

**Snapshot** is a publication that demonstrates the uses of Behavioral Risk Factor Surveillance System (BRFSS) data to illustrate various health behaviors among adult Californians. BRFSS is the largest, ongoing, telephone health survey in the world. Established in 1984, the California BRFSS is an annual effort by the California Department of Public Health (CDPH), Chronic Disease Surveillance and Research Branch, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC), to assess the prevalence of and trends in health-related behaviors and to monitor preventable risk factors for chronic diseases and other leading causes of death in the California adult population.

## BREAST CANCER SCREENING DISPARITIES AND ASSOCIATED RISK FACTORS AMONG CALIFORNIA WOMEN, 2012-2018

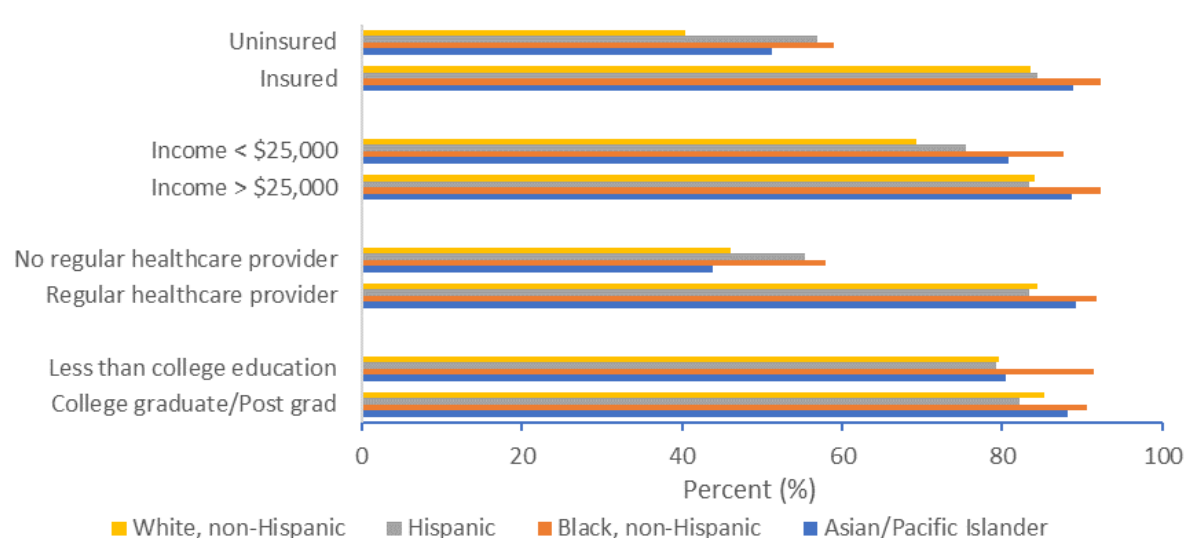
Mammography is the most effective screening tool used today to find breast cancer in women. Yet, some sociodemographic and behavioral risk factors are known to affect women's ability to meet cancer screening guidelines. As described in [Snapshot: Breast Cancer Screening Among California Adult Women, 2012-2018](#), BRFSS breast cancer screening data indicate that the overall proportion of California women, aged 50 to 74 years, meeting United States Preventive Services Task Force (USPSTF) guidelines<sup>1</sup> for breast cancer screening was 81.6 percent. While the prevalence of meeting screening guidelines was 8.6 percent greater among Black non-Hispanic women (90.9 percent) than among White non-Hispanic women (82.3 percent), Black non-Hispanic women are still more likely than White non-Hispanic women to die from breast cancer.<sup>2</sup>

### California BRFSS Breast Cancer Screening Questions:

- 1) A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram? [If 'yes' to 1] ...
- 2) How long has it been since you had your last mammogram?

California BRFSS data pooled from 2012 to 2018 show that breast cancer screening disparities are persistent among women without health insurance, with lower incomes, without a regular healthcare provider, and with lower achieved levels of education. Moreover, these sociodemographic factors that influence screening disparities vary across racial groups.

