American Cancer Society®

Breast Cancer Facts & Figures

2024–2025

Contents

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Fast Facts

- Approximately 1 in 8 women in the US (13.1%) will be diagnosed with invasive breast cancer, and 1 in 43 (2.3%) will die from the disease (Table 1).
- In 2024, an estimated 310,720 new invasive breast cancers and 56,500 cases of ductal carincoma in situ will be diagnosed among women in the US (Table 2), and an additional 2,790 cases will be diagnosed in men.
- In 2024, approximately 42,250 women (Table 2) and 530 men are expected to die from breast cancer.
- Breast cancer incidence increased during the most recent decade of data (2012-2021) by 1% annually overall, with a steeper increase among women younger than 50 years (1.4% per year) than in those 50 or older (0.7% per year). (Figure 2).
- Breast cancer incidence rates range from 104-108 per 100,000 in Hispanic and Asian American/ Pacific Islander women to 138 per 100,000 in White women (Figure 4).
- In contrast to incidence, there is a two-fold difference between racial and ethnic groups in the breast cancer death rate, which ranges from 12-14 per 100,000 in Asian American/Pacific Islander and Hispanic women to 21 in American Indian/Alaska Native women and 27 per 100,000 in Black women (Figure 4).
- Black women have 5% lower breast cancer incidence than White women, but 38% *higher* mortality (Figure 4), largely because of later diagnosis and less access to high-quality treatment.
- American Indian/Alaska Native women have 10% lower breast cancer incidence than White women, but 6% *higher* mortality (Figure 4).
- Breast cancer incidence increased during 2012-2021 by about 1% annually in White, Black, and American Indian/Alaska Native women; 1.6% annually in Hispanic women; and 2.6% annually in Asian American/Pacific Islander women (Figure 5).
- The breast cancer death rate has dropped by 44% since 1989 because of advances in treatment and earlier detection, resulting in approximately 517,900 averted breast cancer deaths (Figure 6).
- Breast cancer mortality has declined in every racial and ethnic group since 1990, except for American Indian/Alaska Native women, among whom rates have remained stable (Figure 6).
- In the most recent decade (2013-2022), the breast cancer death rate was stable in American Indian/ Alaska Native and Asian American/Pacific Islander women, but continued to decline in Black (1.4% per year), White (1% per year), and Hispanic women (0.7% per year) (Figure 6).
- The 5-year relative survival rate for breast cancer is 91%, but drops to 86% at 10 years and 81% at 15 years after diagnosis (Figure 9).
- The 5-year relative survival rate is over 99% for breast cancer diagnosed at a localized stage, when treatment is typically more effective and less extensive, but drops to 87% for regional-stage and 32% for distant-stage disease (Figure 9).
- Black women are least likely to be diagnosed with localized-stage breast cancer and most likely to be diagnosed with distant-stage or unstaged cancer, along with American Indian/Alaska Native women, contributing to disproportionate mortality in both groups (Figure 8).
- Black women have the lowest survival rate for every known stage of breast cancer, reflecting less access to high-quality care, as well as a higher likelihood of triple-negative disease (Figure 9).
- An estimated 67% of women ages 40 years and older had a breast cancer screening in the past two years, ranging from only 51% of American Indian/Alaska Native women to 73% of Black women. (Table 6).
- Breast cancer screening prevalence (past two years) in women 40 and older ranges from 58% in Wyoming to 77% in Rhode Island (Figure 11).
- Black men have the highest male breast cancer incidence and mortality (Figure 10).

Introduction

Breast cancer is the most common cancer diagnosed among women in the US. It occurs when cells in breast tissue change and divide uncontrolled, typically resulting in a lump or mass. Most breast cancers begin in the milk glands (lobules) or in the tubes (ducts) that connect milk glands to the nipple.

Breast cancer typically has no symptoms when it is small and easily treated, which is why mammography screening is important for early detection. A painless lump in the breast or underarm lymph nodes is the most common sign, but other signs and symptoms include breast pain or heaviness; dimpling, swelling, thickening, or redness; and nipple changes or discharge. Any persistent change in the breast should be evaluated by a physician.

Breast cancer encompasses many disease subtypes with different biological, clinical, and prognostic characteristics and is classified according to stage at diagnosis, microscopic appearance, and molecular features. Cancer stage is determined by the extent and spread of disease and is an important predictor of disease outcome (prognosis) and guide for treatment options. Breast cancer that has broken through the wall of the glands or ducts from which it originated and spread into surrounding tissue is called invasive disease. In contrast, ductal carcinoma in situ (DCIS), or stage 0 disease, is diagnosed when presumably malignant cells are still confined to the mammary ducts, usually during screening. Although not all DCIS progresses to invasive disease, it is considered a cancer precursor and increases the risk of subsequent invasive cancer.[1]

Although there has been substantial progress in reducing breast cancer mortality in the US over the past several decades, there are persistent disparities, especially among Black women. Additionally, breast cancer incidence is increasing, with the steepest trends among young women. Continued surveillance of breast cancer is essential to monitor progress and inform cancer control. This report provides a comprehensive overview of current breast cancer statistics in the US, including risk factors, screening, incidence, survival, and mortality rates by state and race and ethnicity. It is meant to be a resource for researchers, policymakers, educators, cancer control advocates, and anyone else interested in learning about breast cancer.

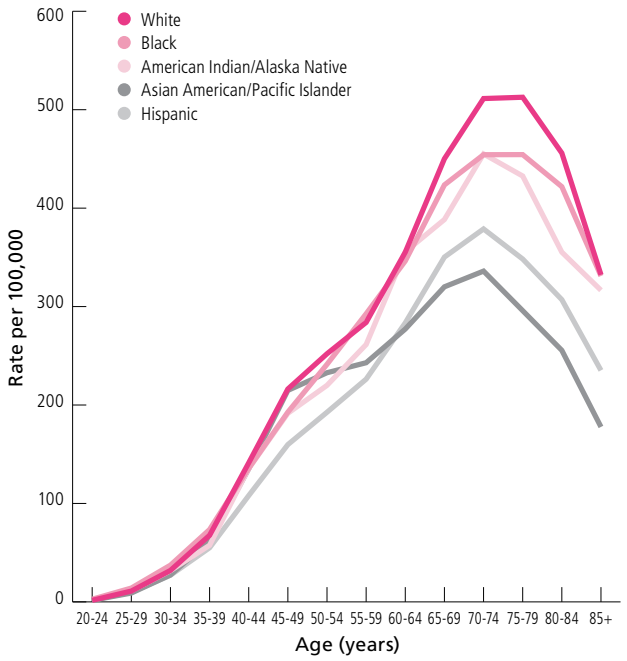
Table 1. Ten-year Probability of Breast Cancer Diagnosis (2018-2019, 2021) and Death (2020-2022)

Current age	Diagnosed with invasive breast cancer	Dying from breast cancer
20	0.1% (1 in 1,344)	<0.1% (1 in 19,247)
30	0.5% (1 in 198)	<0.1% (1 in 2,192)
40	1.6% (1 in 62)	0.1% (1 in 723)
50	2.5% (1 in 41)	0.3% (1 in 348)
60	3.6% (1 in 28)	0.5% (1 in 217)
70	4.2% (1 in 24)	0.7% (1 in 141)
80	3.1% (1 in 32)	1.0% (1 in 103)
Lifetime risk	**13.1% (1 in 8)**	**2.3% (1 in 43)**

Probability is among those who have not been previously diagnosed with cancer and reflects the likelihood of diagnosis/death within 10 years of current age. Percentages and "1 in" numbers may not be numerically equivalent due to rounding.

Source: DevCan, Version 6.7.5.

- Approximately 1 in 8 women (13.1%) will be diagnosed with invasive breast cancer in her lifetime, and 1 in 43 (2.3%) will die from the disease. Lifetime risk is the average risk for all women after accounting for other causes of death, but does not account for individual factors that influence risk, such as race or ethnicity, family history, etc.
- The highest risk of breast cancer diagnosis is among women in their 70s (4.2% or 1 in 24 women), whereas women in their 80s have the highest risk of breast cancer death (1.0% or 1 in 103 women).



Rates are per 100,000 and age adjusted to the 2000 US standard population. Data for American Indians/Alaska Natives are based on Purchased/Referred Care Delivery Area counties. Race is exclusive of Hispanic origin.

Sources: North American Association of Central Cancer Registries, 2024.

