

*The Interagency State Council
on Black and Minority Health
2011 Annual Report*



Indiana State Department of Health
Office of Minority Health
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Executive Summary

In 1992, legislation was passed to adopt the first five-year Strategic Plan on Minority Health for Indiana, as well as the appropriation of a budget to carry out programming. The Indiana General Assembly also passed legislation creating the Interagency State Council on Black and Minority Health (IAC). *Indiana Code 16-46-6* directed the Indiana State Department of Health (ISDH) to establish the IAC with representation from the Indiana House of Representatives, Indiana Senate, and Governor’s Office, as well as various other agencies and organizations (Table 1).

Table 1. Interagency State Council on Black and Minority Health Members – 2009-2011

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Invited advisors: Nancy Jewell, MPA, Indiana Minority Health Coalition; Edwin C. Marshall, O.D., MPH, Indiana University School of Medicine; Margie Fort, National Kidney Foundation

Each year, the IAC addresses one or more of the duties outlined in *Indiana Code 16-46-6*. <http://www.ai.org/legislative/ic/code/title16/ar46/ch6.html>. For 2011, IAC decided to let the 2011 Indiana Health Disparities Report, created by the Indiana State Department of Health, serve as its annual report. This report highlights the most recent state data on disparities in social determinants of health such as access to health care, mortality, morbidity, and behavioral risk factors. In addition, the report examines the state’s progress toward achieving objectives outlined in the 2003 Healthy Indiana – A Minority Health Plan for The State of Indiana – Health Equality Access Leadership (HEAL) the Gap and Healthy People 2020 objectives.

Key Findings

Demographics

As racial and ethnic populations continue to increase, the gaps in health status and health care access will continue to widen.

- Minorities live in all ninety-two Indiana counties.
- In 2010, minorities made up 17 percent of the population.

Social Determinants

There are socioeconomic disparities among racial and ethnic minorities in Indiana.

- In 2010, 42.1% of Hispanics and 25% of blacks were uninsured, compared to 12.2% of whites.
- Hispanic (29.3%) and black (22.2%) adults were more likely to report needing to see a doctor but could not due to cost in the past year than white adults (13.9%).

Preventative Screenings

- The colorectal cancer screening rates (having a sigmoidoscopy or colonoscopy) for black adults (63.7%) aged 50 years and older were similar to that of white adults (63.6%) in 2010. Despite the similar rates in the screening rates, blacks were still more likely to have a higher incidence rate (newly diagnosed cases) of colorectal cancer than whites.
- Black adults (47.0%), age 65 years and older, were less likely than older white adults (68.2%) in the same age group to report having a flu shot in the past 12 months.
- Limited state level data is available for childhood immunizations by race, ethnicity, and gender.

Infant mortality

- In 2008, the infant mortality rate for blacks was 14.9 deaths per 1,000 live births, more than twice the rate for the total population (6.9 deaths per 1,000 live births).
- Allen, Marion, and Lake Counties had the highest black infant mortality rates in Indiana.

Mortality

- Blacks had the highest death rate due to all causes during 2008.
- Homicide was the fifth leading cause of death for blacks and the fourth leading cause for Hispanics in 2008.
- Similar to national trends, deaths rates due to cancer have declined in Indiana. Despite rate decreases, blacks continuously have the highest cancer death rate.

Morbidity

- During 2010, current asthma was similar among black (14.2%) Hispanic (10.0%) and white (8.9%) adults. [95% confidence intervals overlap]
- Prevalence of angina or coronary artery disease was similar among white, black and Hispanic adults in 2010. [confidence intervals overlap]

Risk Factors

- Black (39.8%) and Hispanic (33.0%) adults had a higher prevalence of obesity compared to whites (29.6%).
- Black (30.1%) adults had a higher smoking prevalence than white adults (20.6%) in Indiana in 2010.
- In 2010, Hispanic adults (16.0%) reported binge drinking prevalence, similar to white (13.6 percent) and black adults (12.8 percent).

Progress

- Twenty-six objectives were reviewed from the Healthy Indiana Minority Health Plan. Of those objectives, five were moving away from their targets; nine objectives were progressing toward their targets; and six objectives met and exceeded their targets. There was no change in one objective. For four objectives, there was insufficient and/or unstable data for specific populations. The data source for one objective was unknown and it could be compared with the current data.

Recommendations

In April 2011, the U.S. Department Health and Human Services - Office of Minority Health (DHHS-OMH), released the first ever National Partnership for Action to End Health Disparities (NPA). The NPA was developed by using a "bottom up" approach starting with grass roots or community meetings. These community "voices" meetings were followed by regional meetings. The intent was to change the paradigm of strategy development by giving individuals a vested interest in identifying and developing key procedures for a coordinated national response. The information from these meetings was reviewed for common and priority actions. These actions were subsequently used as the basis for a National Visionary Panel, an implementation strategy workgroup, an evaluation strategy workgroup, and national health disparities plan consensus meeting. Ultimately, this collective process resulted in the development of the five overarching

goals for the NPA and National Stakeholder Strategy for Achieving Health Equity. The five goals are awareness, leadership, healthy system and life experience, cultural and linguistic competency, and data, research, and evaluation. This year the IAC has developed recommendations around the NPA goals, aligning Indiana's efforts to eliminate health disparities with a national plan. This will assist the state in achieving health equity.

Also as a result of the work done to develop the NPA, Regional Health Equity Boards were established. These boards are comprised of experts from community, state, business, and education arenas. Each board has 30 members. Indiana is a part of Region V. The director of the ISDH Office of Minority Health, Antoniette Holt was recently selected to be a member of the regional board. Other members include: Raju Chinthala, Asian Services of Indiana; E. Angles Martinez Mier, IU School of Dentistry; and Waldo Mikels-Carraso, Institute for Latino Studies at University of Notre Dame.

Conclusion

This report illustrates the progress Indiana has made in reducing health disparities in the ten years since the Healthy Indiana Minority Health Plan was developed. Infant mortality has declined over the years, yet blacks persistently have the highest infant mortality rate in the state. Similarly, the overall death rate has decreased, but blacks continue to have the highest overall mortality rate. There is still much work to be done in addressing the cradle to grave health disparities that exist in Indiana. The gaps in health status and health outcomes will continue to widen as Indiana becomes more racially and ethnically diverse and its populations live longer. In order to meet the targeted objectives outlined in the Healthy Indiana Minority Health Plan, the IAC has developed recommendations for reducing health disparities in Indiana. By developing and carrying out the recommendations set forth in this report, the IAC commits to eliminating health disparities in Indiana.

Background

In 1985, Secretary Margaret Heckler of the U.S. Department of Health and Human Services issued the Report of the Secretary's Task Force on Black and Minority Health. The report documented the overall improvement in the health of Americans. It also revealed "a sad but significant fact; there was a continuing disparity in the burden of death and illness experienced by blacks and other minority Americans, as compared with our nation's population as a whole". After examining the effect of a broad range of behavioral, societal, and health care issues on minority health, the Heckler Report found that six health conditions accounted for more than 80 percent of the "excess" deaths among racial and ethnic minorities compared to whites. These conditions were cancer, heart disease and stroke, complications from diabetes, infant mortality, chemical dependency, homicide and accidents.

The following key principles were outlined to drive the nation's response to the report:

- Incorporate minority health into existing programs.
- Press for greater public and private involvement in the common effort to eliminate health disparities.
- Resolve unanswered questions through a concentrated program of research and data collection.
- Seek new strategies to ameliorate health inequities.

In view of the above principles, the report made the following recommendations:

- Increase health information and education outreach by linking federal and state efforts with minority communities through local leaders who could promote acceptance and reinforcement of the central themes of health promotion messages.
- Increase patient education by developing materials and programs responsive to minority needs and by improving provider awareness of minority cultural and language need.
- Improve the access, delivery and financing of health services to minority populations through increased efficiency and acceptability.
- Develop strategies to improve the availability and accessibility of health professionals to minority communities.
- Provide technical assistance and encourage efforts by local and community agencies to meet minority health needs.
- Improve the quality, availability and use of public health data pertaining to minority populations.
- Adopt and support research to investigate factors affecting minority health, including risk-factor identification, education interventions, and prevention and treatment services.

The Heckler report became the catalyst for initiating activities to address health disparities in the U. S. The Office of Minority Health (OMH) was established in 1986 by the U.S. Department of Health and Human Services. The mission of OMH is to improve and protect the health of racial and ethnic minority populations through the development of health policies and programs that will eliminate health disparities. The OMH serves as the nation's focal point for addressing health disparities that exist between the nation's racial and ethnic populations and the general population. The first State Offices of Minority Health (SOMH) emerged during the era of the Heckler report in 1987.

In 1986, the Indiana State Health Commissioner formed the Black and Minority Health Advisory Committee. The committee was responsible for advising the commissioner on minority health concerns and developing recommendations that might be addressed by the Indiana State Board of Health. The Indiana State Health Commissioner established and staffed the Office of Special Populations in 1991, which was later reorganized and renamed the Office of Minority Health (OMH). The OMH focuses on reducing disparities in preventable health conditions among minorities in the state of Indiana. Legislation was passed to adopt the first five-year Strategic Plan for Indiana on Minority Health in 1992, as well as the appropriation of a budget to carry out programming. The Indiana General Assembly also passed legislation creating the Interagency State Council on Black and Minority Health (IAC). *Indiana Code 16-46-6* directed the Indiana State Department of Health (ISDH) to establish the IAC with representation from the Indiana House of Representatives, Indiana Senate, and Governor’s Office, as well as various other agencies and organizations (Table 1). Each year, the IAC addresses one or more of the duties outlined in *Indiana Code 16-46-6* (<http://www.ai.org/legislative/ic/code/title16/ar46/ch6.html>).

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Introduction

The ISDH established the Indiana Minority Health Advisory Committee (InMHAC) in 2000 under the Indiana Minority Health Initiative. The purpose of the InMHAC was to provide advice and guidance to the ISDH in addressing racial and ethnic minority health disparities. In 2001, the InMHAC was charged with developing a plan for eliminating health disparities in Indiana. As a result, the Healthy Indiana – A Minority Health Plan for The State of Indiana – **H**ealth **E**quality **A**ccess **L**eadership (HEAL) the Gap was created with heart disease, cancer, stroke, asthma, diabetes, HIV/AIDS, and infant mortality as its focus areas. The Minority Health Plan objectives were based on the Healthy People 2010 objectives and they serve as the framework of the plan.

The Indiana State Department of Health Commissioner charged the ISDH OMH with creating a report similar to Health Disparities and Inequalities Report – United States, 2011 published by the CDC in January, 2011. This report highlights recent national data on disparities in mortality, morbidity, behavioral risk factors, access to health care, and social determinants of health. In addition, the report emphasizes recommendations to reduce health disparities.

Purpose

The purpose of this report is to underscore health disparities in Indiana and examine the state’s progress since the development of the Healthy Indiana – A Minority Health Plan for The State of Indiana – HEAL the Gap, as well as examine Indiana’s progress toward achieving the four overarching goals of Healthy People 2020:

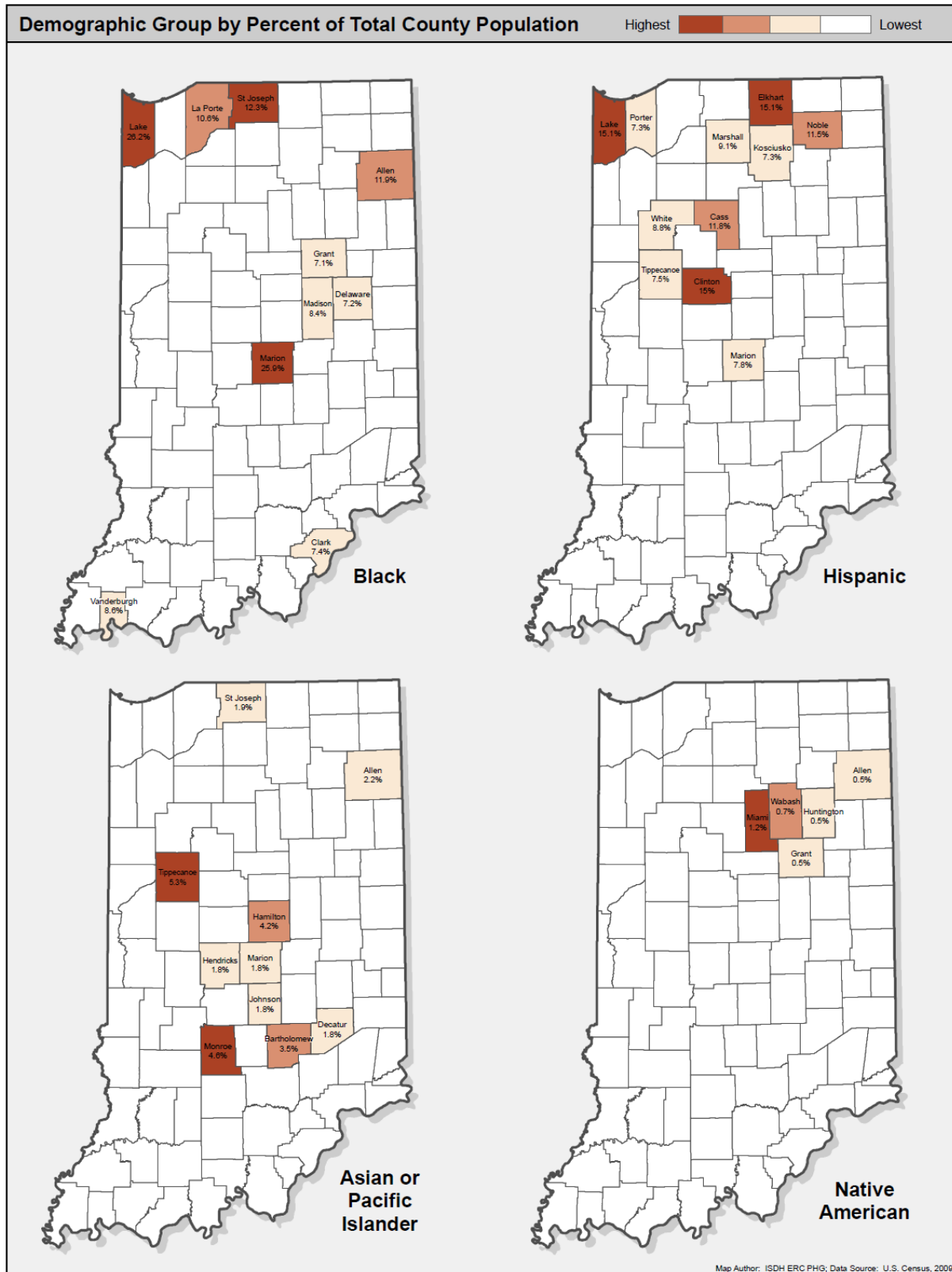
1. Attain higher quality, longer lives free of preventable disease, disability, injury, and premature death
2. Achieve health equity, eliminate disparities, and improve the health of all groups
3. Create social and physical environments that promote good health for all
4. Promote quality of life, healthy development, and healthy behaviors across all life stages.

Chapter I: Demographics

The majority of Indiana's black population resides in the central, northeast, and northwest regions of the state, with the highest percent living in Lake and Marion counties. The north central counties of Miami and Wabash are where the highest percentage of American Indians/Alaskan Natives live. Monroe and Tippecanoe counties have the highest percentage of Asians/Other Pacific Islanders, followed by Hamilton and Bartholomew counties. The largest percentage of Hispanics/Latinos live in northeast and northwest portions of the state – Lake, Elkhart, Cass and Noble counties (Figure 1).

Minorities live in all ninety-two Indiana counties. Twenty-nine counties have been identified as having over 94 percent of the racial and ethnic minorities in Indiana. These counties include the following major urban areas: Indianapolis, Gary, Fort Wayne, South Bend, and Evansville. Several rural counties are included in the 29 counties as well.

Figure 1. Percent of Indiana Population by Race and Ethnicity, Indiana – 2009



Source: Indiana State Department of Health, Epidemiology Resource Center, Public Health Geographic

From 2000 to 2010, Indiana’s population increased from 6,080,520 to 6,483,802 (6.6%). In 2000, racial and ethnic minorities comprised 12 percent of Indiana’s population. By 2010, minorities made up 17 percent of the population. Blacks (9.1%) were the largest minority group in Indiana followed by Hispanics (6.0%). Asians made up nearly two percent of the population, and American Indians / Alaskan Natives accounted for less than one percent (Table 2).

Table 2. Percent of Population Changes by Race and Ethnicity – Indiana – 2000 and 2010

Race / Ethnicity	Percent of Total Population – 2000	Percent of Total Population – 2010	Percent Change, 2000 - 2010
American Indian / Alaskan Native	0.3	0.3	0.0
Asian	1.0	1.6	+60.0
Black or African American	8.4	9.1	+8.3
Hispanic*	3.5	6.0	+71.4
White	87.5	84.3	-3.7

Based on respondents who identified themselves as one race alone and no other race.

*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, June 2011.

Original data from: U.S. Census Bureau Retrieved on 06/07/11 from

http://factfinder.census.gov/servlet/QTTTable?_bm=n&_lang=en&qr_name=DEC_2000_SF1_U_DPI&ds_name=DEC_2000_SF1_U&geo_id=04000US18 and <http://quickfacts.census.gov/qfd/states/18000.html>

By 2030, Indiana’s total population is expected to exceed 7 million. Indiana’s population is expected to become more diverse over the next 20 years with minorities making up more than 20 percent of state’s total population.

According to the U.S. Census Bureau, Indiana’s foreign born population increased from 3.1 percent in 2000 to 4.4 percent in 2009. In comparison, the foreign born population in the U.S. increased from 11 percent in 2000 to 12.5 percent in 2010. Foreign born refers to anyone who was not a U.S. citizen at birth, including U.S. naturalized citizens. Nearly half of the foreign born populations in Indiana originated from Latin America with the majority born in Mexico, which is similar to U.S. countries of origin. More than a quarter of Indiana’s foreign born

populations were from Asia. Approximately 16 percent of Indiana’s foreign born populations were from Europe (Table 3).

Table 3. World Region of Birth of Foreign Born Populations, Indiana – 1990, 2000, 2009

World Region of Birth of Foreign Born	1990 (%)	2000 (%)	2009 (%)
Africa	2.5	3.9	4.7
Asia	30.5	26.6	27.6
Europe	42.3	23.2	16.4
Latin America	17.5	41.5	47.8
Other Regions	7.1	4.7	3.5

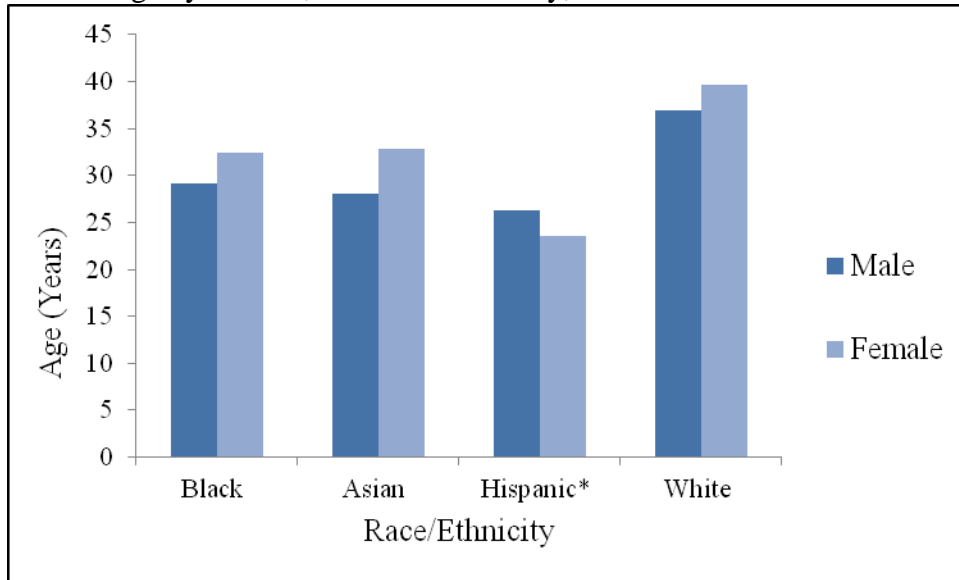
Source: Indiana State Department of Health, Office of Minority Health, June 2011. Original data from: U.S. Census Bureau. Retrieved on 06/24/11 from <http://www.census.gov/prod/2010pubs/acsbr09-15.pdf> and <http://www.census.gov/prod/2003pubs/c2kbr-34.pdf>

The majority (92.4%) of Indiana residents 5 years of age and over speak English only. In 2009, 7.6 percent of residents spoke a language other than English at home, compared to 20.0 percent of the U.S. The majority (4.2%) speak Spanish, which correlates with the high percentage of foreign born populations from Latin America.

