

# EDUCATOR RESOURCES



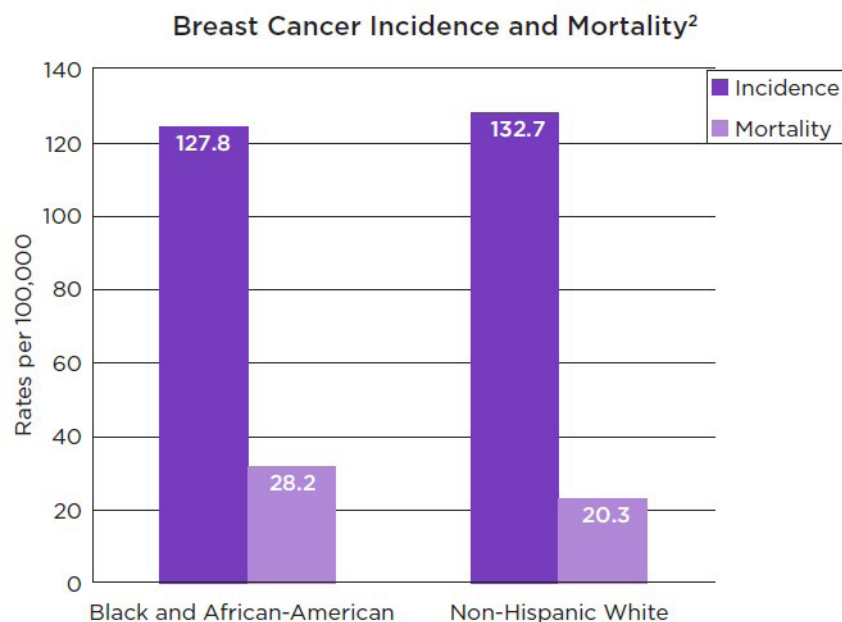
## Breast Cancer Among Black and African-American Women

### *Incidence and Mortality*

Breast cancer is the second leading cause of cancer death among Black and African-American women in the U.S. as it is for non-Hispanic white and Hispanic/Latina women<sup>1</sup>. Studies show that Black and African-American women have slightly lower breast cancer incidence rates compared to white women (see table below)<sup>1</sup>. However, among younger women (less than 45 years), incidence rates are higher among Blacks and African-Americans than whites<sup>2, 3</sup>. Black and African-American women also have a lower 5-year relative survival rate as compared to white women<sup>1</sup>. This difference in mortality is not yet well understood, but several related factors, such as higher grade tumor and advanced stage at diagnosis and being diagnosed with a triple negative breast cancer, are more common in Blacks and African-Americans than whites<sup>4, 5</sup>.

Breast cancer incidence rates among Black and African-American women increased rapidly during the 1980s, largely because of increases in mammography screening. Incidence rates have become more stable since the 1990s<sup>1</sup>. During the early 2000s a sharp decline in the incidence rates among white women was associated with a drop in the use of menopausal hormones. This trend was not seen among Black and African-American women because hormone therapy use was already low in this population<sup>6</sup>.

Black and African-American women have more than a 40 percent higher rate of breast cancer death than white women, despite a slightly lower incidence rate<sup>1</sup>.



### Five-Year Relative Survival Rates

Relative survival compares survival rates between women with breast cancer to women in the general population. For example, the 5-year relative survival for Black and African-American women diagnosed with breast cancer is 80 percent. This means Black and African-American women diagnosed with breast cancer are, on average, 80 percent as likely as Black and African-American women in the general population to live five years beyond their diagnosis. These rates are averages and vary depending on a person’s diagnosis and treatment.

### Relative Survival Rates by Age at Diagnosis

The 5-year relative survival rate for Black and African-American women diagnosed with breast cancer is about 82 percent, compared to nearly 92 percent among non-Hispanic white women<sup>1</sup>. The differences in survival rates may be related to diagnoses with late-stage disease and tumors associated with poor prognosis and delays in medical care after initial diagnosis of breast cancer among Black and African-American women. In addition, disparities within age groups indicate that Black and African-American women under 45 have a significantly lower 5-year relative survival rate compared to non-Hispanic white women.