Figure 1. Age-specific Female Breast Cancer Incidence Rates by Race and Ethnicity, US, 2017-2021

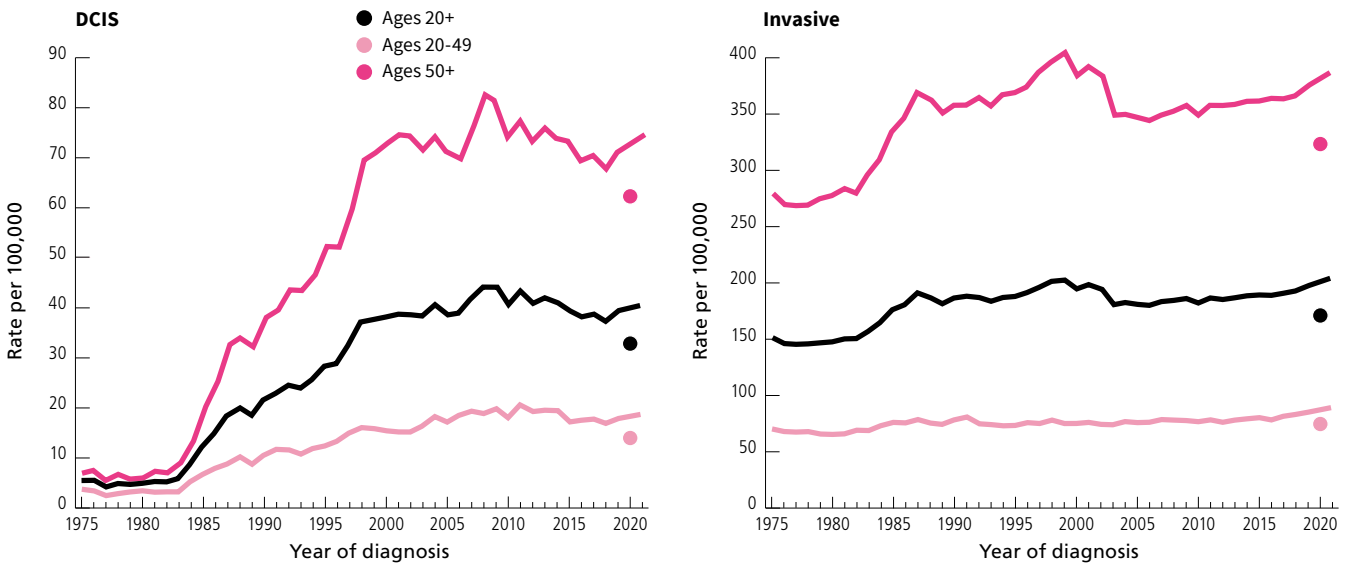
- In women of all racial and ethnic groups, breast cancer incidence increases with age until the seventh decade of life and then decreases, likely due to less screening.
- Black women have the highest incidence of breast cancer until 40 years of age and White women have the highest incidence in ages 65-84 years.
- Hispanic women have the lowest incidence of breast cancer from age 30 to 59 years, and Asian American/Pacific Islander women have the lowest incidence thereafter.
- Variations by age, race, and ethnicity in part reflect differences in screening prevalence (Table 6).

Table 2. Estimated Number of Female Ductal Carcinoma In Situ and Invasive Breast Cancer Cases and Deaths by Age, US, 2024

	DCIS cases		Invasive cases		Deaths	
Age	**Number**	**%**	**Number**	**%**	**Number**	**%**
<40	1,360	2	13,180	4	990	2
40-49	8,750	15	37,650	12	2,620	6
50-59	13,760	24	67,310	22	6,800	16
60-69	17,660	31	89,540	29	10,010	24
70-79	11,890	21	69,130	22	10,140	24
80+	3,080	5	33,910	11	11,690	28
All	**56,500**	**98**	**310,720**	**100**	**42,250**	**100**

DCIS=ductal carcinoma in situ. Estimates are rounded to the nearest 10. Percentages may not add to 100 due to rounding.

- In 2024, an estimated 310,720 new invasive breast cancers will be diagnosed among women in the US, 16% of which will be in women younger than 50 years of age.
- Approximately 56,500 cases of DCIS (stage 0 disease) will be diagnosed in 2024.
- An estimated 42,250 women will die from breast cancer in the US in 2024, more than half of whom will be ages 70 and older.



DCIS=ductal carcinoma in situ. Rates are per 100,000 and age adjusted to the 2000 US standard population; invasive disease is adjusted for delays in reporting.

Source: Surveillance, Epidemiology, and End Results (SEER) Program, SEER 9 Registries, National Cancer Institute, 2024 for years 1975-2018 and SEER Program, SEER 8 Registries, National Cancer Institute, 2024 for years 2019-2021.

Figure 2. Trends in Incidence of Ductal Carcinoma In Situ and Invasive Female Breast Cancer by Age, US, 1975-2021

- Between 1980 and 2000, invasive breast cancer incidence rates increased by 32% in women overall (from 145 to 192 cases per 100,000), with a steeper incline among women ages 50 years and older (40% increase) compared to those younger than 50 years of age (15% increase), largely reflecting widespread rapid uptake of mammography screening, which was then recommended for women ages 50 years and older.
- Invasive breast cancer incidence dropped steeply in the early 2000s following decreased use of menopausal hormone therapy (which was reported to increase breast cancer risk), but thereafter began a slow increase.
- During the most recent decade of data (2012-2021), invasive breast cancer incidence increased by 1% per year, with a slightly steeper trend (1.4% per year) among women younger than 50 years of age than in those who were older (0.7% per year). Rising incidence is thought to reflect increased body weight (postmenopausal diagnoses) and delayed and/or decreased childbirth.
- DCIS is almost exclusively diagnosed during screening and increased by 10-fold in women ages 50 years and older during the 1980s and 1990s. During 2012-2021, incidence of DCIS was stable in both age groups.

Table 3. Factors That Increase Risk of Invasive Female Breast Cancer

Relative risk	Factor
>4.0	Age (65+ versus <65 years, although risk increases across all ages until age 80)
	Biopsy-confirmed atypical hyperplasia
	Certain inherited genetic mutations for breast cancer (e.g., *BRCA1, BRCA2, PALB2, TP53*)
	Lobular neoplasia
	Personal history of early-onset (<40 years) breast cancer
2.1-4.0	Ductal carcinoma in situ
	High endogenous estrogen or testosterone levels (postmenopausal)
	High-dose radiation to chest (e.g., Hodgkin lymphoma treatment)
	Mammographically dense (26% or more) breasts
	Personal history of breast cancer (40+ years)
	Two or more first-degree relatives with breast cancer
1.1-2.0	Alcohol consumption
	Early age at menarche (<11 years)
	Height (tall)
	Late age at first full-term pregnancy (>30 years)
	Late age at menopause (≥55 years)
	Never breastfed a child
	No full-term pregnancies
	One first-degree relative with breast cancer
	Obesity (postmenopausal)
	Personal history of endometrial or ovarian cancer
	Physical inactivity
	Proliferative breast disease without atypia (usual ductal hyperplasia, fibroadenoma)
	Recent and long-term use of menopausal hormone therapy containing estrogen and progestin
	Recent hormonal contraceptive use
	Type 2 diabetes
	Weight gain in adulthood

Note: Relative risk for some factors vary by breast cancer molecular subtype.

- Most women who develop breast cancer have no known risk factors. Approximately 30% of cases can be attributed to potentially modifiable risk factors, such as excess body weight (postmenopausal breast cancer), physical inactivity, and alcohol consumption.[2]
- The strongest risk factors are a personal or family history of breast cancer or a personal history of lesions associated with risk (e.g., DCIS, proliferative lesions with atypia); high-dose radiation to the chest; or certain inherited genetic variations (e.g., *BRCA1* or *BRCA2* gene mutations).
- Genetic variations in *BRCA1* and *BRCA2* account for 5% to 10% of all female breast cancers and 15% to 20% of familial breast cancers.[3] These variations are rare (about 1 in 400 women) in the general population, but occur with higher frequency in certain groups (e.g., Ashkenazi Jewish women).[4]
- Pregnancy influences breast cancer risk differently over time and by disease subtype. Risk increases immediately following childbirth, but decreases for hormone-receptor positive disease after two decades, with an additional reduction among women who are young at first childbirth and/or have more children. In contrast, the risk of hormone-receptor negative disease remains elevated, but is mitigated among women who breastfeed.[5, 6]
- Factors not associated with breast cancer risk include abortion,[7] wearing a bra,[8] and breast implants,[9] although implants can obstruct mammography images and should be noted during scheduling so additional views can be captured.
- For more information on how type 2 diabetes,[10] treatment from Hodgkin lymphoma,[11] and other factors listed in the table increase risk of breast cancer,[12] see References 2-12.