Age distribution

The median age for Indiana’s total population was 36.8 years in 2009. Females in all racial and ethnic groups had a greater median age than males except the Hispanic population. Whites had a higher median age (38.4 years), compared to minorities. The higher median age among whites can be attributed to their higher life expectancy. Both blacks and Asians had median ages of 30.9 years. Hispanics were the youngest population in Indiana with a median age of 25.0 years (Figure 2).

Figure 2. Median Age by Gender, Race and Ethnicity, Indiana – 2009



*Hispanic can be of any race.

Based on respondents who identified themselves as one race alone and no other race.

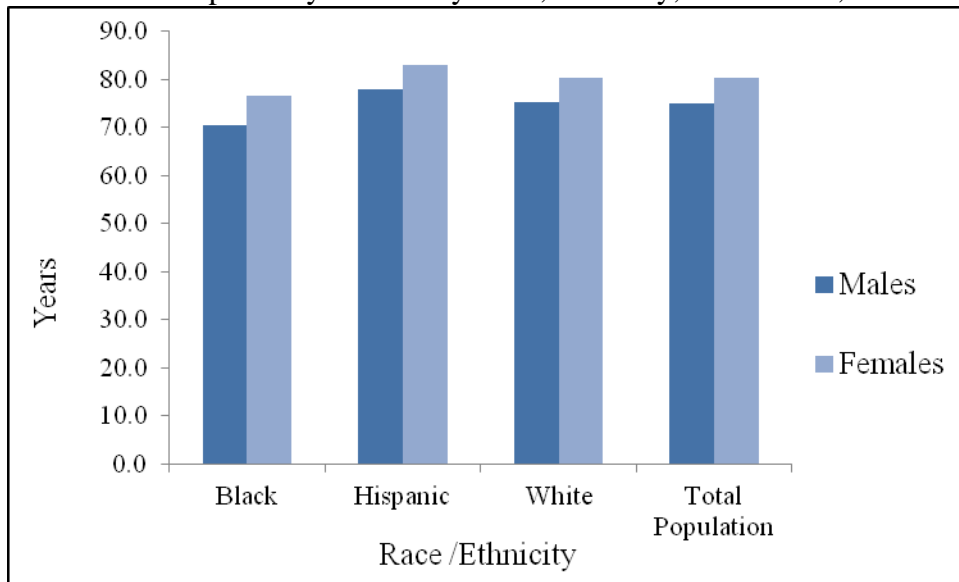
Source: Indiana State Department of Health, Office of Minority Health, June 2011. Original data from: U.S. Census Bureau

Retrieved on 06/27/11 from http://factfinder.census.gov/home/saff/main.html?_lang=en

Life Expectancy at Birth

Life expectancy in the United States has dramatically increased since 1900. At the beginning of the twentieth century, many Americans did not live past 65 years of age. Due to advances in health care and medical technology, the overall health and longevity of Americans has improved. The U.S. life expectancy at birth continues to increase. In 2007, life expectancy at birth for the total U.S. population was 77.9 years. Similarly, life expectancy at birth for the total Indiana population was 77.7 years in 2007. The life expectancy at birth for women was 80.3 years compared to 75.0 years for men. Blacks had the shortest life expectancy at birth than all other racial and ethnic groups in Indiana. Black males (70.0 years) had the shortest life at birth expectancy followed by white males (75.9 years) and Hispanic males (77.9 years). In contrast, Hispanic (83.1 years) and white females (80.4 years) had the highest life expectancies at birth followed by black females (76.7 years). There was insufficient data available on the American Indian population (Figure 3).

Figure 3. Years of Life Expectancy at Birth by Race, Ethnicity, and Gender, Indiana. – 2007



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health August 2011. Original data obtained from Kaiser Family Foundation. *Statehealthfacts.org* retrieved from <http://www.statehealthfacts.kff.org/profileind.jsp?ind=784&cat=2&rgn=16&print=1> on 08/10/11
 Original Source: calculations from the American Human Development Index. Available at: <http://www.measureofamerica.org/maps/>.

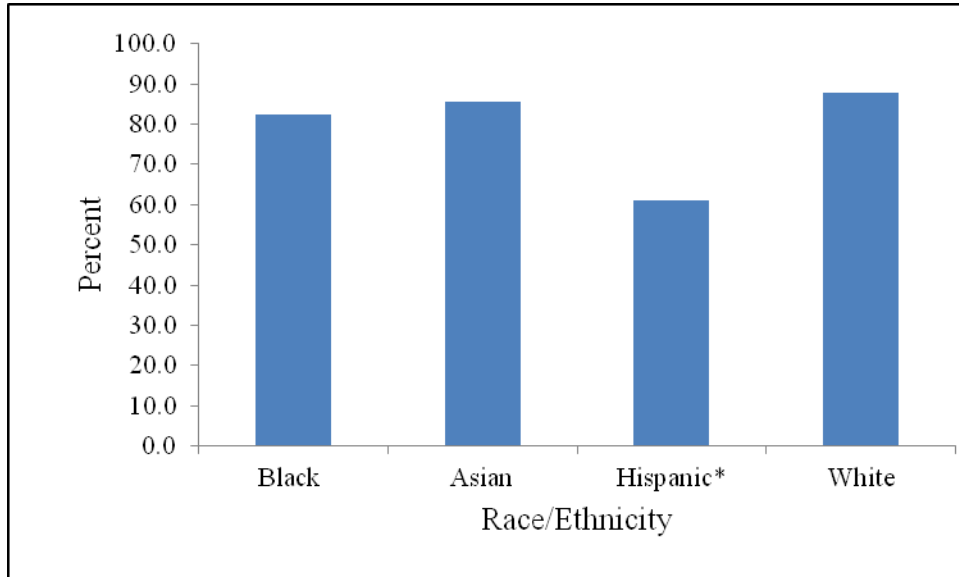
Chapter II. Social Determinants of Health

Health outcomes are also associated with social determinants such as education, home ownership, employment, income, and insurance status, which influence health behaviors. The association between socioeconomic and health status are well documented in public health research. As socioeconomic status declines, so does health status. There are socioeconomic disparities among racial and ethnic minorities in Indiana.

Education

Education is an indicator of quality of life. Generally, as educational levels increase earnings and income increase. Approximately, 87 percent of Indiana's population age 25 years or greater had a high school education or greater. Minorities had less education than whites. The largest difference was seen in the percentage of Hispanics age 25 years and older (61.0%) compared to whites age 25 years and older (87.7%) with a high school education or greater (Figure 4).

Figure 4. Percent of Population with a High School Education or Greater by Race and Ethnicity, Indiana - 2009



*Hispanic can be of any race.

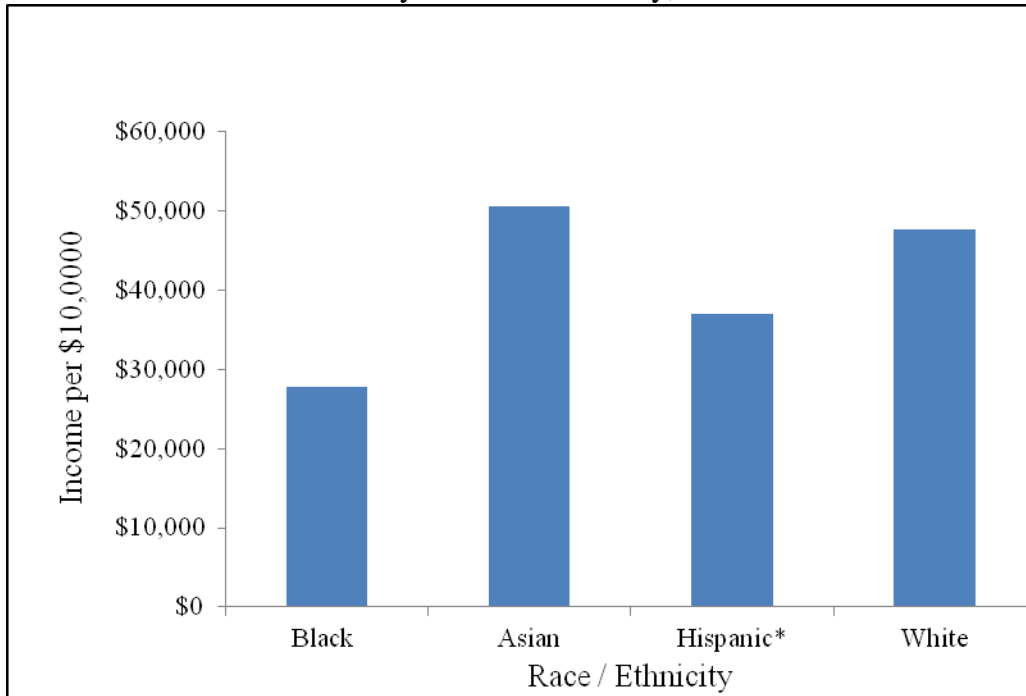
Based on respondents who identified themselves as one race alone and no other race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Data Analysis Team. U.S. Census Bureau, 2009 American Community Survey

Income

There were large differences in incomes among racial and ethnic populations in Indiana. The median household income for the total Indiana population was \$45,424 during 2009. Blacks (\$27,815) and Hispanics (\$36,913) had the lowest median household incomes. In comparison, Asians (\$50,629) and whites (\$47,721) had the highest median household incomes (Figure 5).

Figure 5. Median Household Income by Race and Ethnicity, Indiana – 2009



Based on 2009 inflation-adjusted dollars

*Hispanic can be of any race.

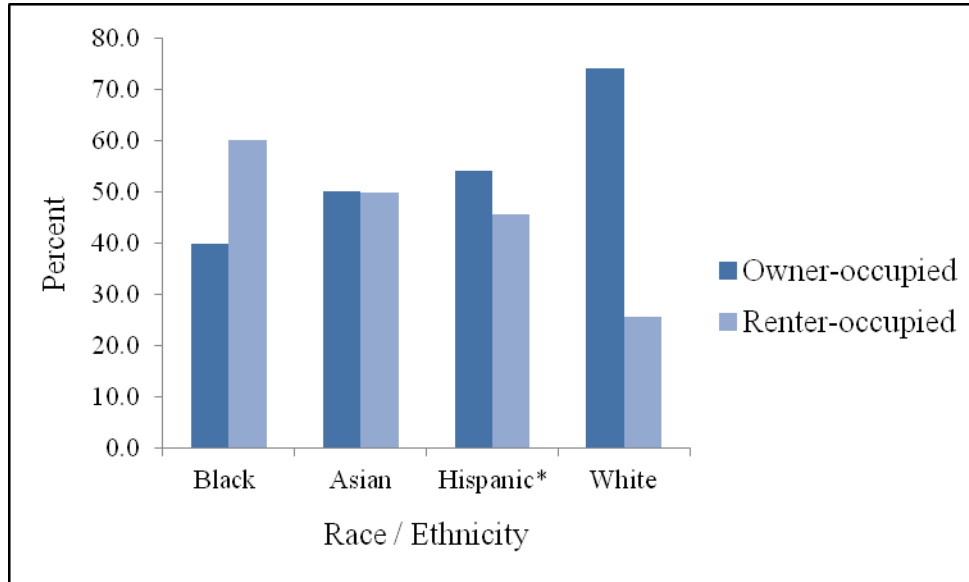
Based on respondents who identified themselves as one race alone and no other race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Data Analysis Team. U.S. Census Bureau, 2009 American Community Survey

Home Ownership

Home ownership is associated with the accumulation of wealth and assets. The majority (70.4%) of Indiana residents owned their homes in 2009. Minorities were less likely to own their homes, and were more likely to rent. The greatest disparity in home ownership was seen between whites (74.3%) and blacks (39.9%), followed by Asians (50.1%) and Hispanics (54.2%) (Figure 6).

Figure 6. Percent of Owner Occupied and Renter Occupied Housing by Race and Ethnicity, Indiana – 2009



*Hispanic can be of any race.

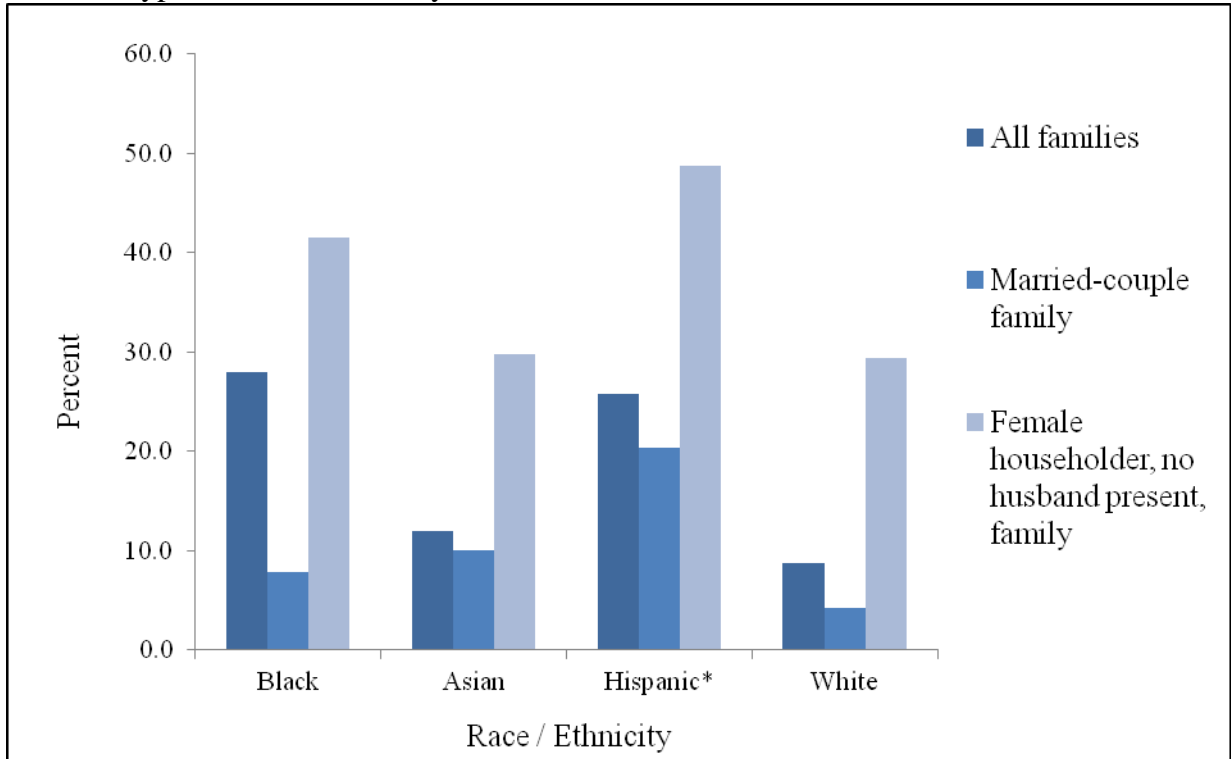
Based on respondents who identified themselves as one race alone and no other race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Data Analysis Team. U.S. Census Bureau, 2009 American Community Survey

Poverty Rate

The poverty rates for all types of minority family structures were higher than the rates for all types of white families during 2009. The poverty rate for all Indiana families was 10.7 percent. Black (28.0%) and Hispanic (25.8%) families had the highest levels of poverty followed by Asians (12.0%). White (8.7%) families had the lowest poverty rate. When comparing the types of family structures, married-couple families had the lowest poverty rate (4.7%). Hispanic married-couple families (20.4%) had a poverty rate nearly five times that of white (4.2%) married-couple families. The poverty rate for Asian married-couple families was 10.1 percent, more than twice that of whites. Black married-couple families (7.9%) had a poverty rate of nearly twice that of white married-couple families. Families with female heads of household with no husband present (32.9%) had the highest poverty rate among all categories of Indiana families. White female heads of household with no husband present had a poverty rate of 29.4 percent. In contrast, Hispanic (48.8%) and black (41.5%) female heads of household with no husband present had the highest poverty levels among all family categories (Figure 7).

Figure 7. Percent of Families in Poverty (for whom poverty status is determined) by Family Type, Race and Ethnicity, Indiana – 2009



*Hispanic can be of any race.

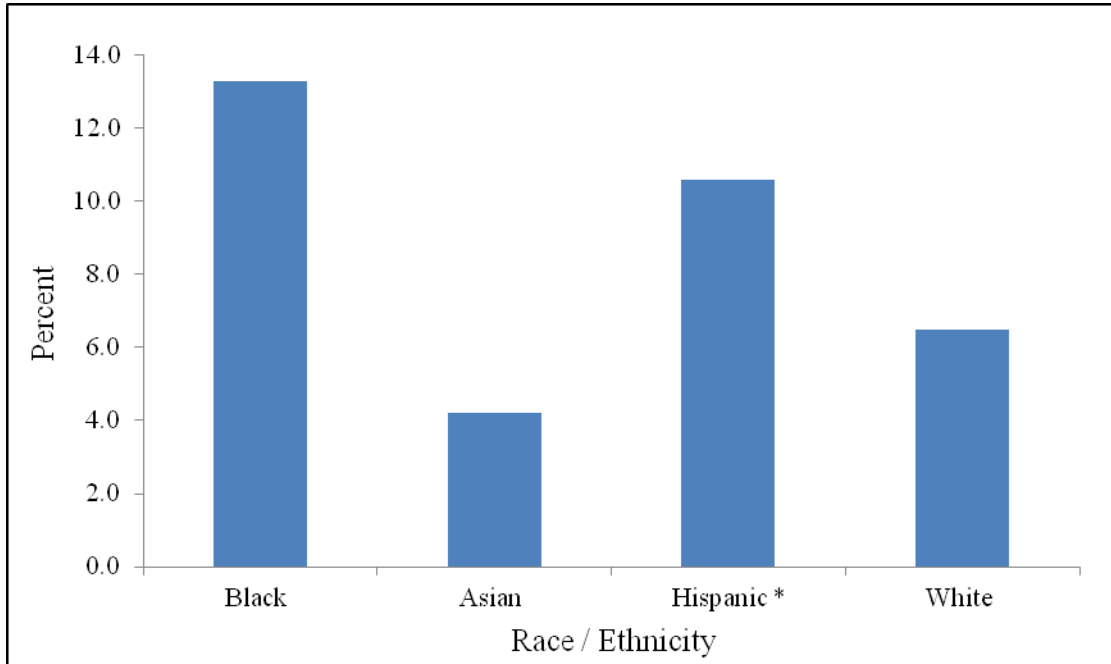
Based on respondents who identified themselves as one race alone and no other race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Data Analysis Team. U.S. Census Bureau, 2009 American Community Survey

Unemployment

The unemployment rate for the total Indiana population 16 years of age and older was 7.2 percent. Asians (4.2%) and whites (6.5%) 16 years and older had the lowest unemployment rates. In contrast, blacks (13.3%) and Hispanics (10.6%) ages 16 years and older had the highest unemployment rates (Figure 8).

