

Breast Cancer in Connecticut

FACT SHEET

August 2016

This project has been funded with Federal funds from the National Cancer Institute, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN261201300019I.



Disease Basics

The majority of breast cancers occur in women. Tumors typically develop in the milk ducts of the breast, with tumors in breast lobules occurring less frequently. Breast cancers are grouped into 4 molecular subtypes, commonly referred to as Luminal A, Luminal B, HER2-enriched, and triple-negative.

Key Points*

- Breast cancer is the most common cancer in CT women.
 - Incidence rates are higher in CT compared to the entire U.S.
 - In CT, breast cancer is the 2nd leading cause of cancer deaths in women.
 - Incidence rates are stable and mortality rates are declining in CT.
 - Non-Hispanic black women in CT have lower breast cancer relative survival rates than non-Hispanic white women.
- *Based on the years **2008-2012**.

Incidence

Between 2008 and 2012, an average of 3,062 new female breast cancer cases were reported annually in CT. Incidence rates, which take into account population size in assessing disease burden, are defined as the number of new disease cases per 100,000 population at risk per year. (Age-adjusted incidence rates – AAIRs – are reported to minimize the confounding effect of age.) In CT, the female breast cancer AAIR for 2008 to 2012 was 137.1, significantly higher than the rate for the U.S. as a whole (123.0). This rate was the 2nd-highest nationally.

The relatively high socioeconomic status (SES) of women living in CT is one of the factors contributing to the comparatively high incidence rate. Women with higher SES tend to have a higher likelihood of developing breast cancer, as they start childbearing later in life and have fewer children, both of which are risk factors for breast cancer. Breast cancer rates in CT, although high, have stabilized for the period 2004-2012 (see figure below), similar to national trends. Rate stabilization is likely influenced by a suite of complex factors, including a dramatic reduction in the use of hormone replacement therapy and increasing rates of early detection through screening mammography.

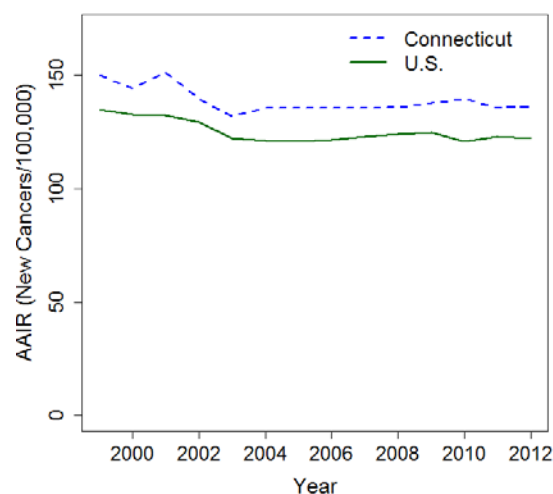
Breast cancer incidence rates differ between racial and ethnic groups, both in CT and nationally. In CT, the non-Hispanic (NH) white female population in CT had an incidence rate (141.2) significantly higher than the rates of NH black and Hispanic female populations (122.5 and 125.5, respectively) for 2008-2012. These latter rates were

All data presented in this factsheet pertain only to female breast cancers.

Incidence Quick Stats (2008-2012)

- Average number of incident (new) breast cancers diagnosed in CT annually: **3,062**
- Average breast cancer AAIR in CT: **137.1**
- CT state ranking for breast cancer incidence rate: **2nd**

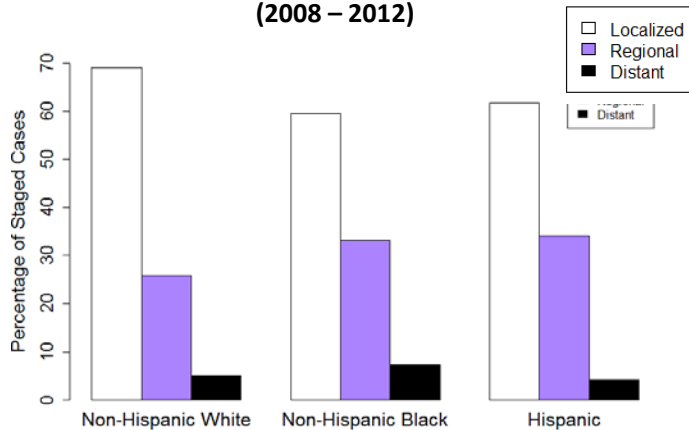
Breast Cancer Incidence Rate Trends



themselves not significantly different from each other in CT. Across the U.S., for the same period 2008-2012, breast cancers incidence rates were significantly different between all three population subgroups, with the NH white rate the highest (128.0), the Hispanic rate the lowest (92.4), and the NH black rate intermediary (123.9).

