patients are more likely to comply with dietary modifications that are consistent with their cultural practices.

ASIAN PROFILE

The Asian community has also experienced a large amount of growth over the past decade. Although Asians only make up about 2% of the total population of Calhoun County, their numbers increased by 39% since 2001.² Much of the growth in the Asian community is due to immigration; about 85% of Asians in Calhoun County are foreign-born.³ The largest Asian immigrant group originates from Burma (otherwise known as Myanmar), a country in Southeast Asia. Census data (in table to the right), however does not accurately reflect our growing Burmese population. According to a recent self-census, there are roughly 1,200 residents of Calhoun County who emigrated from Burma.

Jennifer Thuahzathang, program manager at the Burma Center in Battle Creek, expressed that common challenges many Burmese residents face are communication barriers when seeking health care providers. These barriers result from both a lack of formal translational services and cultural misunderstandings between providers and patients. Doctors often assume that Burmese

County or Region of Origin for Foreign-Born Population Calhoun County, 2010³

	Number	Percent
China	235	12.4%
Japan	338	17.8%
Korea	305	16.1%
India	238	12.6%
Burma*	531	28.0%
Philippines	191	10.1%
Other	57	3.0%

*Likely an underestimate

patients fully comprehend health information because they do not ask questions; however it is common for Burmese people to feel uncomfortable asking questions, even when they do not understand. Additionally, Burmese

patients are often asked to rely on inappropriate translators, such as their own children or a member of the opposite sex. This situation can make it difficult for Burmese patients to discuss sensitive matters with their health care providers and can lead to family conflict and privacy violations. Thuahzathang urged health care organizations in Calhoun County to invest in translational services for the Burmese community and provide more opportunities for their employees to learn about Burmese culture and traditions.



Photo credit: Burma Center

NATIVE AMERICAN PROFILE

Calhoun County is home to 821 individuals who identify as Native American alone and 1,430 individuals who identify as Native American in combination with one or more other races.³ Combined, Native Americans make up about 1.6% of the total county population. Among individuals who listed their race as Native American in combination with one or more races, 53.6% listed white and 34.0% listed black as their other racial heritage.³ The most commonly reported tribal affiliations in Calhoun County, according to the 2010 U.S. Census, are Chippewa (21.5%),

Potawatomi (20.1%), Cherokee (16.8%), and Ottawa (10.1%).³

Bethany Moody, a community health nurse for the Nottawaseppi Huron Band of the Potawatomi (NHBP), agreed to share her perspective on common health issues faced by Native Americans. Moody indicated that chronic diseases such as diabetes, obesity, hypertension, and mental health issues were among the most common health conditions experienced by Native Americans in Calhoun County. Moody described how mental health among Native Americans can be influenced by a history which includes forced migration, separation of children from their families, and suppression of Native languages, religion, customs, and traditions. In fact, it was not until 1978 that a federal law was passed to protect the religious freedom of Native Americans.

Moody related that the summation of these experiences has led to a distrust of the current health care system where there are very few Native American providers available. When asked what health care providers can do to build trust and improve services for their Native American clients, Moody voiced that opening a line of dialogue with the Native American community was imperative. She encouraged health care providers and organizational leaders to visit and learn about Native American culture and traditions and to avoid making health care decisions based on preconceived ideas about the Native American community. She also indicated that many younger generation Native Americans would like for their providers to be more open-minded about integrating traditional healing methods into their care.

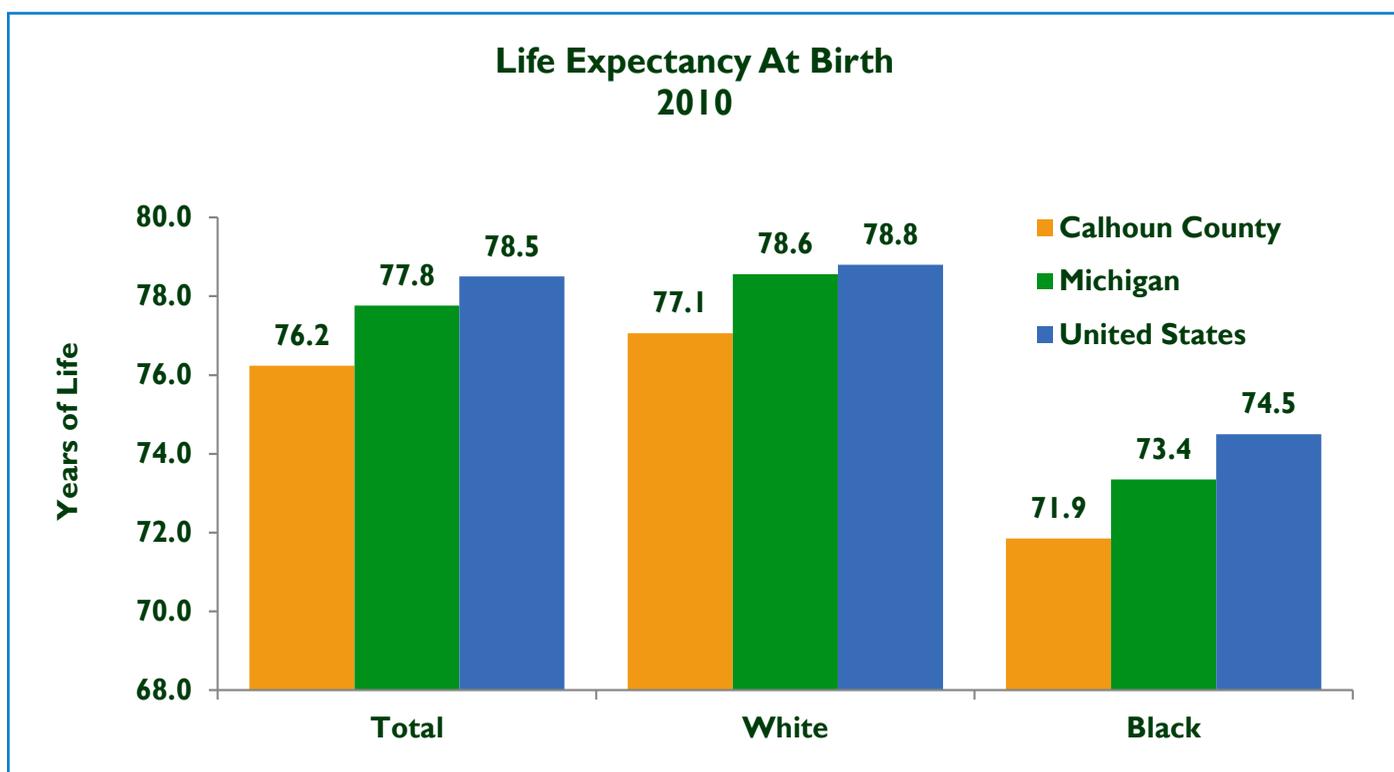
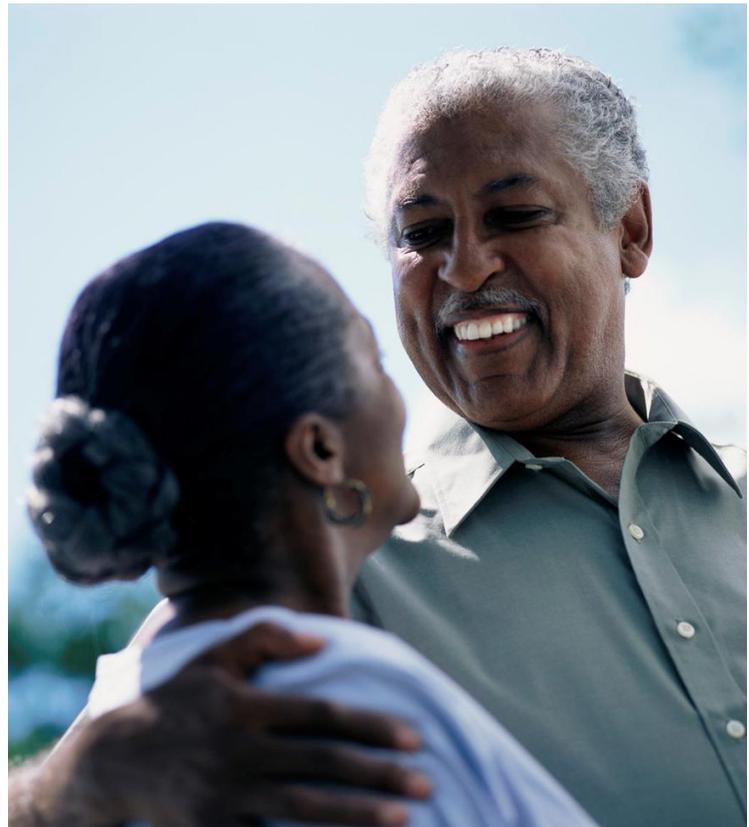