Figure 8. Percent of Unemployed Population (16 Years and Older) by Race and Ethnicity, Indiana – 2009



*Hispanic can be of any race.

Based on respondents who identified themselves as one race alone and no other race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Data Analysis Team. U.S. Census Bureau, 2009 American Community Survey

For many Indiana workers, job loss means loss of both income and health care. The majority (54%) of workers under 65 years of age and their families receive health insurance through an employer. Those nonelderly individuals who do not have or cannot afford employer-based or private insurance go without health care coverage unless they qualify for public health care coverage. Minorities are less likely than whites to have private insurance, more likely to have public health insurance coverage, and they are more likely to be uninsured.

Chapter III: Health Care Access

Insurance

In 2010, 15 percent of Indiana’s adult population reported they did not have any kind of health care coverage, including health insurance, prepaid plans such as HMO’s, or government plans such as Medicare. Table 4 shows select demographic characteristics of Indiana’s uninsured adult population. Men (16.8%) were more likely than women (13.4%) to be uninsured. Young adults ages 18 to 34 years (24.1%) and adults ages 25 to 34 years (23.7%) comprised a large share of the uninsured population. The majority (49.8%) of uninsured were low income, with earnings of less than \$25,000. Nearly, one-third (32.9%) of the uninsured had less than a high school education. Forty-two percent of Hispanics and 25 percent of blacks were uninsured, compared to 12.2 percent of whites.

Table 4. Characteristics of the Uninsured by Sex, Race, Ethnicity, Age Category, Educational, and Income, Indiana – 2010

Characteristics	Percent
Sex	
Male	16.8
Female	13.4
Race /Ethnicity	
Non-Hispanic Black	25.0
Hispanic*	42.1
Non-Hispanic White	12.2
Age	
18 - 24 years	24.1
25 – 34 years	23.7
35 – 44 years	16.5
45 – 54 years	13.7
55 – 64 years	13.0
65+	1.6
Education	
Less than high school	32.9
High school graduate or GED	18.1
Some college or associate’s degree	14.2
College Graduate	6.3
Income	
Less than \$15,000	36.7
\$15,000 to 24,999	33.1
\$25,000 to \$34,999	16.7
\$35,000 to \$49,999	12.3
\$50,000 to \$74,999	5.4
>=\$75,000	4.3

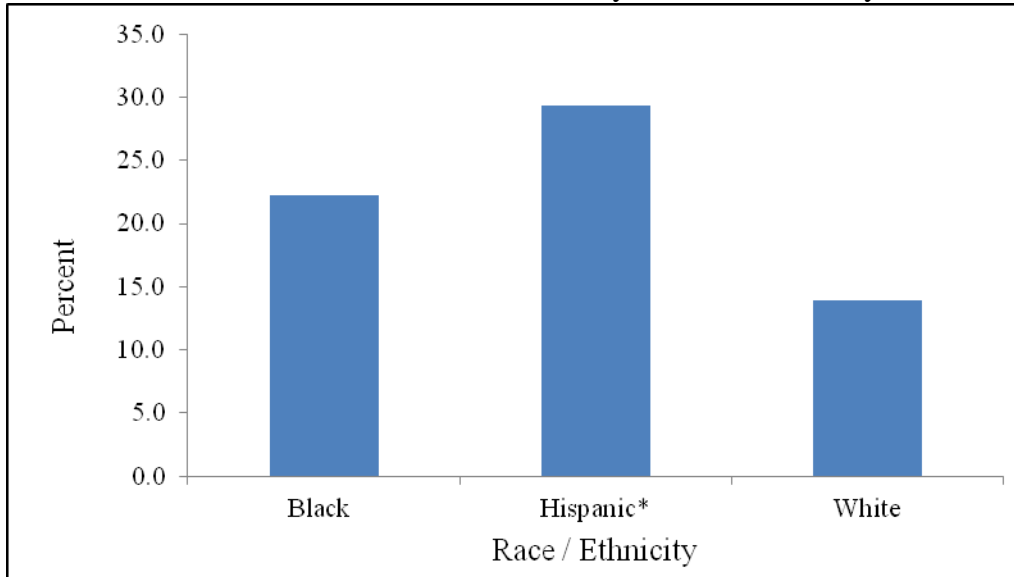
*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

“Health insurance makes a difference in whether and when people get necessary medical care, where they get their care, and ultimately, how healthy people are.” Working individuals with low incomes may opt out of their employer-based insurance due to the inability to afford the premiums and/or deductibles. The unemployed and uninsured may delay or not seek medical treatment, due to lack of insurance and/or money.

Nearly sixteen percent of Indiana’s adult population reported they needed to see a doctor in the past 12 months, but could not because of cost. In 2010, more Hispanic (29.3%) and non-Hispanic black (22.2%) adults reported they needed to see a doctor in the past 12 months but could not due to cost than non-Hispanic white adults (13.9%) (Figure 9).

Figure 9. Percent of Adults Who Reported a Time in the Past 12 Months When They Needed to See a Doctor But Could Not Because of Cost by Race and Ethnicity, Indiana - 2010

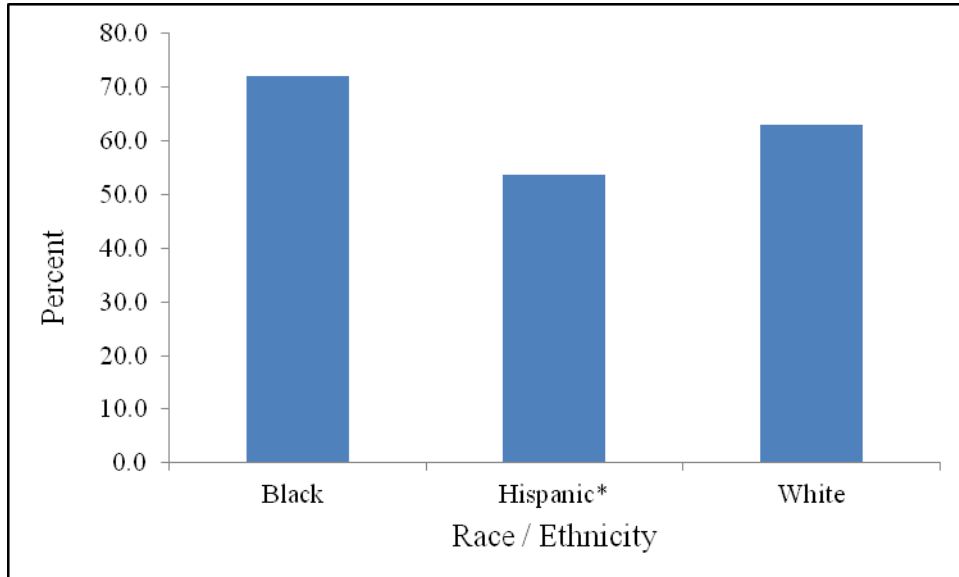


*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

Seventy-two percent of non-Hispanic black and 63 percent of non-Hispanic white adults reported it had been one to twelve months since they last visited a doctor for a routine checkup, compared to 53.7 percent of Hispanic adults (Figure 10).

Figure 10. Length of Time Since Last Routine Checkup of 1-12 Months by Race and Ethnicity, Indiana – 2010



*Hispanic can be of any race.

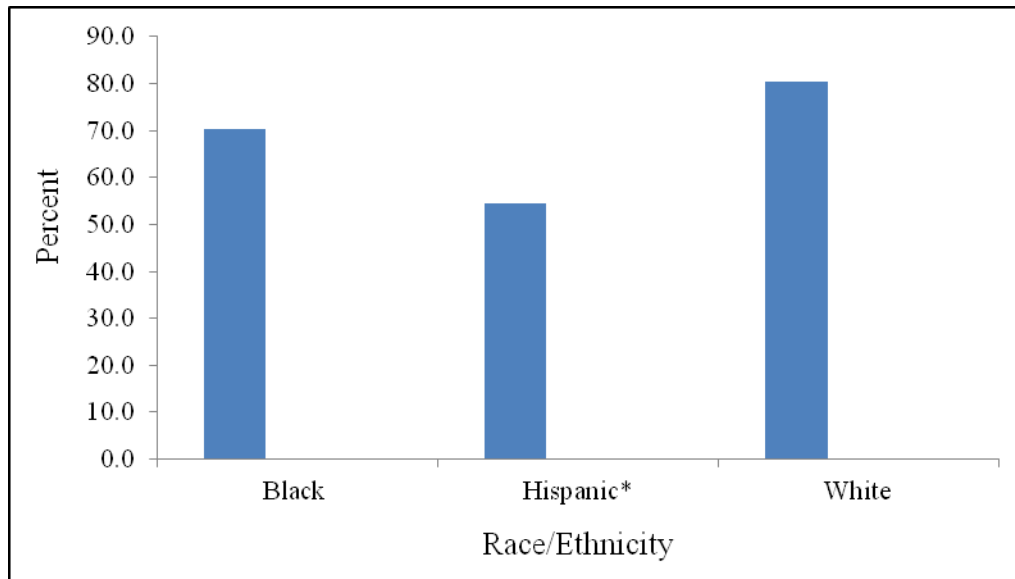
Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

Individuals who have a regular health care provider have better health outcomes than those individuals who do not have a primary source of health care. This is attributed to the following:

- 1.) Greater patient trust in the provider;
- 2.) Good patient-provider communication; and
- 3.) Increased likelihood that patients will receive appropriate care.

In 2010, 80.3 % of non-Hispanic white adults reported having one person they thought of as their personal doctor. In contrast, 70.4 % of non-Hispanic black adults and 54.6 % of Hispanic adults reported having someone they think of as their personal doctor (Figure 11).

Figure 11. Percent of Indiana Residents Who Reported Having Only One Person They Think of as Their Personal Doctor or Health Care Provider by Race and Ethnicity, Indiana – 2010



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

The *Healthy People 2020* access to health care services objectives related to the above mentioned areas include:

- Increase the proportion of persons with health insurance to 100 percent.
- Reduce the proportion of individuals who are unable to obtain or delay in obtaining necessary medical care, including dental care or prescription medicines, to 10 percent.
- Increase the proportion of individuals 18 to 64 years of age who have a specific ongoing source of medical care to 89.4 percent.

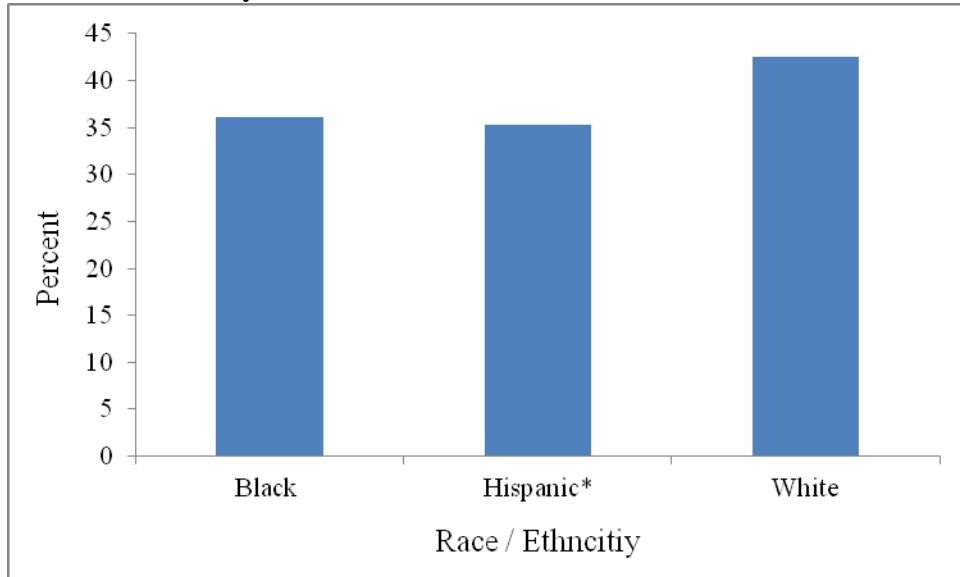
Chapter IV: Preventative Care

Adult Immunizations

Racial and ethnic minorities are less likely to receive recommended immunizations for pneumonia and influenza. Minorities with pneumonia and flu have higher rates of hospitalization as well as poorer health outcomes than whites.

During 2010, the percent of white adults (42.6%) who reported having had a flu shot in the past 12 months, were similar to Hispanic (35.3%) and black adults (36.1%) reported (Figure 12). [The 95% confidence intervals overlap.]

Figure 12. Percent of Adults Who Reported Having Had a Flu Shot in the Past 12 Months, by Race and Ethnicity, Indiana – 2010

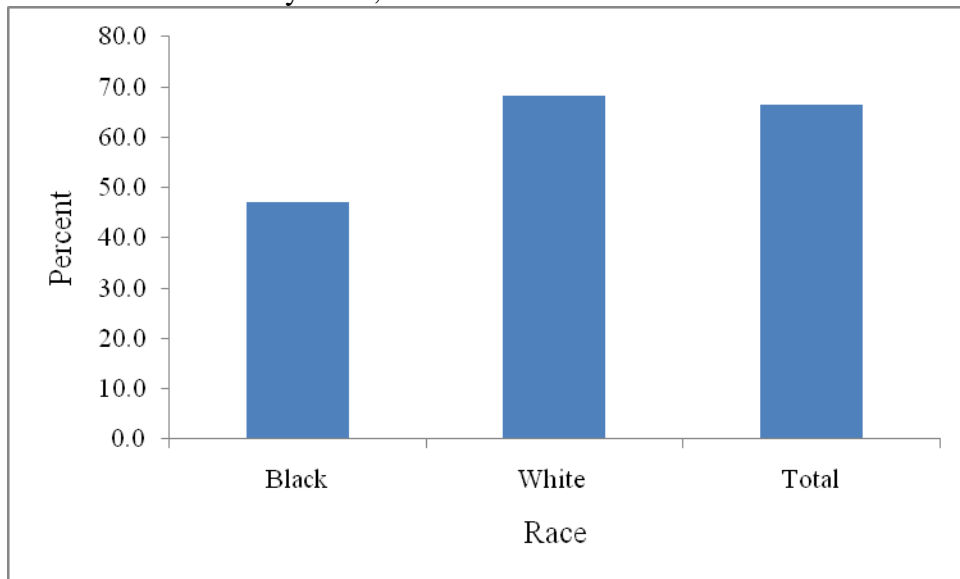


*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

Older adults are at increased risk of getting vaccine preventable diseases like influenza. There was a significant difference between the percent of older black and white adults, age 65 years, who reported having had a flu shot in the past 12 months (Figure 13).

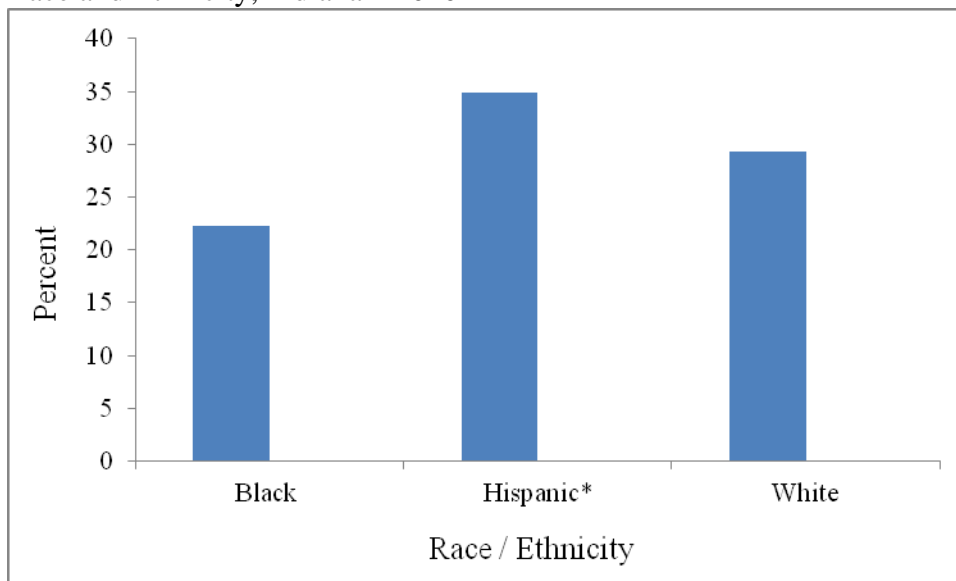
Figure 13. Percent of Adults Age 65 Years and Older Who Reported Having a Flu Shot in the Past 12 Months by Race, Indiana - 2010



Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

Black adults were less likely than Hispanic and white adults to report ever having had a pneumonia vaccination (Figure 14). [The percent of Hispanics who reported ever having had a pneumonia vaccine was not significantly different than that of blacks and whites.]

Figure 14. Percent of Adults Who Reported Ever Having Had a Pneumonia Vaccination, by Race and Ethnicity, Indiana – 2010



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team, 2010 Indiana BRFSS

The *Healthy People 2020* adult immunization objectives are:

- Increase the percentage of non-institutionalized adults, ages 18 to 64 years, who are vaccinated annually against seasonal influenza to 90 percent.
- Increase the percentage of adults who are vaccinated against pneumococcal disease to 60 percent.

Childhood Immunizations

Vaccines provide children with immunity to certain diseases like measles, mumps, and rubella. Currently, Indiana recommends that children ages 19 to 35 months receive the following dosages of vaccines: [4:3:1:3:3:1:4] four or more doses of diphtheria, tetanus, and pertussis (DTaP); 3 or more doses of poliovirus; 1 or more doses of measles/mumps/rubella (MMR); primary series (3) of *Haemophilus influenzae* type b (Hib); 3 or more doses of hepatitis B (hep B); 1 or more doses of varicella; and 4 or more doses of pneumococcal conjugate vaccine (PCV).

The National Immunization Survey (NIS) is used to monitor efforts to prevent and reduce vaccine-preventable diseases. In 2010, the NIS revealed 70.2 percent of the total Indiana children and 70.3 percent of non-Hispanic white children ages 19 to 35 months surveyed received the recommended [4:3:1:3:3:1:4] dosages of vaccines. Unfortunately, limited NIS data is available by race and ethnicity for Indiana, which may be due to small sample sizes. Only 30,000 children are surveyed nationally each year. The CDC cautions that estimates for

particular states and reporting areas and for racial/ethnic populations should be interpreted with caution.

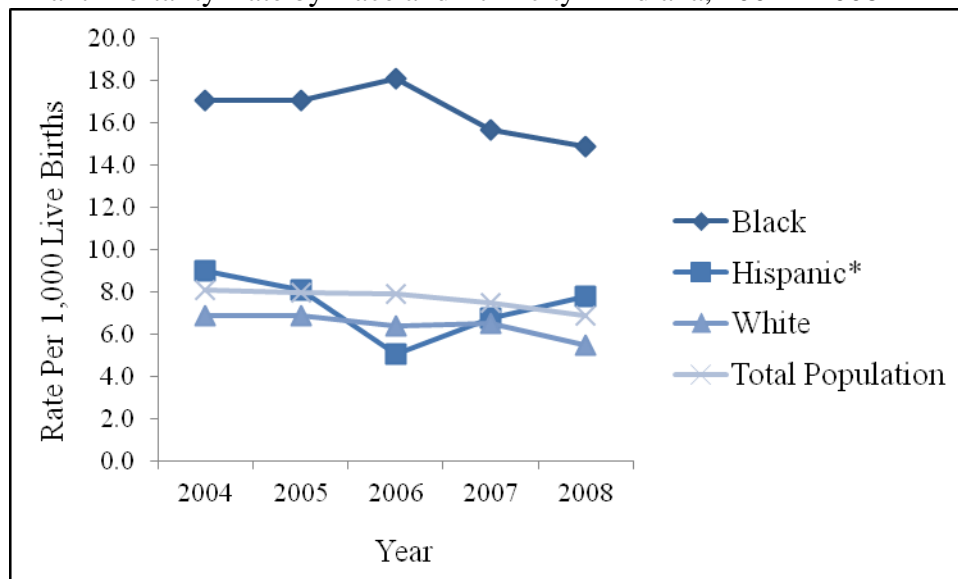
The Healthy People 2020 childhood immunization objective is:

- Increase the proportion of children ages 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and PCV vaccines to 80 percent.

