

***Kalamazoo County Health Indicators  
Disaggregated by Race, Place and  
Socioeconomic Status  
and  
Key References for Understanding Health  
Disparities and for Building Healthier  
Communities***

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Prepared for Kalamazoo Matters Community Health Discussion, April 1, 2010



## ***Introduction***

### ***All of Us Do Better When All of Us Do Better***

This is the theme for *Kalamazoo Matters*, a series of community conversations on health, education and employment, cosponsored by Western Michigan University's Lewis Walker Institute for the Study of Race and Ethnic Relations and the Arcus Center for Social Justice Leadership at Kalamazoo College. The series begins by posing the following questions:

*Are we as healthy a community as we need to be if we are to truly become a city of promise?*

*How healthy are we?*

*What can we do to become a healthier community?*

A recent survey<sup>1</sup> of selected ***factors that influence health*** county-wide found that **Kalamazoo ranks 13<sup>th</sup>** among 82 Michigan counties (84<sup>th</sup> percentile), based on a composite list of indicators that include selected health behaviors, access to and quality of clinical care, socioeconomic factors and the physical environment. However, the same survey found that with regard to **health outcomes, the county ranked only 37<sup>th</sup>** among 82 Michigan counties (55<sup>th</sup> percentile). Health outcome indicators include premature death, low birth weight, and residents' perceptions of their own health and mental health. While it may be comforting to know that Kalamazoo County is above average relative to other Michigan counties with regard to these important quality of life indicators, are we as healthy a community as we need to be? Also, do these *aggregate data* for the county mask serious variations among different communities in Kalamazoo?

The information that follows is a review of a variety of health indicators for Kalamazoo County, *disaggregated by race, place and income levels*. The data show that there are serious health disparities among Kalamazoo county residents depending on residents' race, neighborhood and income. Accompanying the data are bullet points summarizing key facts related to these disparities, in general, and for Kalamazoo, in particular. Local data for Kalamazoo are from the Kalamazoo County Department of Health and Community Services.<sup>2</sup>

Race, place, and socioeconomic status are strong predictors of health outcomes. In examining the health status of communities, the statistical effects of race, place and class

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<sup>1</sup> County Health Rankings, a project of the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. See <http://www.countyhealthrankings.org/michigan>

<sup>2</sup> See <http://www.kalcounty.com/hcs/>

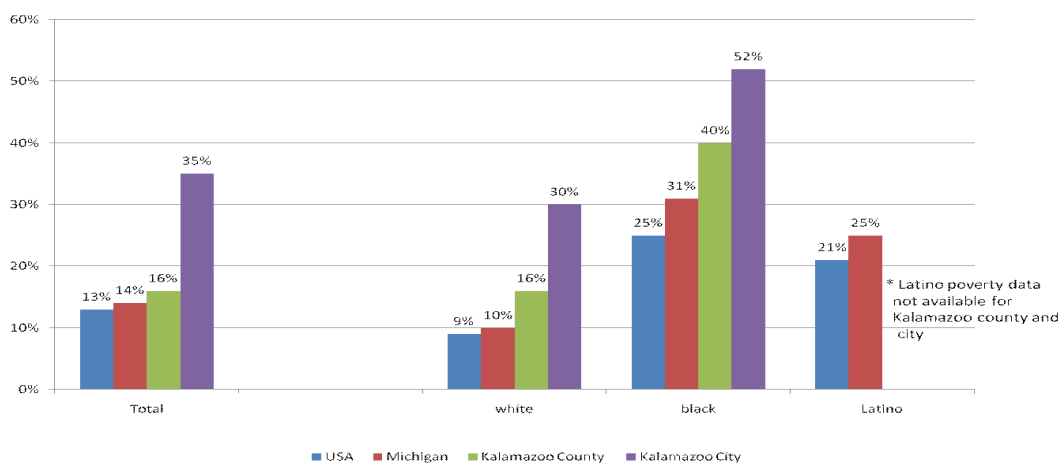
are highly correlated with each other. However, study after study has shown that each continues to be independently related to health after accounting for the statistical effects of the others. For example, racial disparities observed in health indicators generally persist even after controlling for socioeconomic differences. Let us explore why these health disparities exist in Kalamazoo, how they affect our community now and our prospects for the future. How can we work together to become a healthier community – a community that is better prepared to realize our promise?

# Health Data for Kalamazoo County

## POVERTY,<sup>3</sup> RACE, PLACE AND HEALTH: THE BIG PICTURE

- Poverty and racial minority<sup>4</sup> status are often accompanied by poorer health and health disparities.
- Health disparities are differences in the incidence, prevalence, mortality and burden of diseases among specific population groups.
- 14% of Michigan's population is classified as living in poverty compared to the national average of 13%. In Kalamazoo County, 16% of residents are poor. In the city of Kalamazoo, 35% of residents live in poverty.
- The poverty rate for non-Hispanic whites and for blacks in Kalamazoo County is 13% and 40% respectively. This compares to 10% for whites and 31% for blacks, statewide.
- In the city of Kalamazoo, 30% of white residents are poor, compared to 52% of black residents.<sup>5</sup>

Poverty Rates by Race/Ethnicity: USA, Michigan, Kalamazoo County and City, 2007



<sup>3</sup> Poverty data are from the 2007 American Community Survey, as compiled by the Lewis Walker Institute. These data are estimates compiled by the Census Bureau. See [http://www.haltpoverty.org/research\\_kalamazoo](http://www.haltpoverty.org/research_kalamazoo)

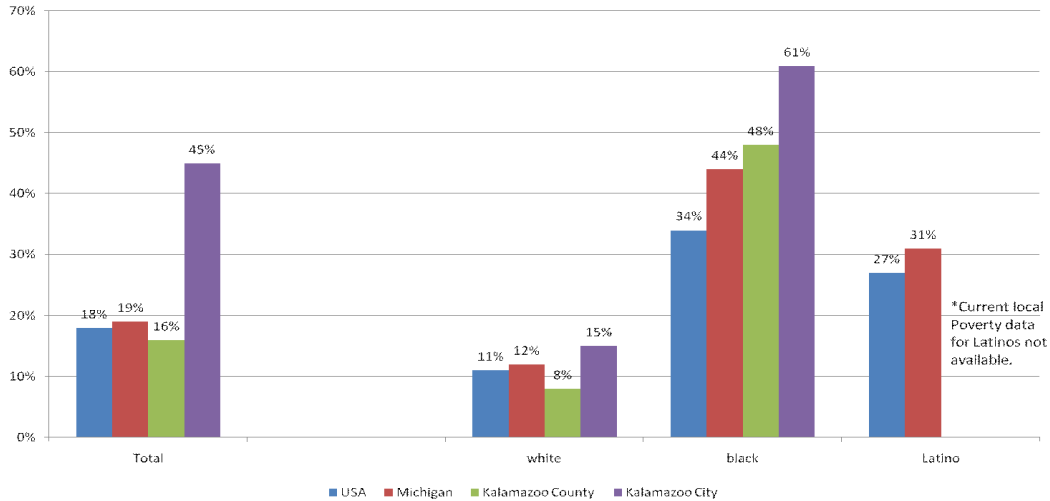
<sup>4</sup> Comparable local data for Hispanics and other groups in Kalamazoo are not available.