Photo copyright (c) 2008 Brita Brookas of VISION Photo

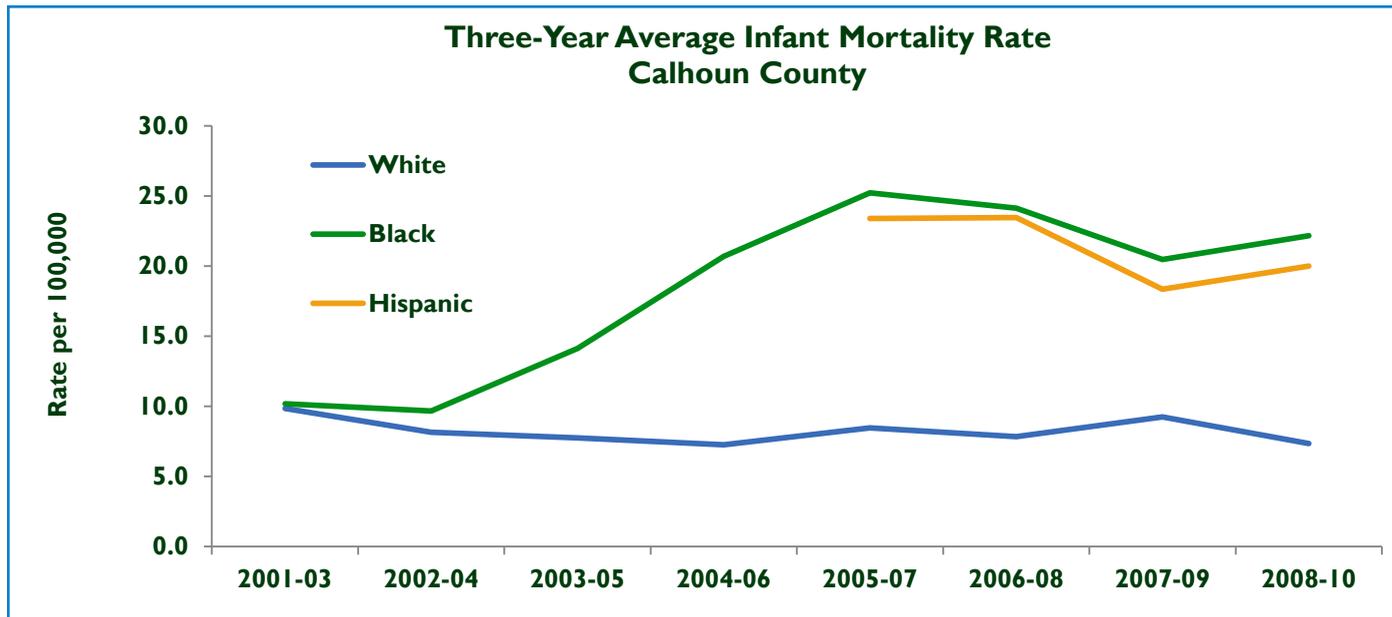
LIFE EXPECTANCY

Life expectancy at birth indicates the number of years a newborn infant is likely to live if current conditions affecting health and mortality were to remain the same throughout his or her lifetime. Life expectancy is a common measure of overall health and well-being and is often used to compare health across demographic or geographic groups.

Although life expectancy has continuously increased over time, there continues to be relatively large gaps between racial groups. For example, whites have a longer life expectancy than African Americans at all geographic levels. In Calhoun County and Michigan, a white infant born in 2010 can expect to live on average 5.2 years longer than a black infant born in the same year.⁴ At the national level, white infants will live an average of 4.3 years longer than black infants.⁴



INFANT MORTALITY



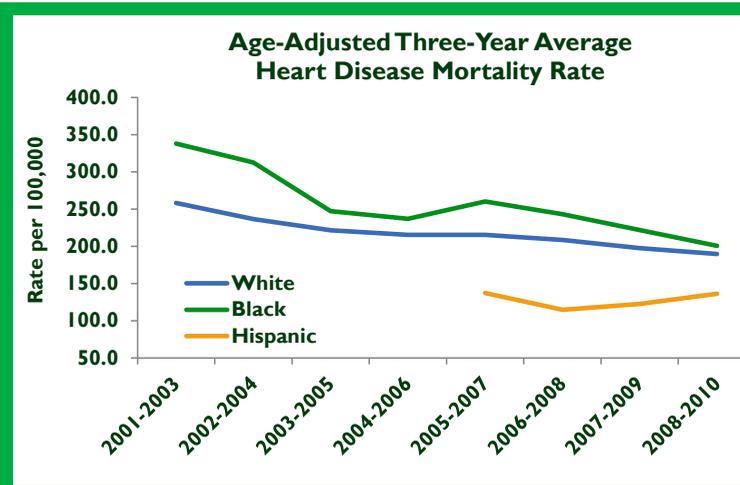
For every thousand infants born in Calhoun County, 11 do not make it to their first birthday.⁵ Between 2006 and 2010, Calhoun County had the third highest infant mortality rate (IMR) in the state of Michigan.⁵ Additionally, there is a substantial disparity in infant mortality between white, black, and Hispanic infants in Calhoun County. Between 2008 and 2010, the IMR among black infants (22.2 deaths/1,000 births) and Hispanic infants (20.0 deaths/1,000 births) was roughly three times higher than the IMR among white infants (7.3 deaths/1,000 births).⁵ According to the World Bank, this places the black and Hispanic IMR in Calhoun County roughly equal to the Dominican Republic, Nicaragua, and the Philippines.⁶

The majority of infant deaths are the result of being born too small and/or too early. In Calhoun County, black infants are 60% more likely to be born premature (before 37 weeks gestation) and 95% more likely to have a low birth weight (below 2,500 grams) compared to

white infants.⁵ Although it is not always clear what causes a baby to be born premature, research has shown that there are ways to reduce the risk of delivering a premature or low birth weight baby. For example:

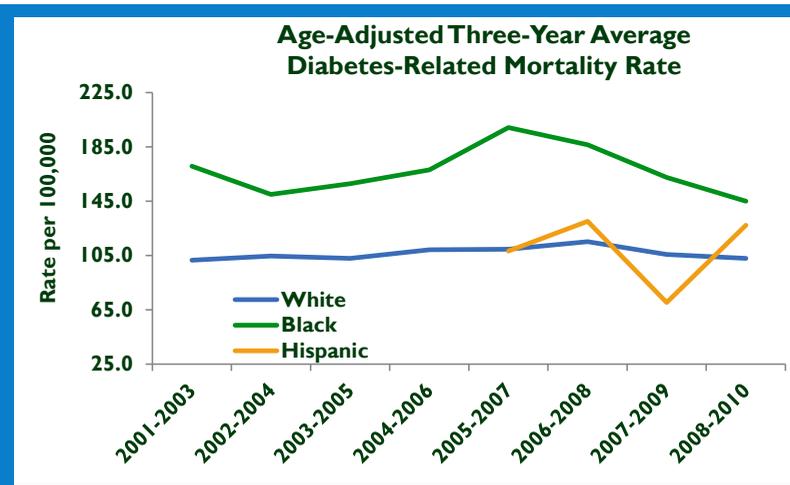
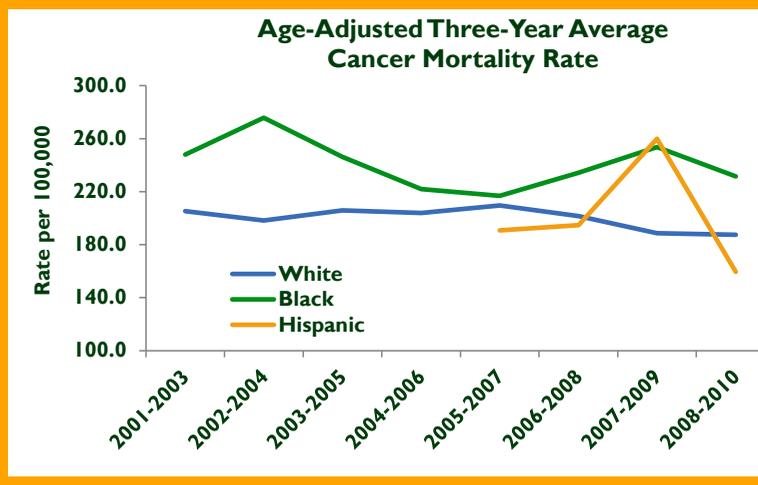
- Some women may benefit from progesterone medications that reduce the risk of preterm delivery. Women with a prior preterm delivery should discuss with their doctor if this option is right for them.
- In Calhoun County, women who smoked tobacco during pregnancy were roughly 80% more likely to have a low birth weight infant and 20% more likely to deliver prematurely compared to women who did not smoke.⁵ Quitting smoking before pregnancy can greatly reduce the risk of low birth weight and prematurity.

