



## What is the Impact of Cancer on African Americans in Indiana?

Table 13. Burden of Cancer among African Americans — Indiana, 2008–2012

|                          | Average number of cases per year (2008–2012) | Rate per 100,000 people* (2008–2012) | Number of cases (2012) | Rate per 100,000 people* (2012) |
|--------------------------|--|--------------------------------------|------------------------|---------------------------------|
| <b>Indiana Incidence</b> | 2,338  | 479.6                                | 2,181                  | 430.8                           |
| <b>Indiana Mortality</b> | 995  | 221.2                                | 1,063                  | 228.6                           |

\* Age-adjusted

Source: Indiana State Cancer Registry

# CANCER FACTS & FIGURES FOR AFRICAN AMERICANS

## Bottom Line

African Americans have the highest mortality rate and shortest survival of any racial and ethnic group in the US for most cancers.<sup>1</sup> The causes of these inequalities are complex and are thought to reflect social and economic disparities more than biologic differences associated with race. These include inequities in work, wealth, income, education, housing, and overall standard of living, as well as barriers to high-quality cancer prevention, early detection, and treatment services.<sup>1</sup> In Indiana, while the overall racial disparities in cancer incidence and mortality rates have been gradually decreasing, during 2008–2012 African Americans still had almost a four percent greater incidence of cancer than whites, and over a 21 percent higher mortality rate.

## What Types of Cancer Impact the African American Community the Most?

Table 14 provides an overview of the leading types of cancer that impacted African Americans in Indiana during 2012. Prostate cancer was the most common cancer diagnosed in African American males. Breast cancer was the most common cancer diagnosed in African American females. The leading cause of cancer death among males and females was lung cancer. Colorectal cancer was the third leading cause of cancer deaths among males and third leading cause of cancer death for females. Breast cancer was the second leading cause of cancer death for females.

**Table 14. Leading Sites of New Cancer Cases and Deaths among African Americans by Sex — Indiana, 2012**

### Number (%) of New Cases

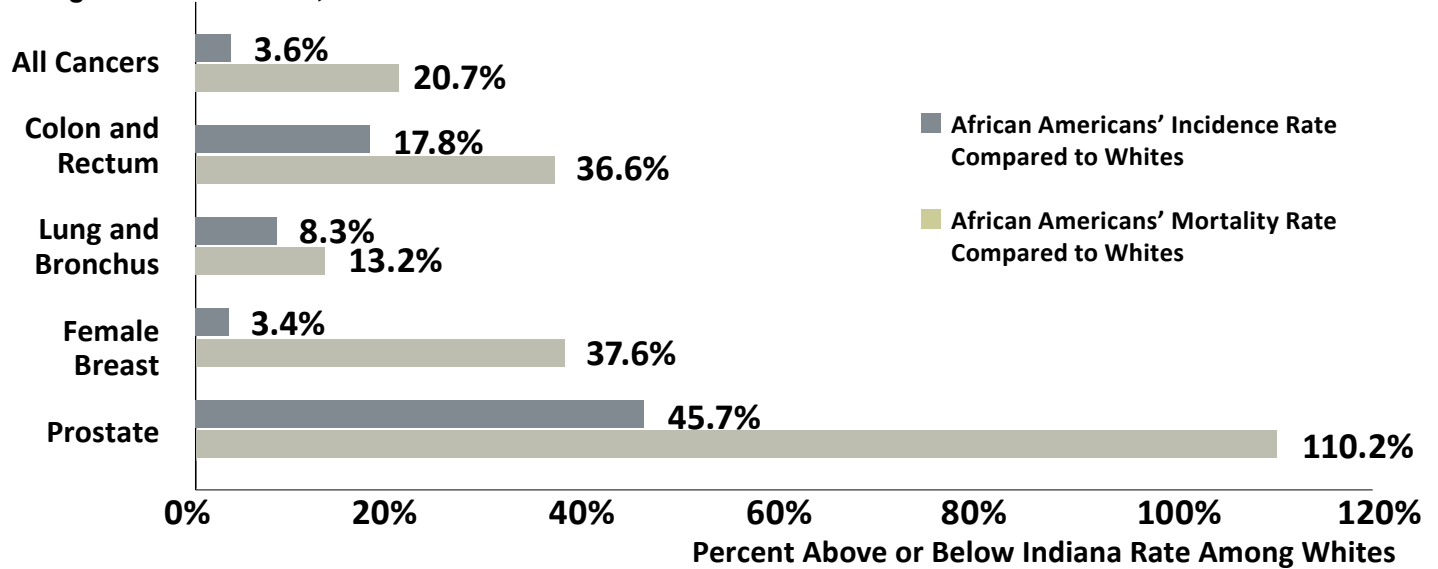
| Male                    | Count      | %     | Female                  | Count        | %     |
|-------------------------|------------|-------|-------------------------|--------------|-------|
| Prostate                | 257        | 26.1% | Breast                  | 359          | 30.0% |
| Lung and Bronchus       | 171        | 17.3% | Lung and Bronchus       | 148          | 12.4% |
| Colon and Rectum        | 94         | 9.5%  | Colon and Rectum        | 117          | 9.8%  |
| Kidney and Renal Pelvis | 59         | 6.0%  | Pancreas                | 42           | 3.5%  |
| Urinary Bladder         | 34         | 3.4%  | Non-Hodgkin Lymphoma    | 41           | 3.4%  |
| Pancreas                | 30         | 3.0%  | Thyroid                 | 29           | 2.4%  |
| Non-Hodgkin Lymphoma    | 29         | 2.9%  | Kidney and Renal Pelvis | 28           | 2.3%  |
| Oral Cavity and Pharynx | 27         | 2.7%  | Cervix Uteri            | 23           | 1.9%  |
| Leukemia                | 20         | 2.0%  | Ovary                   | 20           | 1.7%  |
| Melanoma of the Skin    | 2          | 0.2%  | Melanoma of the Skin    | 4            | 0.3%  |
| <b>All Sites</b>        | <b>986</b> |       | <b>All Sites</b>        | <b>1,195</b> |       |