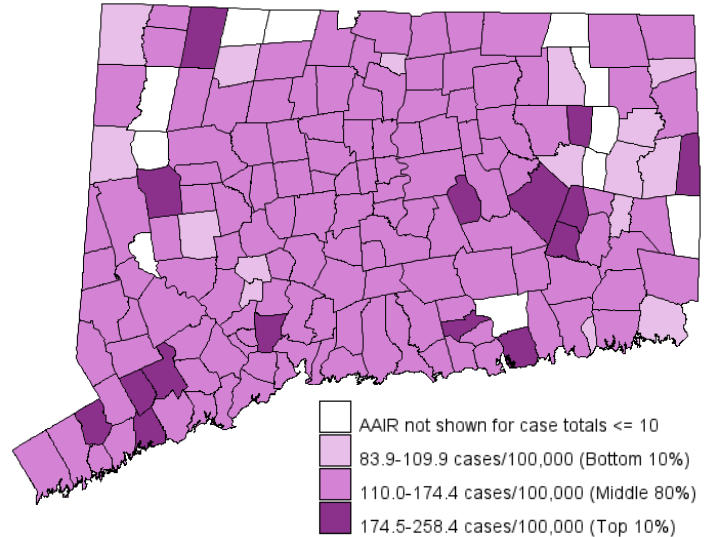
The stage of a cancer describes how far it has spread at the time of diagnosis and is an important prognostic factor. In CT, as across the U.S., the majority of new

CT Breast Cancer Incidence by Diagnosis Stage (2008 – 2012)



breast cancers diagnosed annually are limited to the breast (localized), regardless of race. However, NH black women have a greater proportion, compared to NH white women, of cancers diagnosed in the regional and distant stages, when tumors have spread to surrounding tissues and organs and are harder to treat.

Breast Cancer Age-adjusted Incidence Rates for CT Towns (2008 – 2012)



Mortality

Breast cancer is the 2nd leading cause of cancer deaths in CT women. However, the overall CT female breast cancer mortality rates (age-adjusted – AAMRs) have been declining since 1999, a pattern mirroring national trends. This decline is due to several factors, including improvement in treatments and detection of breast cancers at an earlier, more treatable stage due to screening.

Also similar to national patterns, breast cancer mortality rates in NH black female populations in CT are significantly higher than those in NH white women, despite lower incidence rates in NH black populations.

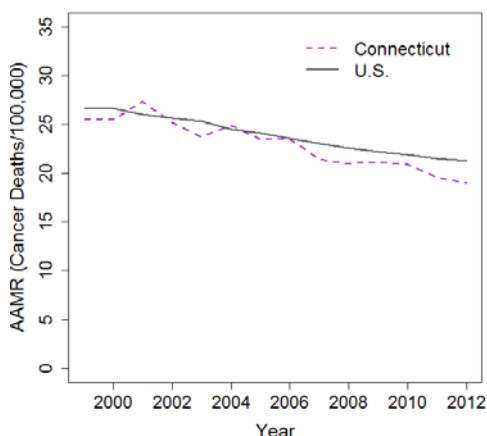
Mortality Quick Stats (2008-2012)

- Average breast cancer deaths in CT annually: **492**
- Average breast cancer AAMR in CT: **20.3**
- CT state ranking for breast cancer mortality rate: **38th**

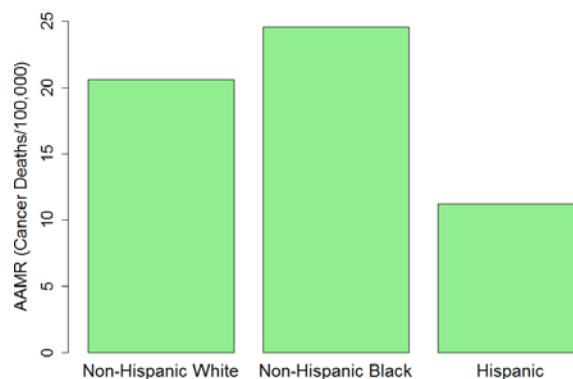
The lower incidence but higher mortality rates for breast cancer seen in NH black women compared to NH white women has several likely explanations, including greater access to, or utilization of, screening mammography by NH white women and higher rates of triple-negative breast cancers (TNBC) in black women. TNBCs have a

worse prognosis than other breast cancer subtypes. This black/white disparity is a reversal of rankings of the situation observed in 1992, when breast cancer AAMRs associated with NH black women were lower than the AAMRs associated with NH white women. The breast cancer AAMRS in Hispanic women in CT are significantly lower than in NH white and black female populations.