CHRONIC DISEASE DISPARITIES



Heart disease is the leading cause of death in Calhoun County, resulting in 344 deaths in 2010.⁷ Although the rate of death from heart disease has decreased over the past 10 years, it still remains higher for African Americans. In general, Hispanics are the least likely to die from heart disease in Calhoun County.

Cancer is the second leading cause of death in Calhoun County.⁷ However, cancer accounts for more potential years of life lost than any other cause because it frequently affects individuals at younger ages. Between 2008 and 2010, African Americans were 23% more likely to die from cancer than whites in Calhoun County.⁷



Diabetes-related mortality includes deaths that occur as a direct result of diabetes and deaths that are precipitated by diabetes. African Americans were 41% more likely than whites to die from a diabetes-related cause between 2008 and 2010.⁷ Trends among Hispanics are not consistent within Calhoun County.

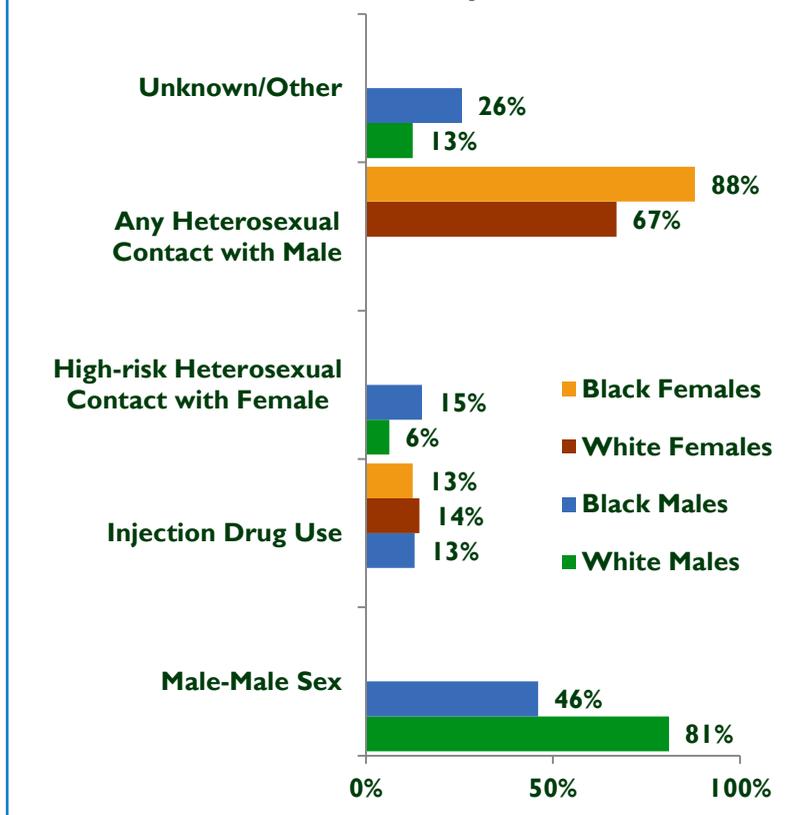
HIV

In 2012, there were an estimated 180 individuals living with HIV/AIDS in Calhoun County, roughly 16% of whom did not know they were infected.⁸ African Americans, particularly African American men, are disproportionately burdened by HIV compared to other racial and ethnic groups. In Calhoun County, for example, the rate of HIV among African Americans (376 cases per 100,000) is almost six times higher than the rate among white residents (64 cases per 100,000).⁸

The most frequent way HIV is transmitted among men, both white and black, is through male to male sex.⁸ For women however, the most common transmission route is through heterosexual sex with an HIV-infected male partner.⁸ HIV can also be spread when injection drug users share needles or through contaminated blood transfusions. An HIV-infected mother may also sometimes pass the virus to her baby during birth.

Medical treatment can dramatically improve the lives of people living with HIV. HIV treatment can slow the progression of

**HIV Transmission Risk
Calhoun County 2012**



disease and even may help reduce the ability to transmit the virus to other people. However, despite advances in HIV treatment, medications are expensive and come with many side effects. These medications will need to be taken for life because there is no cure for HIV.

One of the most important steps to prevent the spread of HIV is for an individual to know their status and encourage their partner(s) to get tested as well. Many clinics now offer free or low-cost rapid HIV tests that can provide results in as little as 15 minutes.

Free or Low-Cost HIV Testing Sites

Calhoun County Public Health Department
190 E. Michigan Ave Suite A-100
Battle Creek, MI 49014
269-969-6363

Planned Parenthood of Mid & South Michigan
Battle Creek Clinic
2855 Capital Ave SW
Battle Creek, Michigan 49015
269-964-0885
800-230-7526

VIOLENCE

Once seen as an unfortunate yet inescapable reality, violence is now considered a major public health concern in the United States. From 2006-2010, Calhoun County had the fourth highest homicide rate (5.8 deaths / 100,000 residents) in the state of Michigan, behind only Wayne, Genesee, and Saginaw counties.⁷ Violence affects people from all walks of life and can take many forms, from youth violence to child maltreatment, elder abuse to intimate partner violence.

Over the past decade, the homicide mortality rate for African Americans was an average of nine times higher compared to whites in Calhoun County. Between 2001 and 2010, there were 38 deaths among black victims of homicide but only 29 deaths among white victims.⁷ Like many other communities across the United States, homicide particularity affects young black men in Calhoun County. Despite only accounting for 4% of the total population, black males between the ages of 15 and 44 years accounted for over a third (34%) of all homicide deaths over the past decade.^{2,7}

Most homicide deaths (66%) in Calhoun County resulted from the use of a firearm.⁷ Firearms were also the selected instrument in 63% of completed suicides in 2010.⁷ In addition to gun-violence resulting in death, in 2011 police made 80 arrests for gun-related