Age at Diagnosis	Percent 5-Year Relative Survival Rate <sup>1</sup>	
	Black and African-American	Non-Hispanic White
All ages	80.4	90.8
Under 45	78.6	89.6
45-54	81.2	91.7
55-64	80.6	91.1
65 and older	78.0	90.0

### Relative Survival Rates by Stage at Diagnosis

When talking about breast cancer survival rates, it is important to understand that 5-year relative survival rates vary depending on the stage at diagnosis. Breast cancer staging is very complex and is done by health care professionals. The stage of the cancer is determined by the size of the tumor, whether it has spread to lymph nodes and whether it has spread to other parts of the body. For instance, *Ductal carcinoma in situ* (also called *DCIS* or *in situ*) refers to the stage in which the cancer is contained within the milk duct. It is considered pre-cancerous as it has not yet spread outside of the duct. Please remember, each cancer is unique and each individual diagnosed with cancer should ask her/his doctor to help determine her/his prognosis (likely outcome).



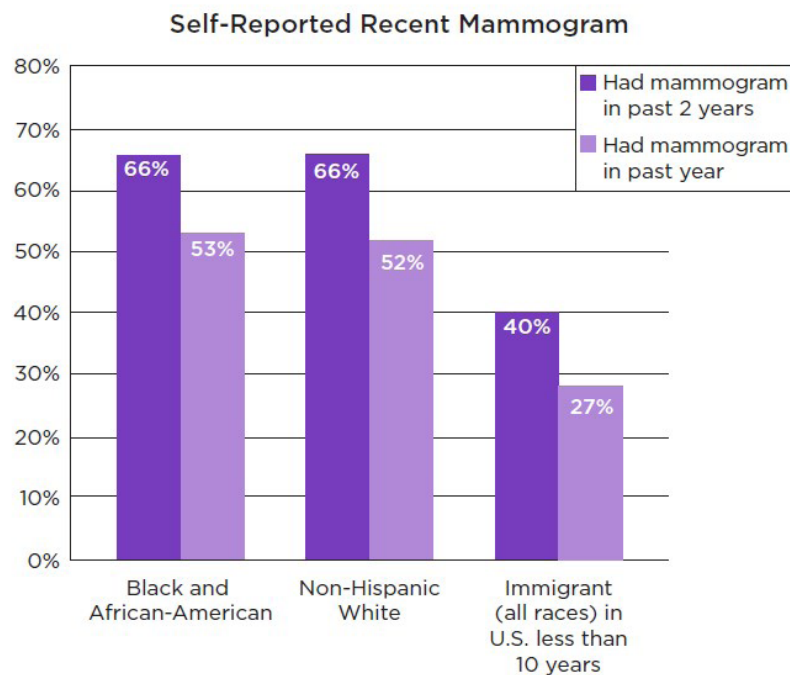
For more information about DCIS, see [Facts for Life: Ductal Carcinoma in Situ.](#)

Stage at Diagnosis	Percent 5-Year Relative Survival Rate <sup>2</sup>	
	Black and African-American	Non-Hispanic White
In Situ	100	100
Localized	94	99
Regional	75	86
Distant	17	27

## Screening Habits

Mammography screening rates for Black and African-American women are similar to those for non-Hispanic white and Hispanic/Latina women<sup>8, 9, 10, 11</sup>. There is some evidence that Black recent immigrants (living in the U.S. for less than 10 years) have a lower rate of annual mammography screening than do U.S.-born African-Americans and whites. This is likely a result of factors related to lower health care utilization, due in part to a lack of health insurance among the Black immigrant population<sup>12</sup>.

Black and African-American women are often diagnosed with breast cancer at a later stage than non-Hispanic white women<sup>1</sup>. It is believed that this may occur for a number of reasons, including longer timespans between mammograms, lack of timely follow-up on suspicious screening results, as well as differences in tumor characteristics<sup>13, 14</sup>. However, it is believed that much of this disparity remains unexplained<sup>15</sup>.



## Triple Negative Breast Cancer

Studies have shown that Black and African-American women are at higher risk of triple-negative breast cancer (TNBC)<sup>5, 16</sup>. This diagnosis refers to cancer cells that test negative for three receptors including Estrogen (ER-), Progesterone (PR-) and Human Epidermal Growth Factor 2/neu-negative (HER2-). Women diagnosed with TNBC have a poorer prognosis for at least the first five years after diagnosis than those with other breast cancer subtypes. This is largely due to the lack of specific therapies to treat the tumor, though many cases of TNBC are effectively treated with chemotherapy.



For more information about triple negative breast cancer, see [\*Facts for Life: Triple Negative Breast Cancer.\*](#)

It is important to remember that while Black and African-American women are at higher risk of TNBC, the percentage of Black and African-American women diagnosed with this type of breast cancer is still relatively low. TNBC is typically seen in basal-like cell carcinoma which accounts for only 10-20 percent of breast cancer diagnoses<sup>1</sup>. Among Black and African-American women, more than 30 percent of breast cancer cases are TNBC, compared to 10 percent among white women<sup>17</sup>.