Chapter V. Infant Mortality

Infant mortality is one of the most important health indicators of a population. It is an accepted standard used to compare the health and well-being of racial and ethnic populations in the U.S. From 2004 to 2008, Indiana’s total infant mortality rate decreased from 8.1 to 6.9 deaths per 1,000 live births. Despite this decline in infant mortality rates, large disparities still persist. Blacks continue to have the highest infant mortality rates of any racial and ethnic group in Indiana. In 2008, the infant mortality rate for blacks was 14.9 deaths per 1,000 live births, a rate more than twice the rate for the total population (6.9 deaths per 1,000 live births), nearly three times that of whites (5.5 deaths per 1,000 live births), and more than one and a half the rate of Hispanics (7.8 deaths per 1,000 live births). From 2006 to 2008, the infant mortality rate for Hispanics increased from 5.1 to 7.8 deaths per 1,000 live births (Figure 15).

Figure 15. Infant Mortality Rate by Race and Ethnicity – Indiana, 2004 – 2008



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team.

During 2008, Allen, Marion, and Lake Counties had the highest black infant mortality rates in Indiana (Table 5).

Table 5. Counties with the Highest Black Infant Mortality Rates, Indiana – 2008

Rank	County	Black	White	Total Population
1	Allen	26.0	6.3	9.8
2	Lake	13.5	5.4	8.6
3	Marion	13.8	4.5	8.1

Rate per 1,000 live births

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team.

The Healthy People 2020 infant mortality related objective is:

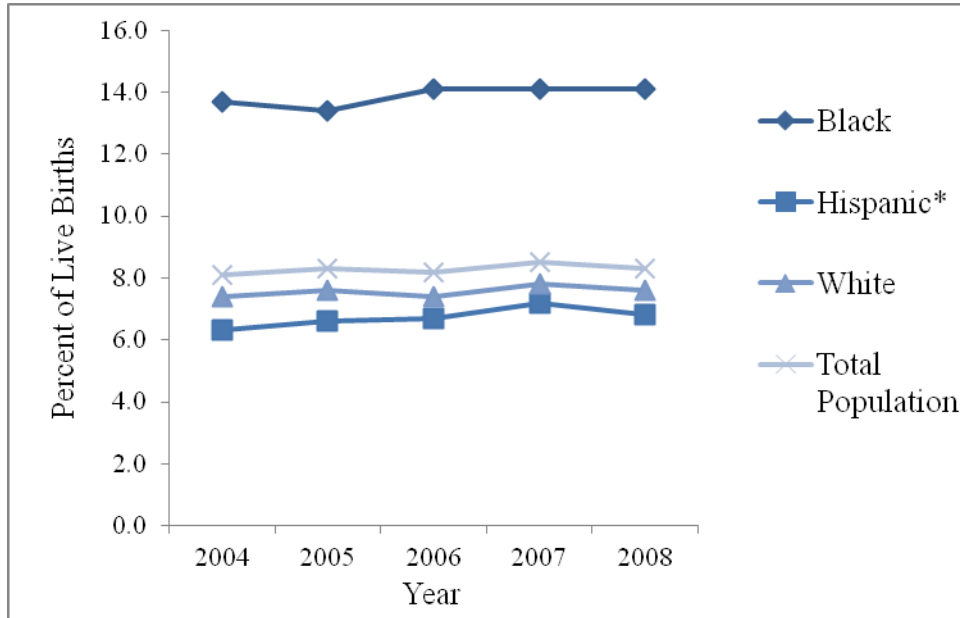
- Reduce infant mortality rate to 6.0 deaths per 1,000 per live births.

Birth Outcome Indicators

There are many causes for infant mortality. One of the most important predictors of survival and subsequent health is the gestational age of an infant. Premature or preterm (less than 37 weeks gestation) infants have a greater risk of death and disability. In 2008, 10.6 percent of 1,000 live births were preterm. Black mothers had a higher percent of premature births (15.6 percent of 1,000 live births) than white mothers (9.9 percent of 1,000 live births) and Hispanic mothers (9.8 6 percent of 1,000 live births).

Birth weight is also a major predictor of infant health. Infant mortality is highest for the smallest of babies, and it decreases as birth weight increases. Low birth weight is defined as an infant weighing less than 2,500 grams (5 pounds, 8 ounces) at birth. From 2004 to 2008, the percentage of low birth weight infants has been unchanged. Blacks had the highest percentages of low birth weight infants, which was consistent with disparities in infant mortality and premature live births. The percent of infants born at low birth weight increased from 8.1 percent to 8.5 percent (statistically significant) of live births from 2004 to 2007 (Figure 16).

Figure 16. Percent of Low Birth Weight Infants by Race and Ethnicity of Mother – Indiana, 2004 – 2008

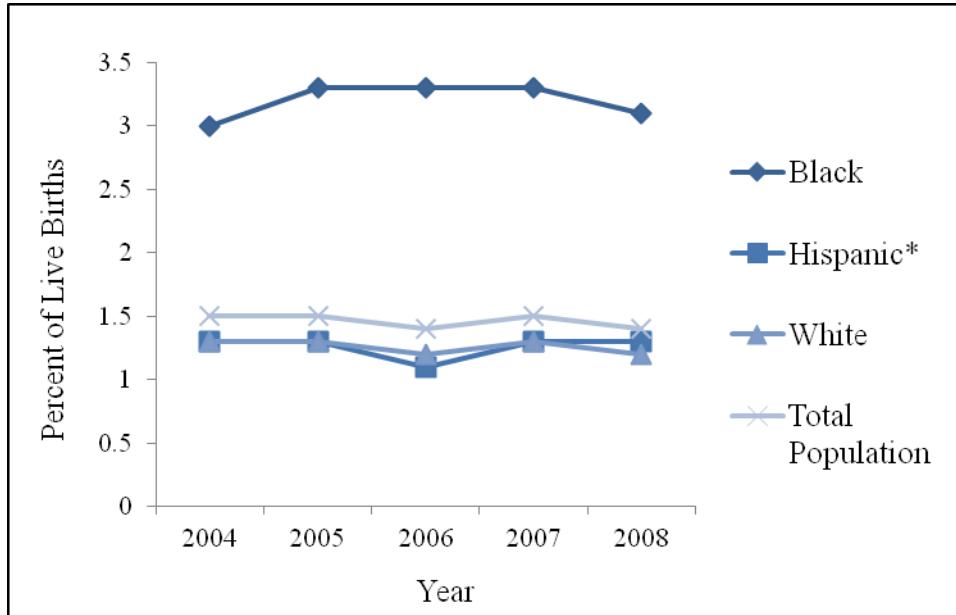


*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team.

Very low birth weight is defined as an infant weighing less than 1,500 grams (3 pounds, 5 ounces). From 2004 to 2008, the percent of very low birth weight infants for the total population ranged from 1.5 to 1.4 percent per 1,000. Blacks had the highest percentages of very low birth weight infants from 2004 to 2008, which were similar to the trends for low birth weight (Figure 17).

Figure 17. Percent of Very Low Birth Weight Infants by Race and Ethnicity of Mother – Indiana, 2004 – 2008



*Hispanic can be of any race.

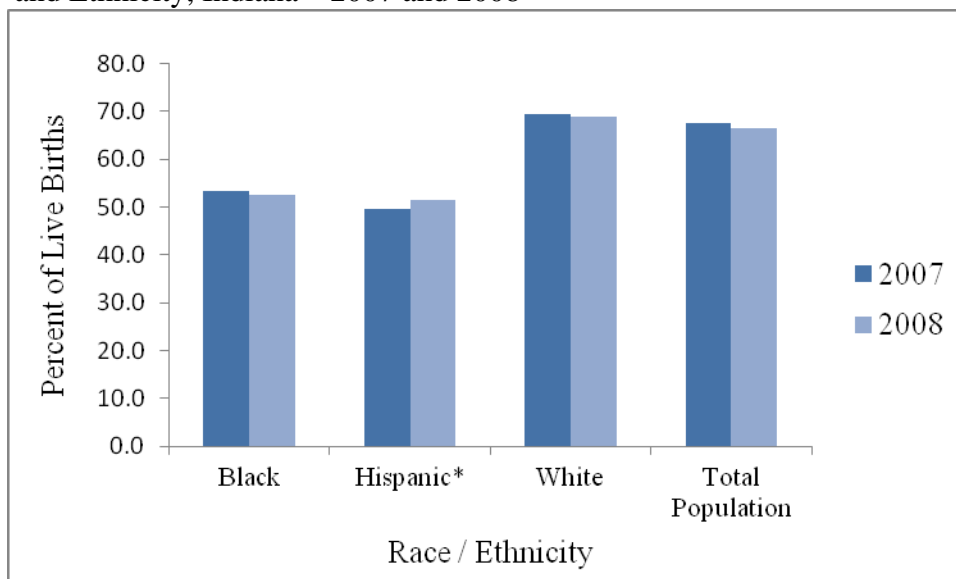
Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team.

Early and continuous prenatal care helps identify conditions and behaviors that can result in low birth weight and very low birth weight infants. Mothers who receive no prenatal care are three times more likely to give birth to low birth weight infants and five times more likely to die than mothers who receive prenatal care.

In 2007, Indiana started using the revised birth certificate (2003 version), which had different questions about prenatal care in the first trimester. The data from 2007 cannot be compared with previous data on prenatal care in the first trimester. The CDC National Center for Health Statistics (NCHS) notified the ISDH that the state would see decreases in the percent of mothers receiving prenatal care in the first trimester as a result of using the revised birth certificate. These changes had been observed in every state using the revised birth certificate and it is considered to be the result of better reporting. Therefore, 2007 data will be the new baseline percentage.

From 2007 to 2008, there was no statistically significant difference in the percent of mothers who received prenatal care in the first trimester among the total population (from 67.5 to 66.6 percent). During the same period, the percent of white mothers who received prenatal care in the first trimester remained unchanged (69.4 % and 68.9 %, respectively). The percent of black mothers who received prenatal care in the first trimester was unchanged (53.4% and 52.6 %, respectively). The percent of Hispanic mothers who received prenatal care in the first trimester also remained unchanged during this time (49.5 % and 51.4 %, respectively) (Figure 18). Blacks and Hispanics were less likely than whites to receive prenatal care in the first trimester of pregnancy.

Figure 18. Percent of Mothers Who Received Prenatal Care in the First Trimester by Race and Ethnicity, Indiana – 2007 and 2008



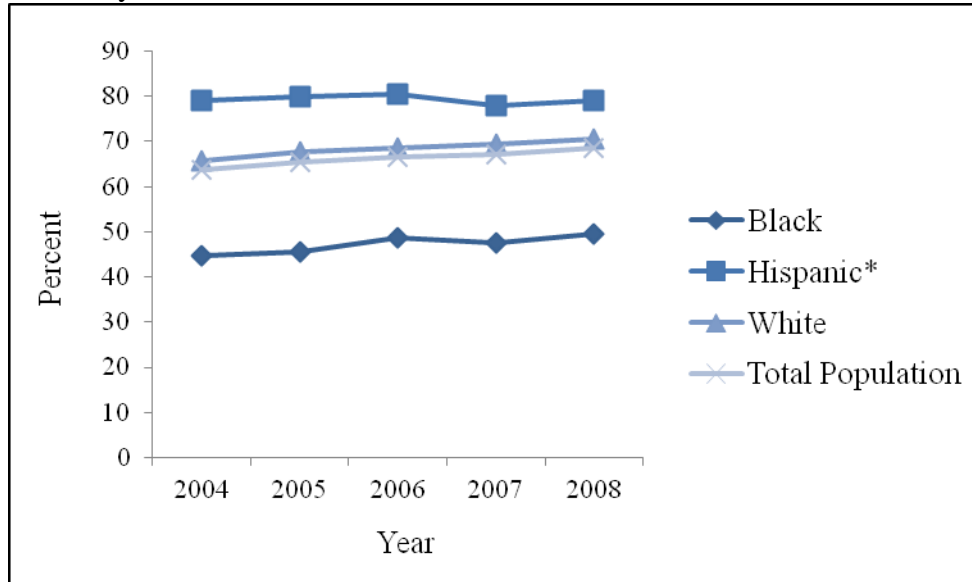
*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, August 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team.

Breast milk provides just the right amount of nutrients and antibodies which protect infants from disease. The chemical make-up of breast milk changes as a baby grows. It has just the right amount of sugar, fat, water and protein to help babies grow. Formula cannot match the unique composition of breast milk. Babies should be fed solely breast milk for the first six months of life and continue breastfeeding for at least one year even as solid foods are introduced. Babies who are fed formula have higher risks of obesity, type I diabetes, asthma, respiratory and ear infections, and sudden infant death syndrome (SIDS).

From 2004 to 2008, the percent of mothers in Indiana who breastfed upon discharge from the hospital significantly increased from 63.8 percent to 68.5 percent. Although the percent of black mothers who breastfed upon discharge from the hospital increased from 44.6 percent to 49.6 percent, black mothers were less likely than white and Hispanic mothers to breastfeed their newborns (Figure 19).

Figure 19. Percent of Mothers Who Breastfed Upon Discharge from the Hospital by Race and Ethnicity - Indiana, 2004 – 2008



*Hispanic can be of any race.

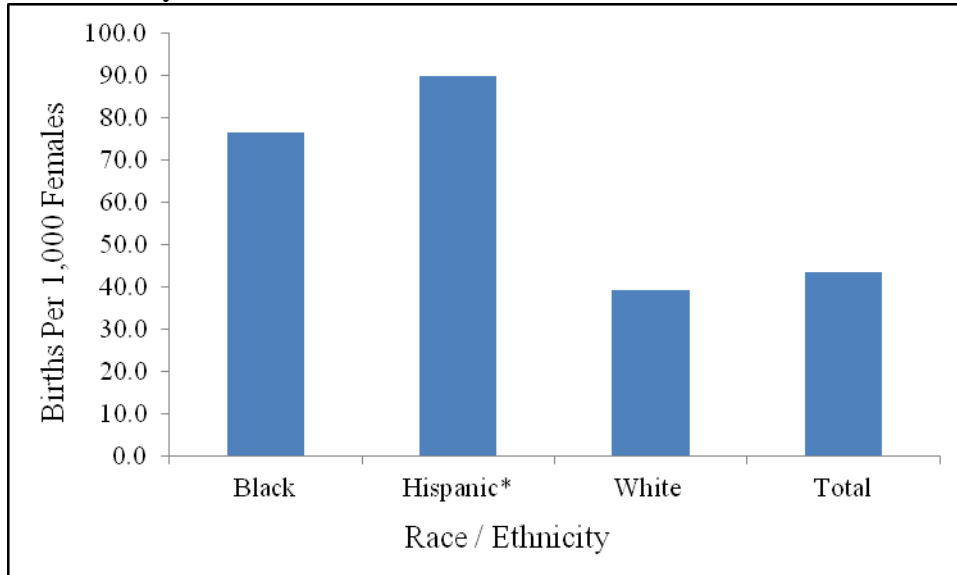
Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

The Healthy People 2020 objectives related to birth outcomes are:

- Reduce the percentage of low birth weight infants to 7.8 %.
In 2008, the percentage of low birth weight for white (7.6 %) and Hispanic (6.8 %) infants met the Healthy People 2020 objective for low birth weight. However, the percentage of low birth weight infants for the total population (8.3 %) exceeded this objective. This was due to the high percentage of black infants with low birth weight.
- Reduce the percentage of very low birth weight infants to 1.4 %.
During 2008, Indiana met this objective for the total population (1.4 %), but the percentage of very low birth weight black infants was 3.1 %.
- Increase the number of pregnant women who receive prenatal care during the first trimester to 77.9 %.
- Increase the percent of infants who were ever breastfed to 81.9 %.

Babies born to teens are at higher risk of being low birth weight. Teen mothers are less likely to receive prenatal care in the first trimester of their pregnancy. In 2008, the overall birth rate for Indiana teens, ages 15 to 19 years of age, was 43.7 births per 1,000 females. Minority teens, ages 15 to 19 years, had the highest birth rates among all Indiana teens. Hispanic teens, ages 15 to 19 years, had a birth rate of 89.9 births per 1,000 females and black teens, ages 15 to 19 years, had a birth rate of 76.7 births per 1,000 females. In contrast, white teens ages 15 to 19 years, had a birth rate of 39.3 births per 1,000 females (Figure 20).

Figure 20. Age-Specific Birth Rates for Females Ages 15 to 19 Years of Age, by Race and Ethnicity, Indiana - 2008



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

In 2008, minority teens were more likely to give birth to preterm and low birth weight infants than white teens, and they were less likely than white teens to receive prenatal care in the first trimester of their pregnancy (Table 6).

Table 6. Percentage of Birth Outcome Indicators for Females Ages 15 to 19 Years, by Race and Ethnicity, Indiana – 2008

Race / Ethnicity	Preterm (%)	Low Birth Weight (%)	Prenatal Care 1 st Trimester (%)
Black	16.0	14.2	42.8
Hispanic*	10.0	6.7	41.4
White	10.5	9.4	54.4
Total Population	11.6	10.3	51.7

*Hispanic can be of any race.

Births per 1,000 females ages 15 to 19 years

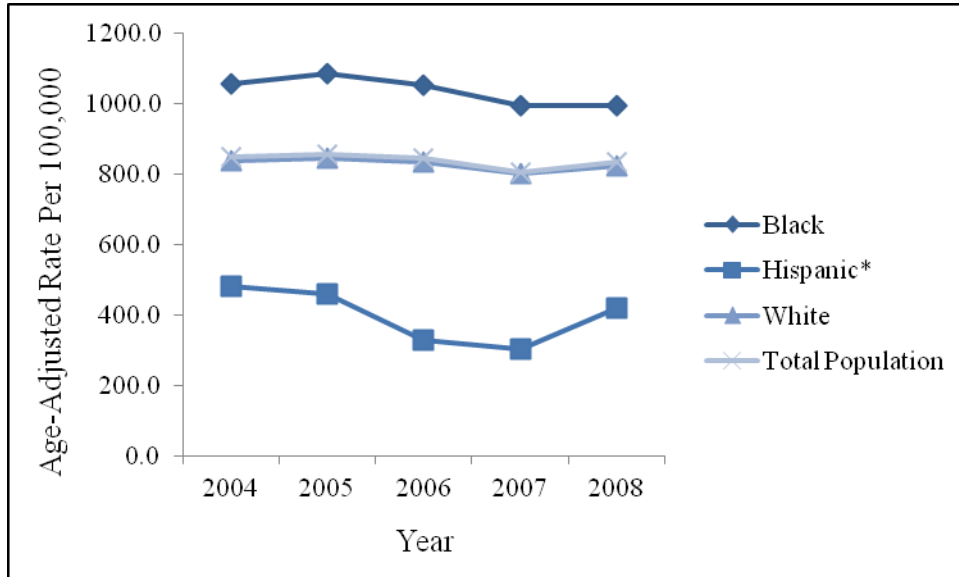
Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

Chapter VI: Mortality and Morbidity

Mortality, or death rate, is used as an indicator to evaluate the overall health of a population. Populations that may be of greater risk of death due to specific conditions, diseases and injuries may be identified using death rates. Between 2004 and 2007, the age-adjusted death rate for all causes decreased among all Indiana populations from 849.5 deaths per 100,000 to 808.1. In 2008, the age-adjusted death rate for all causes among the total population increased to 834.5 deaths per 100,000. The age-adjusted death rate for all causes decreased among Hispanics from

482.2 deaths per 100,000 during 2004 to 305.0 during 2007. In 2008, the age-adjusted death rates for all causes among Hispanics rose to 420.7 per 100,000. Blacks had the highest death rates of all populations in Indiana. Age-adjusted death rates for blacks ranged from 1,058.4 deaths to 995.1 deaths per 100,000 from 2004 to 2008 (Figure 21).