Sociodemographic Disparities for Mammography Among Women Aged 50 to 74 Years, BRFSS 2012-2018



Among California women aged 50 to 74 years, 52.9 percent without health insurance had a mammogram in the past two years, while 83.7 percent with health insurance had a mammogram in the past two years. Among the uninsured, only 40.4 percent of White non-Hispanic women reported having had a mammogram in the past two years compared to 83.6 percent with health insurance.

Among women aged 50 to 74 years reporting an annual household income of less than \$25,000, White non-Hispanics were the least likely to have had a mammogram in the past two years (69.3 percent), followed by Hispanics (75.4 percent), Asian and Pacific Islanders (80.8 percent), and Black non-Hispanics (87.7 percent).

Among women aged 50 to 74 years without a regular healthcare provider, only 49.9 percent reported having a mammogram in the past two years, while 84.1 percent with one or more healthcare providers met the recommended breast cancer screening guidelines. Among women aged 50 to 74 years, the largest disparity for meeting breast cancer screening guidelines among those without a regular healthcare provider compared to those with a regular healthcare provider was seen among Asian and Pacific Islander women (43.8 percent vs 89.2 percent, respectively).

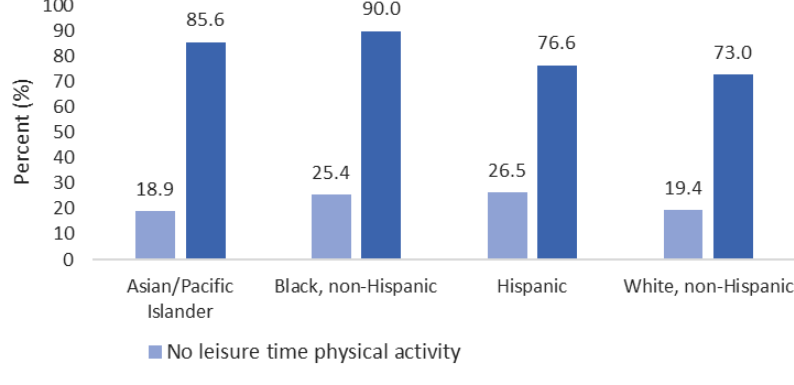
Interestingly, Black non-Hispanic women with less than a college education were slightly more likely to have had a mammogram in the past two years compared to those with a college or post-graduate degree (91.4 percent vs 90.6 percent, respectively).

### Breast Cancer Screening Practices and Associated Risk Factors

All women have some risk of developing breast cancer. Some of these factors such as age and genetics can't be altered. However, lifestyle factors such as physical activity, being overweight, cigarette smoking, and alcohol intake, all known to be associated with increased risk for breast cancer, are modifiable.

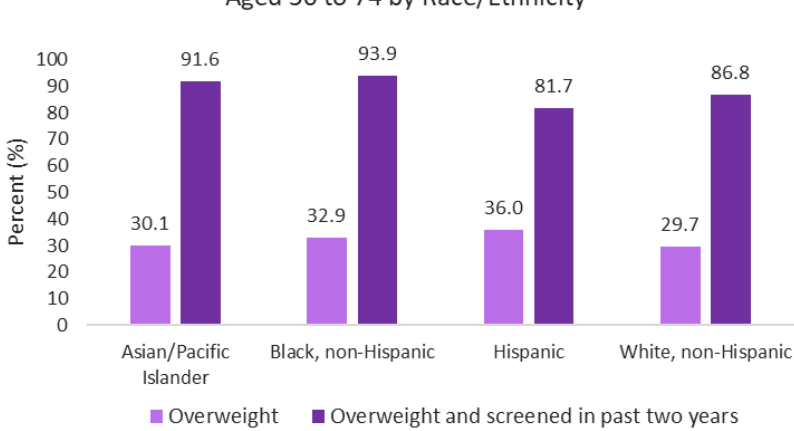
Many studies have demonstrated that women who are physically active have a lower risk of breast cancer than inactive women.<sup>3</sup> Among women aged 50 to 74 years, Hispanics report the highest proportion of not having leisure time physical activity in the last 30 days (26.5 percent), however, White non-Hispanics reported a lower proportion of not having leisure time physical activity in the last 30 days while also having a mammogram in the past two years compared to Hispanics (73.0 percent vs 76.6 percent, respectively).

