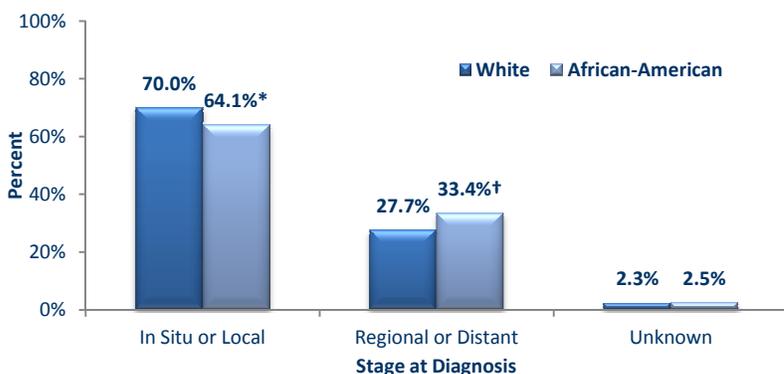




BREAST CANCER is the second leading cause of cancer death, and excluding skin cancers, the most frequently diagnosed cancer among women in Indiana and the United States. There are approximately 4,400 cases diagnosed each year in Indiana. African-American women are at increased risk for poor outcomes relating to breast cancer, in part, because they are more often diagnosed at a younger age, at a later stage of disease and with more aggressive forms of breast cancer. [Figure 1]

Figure 1. Percent of Female Breast Cancer Cases by Stage of Diagnosis and Race — Indiana, 2003-2012



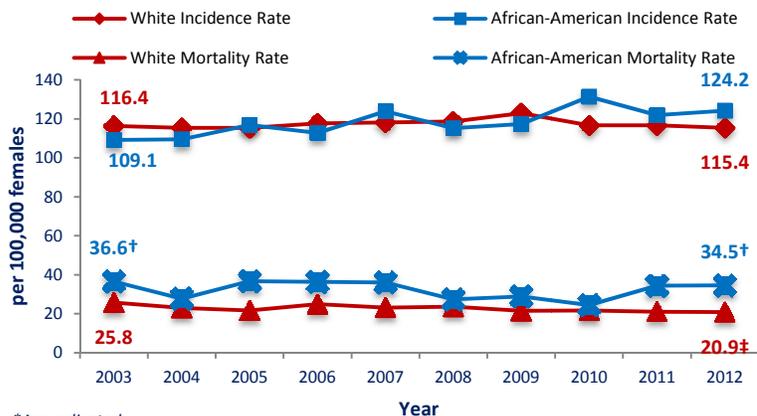
*Proportion of cases diagnosed in the in situ or local stage was significantly lower ($P < .05$) among African-American females when compared to white females.

†Proportion of cases diagnosed in the regional or distant stage was significantly higher ($P < .05$) among African-American females when compared to white females.

Source: Indiana State Cancer Registry.

DISPARITIES exist in breast cancer mortality between white and African-American women. Mortality rates for African-American women were significantly higher in 2003 and 2012 compared to whites. The mortality rate declined significantly during that same period for white women, but did not for African-American women. [Figure 2]

Figure 2. Female Breast Cancer Incidence and Mortality Rates Trends by Race* — Indiana, 2003-2012



*Age-adjusted.

†Rate among African-Americans was significantly higher than rate among whites ($P < .05$).

‡The breast cancer mortality rate among white females was significantly lower ($P < .05$) in 2012 compared to 2003.

Source: Indiana State Cancer Registry.

Who Gets Breast Cancer?

Sex and age are the two greatest risk factors for developing breast cancer. Women have a much greater risk of developing breast cancer, and that risk increases with age. Breast cancer is rare among men; however, they are often diagnosed at later stages and have poorer prognoses.

Factors associated with increased breast cancer risk include weight gain after the age of 18, being overweight or obese, use of menopausal hormone therapy, physical inactivity, and alcohol consumption. Research also indicates that long-term, heavy smoking increases breast cancer risk, particularly among women who start smoking before their first pregnancy.