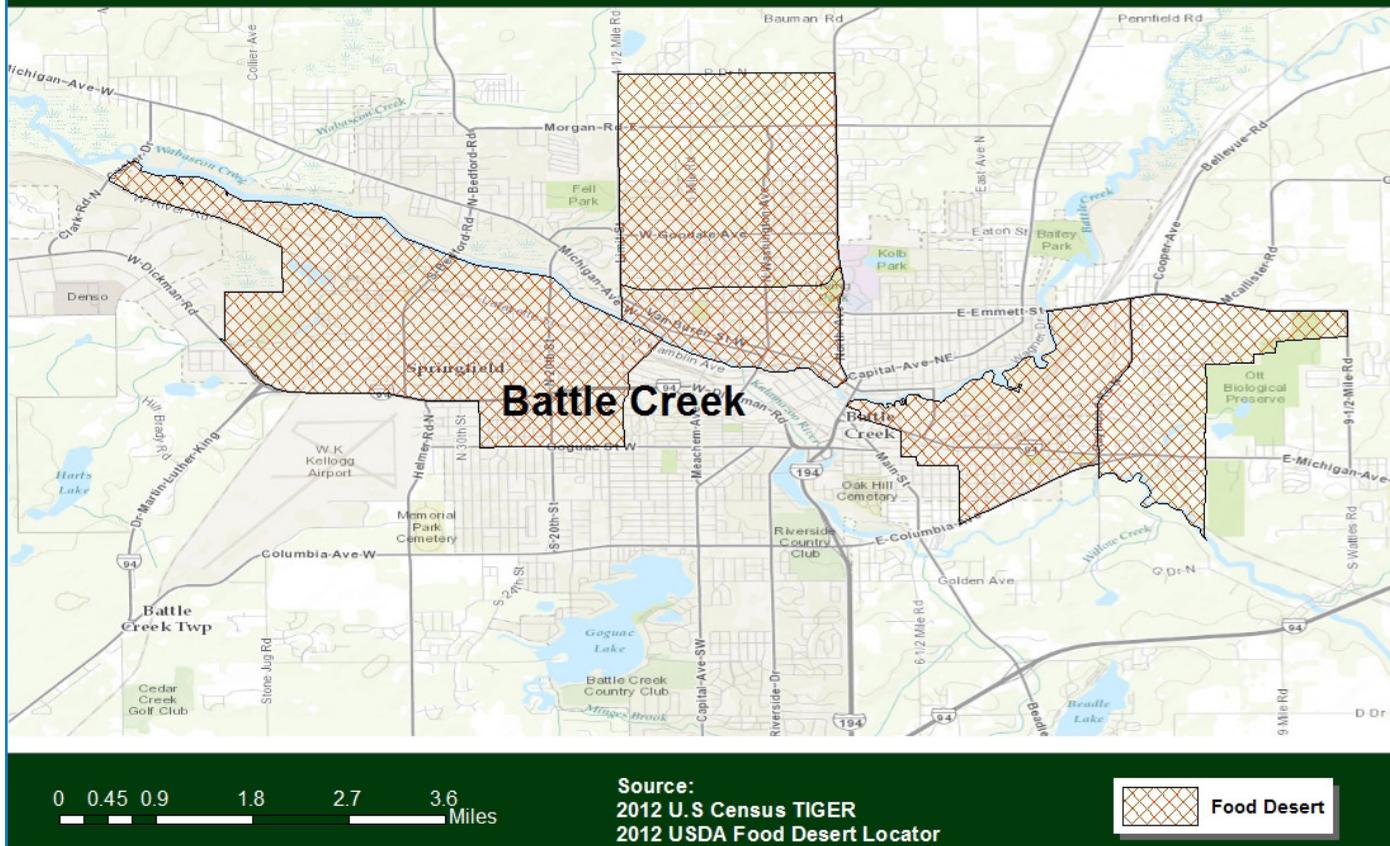


crimes in Calhoun County including 11 armed robberies, 14 aggravated assaults, and 55 weapons violations such as illegal possession, improper storage, or using a firearm under the influence of drugs or alcohol.⁹ Black men were overrepresented among all arrested individuals, accounting for 38 (48% of total) arrests involving firearms.⁹

Deaths resulting from homicide only tell a fraction of the story. Surviving victims of violence are often left with physical and emotional disabilities that make it difficult to function at work or school. The whole community may struggle with fear, anxiety, and sadness in the wake of a violent act. Violence can disrupt services and deteriorate property values. Additionally, there is a substantial financial impact when a life is lost due to violence. In 2010 alone, homicides cost Calhoun County roughly \$8.6 million in medical care and lost productivity.¹⁰

PLACE MATTERS

Designated Food Deserts in Calhoun County



A food desert is an area where most people are low-income and there are few or no grocery stores or supermarkets. Individuals who live in food deserts may have a difficult time accessing affordable, healthy, and nutritious foods like fresh fruits and vegetables, whole-grains, and low-fat dairy products. Therefore, many residents of food deserts have come to depend on low-cost, unhealthy alternatives to meet their nutritional needs. Some research has even suggested that people who live in food deserts are at a higher risk of obesity and chronic diseases related to a poor diet such as heart disease and diabetes.¹¹

In Calhoun County, there are five census tracts which are classified as food deserts, all of which are in the Battle Creek area (shown above). There are a total of 16,136 individuals who live within these designated food deserts, making up about 31% of the total Battle Creek population.¹²

About one-third of the African American population and 16% of the Hispanic population within Calhoun County lives within a food desert. Comparatively, only 8% of non-Hispanic white residents live within a food desert, suggesting that healthy food access is an issue that disproportionately affects minorities in our community.¹²

PLACE MATTERS

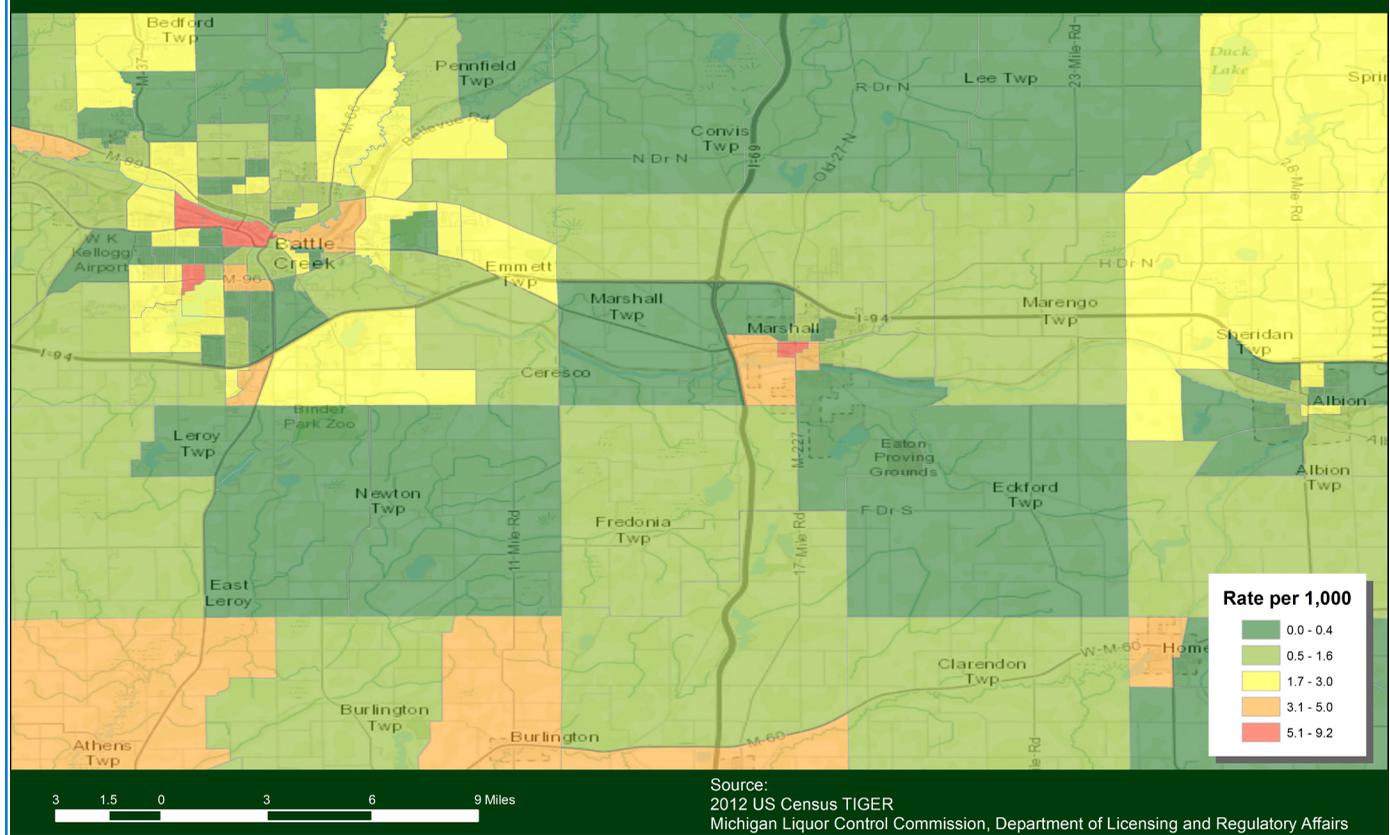
Research has shown that neighborhoods with a high density of bars, liquor stores, and other alcohol vendors experience a higher rate of binge-drinking behaviors, both violent and non-violent crime, as well as a higher rate of motor vehicle crashes.^{13,14} Sociologists have been tracking factors related to the density of alcohol vendors across neighborhoods, and studies have demonstrated that alcohol vendors are more likely to locate in urban neighborhoods with a high proportion of black and Hispanic residents.¹⁵ Low-income neighborhoods are also more likely to have a higher density of alcohol vendors compared to middle- and high-income neighborhoods.¹⁵

In Calhoun County, the neighborhoods (as defined by census block group) with the

highest rate per capita of stores which sell alcohol for consumption off-premises per capita have a combined minority population of 30.4%. Comparatively, the neighborhoods with the lowest off-premise alcohol vendor rate have a minority population of 19.7%.¹⁶ These data indicate a pattern of targeting minority neighborhoods for the distribution of alcohol vendors.