No Leisure Time Physical Activity<sup>a</sup> and Mammogram History among Women Aged 50 to 74 by Race/Ethnicity



Prepared by the California Department of Public Health, Chronic Disease Surveillance and Research Branch.

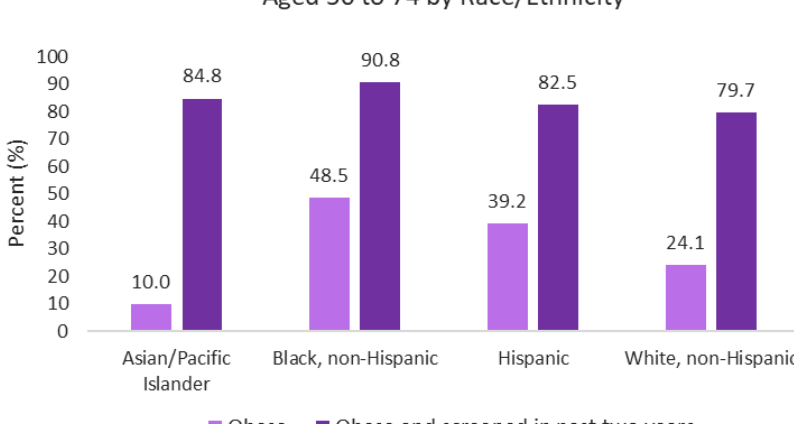
Overweight Status and Mammogram History among Women Aged 50 to 74 by Race/Ethnicity



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Studies show that overweight and obese women have a higher risk of being diagnosed with breast cancer compared to women who maintain a healthy weight, especially after menopause.<sup>3</sup> Among women aged 50 to 74 years, Hispanics appear to have the highest proportion of being overweight (36.0 percent) and yet, of those overweight, report the lowest prevalence of having had a mammogram in the past two years (81.7 percent) compared to other racial groups.

Obesity<sup>b</sup> Status and Mammogram History among Women Aged 50 to 74 by Race/Ethnicity

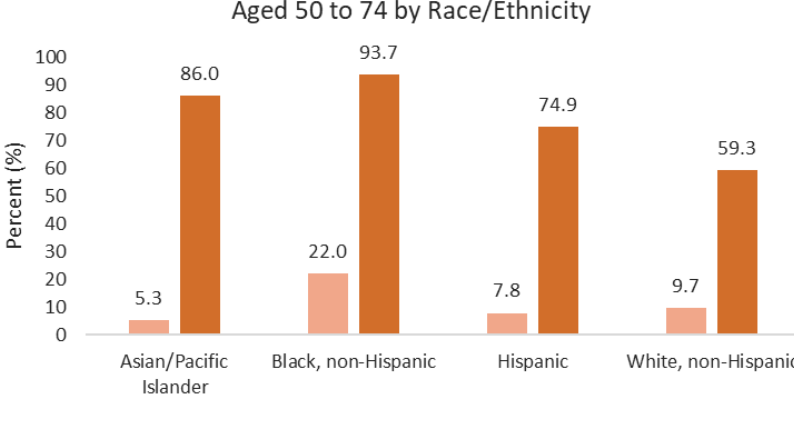


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White non-Hispanic women have a lower prevalence for obesity (24.1 percent) compared to Black non-Hispanic (48.5 percent) and Hispanic (39.2 percent) women, yet BRFSS data show White non-Hispanic obese women reported the lowest proportion of having had a mammogram in the past two years (79.7 percent) compared to other racial groups.