Table 4. Breast Cancer Subtypes and Distributions, US, 2017-2021

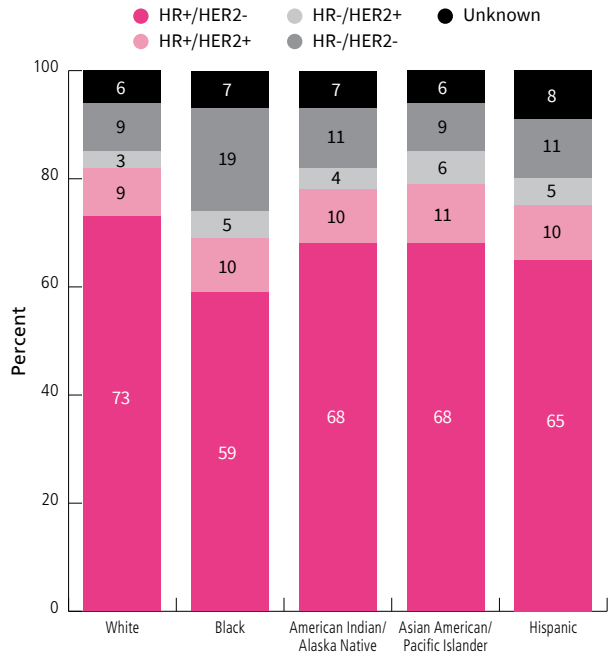
- Breast cancers are most commonly classified based on molecular characteristics that are associated with clinical presentation, response to therapy, and prognosis. The four intrinsic subtypes (Luminal A, Luminal B, human epidermal growth factor receptor 2 [HER2]-enriched, and basal-like) were originally defined by gene expression profiling, but are often approximated based on simpler tests that measure levels of estrogen, progesterone, and HER2, also known as ERBB2. Information about tumor grade and rate of cell division is also sometimes used to assign subtype.
- Four out of five breast cancers test positive for hormone (estrogen and/or progesterone) receptors (HR+) and are generally classified as either Luminal A (70%) or Luminal B (9%) based on the presence of HER2/ERBB2.
- Basal-like cancer, also known as triple-negative breast cancer because it lacks all three biomarkers, accounts for only 10% of cases overall, but is more common among African American women (Figure 3) and those with a *BRCA1* gene mutation.

Intrinsic subtype	Hormone receptor status[a]	HER2/ERBB2	Characteristics	Distribution of cases (%)[b]
Luminal A	Positive	Negative	Slow growing and has the best prognosis, high response to hormone therapy	70
Luminal B	Positive	Positive[c]	Compared to Luminal A, grows faster and worse prognosis	9
HER2-enriched	Negative	Positive	Aggressive and fast growing, improved prognosis since HER2-targeted therapies discovered	4
Basal-like/ triple negative	Negative	Negative	Aggressive and fast growing, more likely to be diagnosed at a later stage	10
Unknown	Unknown	Unknown		7

HER2=human epidermal growth factor receptor 2. ERBB2=erb-b2 receptor tyrosine kinase 2. [a]Hormone receptors include estrogen and/or progesterone. [b]Distibution is based on hormone receptor and HER2 status. [c]Some luminal B cancers may be HER2/ERBB2-negative with a high Ki-67 status (marker of elevated proliferation).

Source: North American Association of Central Cancer Registries, 2024.

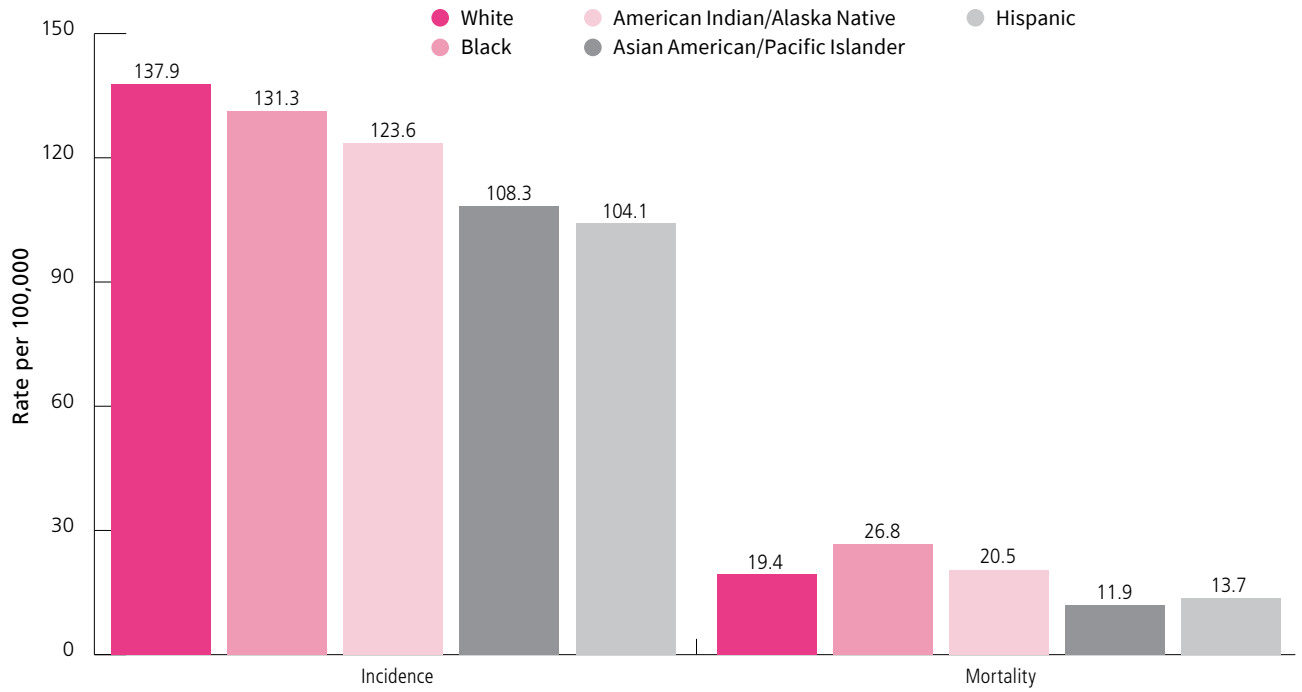
Figure 3. Distribution of Breast Cancer Subtypes by Race and Ethnicity, US, 2017-2021



- HR+/HER2- breast cancer is the most common subtype in every racial and ethnic group, with the highest proportion (73%) among White women and lowest in Black women (59%).
- The distribution of other subtypes is similar across race and ethnicity except for triple-negative breast cancer, which accounts for 1 in 5 cases in Black women versus 1 in 10 cases in all other women. Triple-negative breast cancer is generally more aggressive with higher risk of metastasis and recurrence, in part because it lacks the biomarkers for targeted treatment.
- HR-/HER2+ breast cancer is the rarest subtype, representing 3% to 6% of cases by race and ethnicity.

HR=hormone receptor; HER2=human epidermal growth factor receptor 2. Race is exclusive of Hispanic origin. Numbers may not sum to 100 due to rounding. Data for American Indians/Alaska Natives are based on Purchased/Referred Care Delivery Area counties.

Source: North American Association of Central Cancer Registries, 2024.



AAPI=Asian American/Pacific Islander. AIAN=American Indian/Alaska Native. Rates are per 100,000 and age adjusted to the 2000 US standard population ; incidence is adjusted for delays in reporting. Race is exclusive of Hispanic origin. To reduce racial misclassification, incidence data are confined to Purchased/ Referred Care Delivery Area counties, while mortality data are for the entire US with adjustment factors for racial misclassification applied. (See Data Methods and Limitations, page 20).

Sources: Incidence – North American Association of Central Cancer Registries, 2024. Mortality – National Center for Health Statistics, Centers for Disease Control and Prevention, 2024.

Figure 4. Female Breast Cancer Incidence (2017-2021) and Death (2018-2022) Rates by Race and Ethnicity, US

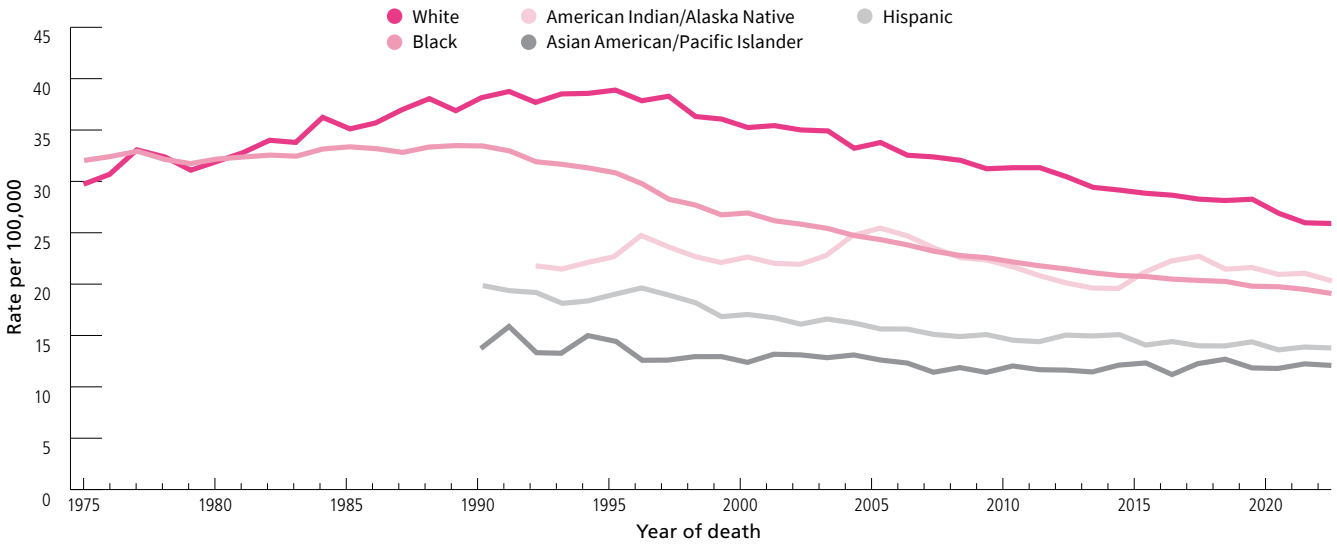
- Breast cancer incidence rates range from 104.1 (per 100,000) in Hispanic women to 137.9 in White women, whereas death rates range from 11.9 (per 100,000) in AAPI women to 26.8 in Black women.
- Compared to White women, Black women have 5% lower breast cancer incidence but 38% *higher* breast cancer mortality, and AIAN women have 10% lower breast cancer incidence but 6% *higher* mortality, although the difference is not statistically significant.
- The disproportionately high burden of breast cancer mortality among Black and AIAN women is due in part to differences in stage at diagnosis (Figure 8) and survival (Figure 9), all of which largely reflect unequal access to high-quality cancer screening and treatment.