This analysis included vendors such as convenience stores, gas stations, grocery stores, and bars or taverns that sell carry-out alcohol for off-premise consumption. This analysis did not include restaurants that only sell alcohol for on-premises consumption.

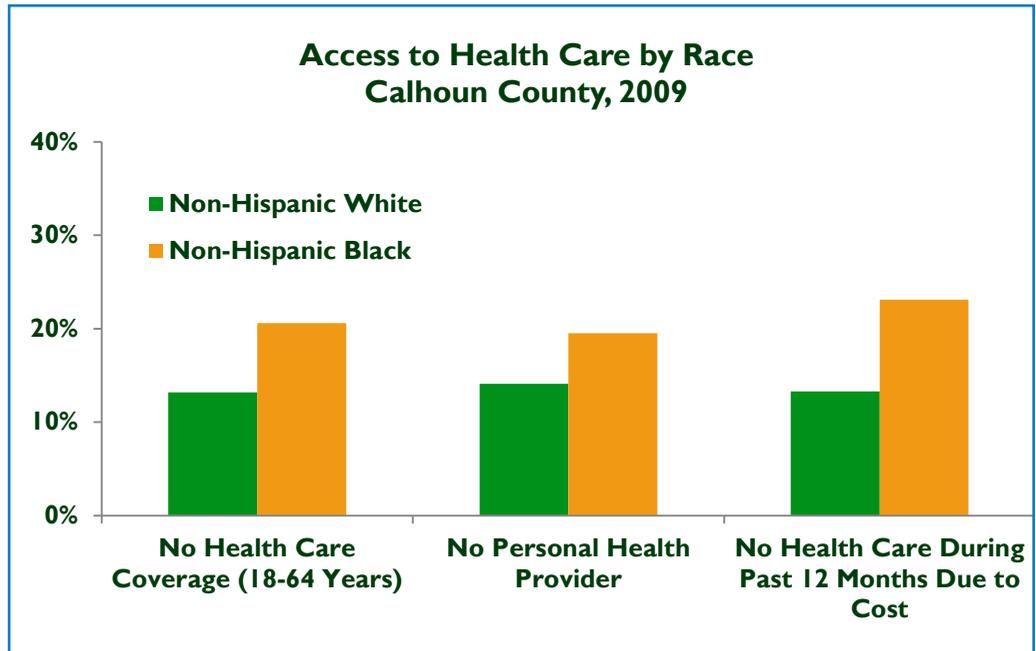
Rate of Licensed Off-Premise Liquor Merchants in Calhoun County, 2012



HEALTH CARE ACCESS

People of color face many unique challenges when attempting to access the health care system. Financial barriers, such as lack of health insurance or transportation and inability to pay out-of-pocket expenses may prevent an individual from seeking needed medical care. Structural factors such as an insufficient number of health care providers, limited office hours, lack of translation services, and institutional discrimination add further barriers for minorities. These barriers often result in delays in receiving appropriate medical treatment, higher utilization of emergency services, and poorer health outcomes.

The CCPHD produces the Behavioral Risk Factor Surveillance Survey (BRFSS) every



five years to assess Calhoun County health behaviors and conditions, including health care access. According to results from the 2009 BRFSS, non-Hispanic black adults are significantly less likely to have adequate access to health care services compared to non-Hispanic white adults in our community. For example, non-Hispanic black residents between the ages of 18 and 64 years were

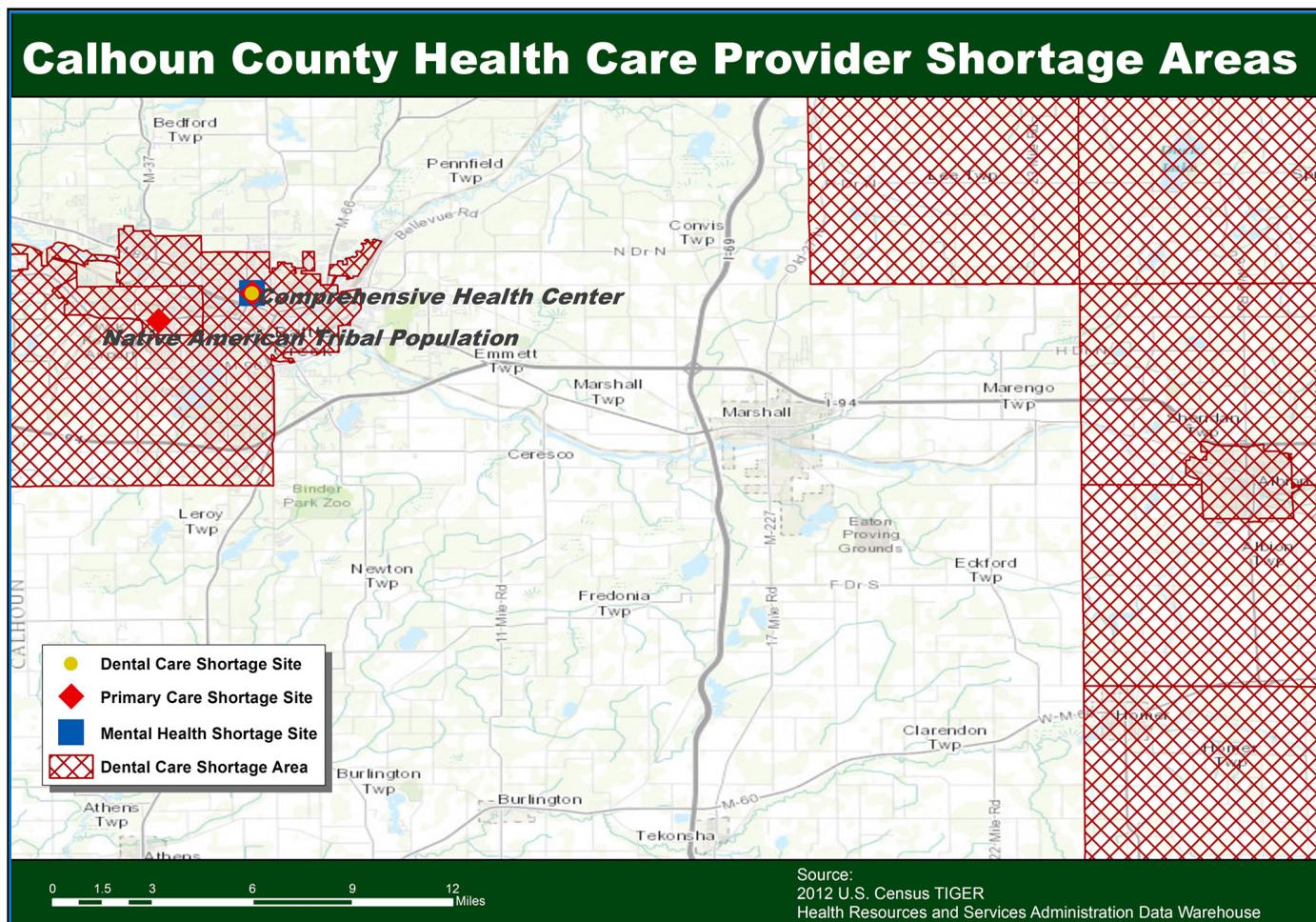
less likely to have health care coverage/health insurance of any kind and were also less likely to report having a personal health care provider than non-Hispanic white residents.¹⁷ Furthermore, non-Hispanic blacks were more likely to report having gone without needed health care in the past 12 months due to cost.¹⁷



HEALTH CARE ACCESS

Health care access is often limited by a shortage of health care providers, especially primary care, mental health, and dental care providers. Residents of health care provider shortage areas (HPSA) may have to wait an extended period of time or travel long distances to see a provider. Currently, there are eight divisions in Calhoun County that are designated as dental care shortage areas, including Battle Creek, Albion, and the easternmost townships including Lee, Clarence, Sheridan, Albion, and Homer townships.¹⁸ Following the elimination of primary care services at the Family Health Center in Albion, residents of the Albion service area must now travel an average of 36 miles round-trip to reach the nearest low-cost health clinic.