Figure 21. Age-Adjusted Death Rates for All Causes by Race and Ethnicity – Indiana, 2004 -2008



*Hispanic can be of any race.

Age-Adjusted Per 100,000. Age Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Indiana State Department of Health, Office of Minority Health, August 2010. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

In 2008, the five leading causes of death for all populations in Indiana were heart disease, cancer, chronic lower respiratory disease, stroke, and accidents. Table 7 shows the five leading causes of death by race and ethnicity.

Table 7. The Five Leading Causes of Death by Race and Ethnicity, Indiana -- 2008

Rank	Black	Hispanic*	White
1	Heart Disease	Cancer	Heart Disease
2	Cancer	Heart Disease	Cancer
3	Stroke	Accidents	Chronic Lower Respiratory Disease

4	Accidents	Homicide	Stroke
5	Homicide	Certain Diseases Originating in the Perinatal Period	Accidents

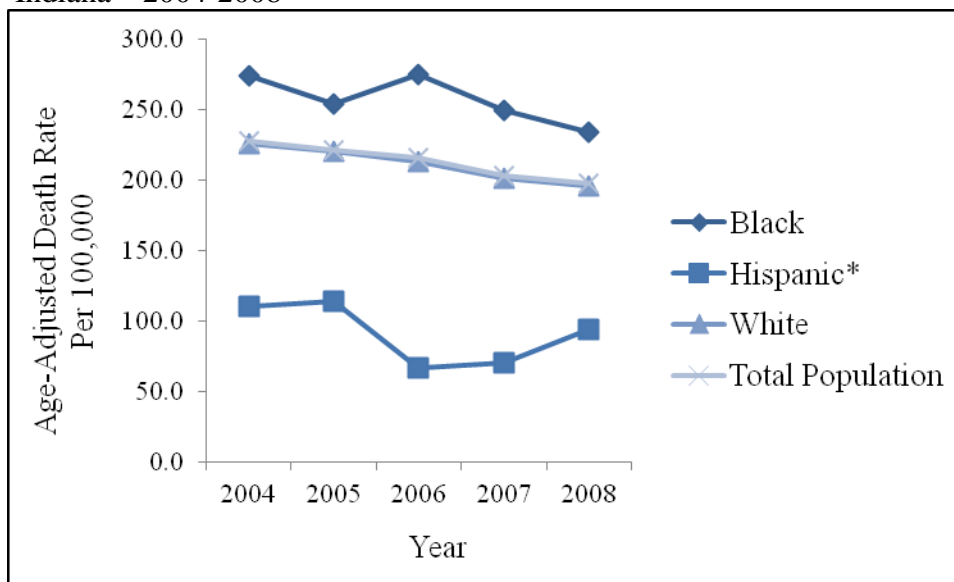
*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

Heart Disease

Heart disease refers to various types of heart conditions. The most common is coronary artery disease, which can cause heart attack, angina, heart failure, and arrhythmias. There were 13,641 deaths reported due to heart disease during 2008. From 2004 to 2008, the age-adjusted death rates for heart disease have decreased among all populations except Hispanics. The age-adjusted heart disease death rates for Hispanics remained similar from [difference not statistically significant] 2007 to 2008. Blacks consistently had the highest age-adjusted death rates due to heart disease (Figure 22).

Figure 22. Age-Adjusted Death Rates Due to Heart Disease by Race and Ethnicity, Indiana – 2004-2008



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

The Healthy People 2020 objectives related to heart disease mortality is:

- Reduce coronary heart disease deaths to 100.8 deaths per 100,000 population

In 2008, the prevalence of self-reported angina/coronary heart disease was similar for Hispanic (2.9%, black (5.8%) and white (4.6%) adults.

Angina, or chest pain, can be caused by a build-up of plaque which block the coronary artery and reduces blood flow to the heart. A heart attack can occur when plaque totally blocks the coronary artery and causes it to rupture. According to the CDC, cholesterol is a waxy, fat-like substance found in your body and many foods. Your body needs it to work properly and makes all that you need. Too much cholesterol can accumulate depending on the kind of foods you eat and the rate at which your body breaks it down. Extra cholesterol can build up in your arteries. Over time, cholesterol deposits, called plaque, can narrow your arteries and allow less blood to pass through.

In 2009, there were no differences between white adults (40.8%) and blacks adults (34.7%) reporting ever being told by a health professional that they have high cholesterol. [There was no statistically significant difference between white and black adults.] This may indicate that blacks are not routinely getting their cholesterol levels checked by a health professional.

The Healthy People 2020 heart disease and stroke related screening objective is:

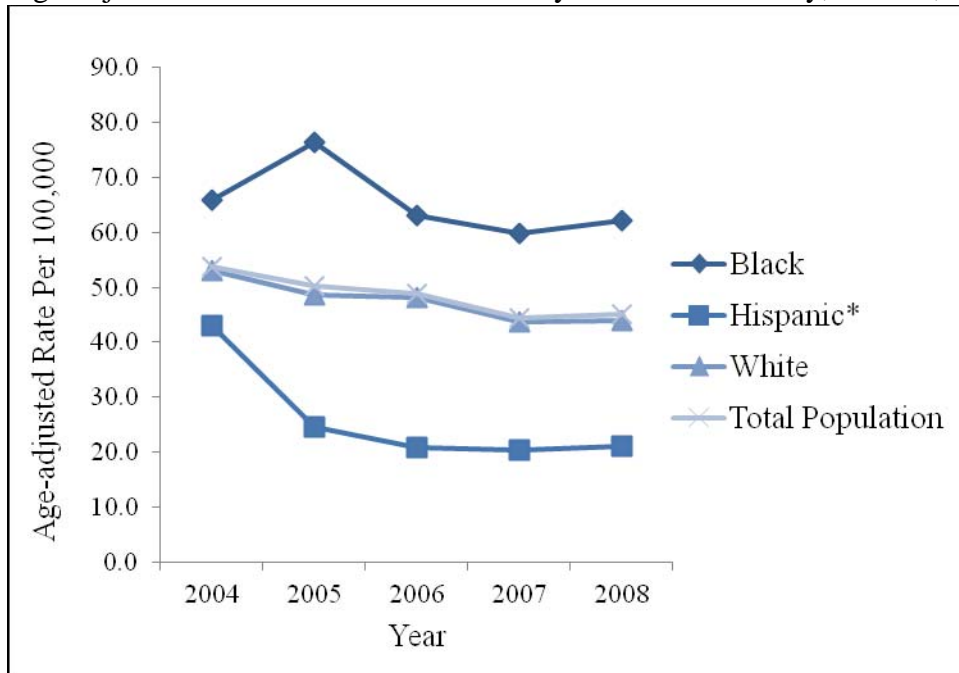
- Increase the proportion of adults, aged 18 years and older, who have had their blood cholesterol checked within the preceding 5 years to 82.1%.

Stroke

Stroke occurs when a blood clot forms and blocks a vessel in the brain or a vessel in the brain bursts. Symptoms of stroke are sudden numbness or weakness in the face, arms, or legs (especially on one side). Difficulty walking or talking (slurred speech and/or and trouble finding words) and confusion are also symptoms of stroke.

From 2004 to 2008, decreases in age-adjusted death rates due to stroke occurred among all populations. Despite the decline in death rates due to stroke, blacks had the highest age-adjusted death rates due to stroke (65.8 to 62.2 deaths per 100,000) from 2004 to 2008 (Figure 23).

Figure 23. Age-adjusted Death Rates Due to Stroke by Race and Ethnicity, Indiana, 2004 – 2008



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health Preparedness Commission, Data Analysis Team.

The Healthy People 2020 objective related to stroke mortality is:

- Reduce the death rate due to stroke to 33.8 deaths per 100,000 population.

In 2010, there were no differences for stroke prevalence between black (6.0%) and white adults (2.6%) for ever having a stroke; however, the percent of black adults reporting a stroke was significantly higher than Hispanic adults (1.5%).

Hypertension, or high blood pressure, is called the “silent killer” because it typically has no signs or symptoms. If not controlled, high blood pressure can lead to stroke. In 2009, about one in three Indiana adults (31.3%) reported that they have ever been told by a health professional they have high blood pressure. Hypertension prevalence was similar among black (35.5%) than white adults (31.8%). The prevalence for Hispanic adults (22.0%) was significantly lower than white or black adults.

The Healthy People 2020 objective related to the prevalence of high blood pressure is:

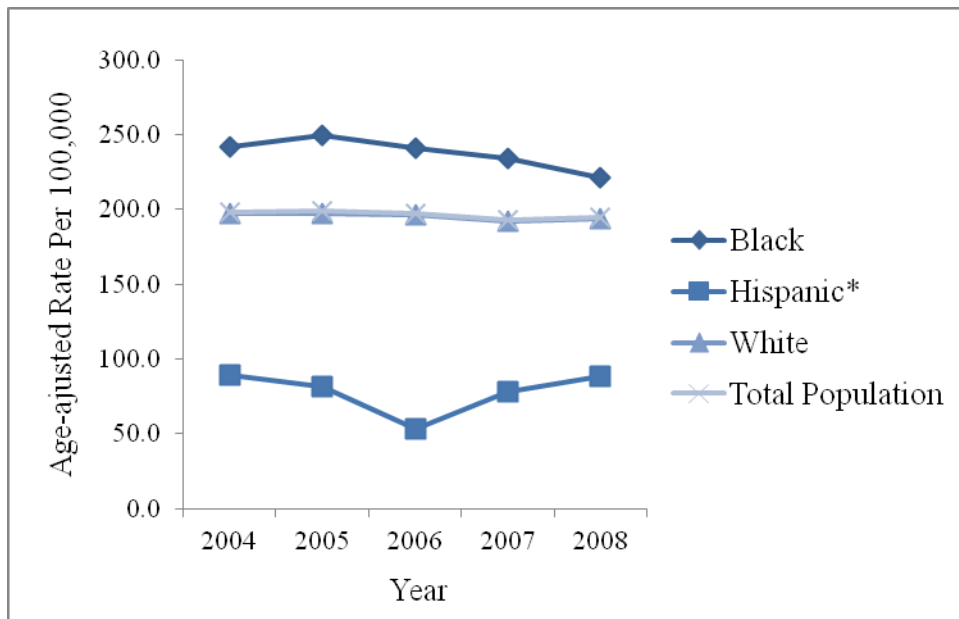
- Reduce the proportion of adults 18 years and older with high blood pressure to 26.9 %.

Cancer

According to the American Cancer Society, there has been an overall decline in the number of diagnosed cases and the number of deaths due to all cancers in the U.S. Between 1998 and 2007, blacks experienced the sharpest decrease in cancer death rates, compared to whites. This is attributed to a decrease in smoking rates and smoking-related cancers.

Similar to national trends, cancer deaths have declined in all Indiana populations (Figure 24). Despite these rate decreases, blacks continuously have the highest cancer death rates. They are more likely to be diagnosed in the advanced stages of disease, when the cancer is less treatable. Consequently, blacks have the shortest survival time for most cancers, regardless of the type of cancer or stage of diagnosis, than any other racial and ethnic group in the U.S.

Figure 24. Age-Adjusted Death Rates Due to All Cancers by Race and Ethnicity, Indiana 2004 – 2008



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health System Development and Data Commission, Data Analysis Team.

The Healthy People 2020 objective related to cancer death is:

- Reduce the overall cancer death rate to 160.6 deaths per 100,000 population.

In 2008, the most common types of cancer deaths among blacks were lung and bronchus cancers. Prostate cancer was the second leading cause of cancer death for black males. Breast cancer was the second leading cause of cancer death for black females. Colorectal cancer was the third leading cause of cancer deaths for both black males and females. Black males had the highest age-adjusted death rate (92.7 deaths per 100,000) due to lung and bronchus cancers compared to white males (81.8 deaths per 100,000) and white females (48.4 deaths per-100,000) and black females (42.9 deaths per 100,000). Black males had an age-adjusted death rate for lung cancer twice that of black females. Data on the most common types of cancers among other minority populations in Indiana is limited.

The Healthy People 2020 objective related to lung cancer death is:

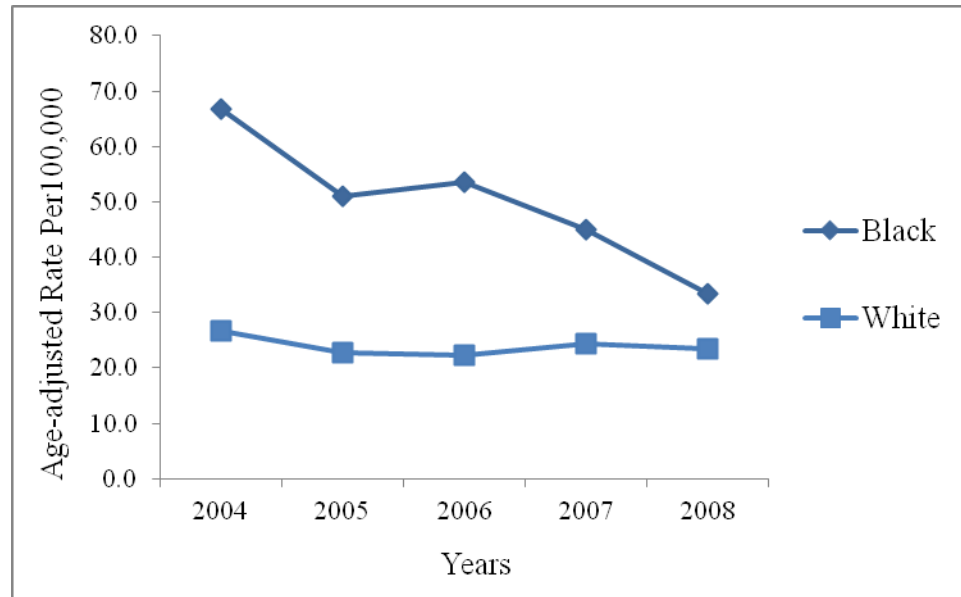
- Reduce the lung cancer death rate to 45.5 deaths per 100,000 population.

Prostate Cancer

From 2004 to 2008, the age-adjusted death rates due to prostate cancer among black males decreased from 66.7 to 33.4 deaths per 100,000 population (Figure 25).

Even with this significant decline in mortality, black males had persistently higher death rates due to prostate cancer. [The difference between black and white males is not statistically significant.]

Figure 25. Age-Adjusted Death Rate for Prostate Cancer by Race, Indiana
2004 - 2008



Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

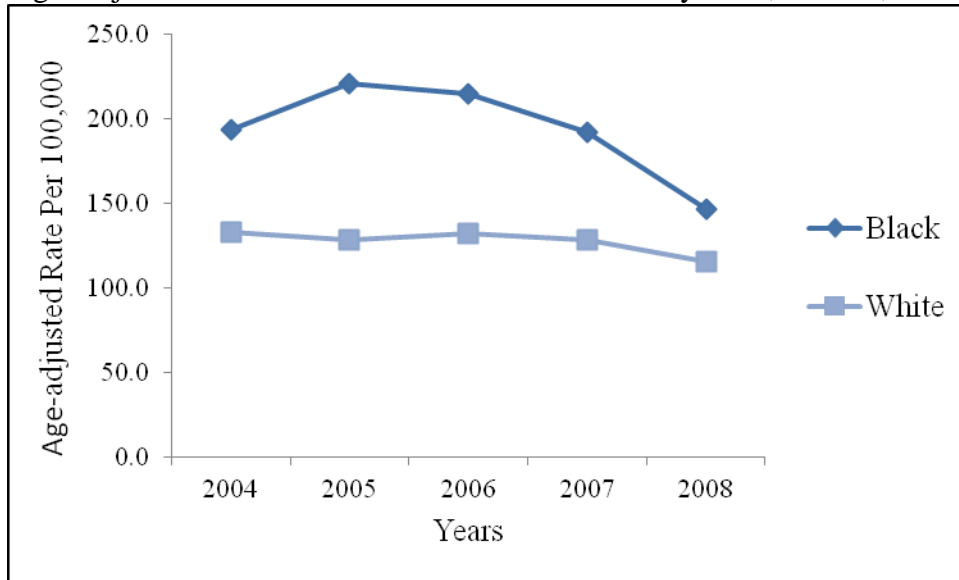
The Healthy People 2020 objective related to prostate cancer death is:

- Reduce the prostate cancer death rate to 23.5 prostate cancer deaths per 100,000 males (age adjusted to the year 2000 standard population).

Black males are more likely than white males to be diagnosed with prostate cancer. One in five black males will be diagnosed with prostate cancer in their life-time.

From 2004 to 2008, the age-adjusted incidence rates for prostate cancer decreased among all male populations. During this period, the age-adjusted incidence rates for prostate cancer among black males decreased from 194.1 to 146.9 cases per 100,000, significantly narrowing the gap between black and white males (Figure 26), though the rate for black males is still significantly higher than white males.

Figure 26. Age-Adjusted Incidence Rates for Prostate Cancer by Race, Indiana, 2004 - 2008



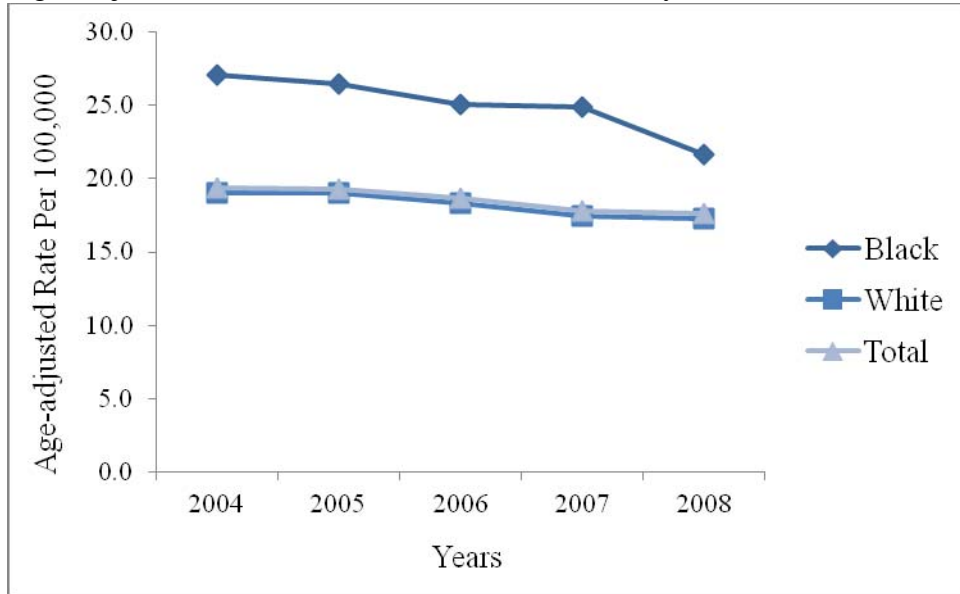
Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

Every biennium the following question is asked on the Behavioral Risk Factor Surveillance System (BRFSS) survey of adult males age 40 years and older: have you ever had prostate-specific antigen (PSA) screening. The 3-year average BRFSS data showed no difference in the percent of black (54.0%) and white (53.4%) males, age 40 years and older, who reported having had a PSA test within the past two years.

Colorectal Cancer

From 2004 to 2008, the age-adjusted death rate due to colorectal cancer among blacks decreased from 27.1 to 21.7 deaths per 100,000. In comparison, the age-adjusted death rate due to colorectal cancer among white decreased from 19.4 to 17.6 deaths per 100,000 during the same period (Figure 27).