<sup>5</sup> These figures include college students living in the city Although it is not possible to estimate precisely, a large percentage of white residents of the city who are poor are college students.

## **POVERTY, RACE, PLACE AND HEALTH: CHILDREN**

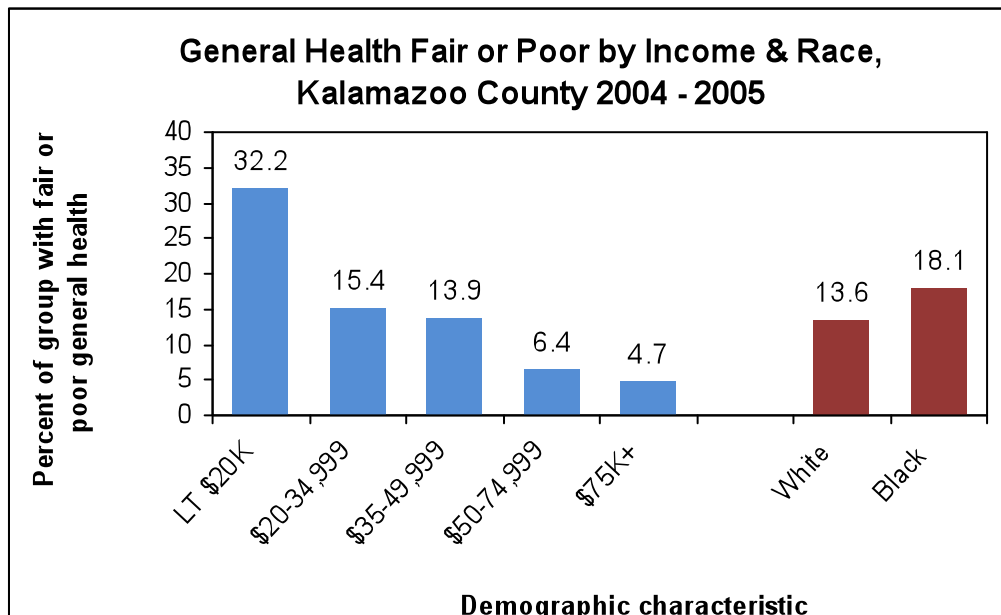
- Health problems that begin in childhood have life-long impacts for the individual and for the society.
- Children at high risk for health problems also are at high risk for encountering educational problems.
- Childhood illness and poor health can contribute to poor school readiness, missed school days and difficulty in learning and reasoning.
- The impacts of social and economic inequality are cumulative throughout the life cycle and early experiences of poor health may increase the risk of illness later in life.
- According to the Children's Defense Fund, the health and care of infants and children is critically important to maximizing the health and vitality of the next generation and it has direct impact on future healthcare costs.
- Reducing health disparities among children will help ensure the economic security of our community.
- 19% of Michigan's children are poor compared to a national average of 18%. In Kalamazoo County, 16% of children are poor. In the city of Kalamazoo, 45% are in poverty.
- The poverty rate for non-Hispanic white and black children in Kalamazoo County is 8% and 48%, respectively. This compares to a child poverty rate of 12% for whites and 44% for blacks, statewide.
- In the city of Kalamazoo, 15% of white children and 61% of black children are poor.