AAPI=Asian American/Pacific Islander; AIAN=American Indian/Alaska Native. Rates are per 100,000 and age adjusted to 2000 US standard population. Race is exclusive of Hispanic origin. Rates were adjusted for reporting delays. Data for American Indian/Alaska Native individuals are based on Purchased/Referred Care Delivery Area counties.

Source: North American Association of Central Cancer Registries, 2024.

Figure 5. Trends in Female Breast Cancer Incidence Rates by Race and Ethnicity, US, 1998-2021

- Overall, the breast cancer incidence rate has increased slowly since the mid-2000s, at least in part because of changing patterns in risk factors, such as increased excess body weight and fewer and/or later childbirths.
- In the most recent 10 years (2012 to 2021), breast cancer increased by about 1% per year in White, Black, and AIAN women; 1.6% per year in Hispanic women; and 2.6% per year in AAPI women. The somewhat steeper trend in recent years may reflect post-pandemic "catch-up" mammography and diagnoses in 2021.
- The steeper increase in Asian women may reflect the influence of Asian immigrants, who have higher breast cancer risk than US-born Asian women.[13]

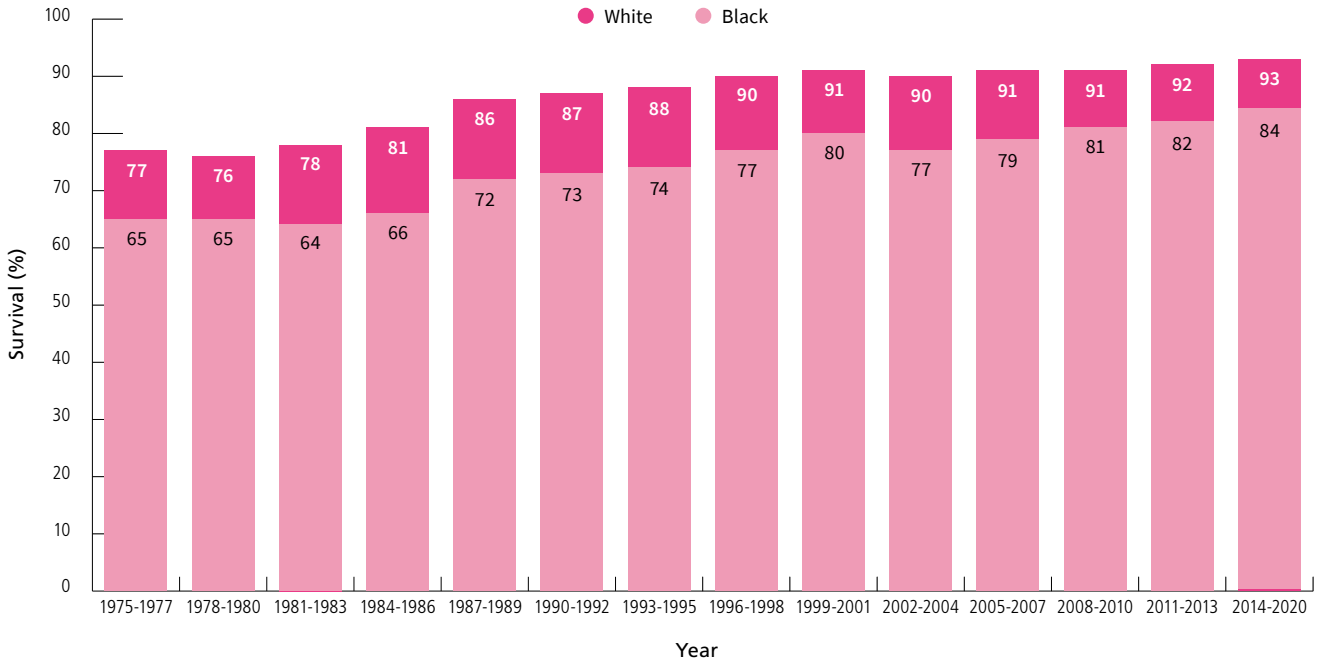


AAPI=Asian American/Pacific Islander. AIAN=American Indian/Alaska Native. Rates are per 100,000 and age adjusted to the 2000 US standard population. Race is exclusive of Hispanic origin, except for years 1975-1989 for Black and White women. Mortality rates for American Indian/Alaska Native women are for the entire United States with adjustment for racial misclassification on death certificates[37] and shown as a 3-year moving average due to sparse data.

Source: National Center for Health Statistics, 2024.

Figure 6. Trends in Female Breast Cancer Death Rates by Race and Ethnicity, US, 1975-2022

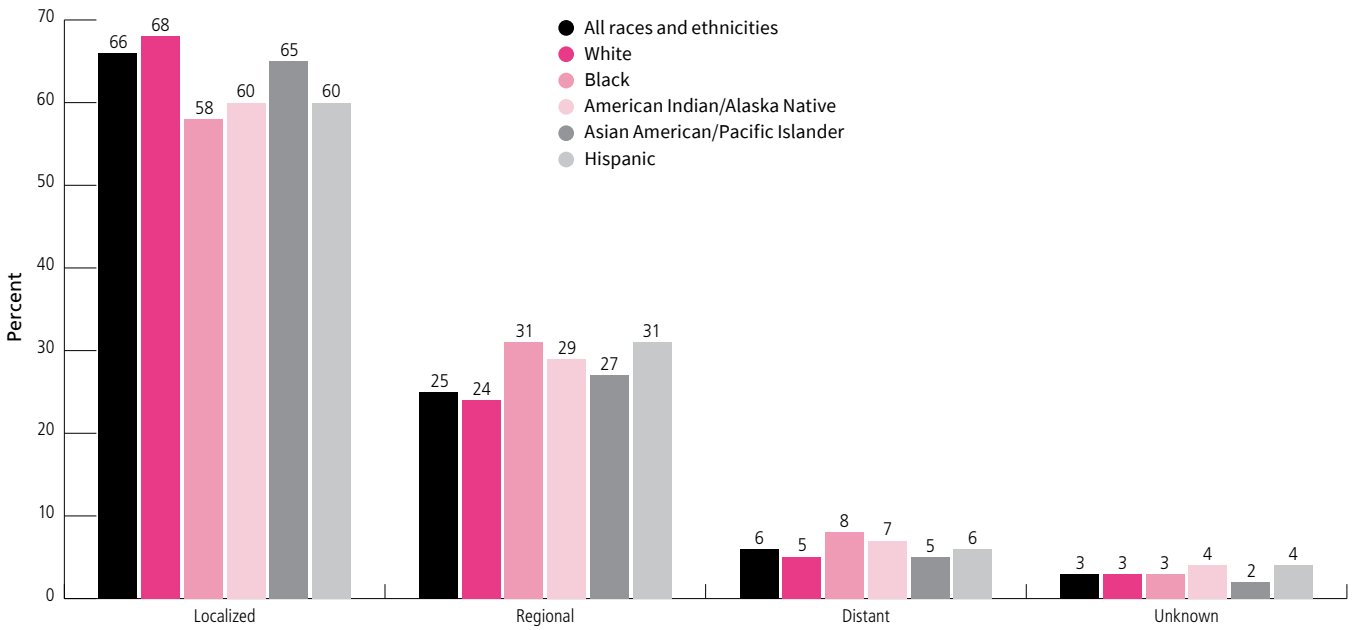
- The breast cancer death rate has dropped by 44% since 1989 because of advances in early detection and treatment,[14] averting approximately 517,900 breast cancer deaths. The pace of the decline has slowed from 1.9% per year from 1998 through 2010 to 1.2% per year from 2010 through 2022.
- However, not all women have benefited equally from this progress. Unequal dissemination of mammography screening and adjuvant hormonal therapies in the 1980s led to the emergence of a Black-White disparity in breast cancer mortality that peaked in 2011 with 44% higher death rates in Black versus White women and has only decreased slightly to 36% in 2022. The gap largely reflects lower-quality care across the continuum, from a higher likelihood of screening at nonaccredited facilities to longer time to follow-up on abnormal tests and a lower likelihood of surgery and adjuvant treatment.[15-17]
- AIAN women have been similarly left behind, with breast cancer death rates remaining stable over the past 3 decades.
- The breast cancer death rate continued to decline during the most recent decade (2013-2022) in Black women (by 1.4% per year), White women (by 1% per year), and Hispanic women (0.7% per year), but was stable in AAPI and AIAN women.