Additional risk factors include:

- ❑ **Family history** – Women who have had one or more first degree relatives who have been diagnosed with breast cancer have an increased risk. Additionally, breast cancer risk increases if a woman has a family member who carries the breast cancer susceptibility genes (BRCA) 1 or 2, which accounts for 5 to 10 percent of all female breast cancers. BRCA mutations also account for 5 to 20 percent of all male breast cancers, and 15 to 20 percent of familial breast cancers.¹
- ❑ **Race** – In Indiana, during 2008-2012, the breast cancer incidence rates for African-American and white women were similar, but the mortality rate for African-American women was 39 percent higher than for whites.²
- ❑ **Reproductive factors** – Women may have an increased risk if they have a long menstrual history (menstrual periods that start early and/or end later in life), have recently used oral contraceptives or Depo-Provera, have never had children, or had their first child after the age of 30.¹
- ❑ **Certain medical findings** – High breast tissue density, high bone mineral density, type 2 diabetes, certain benign breast conditions, and lobular carcinoma in situ can increase a woman's risk in developing breast cancer. In addition, high dose radiation to the chest for cancer treatment increases risk.¹

Factors associated with a decreased risk of breast cancer include breastfeeding, regular moderate or vigorous physical activity, and maintaining a healthy body weight. Two medications – tamoxifen and raloxifene – have been approved to reduce breast cancer risk in women at high risk.¹



Can Breast Cancer Be Detected Early?

Women should have frequent conversations with their health care provider about their risks for breast cancer and how often they should be screened. In general, women should follow these recommendations:

- ❑ **Clinical Breast Exams.** The American Cancer Society recommends that women in their 20s and 30s have a clinical breast exam by a health care professional every three years. Asymptomatic women in their 40s should have yearly clinical breast exams.
- ❑ **Screening Mammograms.** The United States Preventive Services Task Force recommends a screening mammogram every two years for women aged 50 to 74, which help detect cancers before a lump can be felt. Women between the ages of 40 to 49, especially women with a family history of breast cancer, should discuss the risks and benefits of mammography with their health provider to determine if it is right for them.
- ❑ According to the 2012 Indiana Behavioral Risk Factor Surveillance System, only 69.5 percent of women ages 50 and older had a mammogram during the past two years. Indiana currently ranks 46th in the nation for women who have had a mammogram.
- ❑ The Affordable Care Act requires preventive screening services to be included in most insurance policies. Often, these services are paid in full. Individuals should check with their individual insurance providers for specific plan information.

Be Aware! Common Signs and Symptoms of Breast Cancer

- ❑ Lumps, hard knots or thickening
- ❑ Swelling, warmth, redness or darkening
- ❑ Pulling in of the nipple or other parts of the breast
- ❑ Change in size or shape
- ❑ Nipple discharge that starts suddenly
- ❑ Dimpling or puckering of the skin
- ❑ Itchy, scaly sore or rash on the nipple
- ❑ New pain in one spot that doesn't go away

What Factors Influence Breast Cancer Survival?

- ❑ Staging of breast cancer takes into account the number of lymph nodes involved and whether the cancer has moved to a secondary location.
- ❑ When breast cancer is detected early, before it is able to be felt, the five-year survival rate is 99 percent.
 - During 2012, in Indiana, only 53 percent of breast cancer cases were diagnosed at the local stage. Approximately 18 percent were diagnosed in situ (the earliest stage possible for diagnosis).²
 - During this same time, almost 30 percent (29 percent) of Indiana's breast cancer cases were diagnosed in the regional or distant stages.²
- ❑ There are multiple treatment options available for breast cancer patients.
 - Mastectomies are the complete surgical removal of the breast.
 - Lumpectomies are the removal of only the cancerous area of the breast.
 - Local radiation can be used to treat the tumor without affecting the rest of the body.
 - Systemic drugs, which include chemotherapy, hormone therapy and targeted therapy, can be given orally or intravenously that reach cancer cells anywhere in the body.

GET INVOLVED: Join the Indiana Cancer Consortium (ICC)

- ❑ The ICC is a statewide network of over 100 agencies including the Indiana State Department of Health.
- ❑ The ICC seeks to reduce the cancer burden in Indiana through the development, implementation and evaluation of a [comprehensive plan](#) that addresses cancer across the continuum from prevention through palliation.
- ❑ Become a member at www.indianacancer.org.

Community Resources

- To learn more about the [Indiana Breast and Cervical Cancer Program](#), visit www.in.gov/isdh/24967.htm or call the Indiana Family Helpline at 1-855-HELP-1ST (1-855-435-7178).
- To get help with tobacco cessation, call the [Indiana Tobacco Quitline](#) at 1-800-QUIT-NOW (1-800-784-8669) or visit www.QuitNowIndiana.com.
- To access a community toolkit, including resources and information, visit <http://indianacancer.org/breast-cancer-toolkit/>.
- For information on how employers can impact breast cancer screening rates, visit www.indianacancer.org for information on the ICC Employer Gold Standard program.

References

1. American Cancer Society. *Cancer Facts and Figures 2014*. Atlanta: American Cancer Society; 2014. Accessed online at www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2014/index on September 25, 2014.
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