Breast Cancer Mortality Rate Trends



CT Breast Cancer Mortality Rates (2008 – 2012) by Race/Ethnicity

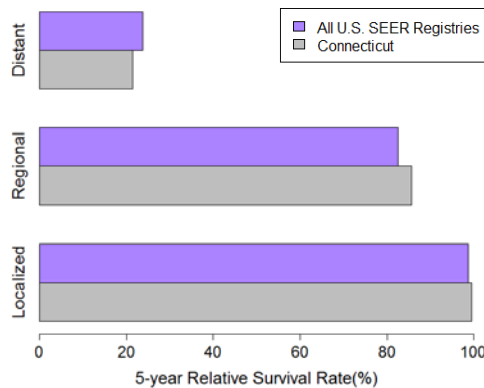


Relative Survival

The relative survival rate is the ratio of a patient's chance of surviving a given time interval after diagnosis of their cancer to that of a person of the same age and sex in the general US population. Hence a cohort of cancer patients with 5-year relative survival rate approaching 100% indicates that they are just as likely to survive 5 years as people of the same age and sex in the general population.

The 5-year relative survival rates for women diagnosed with breast cancer in 2004-2012 in CT was significantly lower for NH black women than for NH white and Hispanic women (81.3% vs 92.3% and 86.4%, respectively). The higher proportion of distant-stage diagnoses in black women undoubtedly contributes to this disparity. Stage at diagnosis has a large impact on a 5-year survival. Five-year relative survival for women of all races diagnosed with breast cancer in CT 2004-12 ranges from 99.5% for women diagnosed with localized disease to 21.5% for women diagnosed with distant disease. Another factor may be tumor subtype. NH black women who are diagnosed with breast cancer have a higher likelihood of being diagnosed with TNBC, which has a poorer 5-year survival compared to other breast cancer subtypes. NH black and white women also differ in the age of diagnosis

Breast Cancer 5-year Relative Survival Rates in CT (2004 – 2012) by Diagnosis Stage

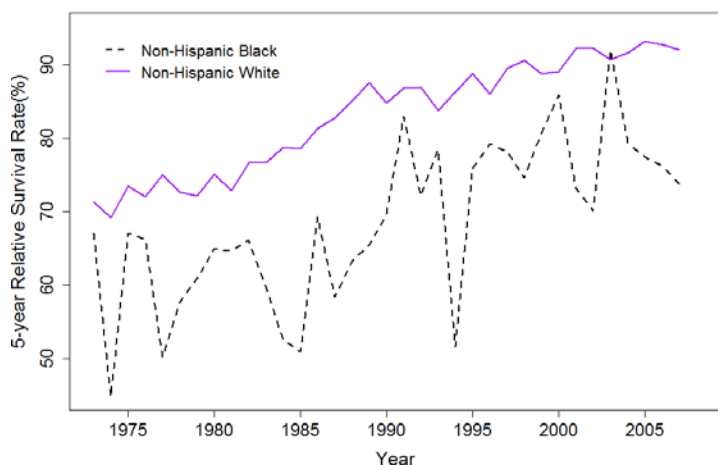


for breast cancer; the median diagnosis age for NH black women in CT of 59 years compared to 62 years in NH white women. Finally, patient sociodemographic factors, obesity, and access to quality treatment also impact patient outcomes. (Note: All relative survival rates presented here were age-standardized and calculated using the Net (Pohar-Perme) method.)

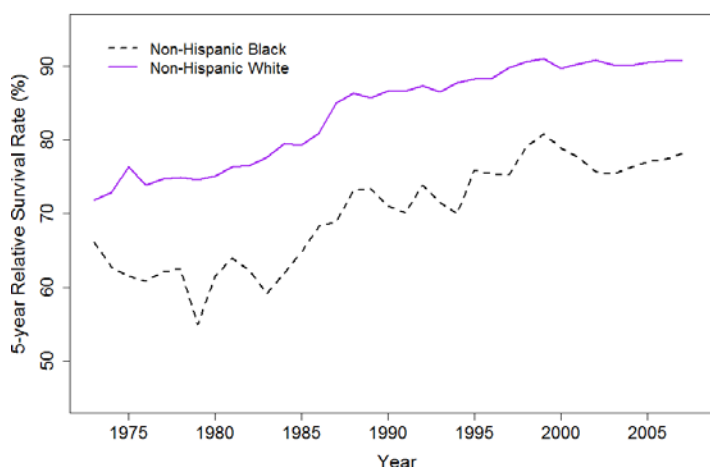
Breast Cancer Relative Survival Rates (2004-2012) (follow-up through the end of December 2012)

	1-year	2-year	3-year	4-year	5-year
Connecticut	97.7%	96.1%	94.2%	93.0%	91.9%
All U.S. SEER Registries	96.9%	94.7%	92.4%	90.6%	89.1%

Breast Cancer 5-year Relative Survival Rates in Connecticut



Breast Cancer 5-year Relative Survival Rates Nationally (All U.S. SEER Registries)



Learn More

The Connecticut Tumor Registry, phone: 860-509-7163, <http://www.ct.gov/dph/TumorRegistry>

<http://seer.cancer.gov/statfacts/html/breast.html>

<http://www.cdc.gov/cancer/breast/statistics/index.htm>