### Number (%) of Deaths

| Male                    | Count      | %     | Female                  | Count      | %     |
|-------------------------|------------|-------|-------------------------|------------|-------|
| Lung and Bronchus       | 158        | 29.9% | Lung and Bronchus       | 148        | 27.7% |
| Prostate                | 65         | 12.3% | Breast                  | 98         | 18.4% |
| Colon and Rectum        | 53         | 10.0% | Colon and Rectum        | 56         | 10.5% |
| Pancreas                | 34         | 6.4%  | Pancreas                | 36         | 6.7%  |
| Liver                   | 30         | 5.7%  | Ovary                   | 21         | 3.9%  |
| Leukemia                | 18         | 3.4%  | Leukemia                | 16         | 3.0%  |
| Kidney and Renal Pelvis | 12         | 2.3%  | Non-Hodgkin Lymphoma    | 13         | 2.4%  |
| Non-Hodgkin Lymphoma    | 9          | 1.7%  | Cervix Uteri            | 11         | 2.1%  |
| Urinary Bladder         | 7          | 1.3%  | Kidney and Renal Pelvis | 7          | 1.3%  |
| Oral Cavity and Pharynx | 7          | 1.3%  | Urinary Bladder         | 6          | 1.1%  |
| <b>All Sites</b>        | <b>529</b> |       | <b>All Sites</b>        | <b>534</b> |       |

Source: Indiana State Cancer Registry

**Figure 28. Comparison of Cancer Incidence and Mortality (Death) Rates among African American to those among Whites — Indiana,\* 2008-2012**



\* Age-adjusted incidence and mortality rates are significantly elevated ( $P < .05$ ) among African Americans compared to whites for all cancer types except for female breast cancer incidence