**Child Poverty Rates by Race/Ethnicity:  
USA, Michigan, Kalamazoo County and City, 2007**

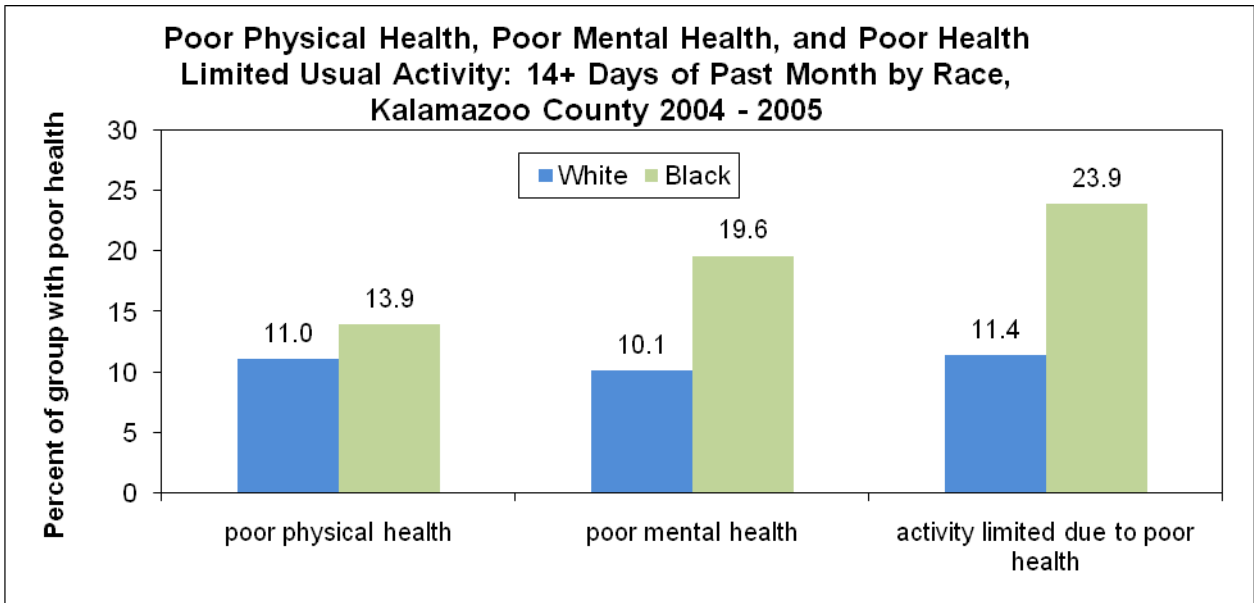


**GENERAL HEALTH STATUS**

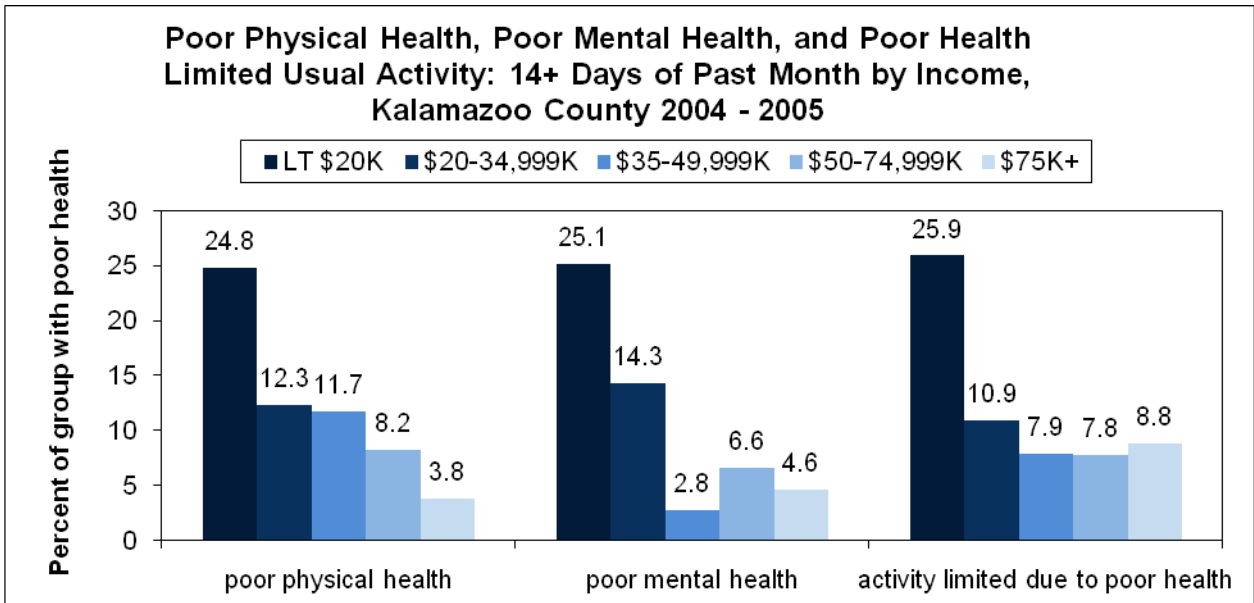
Self-reported health status has been shown to correlate highly with actual health status. The Behavioral Risk Factor Survey (from the CDC) is a telephone survey that was last conducted in Kalamazoo County in 2004-2005, and residents were asked to rate their own health. The graph indicates that in Kalamazoo as income decreased respondents were more likely to report that they were in fair or poor health; this was also more frequently reported among black respondents than white. Respondents with lower income and black respondents were also more likely to report their usual activity was limited by poor physical or mental health during at least 14 days of the previous month.



Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005



Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

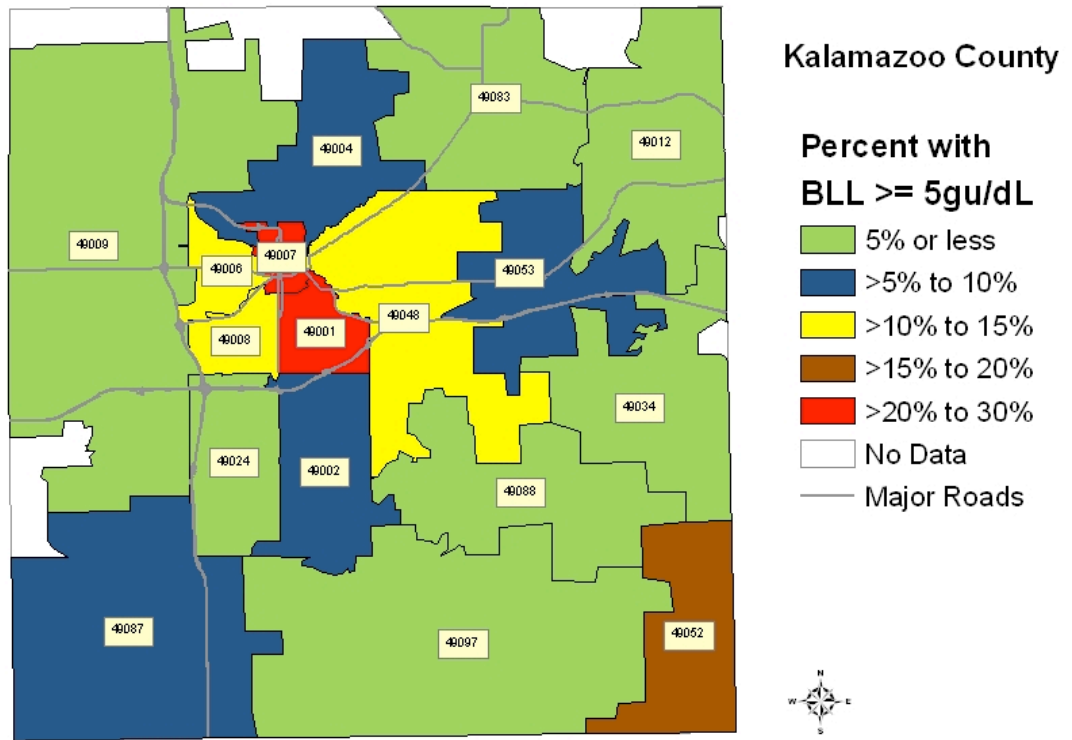


Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

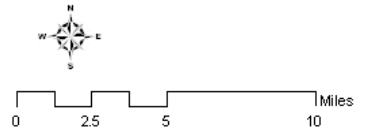
## LEAD POISONING

- A child's growing body can absorb more lead than adults, and their developing brains and nervous systems are more sensitive to the damaging effects of lead.
- High levels of lead can cause learning and behavior problems, stunted growth, hearing problems and headaches.
- Lead can damage a child's ability to learn and reason.
- One study found that 16% of low income children living in older housing have lead poisoning, compared to 4% of all children.
- In Kalamazoo, the rate of elevated blood lead levels ( $\geq 10\mu\text{g}/\text{dL}$ ) among children under age six tested in zip code areas 49001 and 49007 in 2009 was 2.4%, compared with 0.5% of children in the rest of the county who were tested. These two zip codes include the Northside and Edison Neighborhoods in the City of Kalamazoo, and have higher rates of poverty in comparison with the rest of the county. The proportion of children with blood lead levels  $5\mu\text{g}/\text{dL}$  or higher in these areas was 21.5% compared with 7.8% in the rest of the county. Although  $5\mu\text{g}/\text{dL}$  is not a level at which a public health investigation or intervention is initiated, this indicates an overall higher level of risk for lead exposure among children in these zip code areas.