There are also two additional entities in Calhoun County which have too few providers to meet the demand of their client population; the FHC and the NHBP tribal population.¹⁸ The FHC primarily serves low-income, uninsured, or Medicaid-eligible individuals, and is one of the few providers in Calhoun County to serve this population. In 2011, the FHC served 31,105 patients, 32.2% of whom identified as a racial or ethnic minority.¹⁹

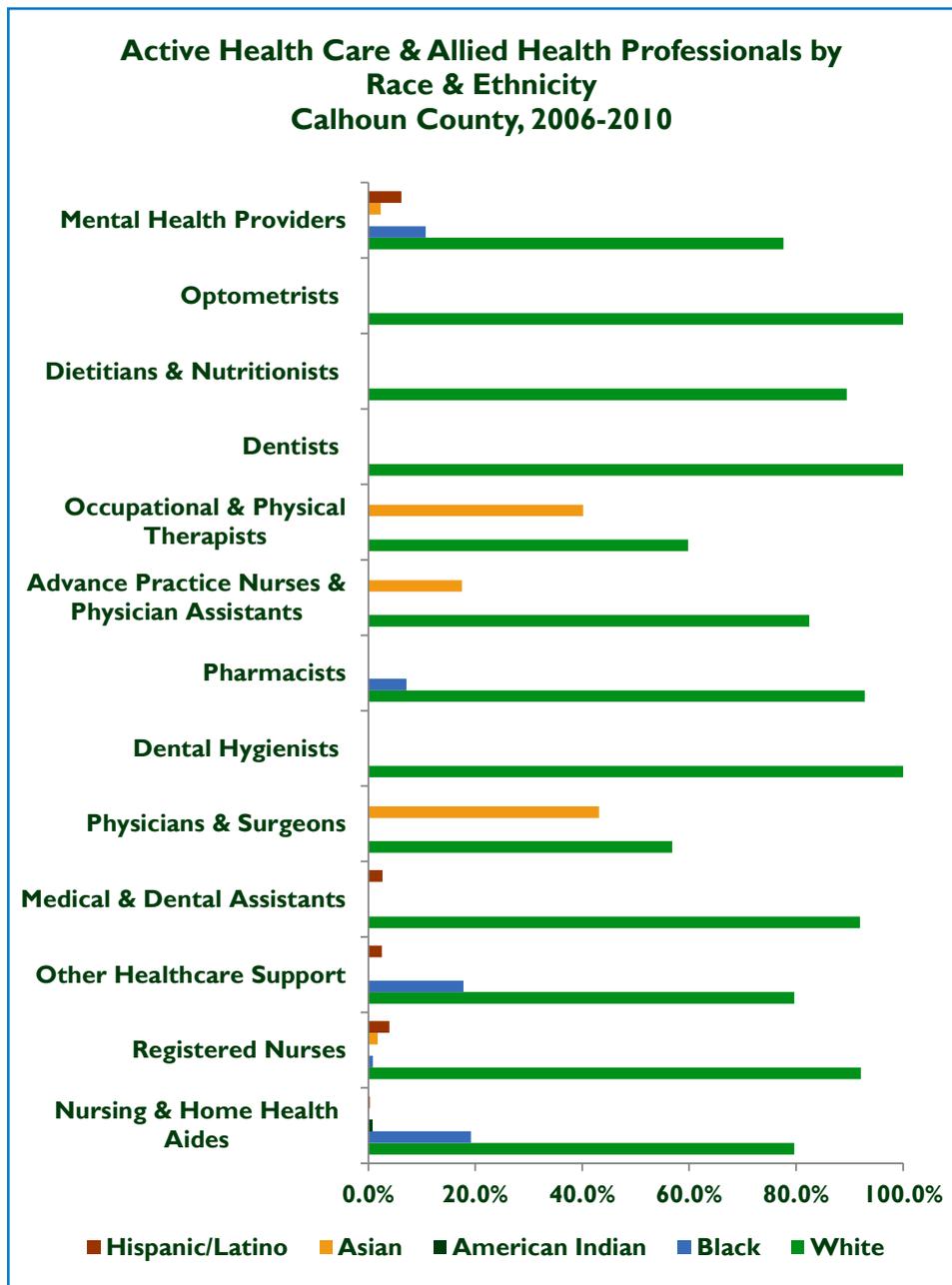


HEALTH CARE WORKFORCE

All individuals should have access to health care, including mental health care, which is culturally and linguistically appropriate. Research has shown that the quality of health care is diminished when providers do not speak their client's preferred language or are insensitive to cultural differences.²⁰ Ideally, each individual should have the option to see a health care provider that shares a common language, culture, background, or heritage. However, data indicate that minorities are often vastly underrepresented in health care and allied health professions.

In Calhoun County, racial and ethnic minorities make up only about 15% of the total health care workforce.²¹ Occupations with low minority representation include registered nurses, medical/dental assistants, optometrists, dietitians/nutritionists, dental hygienists, and pharmacists. African Americans and Hispanics tend to be more represented in lower-skilled professions such as nurse aides and home health aides whereas Asians tend to be more represented in higher-skilled professions such as physicians, physician assistants, and advance-practice nurses.

The physician population in Calhoun County is more racially diverse compared to other



health professions, primarily due to the relatively large proportion of physicians who are Asian. However, despite making up 12% of the population, African Americans account for less than 1% of physicians.²¹ Likewise, Hispanics make up about 5% of the Calhoun County population, but account for less than 1% of physicians.²¹

HEALTH CARE WORKFORCE

National Standards for Culturally- and Linguistically-Appropriate Services in Health Care²²

- Provide effective, understandable, and respectful care that is compatible with patients' cultural beliefs and preferred language
- Recruit, retain, and promote a diverse staff
- Ensure staff receive ongoing training in cultural competency
- Offer language assistance services
- Inform patients of their right to receive language assistance services
- Ensure quality of language services
- Provide written materials in the languages of commonly encountered groups
- Develop and implement a written strategic plan that outlines goals, policies, and accountability related to providing culturally competent care
- Conduct ongoing assessments
- Collect data on patients' race, ethnicity, and spoken language
- Maintain a demographic, cultural, and epidemiological profile of the community
- Develop participatory, collaborative partnerships with communities
- Ensure conflict and grievance resolution processes are culturally sensitive
- Share information with the public about efforts to provide culturally competent care

Health care providers can improve the quality of services provided to diverse patient populations by incorporating cultural competency into their practice. By learning to be more aware of their own cultural beliefs and more responsive to those of their patients, providers begin to view the services they provide from the perspective of their patients. Increased self-awareness and, over time, changed beliefs and attitudes, translate into better health care.

The national Office of Minority Health has published a series of guidelines for the provision of culturally competent care in health care settings (displayed above). These guidelines provide the framework for all health care organizations to best serve the nation's increasingly diverse communities.



SOCIOECONOMIC DISPARITIES

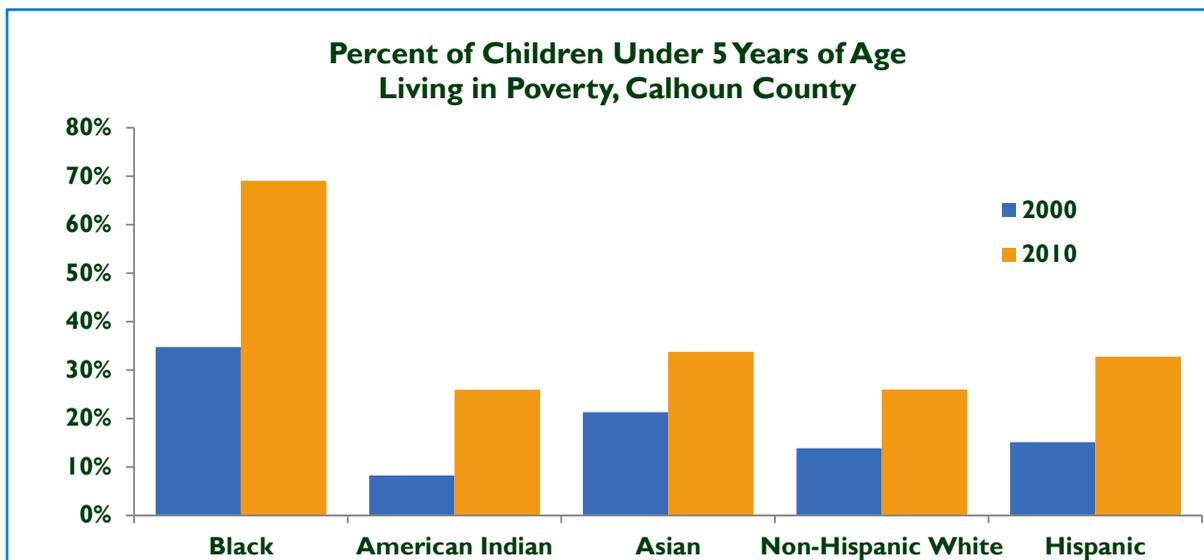
By far, one of the most accurate predictors of health is socioeconomic status (SES). SES refers to one's position or class in society and is usually determined by wealth, education, and occupation. A person with high SES has power, influence, and can easily access financial resources, material goods, and health care. Historically, racial and ethnic minorities in the United States and Calhoun County have been more likely to have lower SES compared to non-Hispanic whites.