Source: Indiana State Cancer Registry

### What are the Cancer Disparities in Indiana Relating to Race?

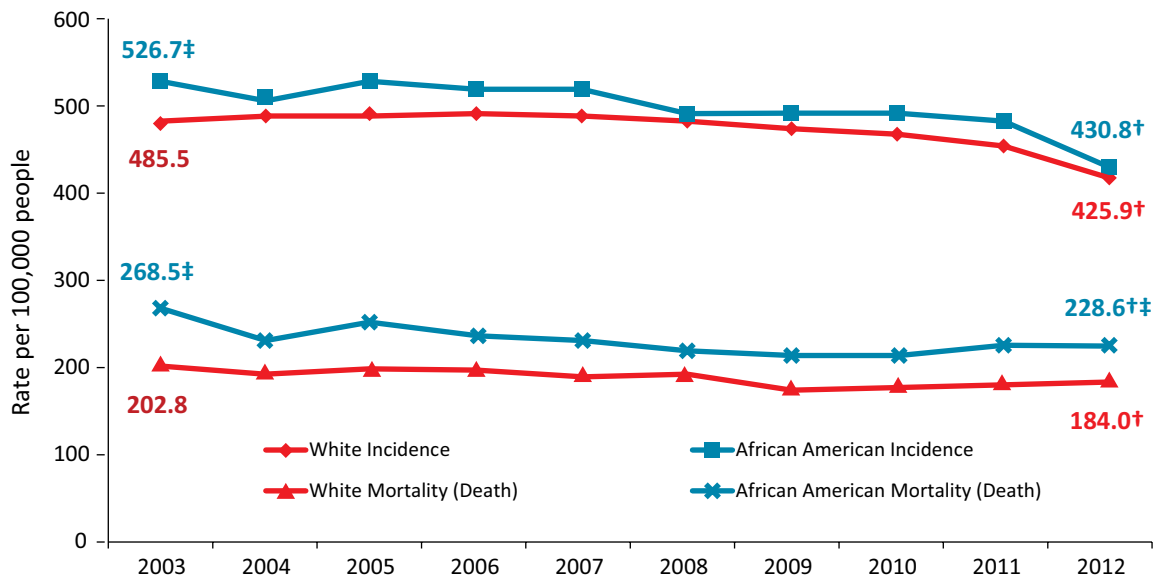
While African Americans, compared to whites, continue to be unequally burdened by cancer in Indiana [Figure 28], the disparities between the two groups have been gradually decreasing [Figure 29]. Despite these gains, continued work needs to be done to address the differences among the races, especially the difference in cancer mortality rates. Some additional information about the impact of specific cancer types among African Americans during 2008-2012 is provided below.

- Colon and Rectum Cancer.** In comparison to whites, African Americans had an 18 percent higher incidence rate (51.5 versus 43.7 cases per 100,000 people, respectively) and a 37 percent higher mortality rate for colon and rectum cancer (22.0 versus 16.1 deaths per 100,000 people, respectively). African American males, in particular, were at greater risk, as their age-adjusted incidence rate was 16 percent greater than white males (57.6 versus 49.6 cases per 100,000 males, respectively) and their mortality rate was 36 percent higher (26.7 versus 19.7 deaths per 100,000 males, respectively). African American females had similar rates to white males, but, compared to white females, they had a 22 percent greater incidence rate (47.2 versus 38.8 cases per 100,000 females, respectively) and a 43 percent greater mortality rate (19.0 versus 13.3 deaths per 100,000 females, respectively).
- Lung Cancer.** In comparison to whites, African Americans had an eight percent higher incidence rate (80.0 versus 73.9 cases per 100,000 people, respectively) and a 13 percent higher

mortality rate (64.3 versus 56.8 deaths per 100,000 persons, respectively). Additionally, the age-adjusted mortality rate for lung cancer was nearly two times greater for African American males compared to African American females (89.0 versus 47.4 deaths per 100,000 females, respectively).

- Prostate Cancer.** The age-adjusted incidence rate for prostate cancer was 46 percent higher among African American males compared to white males (146.3 versus 100.4 cases per 100,000 males, respectively). Moreover, the death rate for prostate cancer was more than two times greater (43.1 versus 20.5 deaths per 100,000 males, respectively).
- Breast Cancer.** African American females had similar incidence rates to white females for breast cancer (122.0 versus 118.0 cases per 100,000 females, respectively). However, the mortality rate for African American females was 38 percent high than the rate for white females (30.3 versus 21.8 deaths per 100,000 females, respectively). Breast cancers diagnosed in African American females are more likely to have factors associated with poor prognosis (*i.e.*, higher grade, advanced stage, and negative hormone estrogen[ER] and progesterone [PR] receptor status) than those diagnosed in white females. Studies have shown that certain reproductive patterns that are more common among African American females (*i.e.*, giving birth to more than one child, younger age at menarche, early age at first pregnancy), may be associated with increased risk for aggressive subtypes of breast cancer.<sup>1</sup>

**Figure 29. Cancer Incidence and Mortality (Death) Rates by Race\* — Indiana, 2003-2012**



\* Age-adjusted

† Rate is significantly lower than in 2003

‡ African American rate is significantly higher ( $P < .05$ ) than the white rate

Source: Indiana State Cancer Registry

### Can Cancer Be Prevented? — see the “Take Charge” box for additional information

Figure 30 describes the burden of some lifestyle and external factors among African American adults in Indiana. Additional information about the impact of cancer risk factors on African Americans in Indiana is provided below.