# Percent of Children Under Age Six with Blood Lead Levels of At Least 5 ug/dL

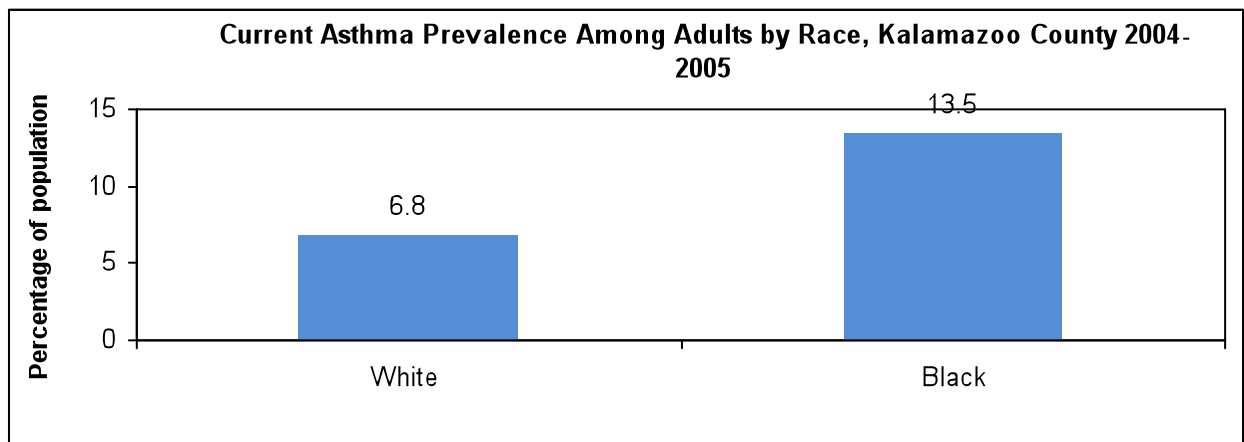


Source: Michigan Department of Community Health, Childhood Lead Poisoning Prevention Program; Childhood Lead Poisoning Data Facts, All ZIP Codes in Michigan, Calendar Year 2009 Children less than Six Years of Age



## ASTHMA

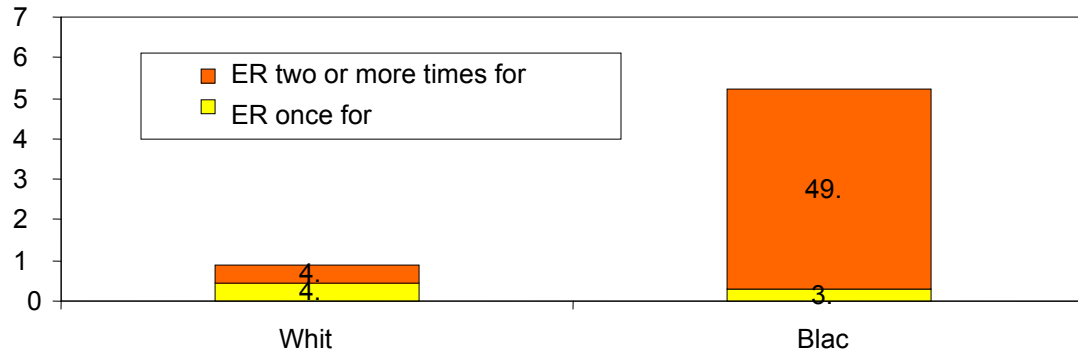
- Asthma is a chronic condition that must be monitored closely and most asthmatics take several different prescription medications.
- The average annual cost of care for an asthma patient is \$4,912
- Costs can be as high as \$12,813 for people who have severe asthma.
- Many poor asthma sufferers take only half the recommended dose of their medication, which leads to more severe symptoms, loss of work days and even hospitalization.
- 20 million Americans have asthma at an estimated cost of \$18.3 billion including lost productivity due to missed school or work.
- The total cost of asthma in Michigan is over \$394,000,000 per year.
- Rates of asthma in children are growing nationally
- Black and low income children are not only more likely to have asthma, they are more likely to suffer from asthma attacks.
- Children with disabling asthma have almost twice as many restricted activity days and lost school days as children with other chronic conditions.
- In Kalamazoo adult asthma prevalence is twice as high among blacks as whites, and among those ever diagnosed with asthma, blacks experience significantly greater morbidity due to the disease. Almost half (49.1%) of black adult asthma sufferers reported having visited a hospital emergency room at least twice in the previous year for asthma compared with 4.3% of whites. Blacks reported higher rates of activity limitation due to asthma in the previous year (52.0% vs. 15.9% of whites reported having had at least one day in the past year when their usual activity was limited due to asthma) and were more likely to have had difficulty sleeping due to their asthma symptoms in the previous month (97.1% vs. 32.7% of whites reported difficulty sleeping due to asthma on at least one night in the past 30 days due to symptoms).



Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

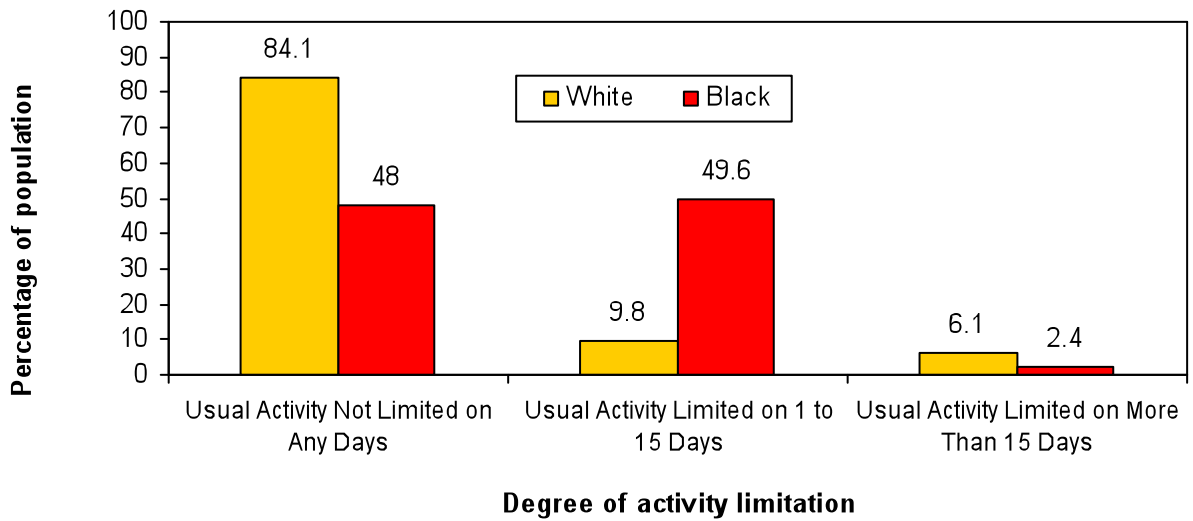
**Emergency Room Visits for Asthma in the Past Months among Adults Who Had Ever Been Diagnosed Asthma by Race, Kalamazoo County 2004-**