Figure 27. Age-Adjusted Death Rates for Colorectal Cancer by Race, Indiana 2004 – 2008



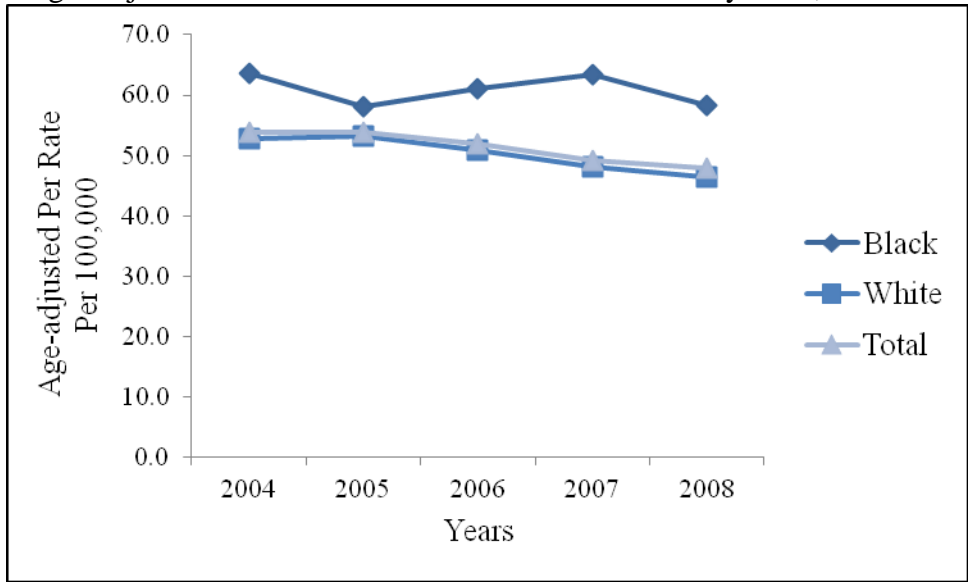
Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

The Healthy People 2020 objective related to colorectal cancer death is:

- Reduce the colorectal cancer death rate to 14.5 deaths per 100,000 population.

Figure 28 shows the age-adjusted incidence rate for colorectal cancer among whites decreased from 52.8 to 46.5 cases per 100,000 during 2004 to 2008. In contrast, the age-adjusted incidence rate for colorectal cancer among blacks decreased from 63.6 to 58.2 cases per 100,000 during the same period (Figure 28).

Figure 28. Age-Adjusted Incidence Rates for Colorectal Cancer by Race, Indiana 2004 – 2008



Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

The percentage of adults in Indiana age 50 years and older who reported ever having a sigmoidoscopy or colonoscopy was 62.8 percent in 2010. The screening rates for colorectal cancer were similar for black (63.7 %) and white (63.6%) adults.

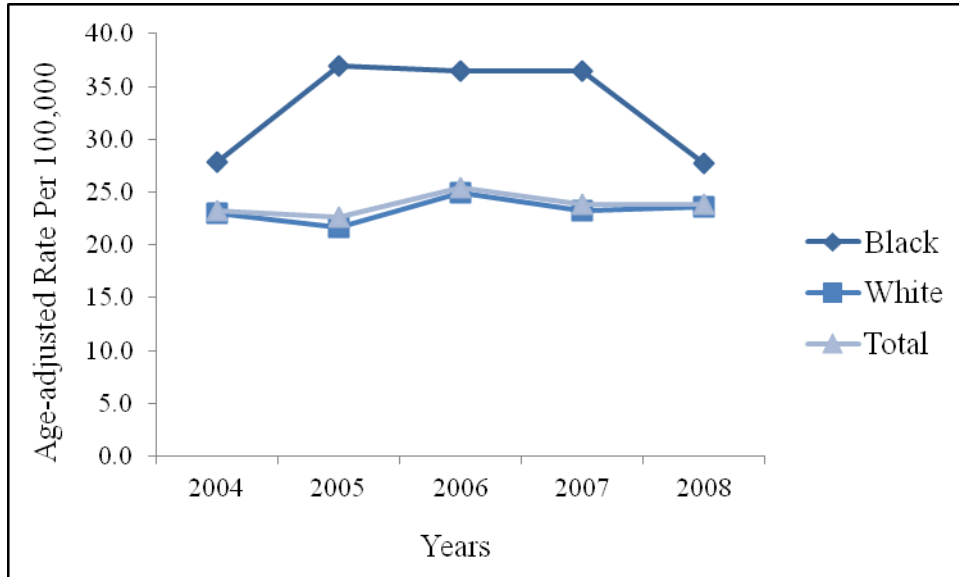
The Healthy People 2020 objective related to colorectal cancer screening is:

- Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines to 70.5 percent.

Breast Cancer

Black females are diagnosed with more aggressive types of breast cancers which are associated with shorter survival. Figure 29 shows a decrease in breast cancer deaths among black females (36.5 to 27.7 deaths per 100,000) from 2007 to 2008 [the difference between 2007 and 2008 is not statistically significant]. Yet, black females had higher age-adjusted death rates due to breast cancer than white females (Figure 29).

Figure 29. Age-Adjusted Death Rates for Breast (Females) Cancer by Race, Indiana 2004 – 2008



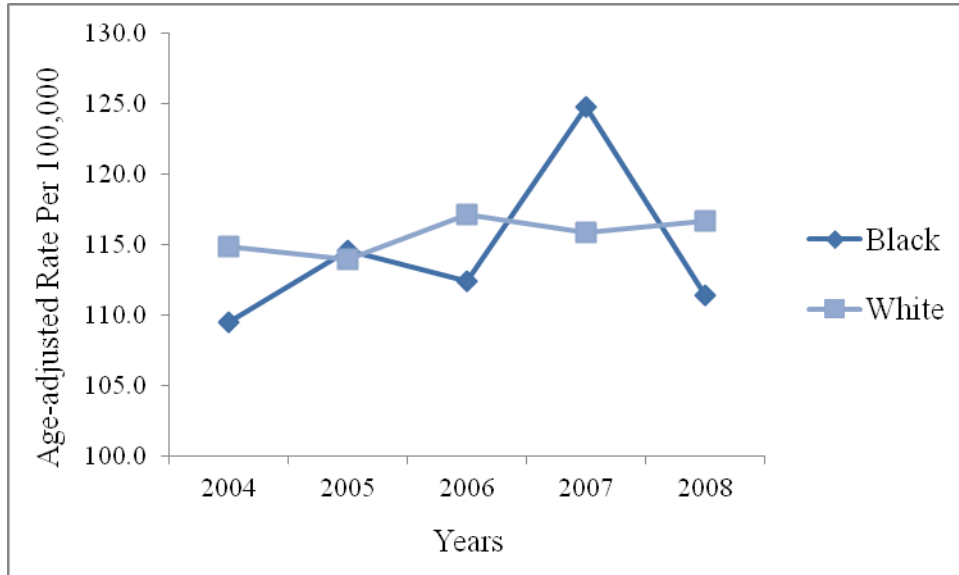
Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

The Healthy People 2020 objective related to breast cancer death is:

- Reduce the female breast cancer rate to 20.6 deaths per 100,000 females.

From 2004 to 2008, black females were diagnosed with breast cancer at rates similar to white females diagnosed with breast cancer (Figure 30). Despite similar diagnosis rates, black females are diagnosed with breast cancer at later stages than white females. According to the American Cancer Society, the later stage at diagnosis of breast cancer among black females is largely attributed to longer periods between mammograms as well as lack of timely follow up on suspicious results.

Figure 30. Age-Adjusted Incidence Rates for Breast Cancer (Females) by Race, Indiana 2004 – 2008



Age-adjusted per 100,000. Adjusted Rates are calculated using the 2000 standard million population, U.S. Bureau of Census. Source: Original data obtained from Indiana State Department of Health, Indiana State Cancer Registry. August 2011

In 2010, the percentage of the total Indiana female population age 40 years and older who reported having had a mammogram was 71.3 percent. There was no difference in percent of black (71.0 percent) and white (71.0 percent) females, age 40 years and older who reported having had a mammogram.

The Healthy People 2020 objective related to breast cancer screening is:

- Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines to 81.1 percent.

Chronic Lower Respiratory Disease

The age-adjusted death rate for chronic lower respiratory disease was highest among whites (59.2 deaths per 100,000) followed by blacks (42.8 deaths per 100,000) and Hispanics (22.1 deaths per 100,000).

Asthma

During 2010 current asthma prevalence was similar among black (14.2 percent), Hispanic (10.0 percent), and white adults (8.9 percent).

Blacks and Hispanics had high rates of emergency department visits and inpatient hospitalizations due to asthma, compared to their proportion of the overall Indiana population. Blacks comprised 9.1 percent of Indiana's population yet they accounted for 31.2 percent of emergency room visits and 27.0 percent of hospital inpatients treated for asthma in 2010. Hispanics represented 6.0 percent of Indiana's population but made up 4.6 percent of emergency room visits and 3.8 percent of hospital inpatients treated for asthma in 2010.

Diabetes

Blacks had an age-adjusted death rate due to diabetes (38.5 deaths per 100,000), compared to whites (23.9 deaths per 100,000) during 2008.

The Healthy People 2020 objective related to diabetes death is:

- Reduce the diabetes death rate to 65.8 deaths per 100,000.

Diabetes can lead to serious complications such as kidney disease, blindness, amputations, high blood pressure, stroke, and heart disease, as well as premature death. More than 65 percent of people with diabetes die from heart disease or stroke. Heart attacks can occur earlier in life and often result in death for people with diabetes.

In 2010, black adults (15.9%) had the highest prevalence of diabetes in Indiana compared to white (9.3%) and Hispanic adults (7.9%). [The difference between black adults and Hispanic adults was not statistically significant.]

Blacks accounted for 21.7 percent of emergency room visits and 22.5 percent of hospital inpatients treated for diabetes in 2010. Hispanics represented 4.3 percent of emergency room visits and 3.7 percent of hospital inpatients treated for diabetes in 2010.

Healthy People 2020 objective related to the number of new cases of diabetes is:

- Reduce the annual number of new cases of diabetes to 7.2 new cases per 1,000 population aged 18 to 84 years.

HIV/AIDS

In 2008, there were 121 reported deaths from HIV/AIDS. The death rate for blacks was 9.4 deaths per 100,000, compared to 1.1 deaths per 100,000 for whites.²⁶

The Healthy People 2020 objective related to HIV/AIDS death is:

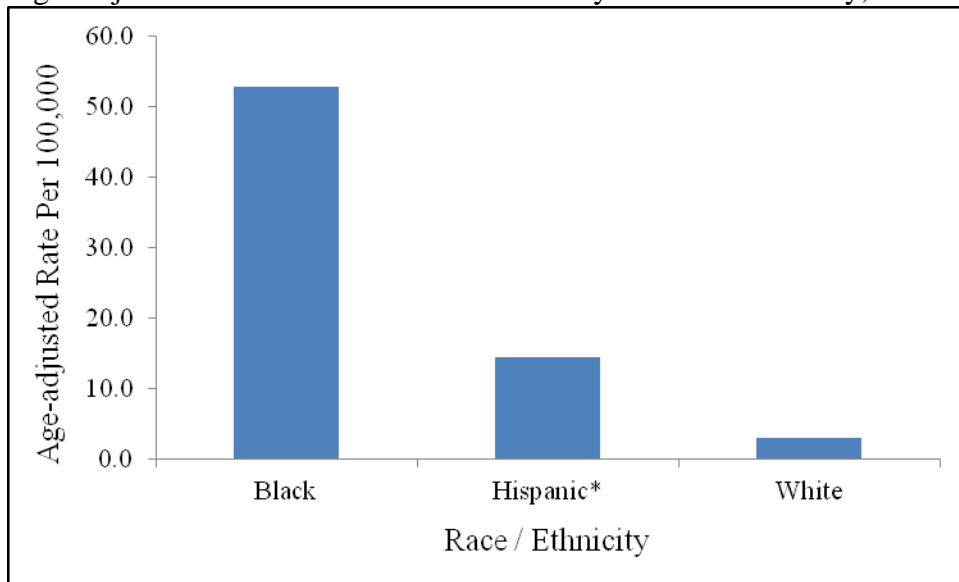
- Reduce deaths due to HIV infection to 303 deaths per 100,000
Although Indiana met the Healthy People 2020 objective related to HIV/AIDS related deaths, disparities still exist.

By the end of December 2009, there were 9,646 Indiana residents living with HIV/AIDS. The majority of people living with HIV/AIDS are middle age males residing in urban areas. Blacks are disproportionately affected by HIV/AIDS. The prevalence rate among blacks in Indiana was 579.8 cases per 100,000, followed by Hispanics (201.1 cases per 100,000) and whites (95.3 cases per 100,000).³³

Homicide

Homicide was the fifth leading cause of death for blacks and the fourth leading cause of death for Hispanics in 2008. It was the third and fourth leading cause of death for black and Hispanic males, respectively. Black males had an age-adjusted death rate of 52.9 deaths per 100,000 followed by Hispanic males with an age-adjusted homicide rate of 14.6 deaths per 100,000 (Figure 31).

Figure 31. Age-Adjusted Death Rate Due to Homicide by Race and Ethnicity, Indiana – 2008



*Hispanic can be of any race.

Age-adjusted death rates per 100,000 deaths

Source: Indiana State Department of Health, Office of Minority Health, October 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Epidemiology Resource Center, Data Analysis Team.

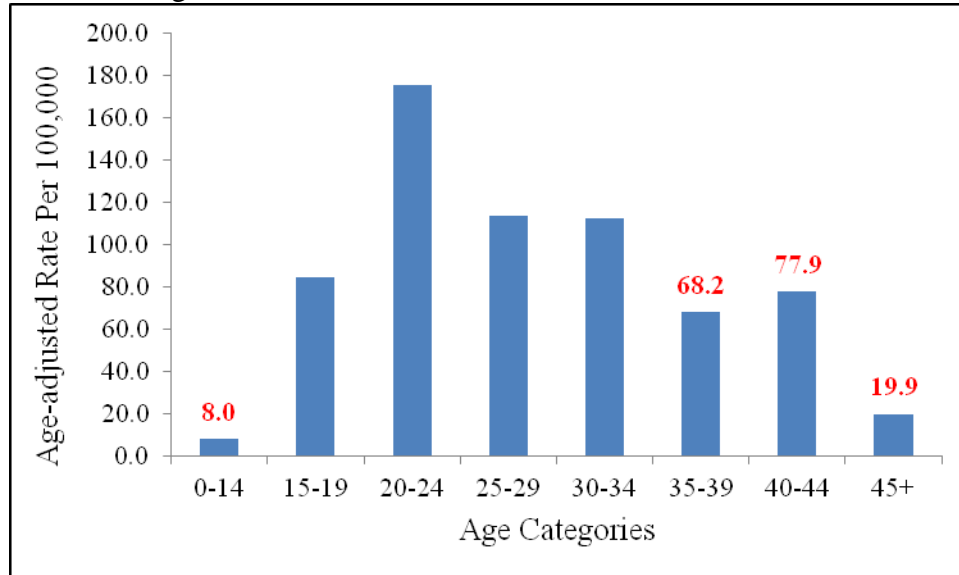
The Healthy People 2020 objective related to homicide mortality is:

- Reduce the deaths due to homicide to 5.5 deaths per 100,000.

During 2008, the age-adjusted homicide rate for the total Indiana population was 5.2 deaths per 100,000. This met the Healthy People 2020 objective. However, there are large disparities in homicide rates for black and Hispanic males. The homicide rate for Hispanic males was nearly three times the Healthy People 2020 objective. The homicide rate for black males was nearly 10 times the Healthy People 2020 objective.

Black males ages 20 to 24 years of age had the highest age-adjusted death rates due to homicide followed by black males ages 25 to 29 and 30 to 34 years. Figure 32 shows the homicide rates for black males by age categories (Figure 32).

Figure 32. Age –Adjusted Death Rates for Homicides for Black Males by Age Categories, Indiana - 2008



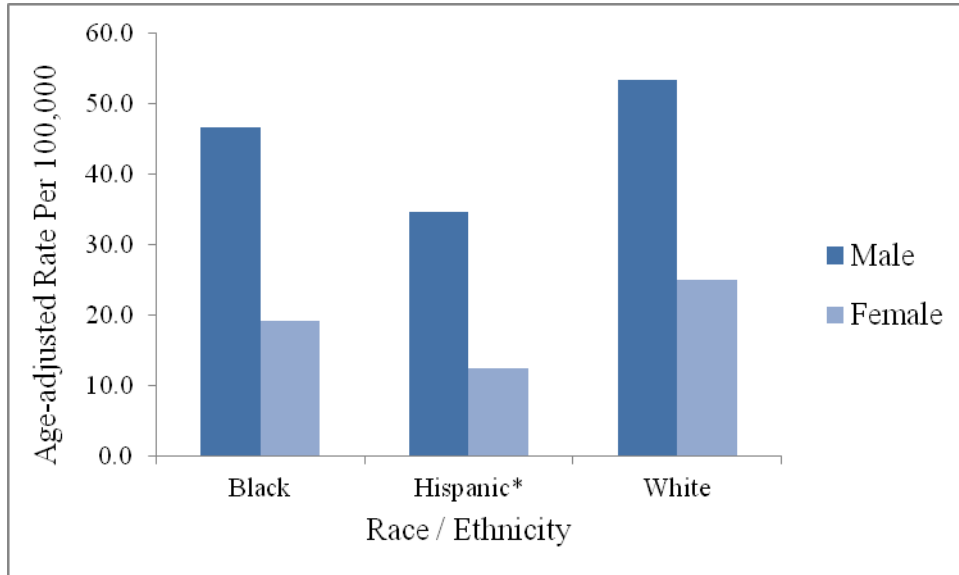
***red/bold** = The data is unstable. Less than 20 deaths- interpret with caution

Age-adjusted death rates per 100,000 deaths. Source: Indiana State Department of Health, Office of Minority Health, October 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team.

Accidents

Accidents, or unintentional injury, were the third leading cause of death among Hispanics and the fourth leading cause of death among blacks during 2008. Deaths due to accidents were higher among males than females in all populations. White males (53.4 deaths per 100,000) had the highest average age-adjusted death rate due to accidents followed by black males (46.7 deaths per 100,000) and Hispanic males (34.8 deaths per 100,000) (Figure 33).

Figure 33. Average Age-Adjusted Death Rate for Accidents by Race, Ethnicity, and Gender, Indiana – 2004 – 2008



*Hispanic can be of any race.

Age-adjusted death rates per 100,000 deaths

Source: Indiana State Department of Health, Office of Minority Health, October 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team.

The Healthy People 2020 objective related to unintentional injury mortality is:

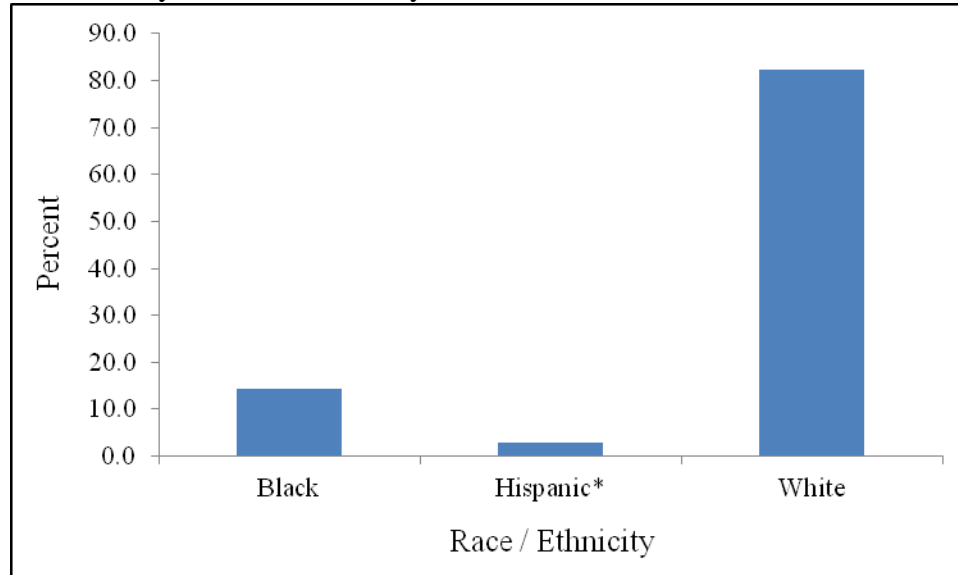
- Reduce deaths due to accidents or unintentional injuries to 36.0 deaths per 100,000.