Source: Surveillance, Epidemiolgy, and End Results (SEER) Program, 22 SEER registries for 2002-2020, 8 SEER registries for 1975-2001 National Cancer Institute, 2024. Cases were followed through 2021.

Figure 7. Trends in Female Breast Cancer 5-year Relative Survival Rates (%) by Race, US, 1975-2020

- The 5-year relative survival has increased from 77% in 1975-1997 to 93% in 2014-2020 in White women and from 65% to 84% in Black women.
- The gap in breast cancer survival between Black and White women peaked in the mid-1980s at a 15% difference, consistent with the emergence of the mortality disparity, and remains at 9% for women diagnosed in 2014-2020.

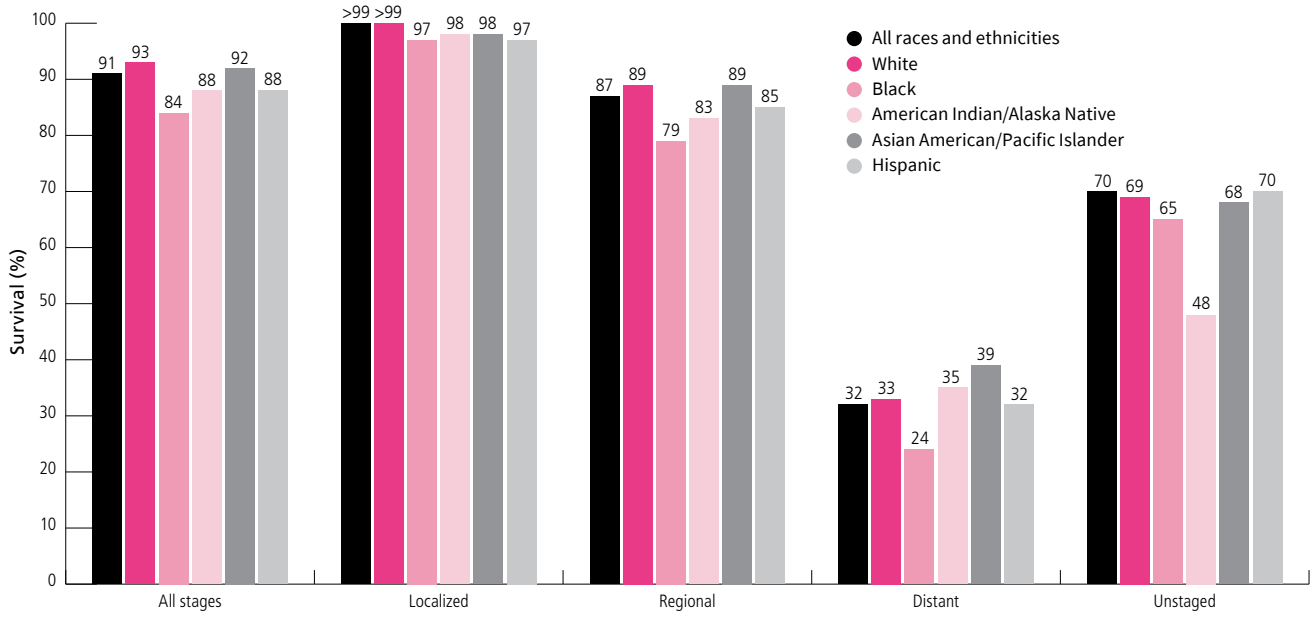


AIAN=American Indian/Alaska Native. Race is exclusive of Hispanic origin. Stage classification is based on Combined Summary Stage. **Local:** an invasive malignant cancer confined entirely to the organ of origin. **Regional:** a malignant cancer that 1) has extended beyond the limits of the organ of origin directly into surrounding organs or tissues; 2) invovles regional lymph nodes; or 3) has both regional extension and involvement of regional lymph node. **Distant:** a malignant cancer that has spread to parts of the body remote from the primary tumor either by direct extension or by discontinous metastasis to distant organs, tissues, or via the lymphatic system to distant lymph nodes. Data for American Indian/Alaska Native individuals are based on Purchased/Referred Care Delivery Area counties.

Source: North American Association of Central Cancer Registries, 2024.

Figure 8. Female Breast Cancer Stage Distribution by Race and Ethnicity, US, 2017-2021

- Two-thirds (66%) of female breast cancer patients in the US are diagnosed with localized-stage disease, when treatment is more likely to be less extensive and more successful.
- Black women are least likely to be diagnosed with localized-stage breast cancer and most likely to be diagnosed with regional- or distant-stage cancer, along with AIAN women, contributing to the disproportionate mortality burden in these groups.
- Differences in stage at diagnosis mostly reflect inequalities in access to and quality of breast cancer screening, but also subtype distribution and probably other societal factors such as discrimination and medical mistrust.



AAPI=Asian American/Pacific Islander. Race is exclusive of Hispanic origin; survival rates for American Indian/Alaska Native women are confined to cases diagnosed in Purchased/Referred Care Delivery Area counties. Survival rates are based on patients diagnosed during 2014-2020 and followed through 2021. Survival rates for American Indian/Alaska Native women have greater than 5% standard error for distant and unstaged disease.

Source: Surveillance, Epidemiology, and End Results (SEER) Program, 22 SEER registries, National Cancer Institute, 2024.

Figure 9. Five-year Relative Survival Rates (%) by Stage at Diagnosis and Race and Ethnicity, US, 2014-2020

- Compared to other cancers, breast cancer has a high 5-year relative survival rate overall at 91%; however, it declines to 86% and 81% at 10 and 15 years after diagnosis, respectively.
- The 5-year relative survival rate is over 99% for disease diagnosed at a localized stage, when treatment is typically more effective and less extensive, but drops to 87% for regional-stage and 32% for distant-stage disease.
- Black women have the lowest survival for every known stage of diagnosis, largely reflecting differences in access to high-quality treatment. Data from clinical trials show that there may be similar survival when treatment is equal[18, 19]; however, other studies have found disparities among young Black and White women even when treatment is the same.[20]
- Survival rates are likely overestimated for Hispanic and AAPI populations because of a higher prevalence of foreign-born individuals who may return to their home country after diagnosis and be lost to vital status follow-up.[21, 22]

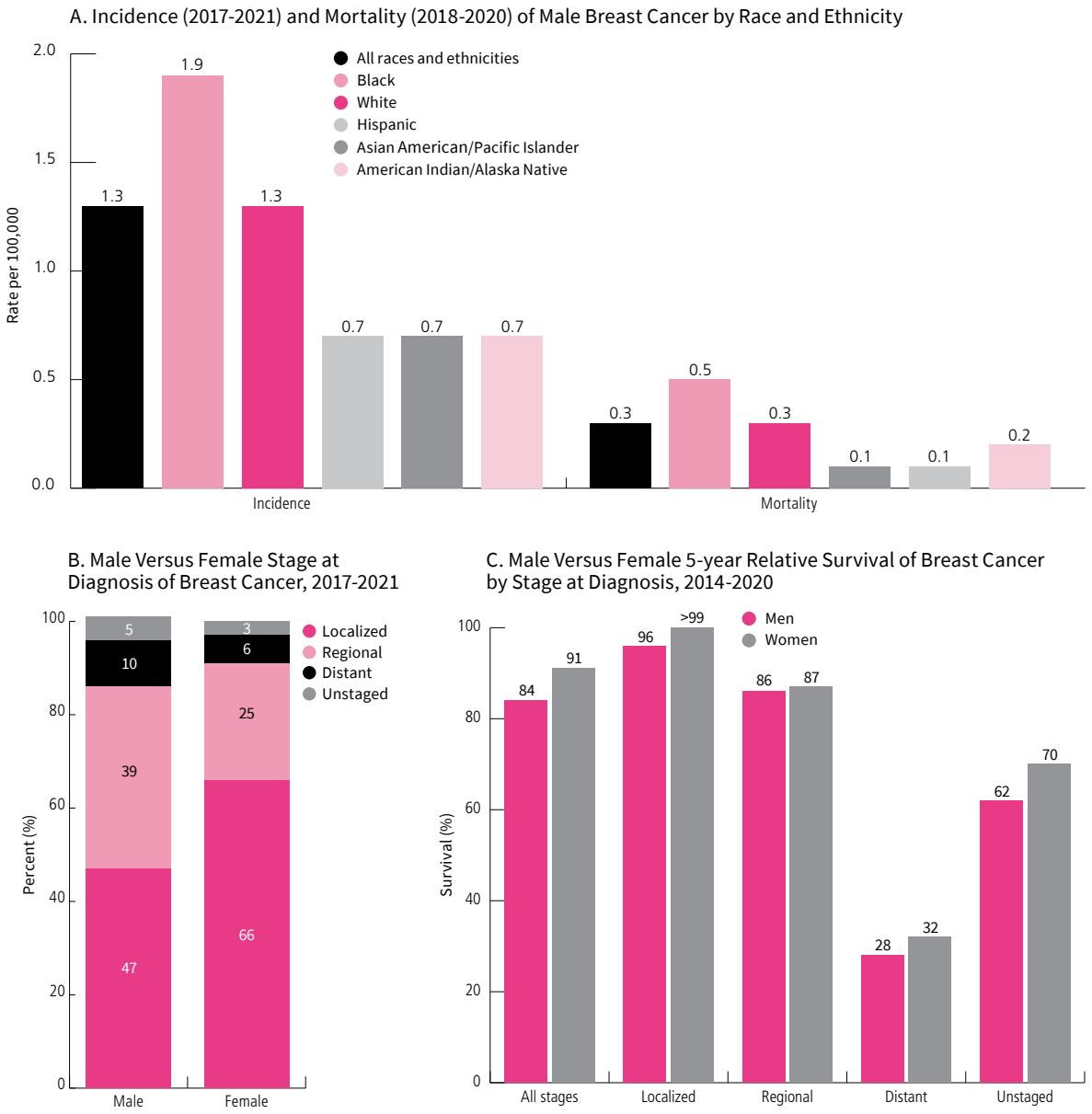
Table 5. State-level Breast Cancer Incidence (2017-2021) and Death (2018-2022) Rates by Race and Ethnicity, US