Poverty is an important reflection of SES. The federal poverty level (FPL) is defined as an annual income of not more than \$22,811 for a family of four with two children.²³ When we look at poverty in Calhoun County, the data show that among very young children, poverty rates have increased among all races over the past 10 years.³ African American children are at the highest risk of poverty. In fact, between 2000 and 2010, poverty rates among African American children have almost doubled, leaving roughly 70% of African American

children ages 0 to 5 years under the federal poverty level.³

Poverty during childhood often has dramatic effects for individuals throughout their lives. Children born into poverty are much more likely to experience poor health including having a low birth weight, asthma, obesity, high blood lead levels, and tooth decay.²⁴⁻²⁷



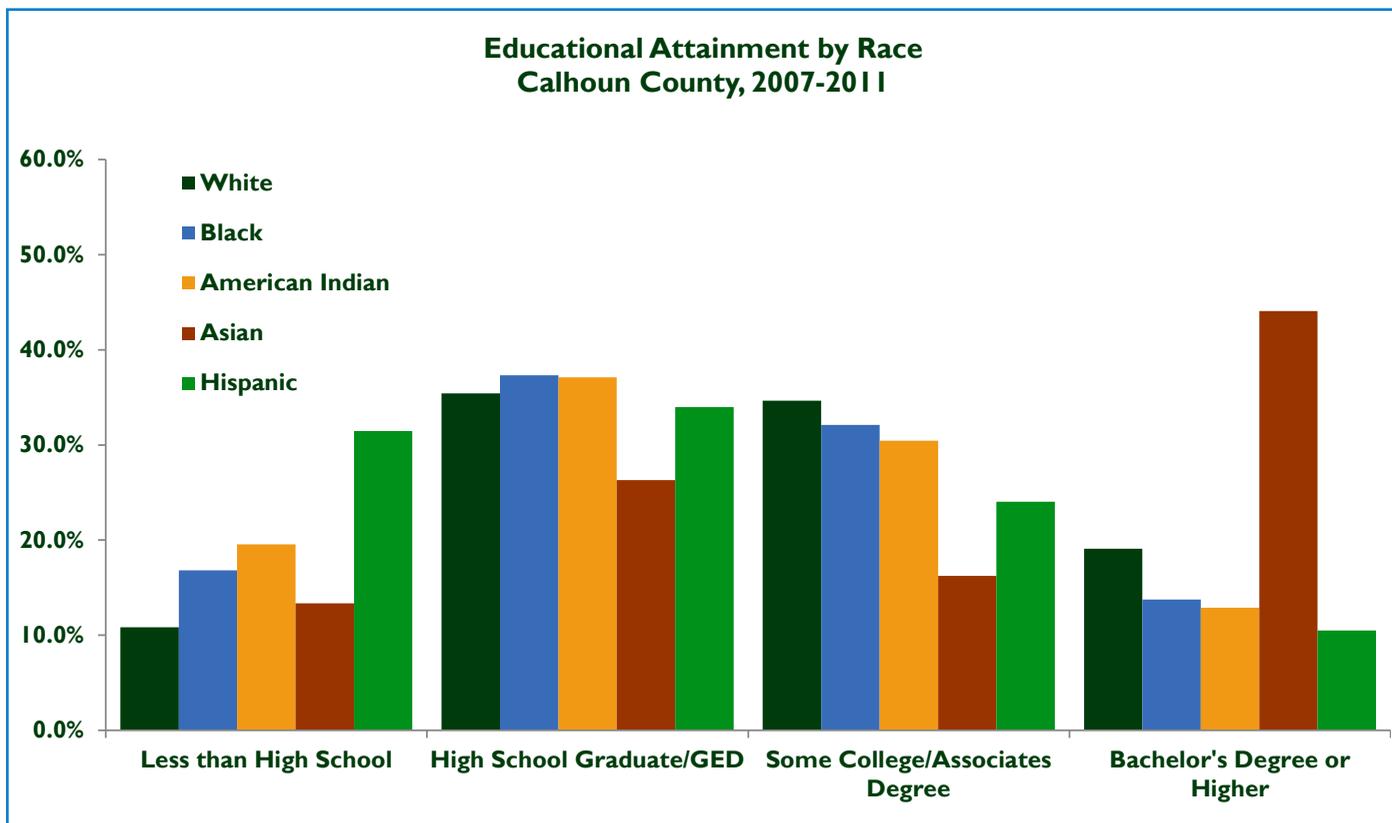
SOCIOECONOMIC DISPARITIES

Educational achievement has a strong impact on the odds of being in poverty, and consequently on the health of individuals. By the year 2018, it is predicted that 63% of all American jobs will require some type of post-secondary education, however only 18.7% of adults aged 25 years and older in Calhoun County currently have a bachelor's degree or higher level education.^{3,28}

Compared to individuals with a bachelor's degree, those without a high school degree are 7.1 times more likely to be below the federal poverty level (FPL), and those with only a high school degree were 3.6 times more likely to be below the FPL.³ Additionally, the median income for individuals with a bachelor's degree was \$31,405 higher than those without a high school degree and \$20,302 higher than those with only a high

school degree.³ These data clearly indicate the necessity of post-secondary education.

Despite the growing need for a highly educated workforce, there continues to be a persistent achievement gap along racial and ethnic lines. Hispanics in Calhoun County are the least likely to have a bachelor's degree or higher level education (10.5%) and most likely to have less than a high school level education (31.5%). Bachelor's degree attainment among American Indians (12.9%) and African Americans (13.8%) was also significantly lower than among non-Hispanic whites (19.1%).³ Asian/Pacific Islander individuals had the highest educational attainment levels on average in Calhoun County with over 44% reporting at least a bachelor's degree and only 13.4% reporting less than a high school level education.³



SOCIOECONOMIC DISPARITIES

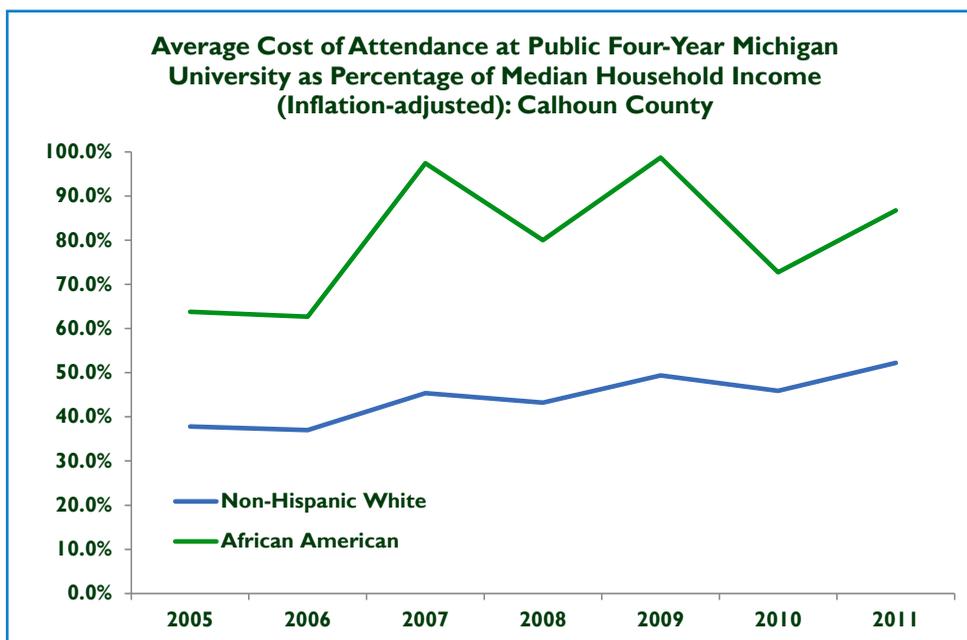
Cost can be a significant barrier to post-secondary education, especially for minorities and low-income individuals. During the 2011-2012 academic year, the annual cost of full-time attendance at a public, four-year institution in Michigan for an in-state undergraduate was \$21,409, including tuition, fees, room, and board.²⁹ Additional costs such as childcare, books, and transportation are not included in this figure. During the same academic year, the average combined amount of scholarship, local, state, and federal grant aid received by students was \$8,468, leaving a difference of \$12,231 that the student is responsible to pay for either out-of-pocket, or by taking out student loans each year.²⁹