Percentage of

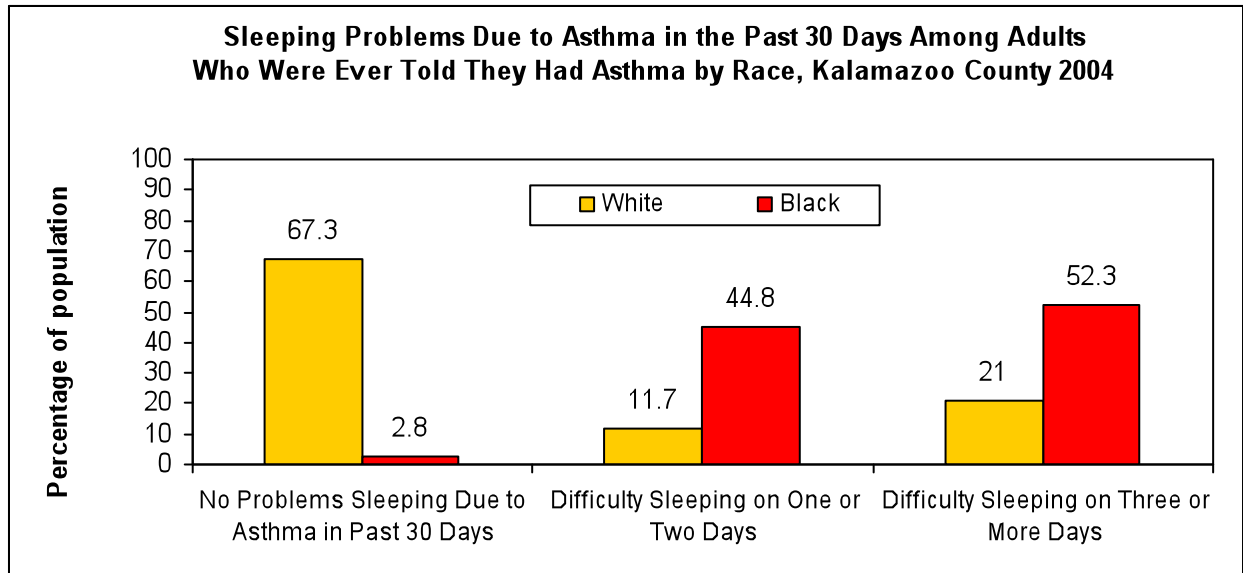


Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

**Activity Limitation in the Past 12 Months Among Adults Who Had Ever Been Diagnosed with Asthma by Race, Kalamazoo County 2004**



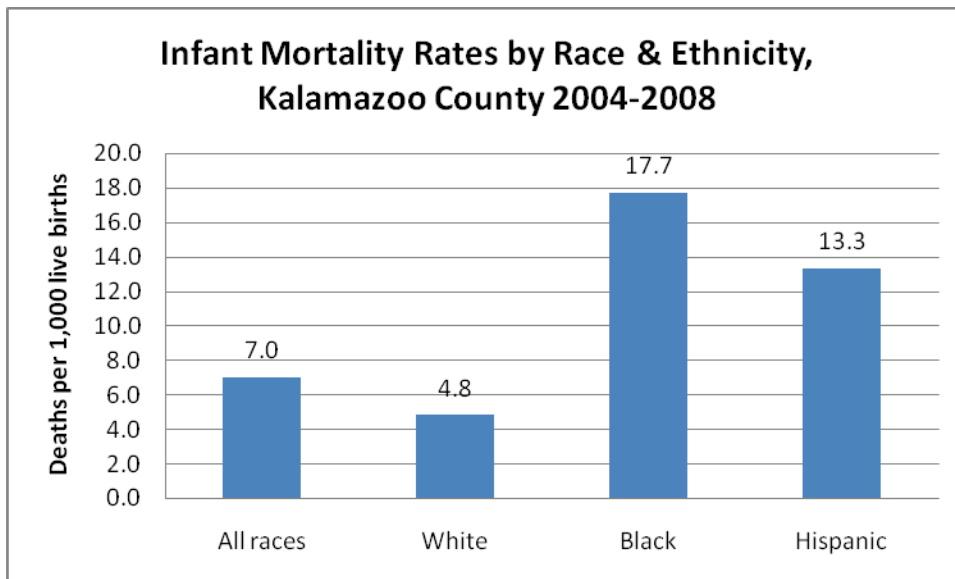
Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005



Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

## INFANT MORTALITY

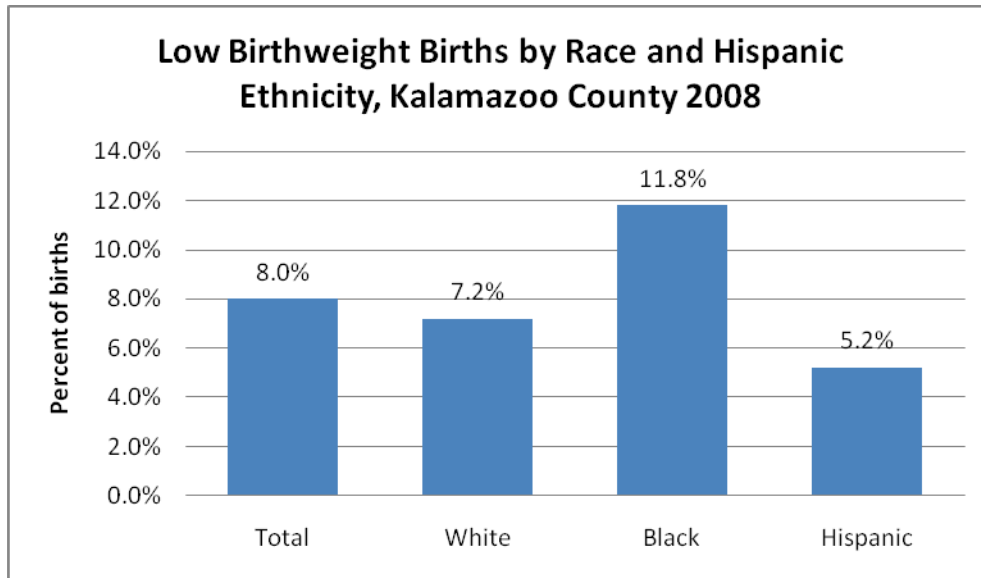
- Infant mortality is our best indicator of how well we do as a nation and as a community in caring for our most vulnerable populations including mothers and babies.
- The human and economic toll exacted by poor pregnancy outcome is enormous and in general in countries where mothers do well, children do well.
- As a whole, the United States does not measure up to other industrialized nations, mainly because our poor communities have such high infant mortality rates.
- American babies are three times more likely to die in their first month as children born in Japan, and newborn mortality is 2.5 times higher in the United States than in Finland, Iceland or Norway.
- Infant mortality rates in the U.S. are highest among minorities and disadvantaged groups.
- For blacks, the national infant mortality rate is nearly double that of the United States as a whole, with 9.3 deaths per 1,000 births.
- In Kalamazoo black infant mortality rates are almost four times those of white residents (babies born to black mothers are 3.7 times more likely to die before they reach one year of age than babies born to white mothers). Compared with black infants in all of Michigan, the black infant mortality rate in Kalamazoo County is higher (17.7 deaths per 1,000 births in Kalamazoo compared with 16.2 deaths per 1,000 births in Michigan) and white infant mortality in Kalamazoo County is statistically similar to the rate among white infants statewide. The infant mortality rate among babies born to Hispanic mothers is also higher than the rate among white infants, but shows large variability from year to year due to the small number of births to Hispanic mothers in our county.