- Breast cancer incidence and mortality vary across states due to differences in the prevalence of risk factors, screening (Figure 11), and receipt and quality of treatment.
- Although overall breast cancer incidence is higher in White women than Black women, rates are higher for Black women in Alabama, Louisiana, and Mississippi, and are not statistically significantly different in 21 of 43 states and the District of Columbia.
- Black women have statistically significantly higher breast cancer mortality than White women in every state except Colorado, New Mexico, Oregon, Rhode Island, Washington, and West Virginia, where rates are similar.
- Hispanic women have lower breast cancer death rates than White women in every state with available data except Hawaii, Mississippi, Montana, New Hampshire, Wisconsin, and the District of Columbia, where rates are similar.

State	Incidence					Mortality				
	All races and ethnicities	White	Black	Hispanic	AAPI	All races and ethnicities	White	Black	Hispanic	AAPI
Alabama	123.3	122.3	130.3	61.0	89.8	20.4	18.6	26.8	7.6	6.0
Alaska[a]	126.3	129.5	101.8	101.8	98.1	17.1	18.1	[b]	10.8	[b]
Arizona	117.5	127.0	106.0	97.5	90.7	18.8	19.6	31.1	14.6	15.2
Arkansas[a]	124.1	123.7	126.8	106.1	103.8	19.8	19.3	28.0	9.1	6.4
California	124.0	139.9	124.7	96.9	113.1	18.8	21.3	29.3	13.3	14.4
Colorado	133.3	138.0	123.8	109.7	100.5	18.6	19.1	22.4	9.0	15.6
Connecticut	143.1	148.1	135.4	122.8	88.5	16.8	17.2	23.8	7.3	9.2
Delaware	139.2	143.4	134.8	111.2	97.1	22.0	21.5	28.2	[b]	8.0
District of Columbia	141.2	151.5	144.2	87.4	82.6	24.0	15.6	32.0	[b]	8.6
Florida	126.7	134.3	116.8	108.7	89.9	18.6	19.1	24.8	13.0	13.9
Georgia	132.6	134.7	134.0	115.8	94.1	20.7	19.0	26.4	12.3	11.9
Hawaii	140.1	140.2	116.6	168.4	137.7	16.6	23.7	[b]	14.7	20.4
Idaho	132.8	134.6	[b]	106.3	110.8	19.7	20.4	[b]	[b]	7.9
Illinois	133.6	139.8	133.7	101.6	106.6	20.2	20.0	30.7	11.3	11.1
Indiana[c]	113.4	115.2	108.5	82.1	80.5	20.3	20.3	25.9	7.5	12.6
Iowa	136.9	139.1	134.1	76.2	96.2	17.8	17.9	25.4	7.6	9.4
Kansas	135.8	137.3	134.9	100.8	88.6	19.9	19.9	26.3	10.2	15.1
Kentucky	129.2	130.0	133.1	90.6	82.7	21.4	21.3	26.1	12.3	10.8
Louisiana	130.4	130.2	137.3	90.9	86.3	22.1	20.0	28.1	12.5	12.3
Maine	132.8	134.2	[b]	84.2	73.8	16.7	16.8	[b]	[b]	[b]
Maryland	135.5	144.4	134.4	86.4	101.8	20.0	18.6	25.9	10.4	11.7
Massachusetts	136.8	142.7	120.9	97.9	96.6	15.2	15.4	18.6	7.6	10.9
Michigan	127.0	129.6	121.1	88.8	88.4	20.3	19.7	27.2	11.7	14.4
Minnesota	140.4	143.6	112.5	117.3	87.8	17.2	17.3	23.3	8.6	10.0
Mississippi	124.6	124.0	129.7	51.1	88.7	23.4	20.1	30.4	12.3	14.9
Missouri	133.2	134.9	134.2	74.8	91.8	20.0	19.3	28.4	9.5	9.4
Montana	136.3	137.0	[b]	70.5	[b]	17.7	17.3	[b]	[b]	15.5
Nebraska	130.7	134.6	129.9	100.4	74.6	19.5	19.8	27.5	[b]	11.0
Nevada	113.0	121.0	119.0	78.1	107.2	21.7	23.4	31.8	18.5	12.0
New Hampshire	139.6	142.4	82.0	111.4	72.8	17.6	17.9	[b]	11.8	13.8
New Jersey	136.4	148.6	131.3	105.3	106.1	19.1	20.2	25.6	9.9	12.4
New Mexico	116.3	125.0	117.0	109.6	93.6	19.3	21.7	28.7	11.2	17.2
New York	134.1	144.4	123.8	107.5	110.2	17.2	17.6	23.0	9.2	11.6
North Carolina	143.2	145.8	143.1	107.0	92.6	19.9	18.8	26.5	8.3	9.6
North Dakota	130.9	131.9	[b]	[b]	102.0	16.2	16.3	[b]	[b]	[b]
Ohio	132.3	134.4	127.7	81.6	93.0	20.2	19.8	26.5	11.2	8.9
Oklahoma	124.5	123.4	132.3	91.3	96.6	22.4	22.6	29.2	11.1	14.7
Oregon	131.1	133.1	111.0	104.7	96.1	19.1	19.9	18.9	12.3	10.6
Pennsylvania	131.2	133.9	124.8	102.6	86.1	19.6	19.2	27.3	9.0	12.8
Rhode Island	139.1	144.2	128.5	90.4	103.9	16.1	16.7	16.9	[b]	8.9
South Carolina	133.7	135.9	132.4	96.2	82.2	21.3	20.2	26.2	8.1	10.5
South Dakota	129.6	132.9	[b]	[b]	131.9	18.3	18.0	[b]	[b]	[b]
Tennessee	124.6	126.4	122.2	88.6	80.2	21.7	20.9	28.8	10.0	10.3
Texas	121.4	133.4	128.3	99.3	92.6	19.7	20.6	28.7	11.8	15.1
Utah	119.1	119.0	77.4	130.0	94.4	20.2	20.7	[b]	14.5	16.8
Vermont	127.9	127.6	[b]	137.7	77.5	16.9	17.1	[b]	[b]	[b]
Virginia	129.0	131.9	133.7	85.8	86.2	20.2	19.5	27.0	12.0	11.8
Washington	137.1	140.9	108.6	111.1	110.3	18.7	19.6	19.3	11.1	12.8
West Virginia	124.7	126.0	118.3	66.3	78.3	21.1	21.2	28.6	[b]	[b]
Wisconsin	137.0	138.5	143.0	106.1	81.5	17.9	17.8	26.4	7.7	14.0
Wyoming	122.7	126.2	[b]	89.2	[b]	19.9	20.3	[b]	[b]	11.1
Puerto Rico[d]	99.0					17.0				

AAPI=American Asian/Pacific Islander. Race is exclusive of Hispanic origin. Rates are per 100,000 and age adjusted to 2000 US standard population. [a]Incidence rate is for diagnosis years 2017-2020. [b]Statistic not displayed due to fewer than 25 cases or 10 deaths. [c]Incidence rate from CiNA Explorer. [d]Data limited to all race and ethnicities combined; mortality data for 2016-2020.

Sources: Incidence: North American Association of Central Cancer Registries, 2024. Mortality: National Center for Health Statistics, 2024.



