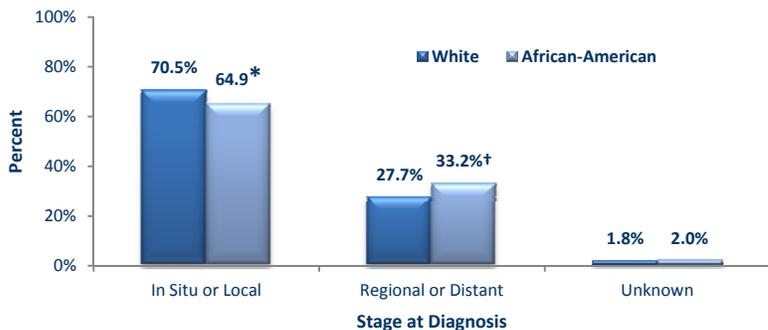




BREAST CANCER

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 were approximately 4,653 cases of invasive breast cancer diagnosed during 2014 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, 2005-2014



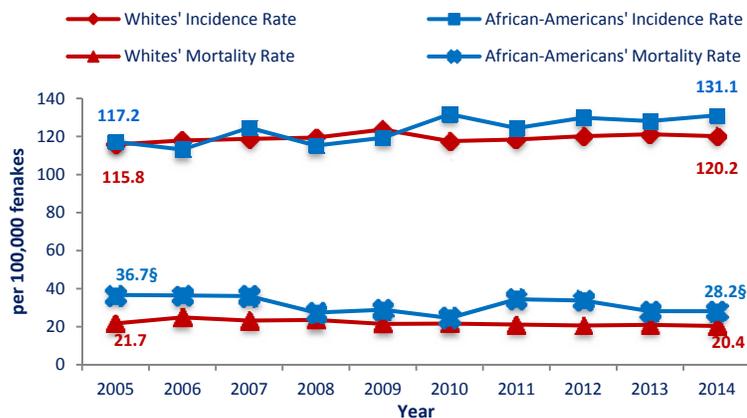
*Proportion of cases diagnosed in the in situ or local stage was significantly lower ($P < .05$) among African-American females when compared to white females.

†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 internal data generator.

DISPARITIES exist in breast cancer mortality between white and African-American women. Mortality rates for African-American women in Indiana were 28 percent higher than for whites. In addition, African-American women had significantly higher rates of diagnosis at the regional or distant stage.

Figure 2. Female Breast Cancer Incidence and Mortality Rates Trends by Race*† — Indiana, 2005-2014



*Age-adjusted

†There were no significant changes in incidence and mortality in 2014 compared to 2005 for African-Americans or white.

§African-American mortality rates in 2005 and 2014 were significantly higher than for whites.

Source: Indiana State Cancer Registry internal data generator.

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. The International Agency for Research on Cancer has concluded that shift work, especially at night, may be associated with an increased risk of breast cancer.¹

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, risk increases if a woman has a family member who carries the breast cancer susceptibility genes (BRCA 1 or 2).
- ❑ **Race** – In Indiana, during 2014, the breast cancer incidence rates for African-American and white women were similar, but the mortality rate for African-American women was 28 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, have never had children, had their first child after the age of 30, or have high natural levels of sex hormones.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 of 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 for at least one year, 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. 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 2014 Indiana Behavioral Risk Factor Surveillance System, 72.4 percent of women ages 50 to 74 had a mammogram during the past two years.

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.

The Indiana Breast and Cervical Cancer Program (BCCP) is the Hoosier implementation of the National Breast and Cervical Cancer Early Detection Program. The BCCP provides access to breast and cervical cancer screenings, diagnostic testing and treatment for underserved and underinsured women who qualify for services. Visit <http://www.in.gov/isdh/24967.htm> for more information and eligibility requirements.

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

Community Resources

- To learn more about the [Indiana Breast and Cervical Cancer Program](http://www.in.gov/isdh/24967.htm), visit www.in.gov/isdh/24967.htm or call 317-233-7448.
- To get help with tobacco cessation, call the [Indiana Tobacco Quitline](http://www.QuitNowIndiana.com) 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 2016*. Atlanta: American Cancer Society; 2016. Accessed online at www.cancer.org/research/cancerfactsstatistics/cancerfactsfigures2016/index on August 30, 2016.
2. Indiana State Cancer Registry internal data generator. Accessed August 7, 2016.

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 2014, in Indiana, only 55 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, 26 percent of Indiana's breast cancer cases were diagnosed in the regional or distant stages, and 1 percent were diagnosed at an unknown stage.²
- ❑ There are multiple treatment options available for breast cancer patients.
 - Mastectomies are the partial or complete surgical removal of one or both breasts.
 - 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 to reach cancer cells 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.