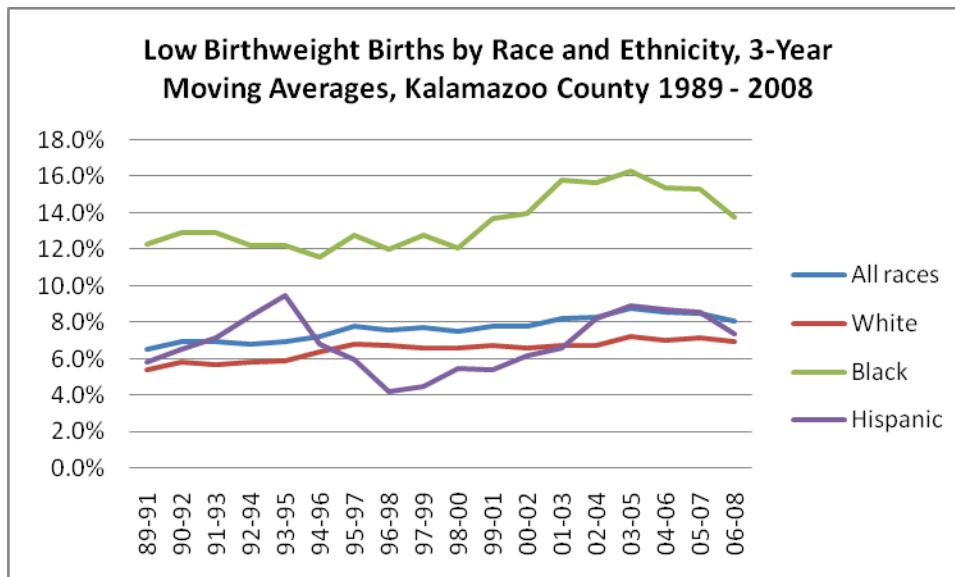
Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development, Michigan Resident Live Birth File 2004 – 2008 and Michigan Resident Death File 2004 – 2008

## LOW BIRTHWEIGHT

- Babies born weighing less than 5 pounds, 8 ounces are considered low birthweight.
- Low birthweight babies are at increased risk for serious health problems as newborns and they are at greater risk for lasting disabilities including cognitive and motor impairments.
- Low birthweight in general is linked to later adult chronic medical conditions, such as diabetes, hypertension, and heart disease.
- Poor and black women have nearly twice the chance of having a low birthweight baby.
- Nationally, the CDC reports that in 2006 8.3% of babies born were low birth weight.
- In Kalamazoo County in 2008 8.0% of babies were low birthweight, but 11.8% of black women giving birth had low birthweight babies. Over a twenty year period in Kalamazoo County, babies with black mothers have consistently had higher rates of low birthweight than babies born to white mothers.



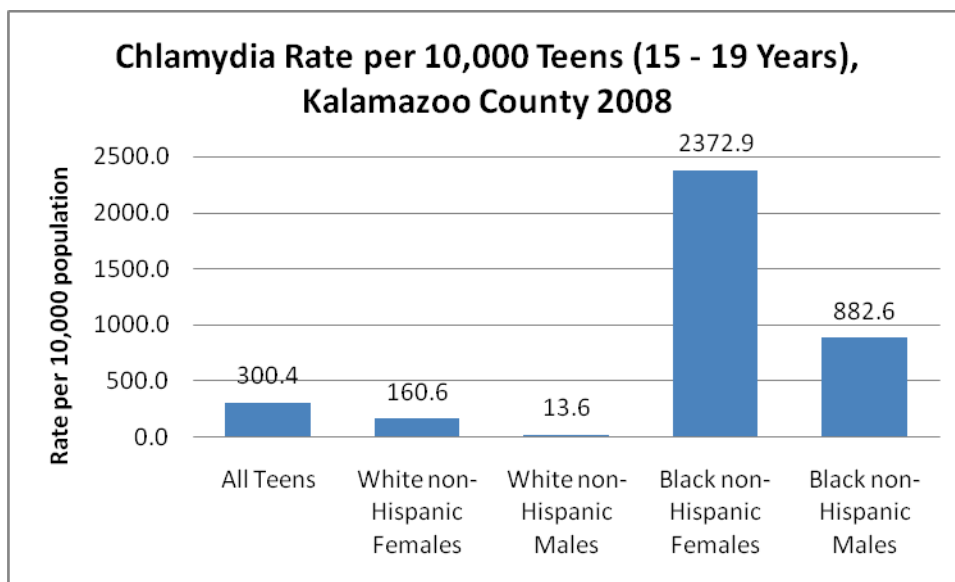
Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development, Michigan Resident Live Birth File 1989 – 2008



Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development, Michigan Resident Live Birth File 1989 - 2008