Race is exclusive of Hispanic origin; survival rates for American Indian/Alaska Native people are confined to cases diagnosed in Purchased/Referred Care Delivery Area counties. Survival rates are based on patients diagnosed during 2014-2020 and followed through 2021. The male survival rate for unstaged disease has a standard error greater than 5%.

Source: Surveillance, Epidemiology, and End Results (SEER) Program, 22 SEER registries, National Cancer Institute, 2024.

Figure 10. Male Breast Cancer Statistics, US

- Breast cancer in men is rare, accounting for less than 1% of all breast cancer cases in the US. Still, 2,790 men will be diagnosed with breast cancer and 530 men will die from the disease in 2024.
- Black men have the highest breast cancer incidence (1.9 per 100,000) and mortality (0.5 per 100,000) of all racial and ethnic groups (Figure 10A).
- Compared to women, men are more likely to be diagnosed with advanced (regional- or distant-stage) disease (48% versus 31%; Figure 10B), reflecting the absence of screening, as well as delays in diagnosis due to lack of awareness.
- The 5-year relative breast cancer survival rate is lower in men than women overall (84% versus 91%, respectively) and for every stage of diagnosis (Figure 10C).

	Within the past year	Within the past 2 years
Overall	**49**	**67**
Age (years)		
40-44	38	52
45-64	54	73
65-74	58	77
75+	39	56
Race/Ethnicity		
Hispanic/Latina	44	65
White	51	68
Black	55	73
Asian American[a]	44	62
American Indian/Alaska Native	31	51
Education		
Some high school or less	34	55
High school diploma or GED	46	63
Some college/Assoc. degree	49	67
College graduate	56	74
Sexual orientation		
Gay/Lesbian	45	65
Straight	50	68
Bisexual	39	61
Health insurance status (age < 65 years)		
Uninsured	23	37
Private	55	73
Medicaid/pub/dual	43	61
Medicare (ages ≥65 years)	49	67
Other	52	76
Immigration		
Born in US/US Territory	51	68
In US fewer than 10 years	24	48
In US 10 or more years	45	66
Region		
Northeast	52	69
Midwest	52	68
South	49	68
West	45	63

AIAN=American Indian/Alaska Native; GED=General Education Development high school equivalency. Race is exclusive of Hispanic origin. Estimates do not distinguish between examinations for screening and diagnosis. Except by age and insurance status, estimates are age adjusted using age groups 40-49, 50-64, and 65+ years. [a]Does not include Pacific Islander women.

Source: National Health Interview Survey, 2021.

Table 6. Mammography Prevalence (%), Women 40 and Older, US, 2021

- In 2024 the United States Preventive Services Task Force revised their breast cancer screening recommendations to biennial mammography beginning at age 40 years,[23] which more closely aligns with American Cancer Society recommendations. (See sidebar.)
- Among women ages 40 years and older, an estimated 49% and 67% had a mammogram in the past one and two years, respectively, in 2021.
- The lowest screening prevalence is among women ages 40-44 years; those who are AIAN; and those who have less than a high school education, are uninsured, or immigrated in the past 10 years.
- Although Black women appear to have the highest screening prevalence (73% in the past two years), studies suggest they are less likely to have high-quality screening and timely follow-up of abnormal results,[24, 25] and may also be more likely to over-report screening.[26, 27]

Figure 11. Mammography Prevalence (%) in the Past Two Years by State, Women 40 and Older, 2022

Estimates are age adjusted using age groups: 40-49, 50-64, and 65+ years.
Source: Behavioral Risk Factor Surveillance System, 2022.

- In 2022, the prevalence of mammography in the past two years among women ages 40 years and older ranged from 58% in Wyoming to 77% in Rhode Island and was lowest in Western states.
- State variation in screening reflects differences in rurality,[28] socioeconomic status, and health care policy. For instance, Medicaid expansion is associated with increased mammography screening among low-income women.[29]

American Cancer Society Recommendations for Breast Cancer Screening

Women at Average-risk[30]

The American Cancer Society recommends that women at average risk of breast cancer (i.e., no personal history of breast cancer, suspected or confirmed genetic variant known to increase risk, strong family history, or history of previous radiotherapy to the chest) be screened with mammography at the following ages:

- Ages 40 to 44 years, have the opportunity to begin annual screening
- Ages 45 to 54 years, undergo annual screening
- Ages 55 years and older, transition to biennial screening or have the opportunity to continue annual screening, and continue screening as long as life expectancy is 10 years or more

Women at High-risk[31]

The American Cancer Society recommends women at high risk of breast cancer (i.e., having a lifetime risk of breast cancer of about 20% to 25% or greater according to risk assessment tools based mainly on family history, a known genetic variation that increases risk or a first-degree relative with a known variation, a strong family history of breast cancer and/or ovarian cancer, or prior chest radiation therapy) begin annual screening with magnetic resonance imaging (MRI) and mammography at age 30 years.

American Cancer Society Programs, Research, and Advocacy

The American Cancer Society is a leading cancer-fighting organization with a vision of ending cancer as we know it, for everyone. We are the only organization that integrates research, advocacy, and direct patient support to measurably improve lives. This work could not be accomplished without the strength of our dedicated volunteers, who drive every part of our mission. With the support of our employees, volunteers raise funds to fuel research breakthroughs; advocate for important issues like health equity and more affordable care; and provide and support patient and caregiver programs, including transportation and lodging that increase access to cancer care, just to name a few.

Patient Support

At the American Cancer Society, we continue to refine our approach and deepen our commitment to ending breast cancer as we know it, for everyone. We work to touch as many lives as possible and ensure no one faces breast cancer – or any cancer – alone, understanding that people have different circumstances and needs throughout their cancer journey. We also work to establish and enhance collaborative partnerships with shared goals to eliminate cancer disparities, improve the lives of people with cancer and their families, assist cancer professionals in providing the highest-quality care, and provide anyone impacted by cancer with the support, information, and resources they need – from prevention to detection and diagnosis, through treatment and survivorship, and for some, the end of life. (See Table 7 for information on the programs and services we offer.) The American Cancer Society also has cancer information available in other languages; visit cancer.org/cancer-information-in-other-languages to learn more.

Table 7. American Cancer Society Programs and Services for People With Breast Cancer

Program/Service	Description	Contact information
Cancer Helpline	Provides answers to questions 24/7 about breast cancer and connects people with resources	1-800-227-2345 chat online at cancer.org
Patient Education Materials	Evidence-based, understandable, and actionable health information curated by oncology physicians and nurses	cancer.org/breastcancer cancer.org/materials cancer.org/bookstore
Cancer Survivors Network℠	A safe online community where patients, survivors, and caregivers can support each other, ask questions, and share practical tips	csn.cancer.org
Hope Lodge®	Provides free, temporary lodging for people facing cancer and their caregivers when treatment is far from home	1-800-227-2345 cancer.org/hopelodge
Reach To Recovery®	Connects people facing breast cancer with trained volunteer breast cancer survivors for one-on-one support	reach.cancer.org
Road To Recovery®	Removes barriers to cancer treatment by providing people with transportation to and from cancer treatments and appointments through volunteer drivers	1-800-227-2345 cancer.org/roadtorecovery
EverYou™	Offers a curated selection of quality wigs, headwear, and post-surgical products, including bras and breast forms, to help people keep feeling like themselves during and after treatment (previously *"tlc" Tender Loving Care*®)	1-800-850-9445 everyou.com
ACS CARES™ (Community Access to Resources, Education, and Support)	Provides high-quality, personalized resources and virtual support for people with cancer and their caregivers through a phone application and over the phone	cancer.org/support-programs-and-services/acs-cares.html
Support for Caregivers	Offers caregivers for people with cancer support by providing information, resource guides, and videos about what to expect and how to protect their own health and well-being	cancer.org/cancer/caregivers For Spanish: cancer.org/es/cancer/caregivers

Research

The American Cancer Society invests more money in breast cancer research than any other cancer type. We fund research that spans the cancer continuum from prevention and early detection to treatment and beyond, and have contributed to the development of potentially lifesaving breast cancer drugs, such as tamoxifen and Herceptin.