Some experts caution that the rising costs of higher education are preventing many

of today's young people from accessing educational and career opportunities. For example, among public, four-year universities in Michigan, the average cost of attendance has increased by 70% between 2001 and 2011, whereas Midwest consumer prices only increased by 25% during the same time period. Furthermore, the median household income in Michigan fell by 15% between 2001

and 2011 after adjusting for inflation. In 2011, average college costs were about 87% of the annual median income for African American households in Calhoun County, but only 52% of the annual median income for non-Hispanic white households, illustrating the additional burden minorities often face.^{29,3}



RECOMMENDATIONS

1. Many observed health disparities are largely caused by the social determinants of health, such as an imbalance in income, education, and neighborhood conditions. Therefore, any efforts to improve the health of minority populations should take a holistic approach and actively encourage participation from education, employment, and urban planning sectors.
2. Funders and coordinating agencies can strengthen the capacity of organizations working to improve health equity including government, non-profits, grass-roots organizations, health care providers, and private businesses by fostering cross-sector partnerships and collaborations.
3. In order to improve the quality of health care minorities receive, all health care organizations should make a commitment to integrate the National Standards for Culturally- and Linguistically-Appropriate Services (CLAS) in Health Care into their practice, including an effort to train, recruit, and retain more African American, Hispanic, and bilingual providers in Calhoun County. Diversity should be reflected at all levels of health care organizations, including leadership positions.
4. Organizations and agencies serving minority populations should continuously collect and analyze data on race, ethnicity, and language preference, to ensure equity in the quality of care and services received by clients. Organizations and agencies should solicit feedback from clients and employ client voices in quality improvement initiatives.
5. Health care providers should seek to improve access by developing programs and staffing patterns that build the skills of consumers to be better informed and equipped to effectively navigate through the health care system.
6. Public health organizations should encourage a greater emphasis on culturally-appropriate, evidenced-based, primary prevention strategies focused on improving the health of minority populations. Efforts should not solely focus on treatment of disease, but rather should prioritize the prevention of disease by addressing the social, environmental, and institutional factors which are responsible for the health disparities we observe in our community. Effective and innovative strategies at the local level should be identified and celebrated.
7. Data relevant to measuring the health of minority populations should be continuously monitored and shared with community members and local leaders in order to drive decision-making and action.

SOURCES AND TECHNICAL NOTES

1. Du Bois, WEB. *The Health and Physique of the Negro American: Report of a Social Study made under the direction of Atlanta University; together with the Proceedings of the Eleventh Conference for the Study of Negro Problems, held at Atlanta University, on May the 29th, 1906.* Atlanta, GA: The Atlanta University Press; 1906.
2. National Center for Health Statistics. Postcensal estimates of the resident population of the United States for July 1, 2001-July 1, 2011, 2011.
3. U.S. Census Bureau. American Community Survey Five-Year Estimates, Selected Population Tables, 2006-2010.
4. Division for Vital Records & Health Statistics, Michigan Department of Community Health. Michigan Resident Death File, 2010.
5. Division for Vital Records & Health Statistics, Michigan Department of Community Health. Michigan Resident Death and Birth Files, 2001-2010.
6. The World Bank. Level & Trends in Child Mortality. Available at: <http://data.worldbank.org/indicator/SP.DYN.IMRT.IN>. Accessed September 19, 2012.
7. Division for Vital Records & Health Statistics, Michigan Department of Community Health. Michigan Resident Death File, 2001-2010.
8. *Biannual HIV Surveillance Analysis: Calhoun County.* HIV/STD/VH/TB Epidemiology Section, Division of Communicable Disease, Bureau of Disease Control, Prevention, and Epidemiology, Michigan Department of Community Health. 2012.
9. Michigan State Police. 2011 Incident Based Crime Data Online. Available at: <http://www.micrstats.state.mi.us/MICR/Home.aspx>. Accessed December 10, 2012.
10. Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. WISQARS Cost of Injury Reports. Available at: <http://wisqars.cdc.gov:8080/costT/>. Accessed January 14, 2013.
11. Morland K, Diez Roux, A, Wing S. Supermarkets, other food stores, and obesity. The Atherosclerosis Risk in Communities Study. *J Prev Med.*;30(4):333-339.
12. Economic Research Service, U.S. Department of Agriculture. Food Desert Locator. Available at : <http://www.ers.usda.gov/data-products/food-desert-locator.aspx>. Accessed September 20, 2012.
13. Theall KP, et al. The neighborhood alcohol environment and at-risk drinking among African Americans. *Alcohol Clin Exp Res.* 2011;35(5):996-1003.
14. Campbell CA, et al. The effectiveness of limiting alcohol outlet density as a means of reducing excessive alcohol consumption and alcohol-related harms. *Am J Prev Med.* 2009;37(6):556-569.
15. Berke EM, Tanski SE, Demidenko E, Alford-Teaster J, Shi X, Sargent JD. Alcohol retail density and demographic predictors of death disparities: a geographic analysis. *Am J Public Health.* 2010;100(10):1967-1971.

SOURCES AND TECHNICAL NOTES

16. Michigan Department of Licensing and Regulatory Affairs, Liquor Control Commission. Online Active or Escrowed License Query. Available at: <http://www2.dleg.state.mi.us/llist/>. Accessed December 17, 2012.
17. *Calhoun County Behavioral Risk Factor Surveillance Survey*. Calhoun County Public Health Department. 2009.
18. Health Resources and Services Administration, U.S. Department of Health and Human Services. Health Professional Shortage Areas Data File, 2011.
19. Family Health Center of Battle Creek. 2011 Annual Report. Available at: <http://www.fhcbc.org/aboutus/Annual-Report-2011.pdf>. Accessed December 19, 2012.
20. Weech-Maldonado R, Elliot M, Pradhan R, Schiller C, Hall A, Hays RD. Can hospital cultural competency reduce disparities in patient experiences with care? *Med Care*. 2012;50(Suppl):S48-50.
21. U.S. Census Bureau. American Community Survey Five-Year Estimates, Equal Employment Opportunity Tabulation, 2006-2010.
22. Office of Minority Health, U.S. Department of Health and Human Services. National Standards for Culturally and Linguistically Appropriate Services in Health Care (CLAS Standards). Available at <https://www.thinkculturalhealth.hhs.gov/index.asp>. Accessed November 12, 2012.
23. U.S. Census Bureau. Federal Poverty Threshold, 2011.
24. Collins JW Jr, Wambach J, David RJ, Rankin KM. Women's lifelong exposure to neighborhood poverty and low birth weight: a population-based study. *Matern Child Health J*. 2009;13(3):326-333.
25. Beatrice N, Lise G, Victoria ZM, Louise S. Longitudinal patterns of poverty and health in early childhood: exploring the influence of concurrent, previous, and cumulative poverty on child health outcomes. *BMC Pediatr*. 2012;12(141).
26. Vivier PM, Hauptman M, Weitzen SH, Bell S, quilliam DN, Logan JR. The important health impact of where a child lives: neighborhood characteristics and the burden of lead poisoning. *Matern Child Health J*. 2011;15(8):1195-1202.
27. Elani HW, Harper S, Allison PH, Bedos C, Kaufman JS. Socio-economic inequalities and oral health in Canada and the United States. *J Dent Res*. 2012;91(9):865-870.
28. Carnevale AP, Smith N, Strohl J. *Help Wanted: Projections of Jobs and Education Requirements Through 2018*. The Georgetown University Center of Education and the Workforce. 2010.
29. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Integrated Postsecondary Education Data System, Provisional Data Release, 2011-2012.
30. U.S. Census Bureau. American Community Survey One-Year Estimates, Selected Population Tables, 2005-2011.