- Body Weight, Diet, and Physical Activity.** Scientific evidence suggests that nationally about one-third of cancer deaths are related to overweight or obesity, physical inactivity, and poor nutrition, and thus could be prevented.<sup>2</sup> In particular, being obese has been linked with increased risk for developing cancers of the breast (in postmenopausal females), colon, endometrial, kidney, and esophagus. In 2013, in Indiana, African American adults were 36 percent more likely than white adults to be considered obese based on body mass index (BMI) (41.7 percent versus 30.6 percent, respectively).<sup>3</sup> Additionally, 58 percent of African American adults did not get their recommended 150 minutes of exercise per week, and almost 80 percent failed to eat the recommended daily servings of fruits and vegetables (*i.e.*, 2 cups of fruit and 2½ cups of vegetables per day).<sup>3</sup>
- Tobacco.** Smoking is the most preventable cause of premature death in the US and is responsible for about 30 percent of all cancer deaths.<sup>4</sup> In 2013, 24.8 percent of African American adults were current smokers, with 26.4 percent of males and 23.4 percent of females reporting current smoking.<sup>3</sup>
- Health Care Coverage.** Uninsured and underinsured patients are substantially more likely to be diagnosed with cancer at a later stage, when treatment can be more

extensive and more costly.<sup>1</sup> In 2013, in Indiana, African American adults were 70 percent more likely than white adults to not see a doctor during the year because of cost (22.8 percent versus 13.4 percent, respectively) and African Americans, ages 18–64, were 66 percent more likely than white adults to not have any form of health care coverage (28.8 percent versus 17.3 percent, respectively).<sup>3</sup>

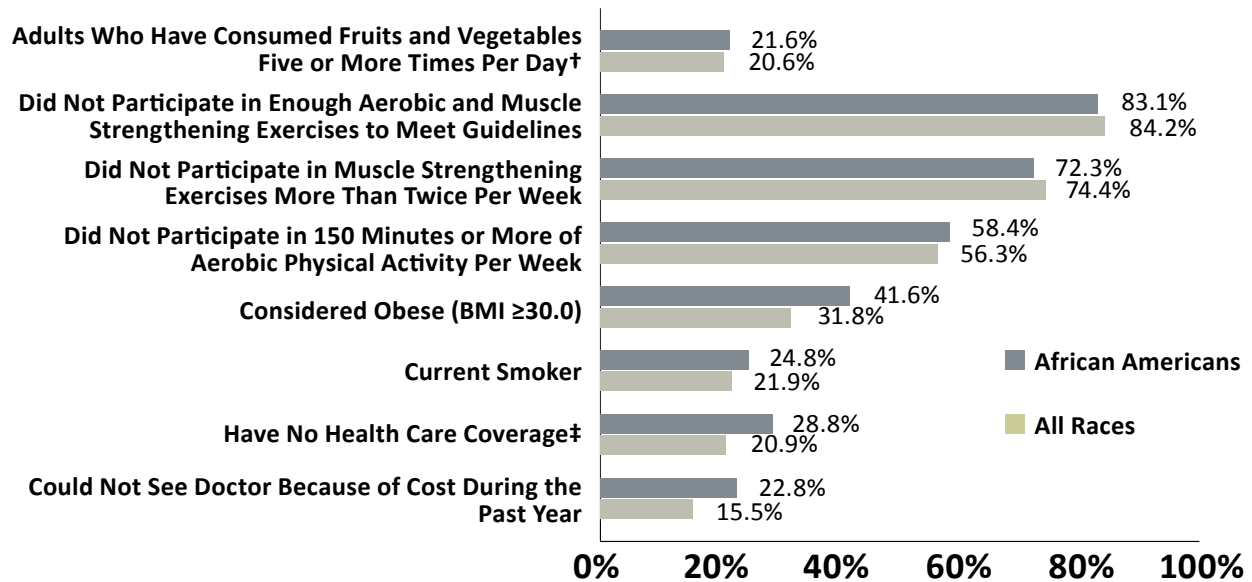
### Can Cancer Be Detected Early?

Early detection tests can lead to the prevention of cancer through the identification and removal of precancerous lesions, particularly for cancers of the cervix and colon and rectum. Screening can detect cancer at an earlier stage, which can reduce the extent of treatment, improve the chances of cure, extend life, and thereby improve the quality of life for cancer survivors. In general, race did not play a role in cancer screening rates among Indiana adults during 2012 [Figure 31].

