

## Lost Time, Lost Lives: Racial/Ethnic Disparities in Years of Life Lost to Breast Cancer in California

### Public Health Concern

Breast cancer (BC) not only presents a significant public health challenge in California but also has profound implications on the years of life lost (YLL) among affected populations. The Affordable Care Act (ACA) was meant to expand Medicaid (Medi-Cal in California) coverage among uninsured and low-income women, and there was a reduction in uninsured patients from 22.6% to 13.5% in expansion states between the years 2012-2016 (Le Blanc et al., 2020). Le Blanc and associates (2020) found that the incidence rates remained stable in expansion states even after the passage of ACA, although they rose by 2.7% in non-expansion states. In 2020, the BC incidence rate was 111.5 per 100,000 in California, making it the leading cancer for new cancer cases (Center for Disease Control and Prevention (CDC), 2023). White women have a higher BC incidence, with an age-adjusted rate of 130.3 per 100,000 women and a mortality rate of 18.8 per 100,000 women (CDC, 2023). Although African American women also have a slightly lower incidence rate of 125.4 per 100,000, the age-adjusted rate for cancer deaths is 26.8 per 100,000 women (CDC, 2023). The median age of diagnosis for BC is 62; however, the median age of diagnosis for African American women is 60, whereas for White women, it is 64 (American Cancer Society, 2024). While mortality rates offer insights into the progress of addressing breast cancer, they do not fully capture the burden of premature deaths on those who died from cancer at a younger age (Bencina et al., 2023). YLL represents a population-based mortality indicator of the impact of that disease on society and offers insight into the extent to which one's life was cut short (Song et al, 2020). This data brief focuses on analyzing YLL by race/ethnicity among females who died from breast cancer in California from 2016-2018. By examining YLL, we aim to uncover racial and ethnic disparities in the impact of breast cancer on premature mortality, shedding light on disparities that require targeted interventions and support.

### Objective

The objective is to estimate the YLL by race/ethnicity in California for females who died from breast cancer from 2016-2018. By employing a methodological approach using mortality data from the California Vital Statistics Database, this brief aims to shed light on the racial/ethnic disparities in YLL from breast cancer.

### Methods

This study utilizes mortality data from the California Department of Public Health (CDPH) Data and Statistics from 2016-2018 to calculate YLL and age-standardized YLL rates (ASYRs). The total number of deaths from breast cancer mortality in California from 2016-2018 was 13,385 deaths. The age-standardized YLL rates were calculated using population estimates for each race/ethnicity from the 2018 5-year estimates from the American Community Survey. The rates were standardized using the 2000 U.S. Standard Population weights. The age-standardized YLL ratio was calculated using White as a reference and dividing the ASYR of each race/ethnicity by the ASYR for White.

### Key Findings

Table 1 shows YLL, number of deaths, average YLL, age-standardized YLL rates (ASYR), and the ASYR ratios by race/ethnicity. The average YLL was higher among Asian (25.5) and Hispanic (25.1) women in comparison to White (17.1) women. Although Whites (8,047) and Hispanics (2,382) had the largest number of deaths, Black/African American (1,180) and Asian (1,434) women had the highest age-standardized YLL rate (Figure 1). The age-standardized YLL rate was 1.97 times higher in comparison to White women (Table 1). The rates for Asians (1075.5) and Hispanics (951.9) were slightly higher than the White (936.6) females.

Table 1: Years of Life Lost (YLL) and age-standardized YLL Rate by Race/Ethnicity for Women, California, 2016-2018

Race/Ethnicity	YLL	Deaths	Average YLL	ASY R	ASY R Ratio
White	137,832.50	8,047	17.1	936.61	1.00
Hispanic	59,715.90	2,382	25.1	951.93	1.02
Black/African American	23,799.80	1,180	20.2	1848.51	1.97
Asian	36,633.90	1,434	25.5	1075.47	1.15
American Indian	649.8	37	17.6	433.84	0.46
Other	7,166.00	305	23.5	298.51	0.32
Total	265,797.90	13,385	-	5544.87	-