Chapter VII: Years of Potential Life Lost (YPLL)

Years of Potential Life Lost (YPLL) is a measurement of premature mortality. According to the CDC, YPLL is presented for persons less than 75 years of age because the average life expectancy in the United States is over 75 years. For example, the death of a 25- year- old would account for 50 years of lost life, while the death of a 60- year- old would account for 15years.

In 2007, there were 495,538 years of potential life lost before the age of 75 years due to all causes of death for the total Indiana population. Approximately 24 percent of potential years of life were lost due to unintentional injuries (accidents), suicides, and homicides. Cancer and heart disease contributed to 21.6 and 16.2 years of potential life lost, respectively. Figure 34 shows the percent of potential years of life lost due to all causes of death by race and ethnicity (Figure 34). Whites had 82.2 YPLL due to all causes, and they comprise 84.3 percent of the population. In contrast, blacks had 14.4 percent of years of potential life lost due to all causes, yet they make up only 9.1 percent of the population.

Figure 34. Percent of Years of Potential Life Lost Before Age 75 for All Causes of Death by Race and Ethnicity, Indiana --2007



Non-Hispanic White, Non-Hispanic Black, Non-Hispanic American Indian, Non-Hispanic Asian
 Hispanic can be of any race

Source: Indiana State Department of Health, Office of Minority Health,
 September 2011. Original data from Source: CDC, National Center for Injury Prevention and
 Control (NCIPC), Web-based Injury Statistics Query and Reporting System (WISQRS), 2007

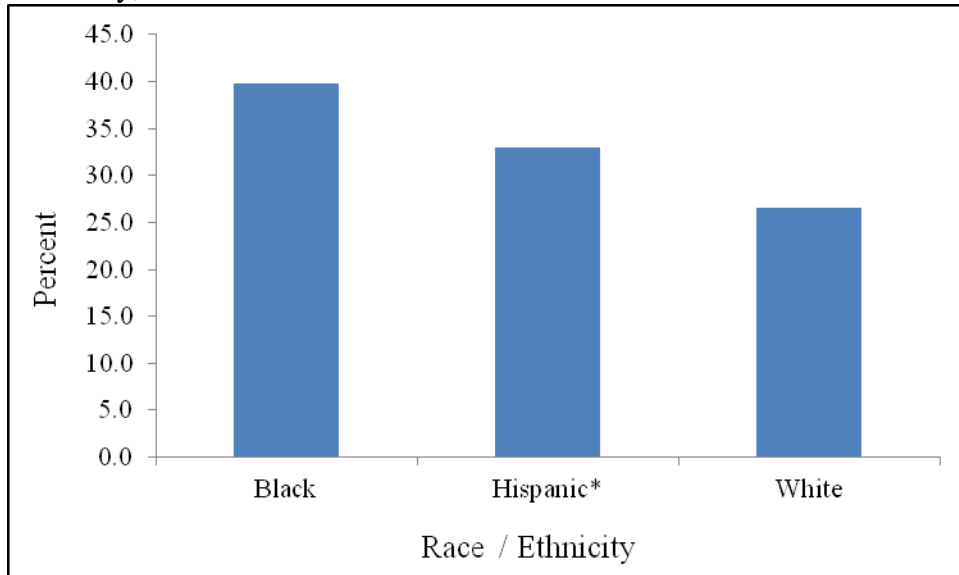
Chapter VIII: Risk Factors

Obesity

Obesity increases the risk of many chronic diseases such as diabetes, heart disease, and cancer. In 2010, 30.2 percent of Indiana's adults were considered to be obese based on a body mass index (BMI) greater than or equal to 30 calculated from self-reported height and weight. Black (39.8%) and Hispanic adults (33.0%) had a higher prevalence of obesity than white adults (29.6%) (Figure 35).

Figure 35. Percent of Adults Considered to be Obese (BMI greater than or equal to 30**) by Race and

Ethnicity, Indiana – 2010



*Hispanic can be of any race.

**BMI calculated from self-reported height and weight

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team 2010 BRFSS

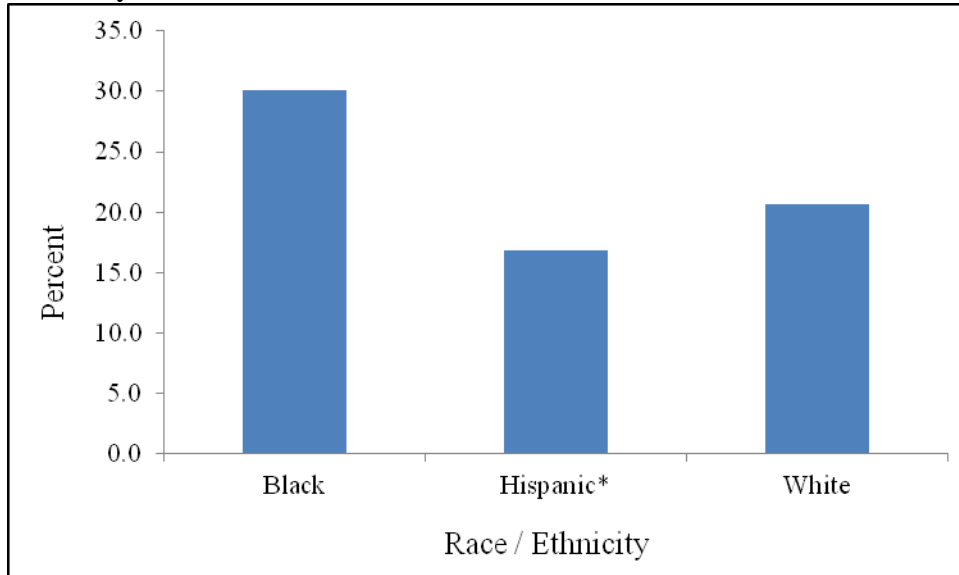
The Healthy People 2020 objective related to adult obesity is:

- Reduce percent of adults who are obese to 30.6 percent.

Smoking

Smoking is the most preventable cause of premature death in the U.S., and is responsible for about 30% of all cancer deaths. Black adults (30.1%) had a higher smoking prevalence than white adults (20.6%) in 2010. The percent of Hispanic adults (16.8%) who were current cigarette smokers was not significantly different than black adult smokers (Figure 36).

Figure 36. Percent of Adults Who Reported Being Current Cigarette Smokers, by Race and Ethnicity, Indiana – 2010



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team 2010 BRFSS

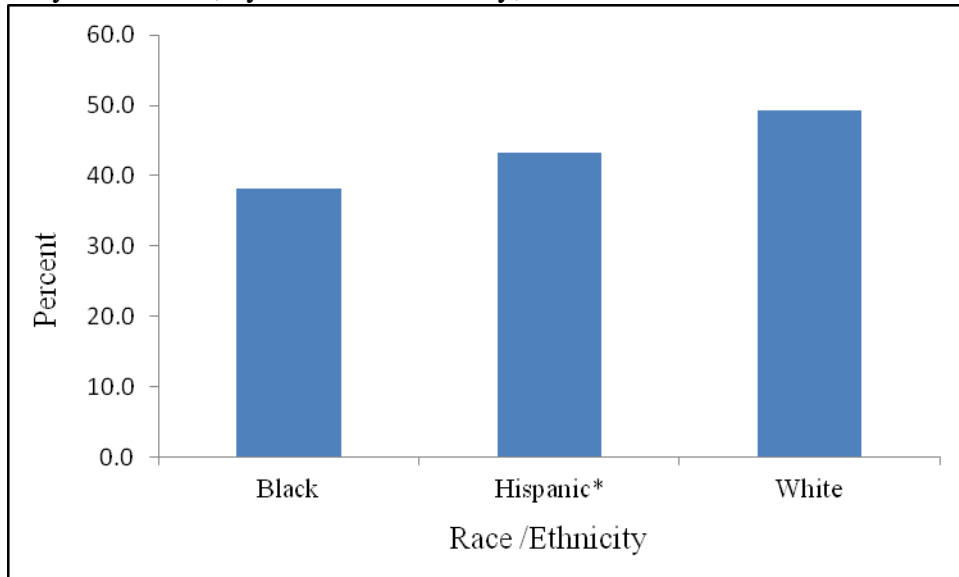
The Healthy People 2020 objective related to current cigarette smoking among adults is:

- Reduce percent of adults aged 18 years and older who are current cigarette smokers to 12.0 percent.

Physical Activity

Black adults (38.1%) were less likely than white adults (49.2%) to report 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week (Figure 37) in 2009. The prevalence for Hispanic adults (43.3%) was not significantly different than white or black adults.

Figure 37. Percent of Adults Who Reported 30+ Minutes of Moderate Physical Activity Five or More Days Per Week, or Vigorous Physical Activity for 20+ Minutes Three or More Days Per Week, by Race and Ethnicity, Indiana - 2010



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team, 2009 BRFSS

The Healthy People 2020 objective related to physical activity for adults is:

- Increase the proportion of adults who engage in aerobic physical activity of at least moderate intensity for at least 150 minutes/week, or 75 minutes/week of vigorous intensity, or an equivalent combination, to 47.9 percent.

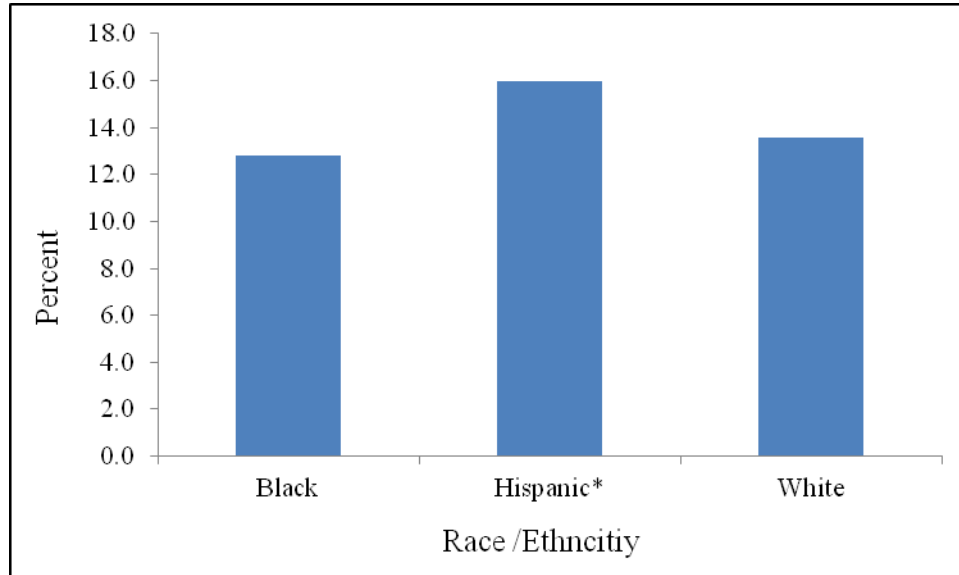
Fruit and Vegetable Consumption

During 2009, the prevalence of adults who reported consuming fruits and vegetables five times or more per day was about the same for black (20.3%), white (21.6%), and Hispanic (24.6%) adults.

Drinking

Binge drinking is described as males having five or more drinks on one occasion and females having four or more drinks on one occasion. In 2010, the prevalence of binge drinking was similar among Hispanic (16.0%), white (13.6%) and black (12.8%) adults (Figure 38).

Figure 38. Percent of Adults Who Reported Binge Drinking by Race and Ethnicity, Indiana – 2010



*Hispanic can be of any race.

Source: Indiana State Department of Health, Office of Minority Health, September 2011. Original data obtained from Indiana State Department of Health, Public Health and Preparedness Commission, Data Analysis Team, 2009 BRFSS

Chapter IX: Summary of Progress

It has been 10 years since the Healthy Indiana Minority Health Plan was initiated by ISDH. The following shows Indiana's progress toward achieving the plan's targeted objectives for each focus area - infant mortality, heart disease, cancer, stroke, diabetes, asthma, and HIV/AIDS. The information contained in this report was obtained from a variety of sources and it is the most current data available at the time of writing of this report (<http://www.in.gov/isdh/23980.htm>).

Infant Mortality

Four objectives related to infant mortality and birth outcomes were outlined in the Healthy Indiana Minority Health Plan. Objective 1.1 was moving toward its target. Objectives 1.2 and 1.4 were moving away from their targets. Data were unavailable to measure progress of objective 1.3.

Infant Mortality Objectives	Current Data	Data Source
Objective 1.1: Reduce infant deaths among Indiana's black or African American population from 15.9 deaths per 1,000 live births (2000) to 6.7 per 1,000 live births (rate for Indiana's white population in 2000).	By 2008, the infant mortality rate for blacks had decreased to 14.9 deaths per 1,000 live births, moving toward the plan's target objective of 6.7 deaths per 1,000 live births (rate for Indiana's white population during 2000).	ISDH 2008 Mortality Report
Objective 1.2: Reduce the percentage of low birth weight infants among Indiana's black or African American population from 12.7 percent of live births (2000) to 6.7 percent per 1,000 live births (reduce to rate of Indiana's white population).	From 2004 to 2008, the percent of low birth weight black infants increased from 13.7 to 14.1 percent of live births. This is moving away from the targeted objective.	ISDH 2008 Natality Report
Objective 1.3: Reduce the percentage of low birth weight infants among Indiana's Asian or Pacific Islander population from 7.3 percent of live births (2000) to 6.7 percent per 1,000 live births (reduce to percent for Indiana's white population).	There is insufficient data on the Asian or Pacific Islander population to address this target objective.	
Objective 1.4: Reduce very low birth weight (VLBW) among Indiana's black or African American population from 2.9% of live births (2000) to 1.2% of live births (percent for Indiana's white populations)	In 2008, the percent of very low birth weight black infants was 3.1%, moving away from the targeted objective.	ISDH 2008 Natality Report

Heart Disease

Seven objectives for heart disease were outlined in the Healthy Indiana Minority Health Plan. Objectives 2.1 and 2.2 were met. Objective 2.3 showed no change. Objective 2.4 was moving away from its target. There was insufficient data to measure objective 2.5. Objectives 2.6 and 2.7 were moving toward their targets.

Heart Disease Objectives	Current Data	Data Source
<p>Objective 2.1: Reduce coronary heart disease deaths among Indiana’s black or African American population from 243.5 coronary heart disease deaths per 100,000 (2000) to 170.5 deaths per 100,000 (reduce to InMHAC target of 30% improvement).</p>	<p>The overall death rate due to coronary heart disease has decreased in Indiana. The death rate due to heart disease among blacks is has met and exceeded the targeted objective. From 2004 to 2008, death rates due coronary heart disease among blacks decreased from 274.3 to 150.8 (coronary) deaths per 100,000.</p>	<p>2008 Mortality Report</p>
<p>Objective 2.2: Reduce coronary heart disease deaths among Indiana’s Hispanic/Latino population from 173.2 deaths per 100,000 to 161.1 deaths per 100,000.</p>	<p>The targeted objective for heart disease deaths among Hispanics has been met and exceeded. In 2008, Hispanics had an age-adjusted death rate due to coronary heart disease of 61.9 deaths per 100,000.</p>	<p>2008 Mortality Report</p>
<p>Objective 2.3: Reduce the proportion of adults among Indiana’s black or African American adult population aged 20 years and older (2001) with high blood pressure from 35.6% to 16.0% (reduce to HP2010 target).</p>	<p>In 2009, 35.5 percent of black adults ages 18+ reported they had been told by a health professional that they had high blood pressure. This targeted objective showed no change.</p>	<p>2009 BRFSS</p>
<p>Objective 2.4: Reduce the proportion of adults among Indiana’s black or African American population with high total blood cholesterol levels from 20.5 % (2001) to 17.0 % (reduce to HP2010 target).</p>	<p>In 2009, 34.7 percent of black adults reported ever being told by a health professional that they have high cholesterol, moving away from the targeted objective.</p>	<p>2009 BRFSS</p>
<p>Objective 2.5: Reduce the proportion of adults among Indiana’s Hispanic or Latino population with high total blood cholesterol levels from 28.4 % (2001) to 17.0 percent (reduce to HP2010 target).</p>	<p>In 2009, the proportion of adult Hispanics with high cholesterol was suppressed because the data was unstable. Less than 50 responses or the half-width of the 95% confidence intervals is >10. There is insufficient data on the Hispanic or Latino population to address this target objective.</p>	<p>2009 BRFSS</p>

Objective 2.6: Increase the proportion of adults among Indiana’s black or African American adult population, 18 years and older, who have had their blood cholesterol checked within the preceding 5 years from 68.5% (2003) to 85% (increase to InMHAC target)	By 2009, the percent of black adults, 18 years and older, who have had their blood cholesterol checked within the last 5 years had increased to 72.3%, moving toward the target objective.	2009 BRFSS
Objective 2.7: Increase the proportion of adults among Indiana’s Hispanic adult population, 18 years and older, who have had their blood cholesterol checked within the preceding 5 years from 47.4% (2003) to 85% (increase to InMHAC target).	In 2009, the percent of Hispanic adults who have had their blood cholesterol checked within the last 5 years has increased, moving toward the target objective.	2009 BRFSS

Stroke

Two objectives related to stroke were included in the Healthy Indiana Minority Health Plan. Objective 3.1 was moving toward its target and objective 3.2 met its target.

Stroke Objectives	Current Data	Data Source
Objective 3.1: Reduce stroke deaths among Indiana’s black or African American population from 92.3 to 55.4 deaths per 100,000 (reduce to InMHAC target of 40% improvements).	Death rates due to stroke among blacks decreased from 65.8 to 62.2 deaths per 100,000 from 2004 to 2008, moving toward the targeted objective.	2008 Mortality Report
Objective 3.2: Reduce stroke deaths among Indiana’s Hispanic population from 62.5 to 53.1 deaths per 100,000 (reduce to InMHAC target of 15% improvement).	This targeted objective was met and exceeded. From 2004 to 2008, the death rates due to stroke among Hispanics decreased from 43.1 to 21.0 deaths per 100,000.	2008 Mortality Report

Cancer

Seven objectives for cancer were included in the Healthy Indiana Minority Health Plan. Objectives 4.1, 4.2, 4.3, and 4.6 were moving toward their targets. Objectives 4.4, 4.5, and 4.7 met and exceeded their targets.