### What Factors Influence Cancer Survival?

Despite having similar screening rates, African Americans are less likely than whites to survive five years at each stage of diagnosis [Figure 32] for most cancer types.<sup>2</sup> Based on data from the Surveillance, Epidemiology, and End Results (SEER) Program’s nine population-based cancer registries the five-year survival rate for all cancer sites for whites was 69.7 percent compared to 60.7 percent for African Americans during 1973-2011.<sup>5</sup> Much of the difference in survival is believed to be because of barriers that prevent timely and high-quality medical care, including delayed diagnoses after screenings, greater frequency of having later stage diagnoses, and disparities in treatment.

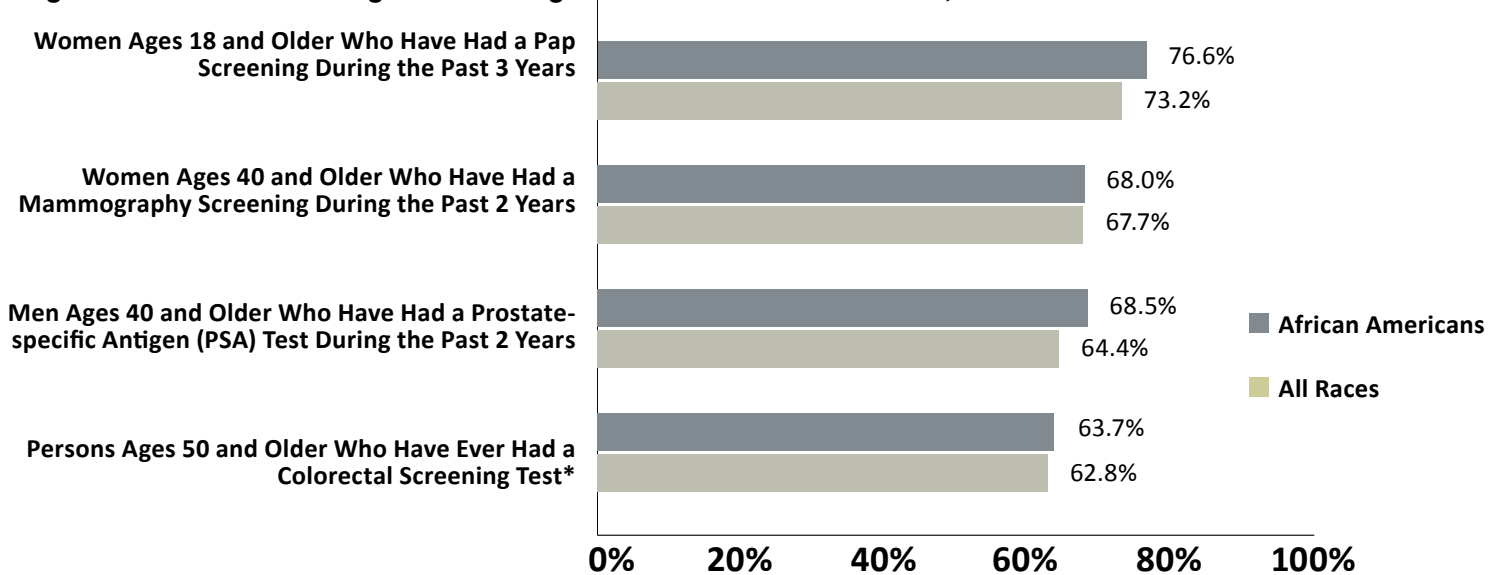
**Figure 30. Preventative Cancer Behaviors and Access to Medical Care among African American Adults\* — Indiana, 2013**



\* Adults are people ages 18 and older  
 † Data from 2009  
 ‡ Adults ages 18–64

Source: Indiana Behavioral Risk Factor Surveillance System

**Figure 31. Cancer Screening Rates Among African Americans — Indiana, 2012**



\* Sigmoidoscopy or colonoscopy

Source: Indiana Behavioral Risk Factor Surveillance System

**REFERENCES**

<sup>1</sup> American Cancer Society. *Cancer Facts & Figures for African Americans 2013-2014*. Atlanta, GA. 2011. Accessed at [www.cancer.org/Research/CancerFactsFigures/index](http://www.cancer.org/Research/CancerFactsFigures/index) on April 10, 2014