Intramural research at the American Cancer Society includes teams that develop and manage cohorts to study the causes of cancer; track cancer occurrence and outcomes; and monitor disparities, emerging trends, risk factor and screening prevalence, and the economic burden of cancer. In 2024, the American Cancer Society launched the VOICES of Black Women study, a collective commitment to understand and improve the health of Black women across the country, including the impact of breast cancer. Additionally, we fund some of the world's leading cancer researchers through grants awarded by the extramural research team. As of May 1, 2024, the American Cancer Society was funding more than $81 million in breast cancer research through 156 research and training grants. Examples of projects researchers are engaged in span the six American Cancer Society research priority areas (indicated in parentheses below) and include:

- Identifying new targeting strategies for circulating tumor cells and exploiting immune cell responses for treating breast cancers (treatment)
- Developing a wearable device to take pictures of breast cancers for assessing effectiveness of ongoing treatments (treatment)
- Understanding the role of the immune system in the spread of breast cancer to other parts of the body (etiology/causes of cancer)
- Evaluating the effects of a high-protein, low-calorie diet on breast tissue and the risk of breast cancer recurrence (etiology/causes of cancer; survivorship)

- Examining the impact of breast density legislation on women's breast cancer knowledge and screening decisions (screening and diagnosis)
- Elucidating biobehavioral mechanisms of breast cancer racial disparities (health equity across the cancer continuum)
- Testing strategies to improve participation in exercise for Hispanic breast cancer survivors (health equity across the cancer continuum, obesity, and healthy eating and active living)
- Developing technologies to understand how breast cancer cells respond to changes in metabolites during cancer initiation and progression (etiology)
- Addressing gaps and disparities in genetic risk prevention in breast cancer patients and their families (health equity across the cancer continuum)

Visit cancer.org/research to learn more about the research being done by the American Cancer Society.

Advocacy

The American Cancer Society Cancer Action Network℠ (ACS CAN), the nonprofit, nonpartisan advocacy affiliate of the American Cancer Society, advocates for clear, comprehensive coverage of breast cancer screening, and to increase access to high-quality cancer treatment services and care. ACS CAN also advocates for Congress and state legislators to continue to invest in cancer research and fund programs across the US that provide low-cost cancer screening and treatment of breast cancer for low-income women. Visit fightcancer.org for more information.

Following are examples of ACS CAN activities and accomplishments:

Improving Access to the Affordable Care Act Through Health Care Reform

- ACS CAN advocates for states to broaden access to health care coverage for all individuals with limited incomes through state Medicaid programs.
- ACS CAN supports legislation to eliminate cost-sharing for follow-up tests needed after an abnormal mammogram and for additional imaging that is recommended for individuals above average risk of breast cancer.

The National Breast and Cervical Cancer Early Detection Program (NBCCEDP)

- ACS CAN advocates for increased funding of the NBCCEDP, which provides community-based breast and cervical cancer screenings to underserved, underinsured, and uninsured communities, to ensure more eligible people have access to cancer screenings.

Protecting the Breast and Cervical Cancer Prevention and Treatment Act (BCCPT)

- ACS CAN has opposed efforts to eliminate or reduce eligibility for the BCPPT, which provides a pathway for breast and cervical cancer treatment through state Medicaid programs.

Breast Density and Mammography Reporting

- ACS CAN has advocated for a national standard developed through an evidence-based process to inform eligible people about breast density and risk.
- The Food and Drug administration finalized a rule to incorporate breast density reporting on mammography reports for the first time in 2023.

Patient Navigation

- ACS CAN advocates for policies that increase access to patient navigation for people with cancer, prioritizing policies that create sustainable funding.

Funding for Cancer Research

- ACS CAN continues to work to increase government funding for cancer research at the National Institutes of Health, including the National Cancer Institute and the National Cancer Center on Minority Health and Health Disparities.

Data Methods and Limitations

Unless otherwise stated, the statistics and statements in this publication refer to invasive (versus in situ) female breast cancer.

Estimated new breast cancer cases and deaths in 2024. The number of new invasive breast cancer cases in the US in 2024 was calculated by estimating complete case counts during 2006 to 2020 in all 50 states and the District of Columbia. Case counts were estimated by applying a spatiotemporal model that considers state variation in sociodemographic lifestyle factors, medical settings, and cancer screening behaviors, as well as delays in case reporting, to high-quality incidence data from the North American Association of Central Cancer Registries (NAACCR). Complete counts were then projected 4 years ahead based on the most recent 4-year average annual percent change (AAPC) in cases. For detailed methodology, please see Liu, et al.[32] and Miller, et al.[33] Counts for 2020 were adjusted for the deficit in cases during March through May due to health care closures during the first months of the COVID-19 pandemic using data from 2018 and 2019.

The estimated number of new ductal carcinoma in situ of the female breast in 2024 was estimated by approximating the actual number of cases diagnosed each year during 2010 through 2019 by applying annual age-specific incidence rates to the corresponding population estimates, adjusting for delays in case reporting based on national delay factors for invasive cancer from NAACCR, and then projecting 5 years ahead using the most recent 5-year AAPC.

The estimated number of breast cancer deaths in the US was calculated by fitting the number of breast cancer deaths for 2008 through 2022 to the same statistical model used to produce estimated cases and then similarly forecasting the number of deaths expected to occur in 2024 based on the most recent 4-year AAPC. Original mortality data were based on underlying cause of death reported on death certificates from the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC).

Important note about estimated cancer cases and deaths for 2024. While the projections provide a reasonably accurate estimate of the cancer burden in 2024, they cannot be used to track cancer trends because they may vary from previous years for reasons other than changes in cancer occurrence. Age-adjusted incidence and mortality rates are the recommended statistics for tracking cancer trends in the US. For more information, see Siegel et al.[34]

Incidence rates. Breast cancer incidence rates are calculated by dividing the number of people newly diagnosed during a given time period by the population at risk. Rates herein are age adjusted to the 2000 US standard population based on 19 age groups and presented per 100,000 female population per year, or per 100,000 male population for male breast cancer. Breast cancer incidence rates for the US in the most recent time period (2016-2021) by age, state, sex, race, and ethnicity were based on nationwide cancer registry data provided by NAACCR. Long-term (1975-2021) incidence trends are based on the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) registries; years 1975-2018 uses previously published SEER 9 registries, and years 2018-2021 uses SEER 8 registries, which account for about 8% of the US population. Analyses of trends by race/ethnicity and stage at diagnosis (1998-2021) were based on NAACCR registry incidence data and adjusted for reporting delay using delay factors when possible. Based on recommendations from the National Cancer Institute, incidence in 2020 was excluded from trend analysis and separated from trend lines in visualizations because it is considered a data anomaly due to pandemic-related health care closures that especially impacted routine screening and related cancers, such as breast.[35, 36]

Mortality rates. Similar to incidence, breast cancer mortality rates are calculated by dividing the number of people who die from breast cancer during a given time period by the number of people in the population at risk. (People at risk include the entire population and not just those with breast cancer.) Rates are presented

per 100,000 population and age adjusted to the 2000 US standard population. The number of deaths is based on the underlying cause of death reported on death certificates compiled by NCHS. Death rates for American Indian/Alaska Native (AIAN) people were adjusted for racial misclassification using ratios published by Arias, et al.[37] due to substantial misclassification of AIAN race on death certificates. Mortality rates for Puerto Rico were obtained from the National Cancer Institute's State Cancer Profiles (statecancerprofiles.cancer.gov/). Mortality trends by race and ethnicity exclude states during years in which data on Hispanic origin were not collected: Louisiana (1990); New Hampshire (1990-1992); and Oklahoma (1990-1996).

Stage at diagnosis. Stage at diagnosis is defined using the Surveillance, Epidemiology, and End Results (SEER) program summary stage classification: *In situ,* the presence of abnormal cells that are confined to the layer of cells where they originated; *local* stage, invasive cancer that is confined to the breast; *regional* stage, cancer that has spread to surrounding tissues and/or lymph nodes; *distant* stage, cancer that has spread to distant organs and/or lymph nodes, including nodes above the collarbone. See seer.cancer.gov/tools/ssm for more information.

Case distribution prevalence. Breast cancer distribution by stage at diagnosis and subtype is calculated as the number of people diagnosed during a given time period divided by the total amount of breast cancer cases, usually given as a percent. Data from NAACCR were used to calculate distributions.

Survival. Relative survival rates account for normal life expectancy by comparing the overall survival among a group of cancer patients to that of people not diagnosed with cancer who are the same age, race, and sex. The 5-year relative survival rates presented in this report include patients diagnosed from 2014 through 2020; 10-year survival rates are based on diagnoses during 2009-2020; and 15-year survival rates are based on diagnoses during 2004-2020. All patients were followed through 2021. See surveillance.cancer.gov/survival/ for more information.

Probability of breast cancer diagnosis or death. Probabilities of developing or dying from breast cancer were calculated using DevCan 6.7.5 probability of developing cancer software developed by the National Cancer Institute. Incidence data are from 22 SEER registries during 2019-2021 but exclude cases in 2020 because of the disruption in diagnoses at the beginning of the COVID-19 pandemic; and mortality data are from NCHS for 2020-2022, including 2020. These probabilities reflect the average experience of women in the US who were not previously diagnosed with breast cancer and do not take into account individual behaviors and risk factors (e.g., utilization of mammography screening and family history of breast cancer).

Screening prevalence. State-level prevalence estimates of mammography are based on Behavioral Risk Factor Surveillance System (BRFSS) data. The BRFSS is an ongoing system of surveys conducted by state health departments in cooperation with the CDC. Data from the CDC's National Health Interview Survey were used to generate national prevalence estimates of mammography by demographic characteristics. Prevalence estimates are age adjusted to the 2000 US standard population using age groups 40-49, 50-64, and 65+ years.

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