## CHLAMYDIA

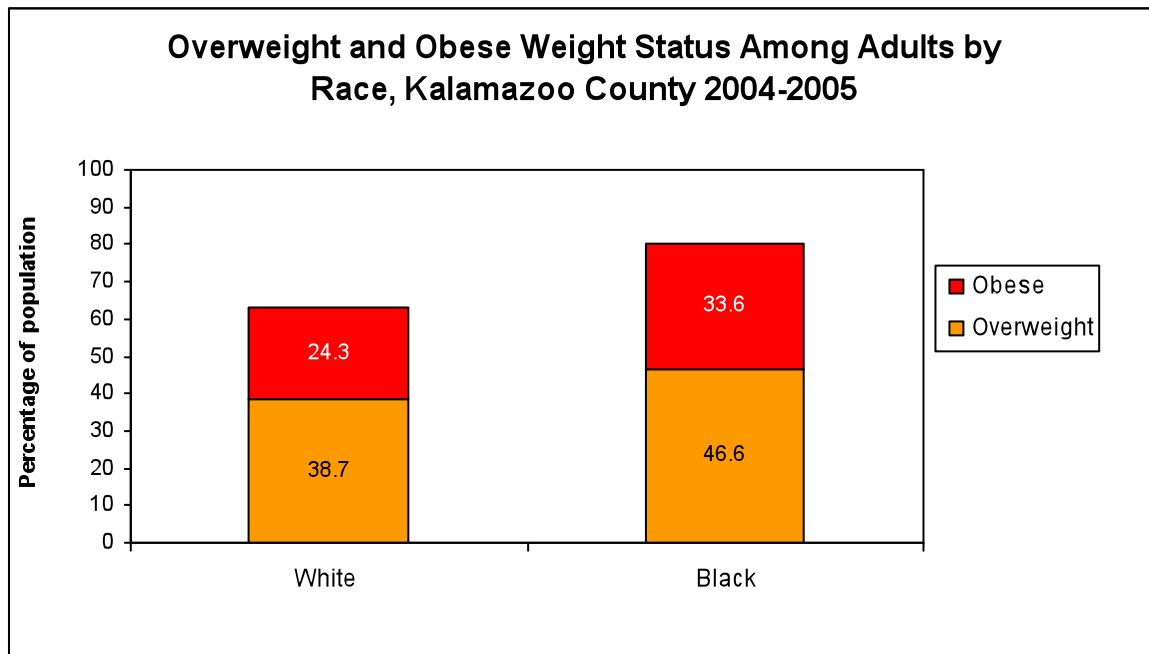
- Chlamydia is a common sexually transmitted disease (STD) caused by the bacterium, *Chlamydia trachomatis*, which can damage a woman's reproductive organs.
- Symptoms of chlamydia are usually mild or absent but there can be serious complications causing irreversible damage, including infertility and premature delivery.
- Babies who are born to infected mothers can get chlamydial infections in their eyes and respiratory tracts.
- Chlamydia is easy to treat with a single dose antibiotic, but often poor women find it difficult to be screened.
- A report by the CDC notes that poverty, lack of insurance and access to care decreases screening of blacks as do concerns about privacy, perceptions of discrimination and poor knowledge of risk.
- Adolescents have the highest risk for Chlamydia and are historically the groups least likely to access routine health screenings.
- In Kalamazoo teens aged 15-19 years have the highest rates of Chlamydia infection, with females more likely to be infected than males. Black non-Hispanic females experience the greatest rates among teens; in 2008 they were 14.8 times more likely to have a reported case of Chlamydia than white teens. While rates among black female teens are significantly higher than rates among white female teens, comparing the rate among black non-Hispanic teen males with the rate among white non-Hispanic male teens shows an even greater disparity by race, with black male teens 64.9 times more likely to have a reported case of Chlamydia than white male teens.



Source: Michigan Disease Surveillance System, data extracted 3/3/09

## OBESITY

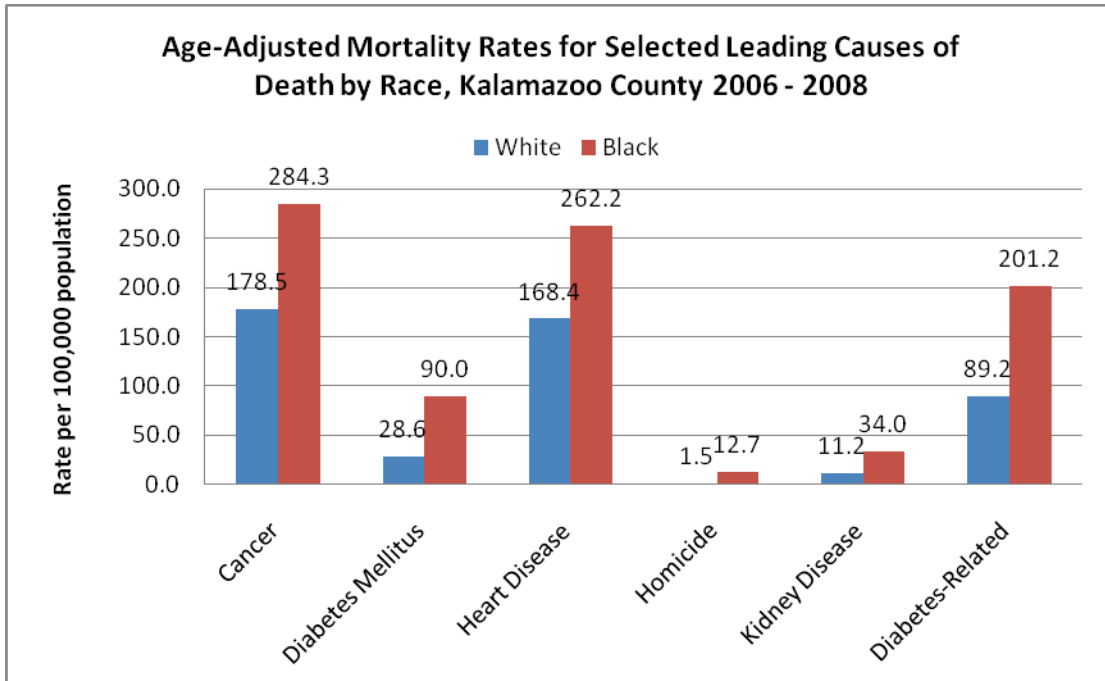
- According to the Surgeon General, while obesity is a problem for Americans in general, overweight and obesity are particularly common among minority groups and those with a lower family income.
- Women of lower socioeconomic status are approximately 50 percent more likely to be obese than those with higher socioeconomic status.
- A recent review reports that the poor-quality retail food environments in disadvantaged areas and higher prices for foods in those areas, in conjunction with limited individual economic resources, contribute to increased risk of obesity within racial and ethnic minorities and socioeconomically disadvantaged populations.
- In Kalamazoo County overweight and obesity are problems for both blacks and whites but the rate of overweight or obesity is higher among blacks (80.2% of blacks compared with 63.0% of whites were either obese or overweight). Body Mass Index or BMI was calculated from self-reported height and weight; a BMI between 25.0 and 29.9 is considered overweight and a BMI of 30.0 or greater is considered obese.