Figure 1: Age-Standardized YLL Rates by Race/Ethnicity for Women in California, 2016-2018

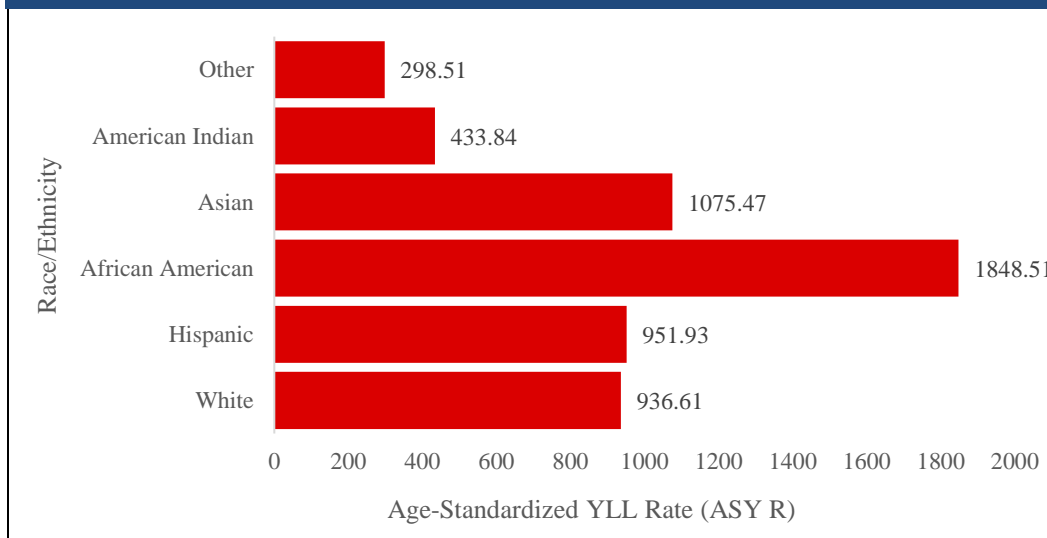


Figure 1 shows the age-standardized YLL Rates by Race/Ethnicity for California females in 2016—2018. African Americans had a higher age-standardized YLL rate in comparison to other racial and ethnic groups.

## Policy Recommendations

Policy recommendations to address the disparities in breast cancer among different racial/ethnic groups should focus on leveraging the ACA to ensure equitable access to healthcare services. This includes ensuring

more women in different racial/ethnic groups, who may be disproportionately affected by breast cancer, are covered by Medicaid and are aware of the preventative services that are offered. Additionally, efforts should be made to enhance health education and awareness programs targeted at racial/ethnic groups with higher YLL rates, emphasizing the importance of early detection and regular screenings. Strengthening patient-provider communication and cultural humility training can also improve outcomes by ensuring patients receive timely and appropriate care. Furthermore, engaging community health workers to serve as liaisons between healthcare providers and underserved communities can help bridge gaps in access and facilitate culturally sensitive care. These recommendations, when implemented comprehensively, have the potential to reduce YLL rates and improve overall breast cancer outcomes for women of all racial and ethnic backgrounds.

## **Conclusion**

These findings reveal important insights into YLL due to breast cancer among different racial/ethnic groups. Asian and Hispanic women, despite having lower numbers of deaths compared to White and African American women, experience a higher average YLL, indicating that breast cancer is impacting these communities at younger ages. Additionally, African American and Asian women have the highest age-standardized YLL rates, suggesting disparities in access to early detection and treatment.

This data brief highlights the need for targeted interventions and increased access to healthcare services in these communities. Efforts should focus on promoting breast cancer awareness, improving screening programs, and ensuring equitable access to quality healthcare for all racial/ethnic groups. Addressing these disparities has the potential to reduce the burden of breast cancer and improve outcomes for women across diverse populations.

Suggested Citation: Sekhon, D., & Alcala, E. (2024). Lost Time, Lost Lives: Racial/Ethnic Disparities in Years of Life Lost to Breast Cancer in California. Central Valley Health Policy Institute. [CVHPI.org/](https://CVHPI.org/)

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