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- 1 Howlader N., Noone A.M., Krapcho M., Garshell J., Miller D., Altekruse S.F., Kosary C.L., Yu M., Ruhl J., Tatalovich Z., Mariotto A., Lewis D.R., Chen H.S., Feuer E.J., Cronin K.A. (eds). "SEER Cancer Statistics Review, 1975-2013," National Cancer Institute, last modified April 2016, [http://seer.cancer.gov/csr/1975\\_2013/](http://seer.cancer.gov/csr/1975_2013/)
- 2 "Cancer Facts & Figures 2015," American Cancer Society (2015).
- 3 "Surveillance, Epidemiology and End Results (SEER) Program," SEER\*Stat Database: NAACCR Incidence - CiNA Analytic File, 1995-2009, North American Association of Central Cancer Registries, [www.seer.cancer.gov](http://www.seer.cancer.gov).
- 4 Chlebowski R.T., Chen Z., Anderson G.L., et al. "Ethnicity and Breast Cancer: Factors Influencing Differences in Incidence and Outcome," *J Natl Cancer Inst* 97, no. 6 (2005): 439-448.
- 5 Carey L.A., Perou C.M., Livasy C.A., et al. "Race, Breast Cancer Subtypes, and Survival in the Carolina Breast Cancer Study," *JAMA* 295, no. 21 (2006): 2492-2502.
- 6 Ravdin P.M., Cronin K.A., Howlader N., et al. "The Decrease in Breast Cancer Incidence in 2003 in the United States," *N Engl J Med* 356, no. 16 (2007): 1670-1674.
- 7 Coates, R.J., Bransfield, D.D., Wesley, M., et al. "Differences Between Black and White Women with Breast Cancer in Time from Symptom Recognition to Medical Consultation. Black/White Cancer Survival Study Group," *J Natl Cancer Inst.* 84, no. 12 (1992): 938-950.
- 8 "2010 National Health Interview Survey (NHIS) public use data release: NHIS survey description," National Center for Health Statistics, U.S. Department of Health and Human Services. (2011). [ftp://ftp.cdc.gov/pub/health\\_statistics/nchs/dataset\\_documentation/nhis/2010/srvydesc.pdf](ftp://ftp.cdc.gov/pub/health_statistics/nchs/dataset_documentation/nhis/2010/srvydesc.pdf).
- 9 "Cancer Prevention and Early Detection, Facts & Figures, 2013," American Cancer Society (2013).
- 10 Garbers, S., Chiasson, M.A. "Breast Cancer Screening and Health Behaviors among African American and Caribbean Women in New York City," *J Health Care Poor Underserved* 17, no. 1 (2006): 37-46.
- 11 Magai, C., Consedine, N.S., Conway, F., Neugut, A.I., and Culver, C. "Diversity Matters: Unique Populations of Older Women and Breast Cancer Screening," *Cancer* 100, no. 11 (2004): 2300-2307.
- 12 Consedine, N.S., Magai, C., and Conway, F. "Predicting Ethnic Variation in Adaptation to Later Life: Styles of Socioemotional Functioning and Constrained Heterotypy," *J Cross Cult Gerontol* 19 (2004): 95-129.
- 13 Menashe, I., Anderson, W.F., Jatoi, I., and Rosenberg, P.S. "Underlying Causes of the Black-White Racial Disparity in Breast Cancer Mortality: A Population-Based Analysis," *J Natl Cancer Inst* 101, no. 14 (2009): 993-1000.
- 14 Press, R., Carrasquillo, O., Sciacca, R.R., Giardina, E.G. "Racial/Ethnic Disparities in Time to Follow-Up after an Abnormal Mammogram," *J Womens Health* 17, no. 6 (2008): 923-930.
- 15 Hunt, B.R., et al. "Increasing Black:White Disparities in Breast Cancer Mortality in the 50 Largest Cities in the United States," *Cancer Epidemiology* (2013).
- 16 Dunn, B.K., Agurs-Collins, T., Browne, D., Lubet, R., Johnson, K.A. "Health Disparities in Breast Cancer: Biology Meets Socioeconomic Status," *Breast Cancer Res Treat* 121, no. 2 (2010): 281-292.
- 17 Stark, A., Kleer, C.C., Martin, I., et al. "African Ancestry and Higher Prevalence of Triple Negative Breast Cancer: Findings from an International Study," *Cancer* 116, no. 21 (2010): 4926-4932.