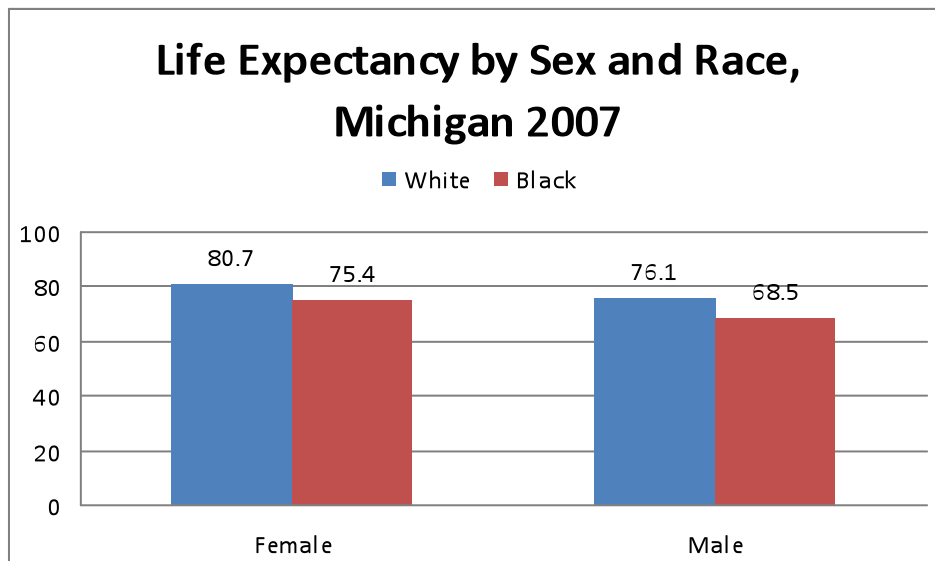
Source: Kalamazoo County Behavioral Risk Factor Survey 2004-2005

## CAUSES OF DEATH

- According to the Office of Minority Health, blacks are more likely to develop cancer than persons of any other racial or ethnic group
- Blacks have the highest cancer death rate of any racial or ethnic group.
- The prostate cancer incidence rate among black men is 1.6 times higher than the rate in white men and the death rate is 2.4 times higher among black men
- Although the rate of newly diagnosed cases of breast cancer is 10% lower among black women, black women die from breast cancer at a rate 1.3 times higher than white women.
- Blacks are twice as likely to have diabetes as whites and they are more likely to experience complications of diabetes.
- Kidney failure is about 2.2 times more common in blacks with diabetes than in whites with diabetes, and lower leg and foot amputations are 2.3 times more common among blacks with diabetes.
- Although 10% of blacks have been diagnosed with heart disease compared with 11% of whites, blacks are 1.3 times more likely to die from the disease than whites.
- In Kalamazoo County the age-adjusted death rates among the black population are notably higher than rates among the white population for deaths due to cancer, heart disease, homicide, kidney disease, diabetes and diabetes-related causes. The overall age-adjusted death rate for blacks was 1.5 times greater than the rate for whites between 2006 and 2008 (1113.7 per 100,000 vs. 739.1 per 100,000). (Age-adjustment is a way to standardize rates in order to compare two populations because it eliminates differences in rates that result from differences due to age composition.)



Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development, Michigan Resident Death File 2006 - 2008



Source: Michigan Department of Community Health, Division for Vital Records and Health Data Development, Michigan Resident Death File 2007

## Key Publications

### *National Plan for Action to End Health Disparities*

Office of Minority Health

DHHS

Draft February, 2010

<http://minorityhealth.hhs.gov/npa/templates/browse.aspx?lvl=1&lvlID=31>

<http://minorityhealth.hhs.gov/npa/images/plan/nationalplan.pdf>

### *Unnatural Causes*

California Newsreal

<http://www.unnaturalcauses.org/>

### *Health, United States, 2009*

Department of Health and Human Services

Centers for Disease Control and Prevention

National Center for Health Statistics

<http://www.cdc.gov/nchs/data/hs/hs09.pdf>

## Local Information Resources

### **Kalamazoo County Department of Health and Community Services**

<http://www.kalcounty.com/hcs/default.asp>

### **Calhoun County Community Report Card**

<http://www.tcccalhoun.org/CRC/Community%20Report%20Card.htm>

## Michigan Resources

### **Michigan Kids Count Data Center**

<http://datacenter.kidscount.org/data/bystate/StateLanding.aspx?state=MI>

### **Michigan's Children**

<http://www.michiganschildren.org/>

Michigan League for Human Services

<http://www.michiganschildren.org/>

### **Michigan Department of Community Health**

<http://www.michigan.gov/mdch>

## National Resources

### **Office of Minority Health**

Department of Health and Human Services

<http://minorityhealth.hhs.gov/>

### **National Center for Minority Health and Health Disparities**

National Institutes of Health

<http://ncmhd.nih.gov/>

### **Centers for Disease Control**

- Behavioral Risk Factor Surveillance Survey (BRFSS)  
<http://www.cdc.gov/brfss/>
- CDC Wonder, Healthy People 2010 Database  
<http://wonder.cdc.gov/data2010/>

### **Agency for Healthcare Quality and Research, (Minority Health)**

<http://www.ahrq.gov/research/minorix.htm>

Health Policy Institute

Joint Center for Political and Economic Studies

<http://www.jointcenter.org/hpi/>

### **National Association of County and City Health Officials (NACCHO)**

- Health Equity and Social Justice site <http://www.naccho.org/topics/justice/>

### **Robert Wood Johnson Foundation** [www.rwjf.org](http://www.rwjf.org)

- Health Disparities <http://www.rwjf.org/pr/topic.jsp?topicid=1180>
- Relation community health topics <http://www.rwjf.org/pr/>

### **Annie E. Casey Foundation** [www.aecf.org](http://www.aecf.org)

- access to Kids Count data system  
<http://www.aecf.org/MajorInitiatives/KIDSCOUNT.aspx>

### **W.K. Kellogg Foundation** [www.wkkf.org](http://www.wkkf.org)

- Healthy kids <http://www.wkkf.org/what-we-support/healthy-kids.aspx>
- Racial Equity <http://www.wkkf.org/what-we-support/racial-equity.aspx>

# **Kalamazoo Matters Partners**

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Angela Graham, Director, Bronson Foundation  
Dr. Arthur James  
Dr. Janice James  
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