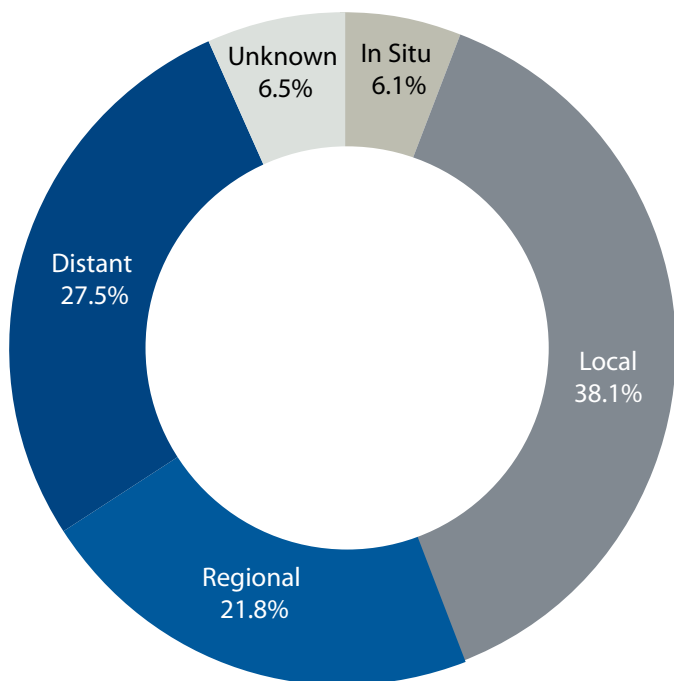
<sup>2</sup> American Cancer Society. *Cancer Facts & Figures 2014*. Atlanta, GA. 2011. Accessed at <http://www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2014/index> on April 10, 2014

<sup>3</sup> 2013 Indiana Behavioral Risk Factor Surveillance System.

<sup>4</sup> Harvard University. *Harvard Report on Cancer Prevention, Vol 1: Causes of Human Cancer*. [Online] April 2009. Accessed at [www.health.harvard.edu/newsletters/Harvard\\_Mens\\_Health\\_Watch/2009/April/The-10-commandments-of-cancer-prevention](http://www.health.harvard.edu/newsletters/Harvard_Mens_Health_Watch/2009/April/The-10-commandments-of-cancer-prevention) on Nov 15, 2011.

<sup>5</sup> National Institutes of Health, National Cancer Institute, Surveillance, Epidemiology, and End Results (SEER) Program. Accessed at [www.seer.cancer.gov](http://www.seer.cancer.gov) on October 1, 2014.

**Figure 32. Percent of Cancer Cases Diagnosed among African Americans During Each Stage\* — Indiana, 2008-2012**



During 2008–2012, of the 11,808 African-American Indiana residents who received a diagnosis of in situ or invasive cancer, 5,218 (44.2 percent) were diagnosed in the in situ or local stage, 5,822 (49.3 percent) were diagnosed in the regional or distant stage, and 768 (6.5 percent) had unknown staging.

\* Includes all in situ and invasive cancers except for basal and squamous cell skin cancers and in situ bladder, cervical, and prostate cancers, which are not reportable

Source: Indiana State Cancer Registry

## TAKE CHARGE!

### What You Can Do to Help Prevent Cancer and Improve Care Among African Americans:

- Maintain a healthy body weight.
- Increase physical activity levels.
- Eat the recommended daily servings of fruits and vegetables.
- Be smoke-free — Visit [www.in.gov/quitline](http://www.in.gov/quitline) for free smoking cessation assistance.
- Identify a primary health care provider and regularly talk about your cancer screening options.
- Talk to your primary health care provider regularly about your cancer screening options.
- Seek treatment early and avoid delaying follow-up care if you are diagnosed with cancer.
- Support the development of culturally relevant resources and support programs for African Americans that focus on early detection and treatment of cancer, as well as, improved access to services.
- Encourage health care providers to be culturally competent (*i.e.*, respectful and responsive to cultural beliefs that influence the health practices of racial and ethnic minority patients).
- Work to decrease the disparities in socioeconomic factors such as employment, income, and insurance status, which influence health behaviors and outcomes.
- Health care providers are encouraged to ask African American patients about their life, encourage them to ask questions, take seriously the responsibility and respect conferred on the provider, and involve family members.