Cancer Objectives	Current Data	Data Source
Objective 4.1: Reduce the overall cancer death rate among Indiana’s black or African American	In 2008, blacks had death rate from cancer of 221.2 deaths per	2008 Mortality

population from 274.9 cancer deaths per 100,000 to 192.4 deaths per 100,000 (reduce to InMHAC target of 30% improvement).	100,000, moving toward the targeted objective.	Report
Objective 4.2: Reduce the lung and bronchus cancer death rate for Indiana's black or African American male population (2000) from 110.7 deaths per 100,000 to 86.3 deaths (reduce to HP2010 target of 22% improvement).	The death rate due to lung and bronchus cancer among black males was 92.7 deaths per 100,000 in 2008, progressing toward the targeted objective.	Indiana Cancer Registry
Objective 4.3: Reduce the lung and bronchus cancer death rate for Indiana's black or African American female population (2000) from 53.7 deaths to 41.9 deaths per 100,000 (reduce to HP2010 target of 22% improvement).	The death rate due to lung and bronchus cancer among black females was 42.9 deaths per 100,000 in 2008, progressing toward the targeted objective.	Indiana Cancer Registry
Objective 4.4: Reduce the prostate cancer death rate among Indiana's Black or African American male population from 70.8 deaths per 100,000 (2000) to 44.3 deaths per 100,000 (reduce to InMHAC target of 40% improvement).	The death rate due to prostate cancer among black males was 33.4 deaths per 100,000 in 2008. This targeted objective was met and exceeded.	Indiana Cancer Registry
Objective 4.5: Reduce the colorectal cancer death rate for Indiana's Black or African American male population from 43.6 colorectal cancer deaths per 100,000 (2000) to 28.3 deaths per 100,000.	This targeted objective was met and exceeded. The death rate due to colorectal cancer among black males was 24.4 deaths per 100,000 in 2008.	Indiana Cancer Registry
Objective 4.6: Reduce the colorectal cancer death rate for Indiana's Black or African American female population from 21.4 colorectal cancer deaths per 100,000 (2000) to 14.1 deaths per 100,000 (reduce to HP2010 target of 34% improvement).	The death rate due to colorectal cancer among black females was 20.4 deaths per 100,000 in 2008, moving toward the targeted objective.	Indiana Cancer Registry
Objective 4.7: Reduce the breast cancer death rate for Indiana's Black or African American female population from 34.7 deaths per 100,000 (2000) to 31.9 deaths per 100,000 (reduce to HP2010 target of 20% improvement).	The death rate due to breast cancer among black females was 27.7 deaths per 100,000 in 2008. This targeted objective was met and exceeded.	Indiana Cancer Registry

Diabetes

Three diabetes objectives were identified in the Healthy Indiana Minority Health Plan. Objective 5.1 was moving toward its targets. There was no reliable data to measure objective 5.2. Objective 5.3 could not be compared with current existing data.

Diabetes Objectives	Current Data	Data Source
Objective 5.1: Reduce the diabetes death rate among Indiana’s black or African American population from 58.7 deaths per 100,000 (2000) to 29.3 deaths per 100,000 (reduce to InMHAC target of 50% improvement).	The death rate due to diabetes among blacks was 38.5 deaths per 100,000 in 2008, moving toward the targeted objective.	2008 Mortality Report
Objective 5.2: Reduce the diabetes death rate among Indiana’s Hispanic population from 51.7 deaths per 100,000 to 25.9 deaths per 100,000 (reduce to InMHAC target of 50% improvement).	In 2008, the diabetes death rate for the Hispanic population was suppressed because the data was unstable (less than 20 deaths).	2008 Mortality Report
Objective 5.3: Reduce the prevalence of diabetes among Indiana’s Black or African American population from 53.0 cases to 26.5 cases per 1,000 (reduce to InMHAC target of 50% improvement).	In 2010, the prevalence of diabetes among black adults was 13.9 percent. The data source used for the targeted objective is not known. It does not appear to be the same data source. Therefore, the two measures cannot be compared to each other.	2010 BRFSS

Asthma

One objective for asthma was included in the Healthy Indiana Minority Health Plan. There were insufficient data to measure targeted objective 6.1.

Asthma Objective	Current Data	Data Source
Objective 6.1: Reduce asthma deaths among Indiana’s black or African American population from 6.3 to 3.8 deaths per 100,000 (reduce to InMHAC target of 40% improvement)	In 2008, the asthma death rate for blacks was suppressed because the data was unstable (less than 20 deaths). .	2008 Mortality Report

HIV/AIDS

Two HIV/AIDS objectives were outlined in the Healthy Indiana Minority Health Plan. Objectives 7.1 and 7.2 were moving away from their targets.

HIV/AIDS Objectives	Current Data	Data Source
Objective 7.1: Reduce the prevalence of HIV/AIDS among Indiana’s black or African American population from 416.6 cases of HIV/AIDS per 100,000 (2000) to	In 2009, the prevalence of HIV/AIDS among blacks was 579.8 cases per 100,000, moving	ISDH, HIV/STD/Viral Hepatitis Division, 2010 HIV/AIDS Epidemiology Profile

250.0 cases per 100,000 (reduce to InMHAC target of 40% improvement).	away from the targeted objective.	
Objective 7.2: Reduce the prevalence of HIV/AIDS among Indiana’s Hispanic population from 131.9 cases per 100,000 (2002) to 79.1 cases per 100,000 (reduce to InMHAC target of 40% improvement).	In 2009, the prevalence of HIV/AIDS among Hispanics was 201.1 cases per 100,000, moving away from the targeted objective.	ISDH, HIV/STD/Viral Hepatitis Division, 2010 HIV/AIDS Epidemiology Profile

Twenty-six objectives were reviewed from the Healthy Indiana Minority Health Plan. Of those objectives, five were moving away from their targets; nine objectives were progressing toward their targets; and six objectives met and exceeded their targets. There was no change in one objective. For four objectives, there was insufficient and/or unstable data for specific populations. The data source for one objective was unknown and it could be compared with the current data.

Chapter X. Recommendations

As a result of growing health disparities seen throughout the U.S., the Department of Health and Human Services Office of Minority Health (DHHS-OMH) wanted to produce a nationwide, cohesive, and sustainable community-driven initiative that would allow the country and each state to eliminate health disparities and achieve health equity. In 2006, the DHHS-OMH started regional conversations to formulate these different objectives and plans. In 2010, the National Partnership for Action (NPA) was established. The intent was to change the paradigm of strategy development by vesting individuals with identifying and helping to develop key procedures for a coordinated national response. The "bottom up" approach included Regional Conversation meetings that were preceded by smaller community “voices” meetings. The information from these meetings was reviewed for common and priority actions. These actions were subsequently used as the basis for a National Visionary Panel, an implementation strategy workgroup, an evaluation strategy workgroup, and national health disparities plan consensus meeting. As a result of the work done to develop the NPA, Regional Health Equity Boards were established. These boards are comprised with experts from community, state, business, and education arenas. Each board has 30 members. Indiana is part of the Region V board. The director of the ISDH Office of Minority Health, Antoniette Holt, was recently selected to be member of the Region V board. Other members include: Raju Chinthala, Asian Services of Indiana; E. Angles Martinez Mier, IU School of Dentistry; and Waldo Mikels-Carraso, Institute for Latino Studies at University of Notre Dame.

In April 2011, the NPA to End Health Disparities was released. The NPA has five overarching goals: awareness, leadership, healthy system and life experience, cultural and linguistic competency, and data, research and evaluation.

NPA Goal 1: AWARENESS - Increase awareness of the significance of health disparities, their impact on the nation, and the actions necessary to improve health outcomes for racial, ethnic, and underserved populations.

Recommendation 1.1: Establish and maintain collaborations with institutions and community-based organizations, such as the Indiana Minority Health Partners, to focus on improving the health of racial and ethnic minorities in Indiana.

Action 1.1: The ISDH/OMH will continue to actively recruit new organizations, facilitate monthly meetings, and support the annual Minority Health Conference. The goal of the conference is to provide information on minority health issues that are rapidly growing but are not addressed in day-to-day community, education, business and governmental leaders.

NPA Goal 2: LEADERSHIP - Strengthen and broaden leadership for addressing health disparities at all levels.

Recommendation 2.1: Promote workforce diversity by supporting efforts to recruit and retain minority students, especially those from underserved areas, into health professions. Currently, the ISHD /OMH receives funding through the DHHS-OMH State Partnership to Improve Minority Health grant which funds the Enhancing Minority Partnership Opportunities; Working to Eliminate Racial and Ethnic Disparities (EMPOWERED) program. The purpose of the program is to recruit and retain minority students into health professions. EMPOWERED targets sixth and seventh grade minority students in Allen, Lake and Marion counties and provides them with information about health careers, health professional mentors, and health professionals clubs.

Rationale: A focused approach of recruiting and retaining minority students can help diversify Indiana's health care workforce.

Action 2.1: The ISDH/OMH will lead efforts to increase funding for the EMPOWERED program to expand the program to other counties.

NPA Goal 3: HEALTH SYSTEM AND LIFE EXPERIENCE - Improve health and healthcare outcomes for racial, ethnic, and underserved populations.

Recommendation 3.1: Support the expansion of existing health coverage programs to minority populations.

Rationale: Health outcomes for minority and underserved populations can be improved by reducing barriers that limit access to healthcare.

Action 3.1: Each year the ISDH sponsors the INShape Indiana Black & Minority Health Fair during the Indiana Black Expo Summer Celebration. This event provides approximately \$1,000 worth of free health screenings. ISDH/OMH will lead efforts to increase funding to expand the screenings offered at the INShape Indiana Black & Minority Health Fair.

Recommendation 3.2: Support efforts to improve health literacy in the state.

Rationale: The inability to communicate in English is the primary barrier to accessing health care and understanding health information. The comprehension (or lack thereof) of health information contributes to adverse health outcomes.

Action 3.2: The IMHC will continue, with support from ISDH-OMH, to conduct a health literacy study to determine the extent of the problem in Indiana.

NPA Goal 4: CULTURAL AND LINGUISTIC COMPETENCY - Improve cultural and linguistic competency and the diversity of the health-related workforce.

Recommendation 4.1: Continue to support current cultural competency trainings with health care professionals. Indiana's health care workforce should be culturally competent and reflect the state's racial and ethnic composition.

Rationale: Cultural issues can hinder communication between health professionals and minority patients, as well as negatively impact health outcomes. Health professionals need to be culturally competent, i.e., respectful and responsive to cultural beliefs that influence the health practices of racial and ethnic minority patients.

Action 4.1: The IMHC and ISDH-OMH will continue to partner to increase cultural and linguistic appropriate knowledge and skills to health care providers via the annual cultural competency conference, webinars, and one-on-one technical assistance, as well as introductory, intermediate, and advance level trainings.

Recommendation 4.2: Support efforts to create new language translation services and expand existing services to health professionals and patients.

Rationale: The inability to communicate in English is the primary barrier to accessing health care and understanding health information. Health information for people with limited English proficiency needs to be communicated clearly in their primary language.

Action 4.2: The ISDH-OMH will continue to identify new language and translation services to health professionals and patients, as well as continue to partner with existing service providers.

NPA Goal 5: DATA, RESEARCH, AND EVALUATION - Improve data availability, and coordination, utilization and diffusion of research and evaluation outcomes.

Recommendation 5.1: Support entities like the IMHC's Racial and Ethnic Minority Epidemiology Center (REMEC) and other organizations, which provide the state data and information for reducing of health disparities through research and program evaluation. Currently, the ISDH-OMH, Family and Social Services Administration (FSSA), and the Indiana University Bowen Research Center are partnering on the State Master Research Plan. The goal of the project is to assess and improve collection and distribution of quality health care data on minorities in Indiana. Key stakeholders throughout the state were identified and convened to develop priority areas.

Rationale: In order to develop effective data-driven programs and policies, complete and accurate minority health data, as well as standardized reporting of race and ethnicity, are needed.

Action 5.1: The State Master Research Plan committee, will continue with the following next steps of the project:

- Transition to a minority health research consortium
- Identify, develop and implement joint research projects
- Identify resources to support research projects
- Create a forum for sharing research
- Influence policies

Action 5.2: IMHC will continue to lead efforts on assessing race, ethnicity and language data collection and standardization.

Chapter XI: Conclusion

This report illustrates the progress Indiana has made in reducing health disparities in the 10 years since the Healthy Indiana Minority Health Plan was developed. Infant mortality has declined over the years, yet blacks persistently have the highest infant mortality rate in the state. Similarly, the overall death rate has decreased, but blacks continue to have the highest overall mortality rate. There is still much work to be done in addressing the cradle to grave health disparities that exist in Indiana. As Indiana becomes more racially and ethnically diverse and its populations live longer, the gaps in health status and health outcomes among racial and ethnic minorities will continue to widen. The Interagency State Council on Black and Minority Health has developed recommendations centered around the NPA goals that will allow the state to continue its progress in reducing health disparities and meet the objectives outlined in the Healthy People 2020. The Interagency State Council on Black and Minority Health commits to supporting partners, stakeholders, and leaders in carrying out these recommendations.

Data Limitations

The Epidemiology Resource Center (ERC) follows the "Rule of Twenty" when examining rates. There should be at least twenty events in the numerator in order to produce a stable rate. When the numerator is less than 20, the rate is unstable, meaning that a small change in the numerator can lead to a large change in the rate from one year to the next. Unstable rates do not lend themselves to being used to make decisions and how data are interpreted is very important to the decision-making process. Misinterpretation of the data can lead to incorrect assumptions about health status.

Blacks or African-Americans are the largest minority group in Indiana. There is limited published data on American Indians, Asians, and Hispanics, due to their smaller numbers. Data on these minority groups are often not reported or referred to as "statistically insignificant", because the rates are so low. Therefore, much of the data in this report focuses on the disparities between whites and blacks or African-Americans.

Accurate and quality data are needed to detect and eliminate health disparities. Therefore, health disparities data is impacted by the lack of standardized collection and reporting of race and

ethnicity. The consistent reporting of race and ethnicity impacts health disparities. The following are examples of how race and ethnicity data is collected in Indiana.

- Hospital admissions – observation vs. self-report
- Birth records – based on mother’s race (can select more than one race)
 - Births are based on the reported race of the mother. Infant deaths are based on the reported race of the infant.
- Death records – funeral directors are responsible for completing most of the information on the death certificate with the assistance of an informant who is usually a family member.
- Behavioral Risk Factor Surveillance System – based on self-reported survey data
- U.S. Census Bureau – based on self-reported data
 - The data contained in this report is based on individuals who identified themselves as one race alone.

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. The BRFSS relies on self-reported data. This type of survey has certain limitations that should be understood when interpreting the data. Many times, respondents have the tendency to under-report behaviors that may be considered socially unacceptable (e.g., smoking, heavy alcohol use). Conversely, respondents may over-report behaviors that are desirable (e.g., physical activity, nutrition).

The National Immunization Survey (NIS) has a sample size of about 30,000 children. However, the sample is not the entire population, and thus sample estimates and population values are likely to be different. The magnitude of the likely difference is quantified through the 95% confidence interval. For example, in 1998, the vaccination coverage estimate for 3 doses of poliovirus vaccine in Alabama was 91.4% +/- 3.2%. This means that the true coverage was probably between 88.2% and 94.6%. When comparing two estimates (e.g., between states or between years), an overlap in the confidence intervals indicates that the observed difference might be due to chance.

Technical Notes

Age-Adjusted Rate – When comparing rates over time or across different populations, crude rates (the number of deaths per 100,000 persons) can be misleading, because differences in the age distribution of the various populations are not considered. Since death is age-dependent, the comparison of crude rates of death can be especially deceptive. Age adjustment, using the direct method, is the application of age-specific rates in a population of interest to a standardized age distribution in order to eliminate differences in observed rates that result from age differences in population composition. According to the National Center for Health Statistics (NCHS), age adjustment is usually done when comparing two or more populations at one point in time or one population at two or more points in time.

The direct method of adjustment was used to produce the age-adjusted rates for this report. In this method, the population is first divided into reasonably homogenous age ranges, and the age-specific rate is calculated for each age range. Then, each age-specific rate is weighted by multiplying it by the proportion of the standard population in the respective age group. The age-adjusted rate is the sum of the weighted age-specific rates. Further information regarding the

calculation of age-adjusted rates can be found in *The Methods and Materials of Demography*, by Henry S. Shryock, Jacob S. Siegel and Associates, U.S. Department of Commerce. Age adjustment by the direct method requires use of a standard age distribution. The 2000 population replaces the 1940 U.S. population for age adjusting mortality statistics. The 2000 standard population also replaces the 1970 civilian non-institutionalized population and 1980 U.S. resident population, which previously had been used as standard age distributions for age adjusting estimates from NCHS surveys. The 2000 standard has implications for race and ethnic differentials in mortality.

Source: National Vital Statistics Report, Volume 47, Number 3

Retrieved from http://www.cdc.gov/nchs/data/nvsr/nvsr47/nvs47_03pdf

“Rates for the American Indian/Alaskan (AIAN) and Asian/Pacific Islander populations should be interpreted with caution because of reporting problems with respect to correct identification of race on the death certificate and in the population censuses and surveys.”

[NVSS]

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual random digit-dial telephone survey of adults aged 18 years and older. The survey is conducted through a cooperative agreement with the Centers for Disease Control and Prevention (CDC). All 50 states and the District of Columbia participate. The BRFSS is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and premature death. Data are collected monthly in all 50 states, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and Guam. More than 400,000 adults are interviewed each year making the BRFSS the largest telephone health survey in the world. States use BRFSS data to identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs. Indiana uses the system to monitor statewide progress toward *Healthy People 2020* objectives in tobacco use, cardiovascular disease, weight, physical activity, fruit and vegetable consumption, breast and cervical cancer, and immunization.

Healthy People 2020 provides science-based, 10-year national objectives for improving the health of all Americans. For three decades, Healthy People has established benchmarks and monitored progress over time in order to:

- Encourage collaborations across sectors.

- Guide individuals toward making informed health decisions.

- Measure the impact of prevention activities.

Through a national consensus process, the DHHS identified specific objectives for improving the health of the Nation, established baseline values for the objectives, and set specific targets to be achieved by 2020. The Nation’s Public Health Service agencies and other federal agencies are involved in pursuing this agenda. Progress toward the achievement of these goals and objectives is monitored by the CDC NCHS.

Infant Mortality is deaths in children under the age of 1 year.

Life Expectancy at birth represents the average number of years that a group of infants would live if the infants were to experience throughout life the age-specific death rates present in the year of birth.

Low Birth Weight is an infant weighing less than 2,500 grams (5 pounds, 8 ounces) at birth.

National Immunization Survey (NIS) is sponsored by the CDC National Center for Immunizations and Respiratory Diseases (NCIRD) and conducted jointly by NCIRD and the NCHS. Beginning in April, 1994, the NIS is a list-assisted random-digit-dialing telephone survey followed by a mailed survey to children's immunization providers to monitor childhood immunization coverage.

Reliability of Rates refers to some of the rates shown in this report, which are based on small populations, a small number of deaths, or both. The rates based on small numbers may be unstable due to random chance factors and should be used with caution. Rates for counties with small populations also may vary considerably from year to year. In addition, allowances must be made for differences in age distributions, etc., when rates are not age-adjusted.

Very Low Birth Weight is an infant weighing less than 1,500 grams (3 pounds, 3 ounces) at birth.

Years of Potential Life Lost is a measurement of premature mortality. According to the CDC, YPLL is presented for persons less than 75 years of age because the average life expectancy in the United States is over 75 years. For example, the death of a 25-year-old would account for 50 years of lost life, while the death of a 60-year-old would account for 15 years.

YPLL-75 is calculated using the following eight age groups: under 1 year, 1-14 years, 15-24 years, 25-34 years, 35-44 years, 45-54 years, 55-64 years, 65-74 years. The number of deaths for each age group is multiplied by the years of life lost, calculated as the difference between age 75 years and the midpoint of the age group. For the eight age groups the midpoints are 0.5, 7.5, 19.5, 29.5, 39.5, 49.5, 59.5, and 69.5. For example, the death of a person 15-24 years of age counts as 55.5 years of life lost. Years of potential life lost is derived by summing years of life lost over all age groups.

YPLL rates can assist in the performance of three basic public health functions:

- 1.) The establishment of research and resource priorities;
- 2.) The surveillance trends in premature mortality, over time and;
- 3.) The evaluation of the effectiveness of program interventions.

YPLL can be used at national, state, and local levels to target public health efforts toward populations at risk for certain diseases or conditions.

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