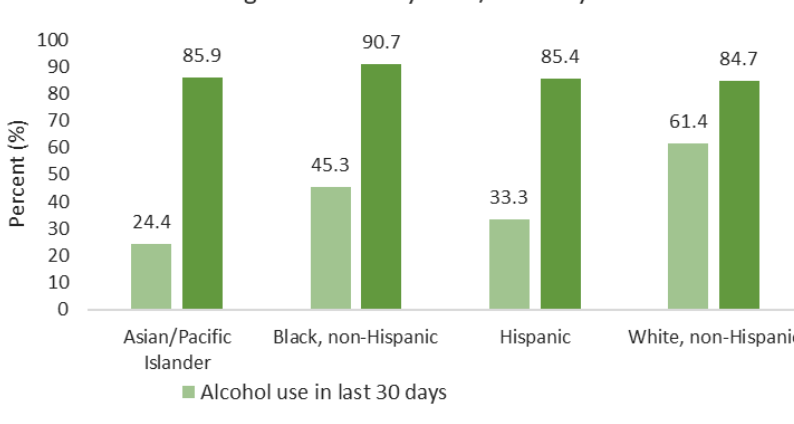
Cigarette smoking has been known to cause several diseases and is linked to a higher risk of breast cancer in women.<sup>3</sup> BRFSS data indicate that Black non-Hispanic women aged 50 to 74 years reported a higher prevalence for cigarette smoking (22.0 percent) compared to White non-Hispanic women (9.7 percent). Conversely, White non-Hispanic women that are current smokers reported the lowest prevalence for having a mammogram in the past two years (59.3 percent), while Black non-Hispanic women that are current smokers reported the highest prevalence (93.7 percent).

Cigarette smoking<sup>c</sup> and Mammogram History among Women Aged 50 to 74 by Race/Ethnicity



Prepared by the California Department of Public Health, Chronic Disease Surveillance and Research Branch.

Alcohol use<sup>d</sup> and Mammogram History among Women Aged 50 to 74 by Race/Ethnicity



Prepared by the California Department of Public Health, Chronic Disease Surveillance and Research Branch.

Research consistently shows that drinking alcohol is consistently associated with an increased risk of breast cancer and that the risk may increase with the amount of alcohol consumed.<sup>3</sup> Although non-Hispanic White women aged 50 to 74 years reported the highest prevalence for consuming an alcoholic drink in the last 30 days (61.4 percent); inversely, these women reported the lowest prevalence for having had a mammogram in the past two years (84.7 percent) compared to other racial groups.

While sociodemographic disparities and environmental risk factors may affect women's ability to meet breast cancer screening guidelines, behavioral modifications such as keeping a healthy weight, engaging in regular physical activity, and limiting alcohol intake can help reduce the risk of breast cancer. Greater awareness among women regarding breast cancer, breast cancer prevention, and the benefits of routine screening together play key roles in the fight against this disease.

<sup>1</sup> <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening>

<sup>2</sup> California all cause mortality 1970-2018, 03/15/2021, California Department of Public Health, Center for Health Statistics Death Master Files 1970-2018. DOF population estimates for 1970-1987, benchmarked DOF population estimates for 1988-1989, and NCHS population estimates for 1990-2018.

<sup>3</sup> <https://www.asian.org/cancer/breast-cancer/risk-and-prevention.html>

**Technical Notes:** a) No leisure time physical activity is defined as having not participated in any leisure time physical activities or exercises during the past month, such as running, calisthenics, golf, gardening, or walking for exercise; b) Obesity is defined as body mass index (BMI) greater than or equal to 30.0. BMI is defined as weight (in kilograms) divided by height (in meters) squared. Weight and height are self-reported; d) Current cigarette smoking is defined as either a daily or on some days, and ever smoked at least 100 cigarettes (five packs) in their life and that they smoke cigarettes now, either every day or on some days; and d) Alcohol use is defined as the consumption of at least one drink in the last 30 days.

### FOR ADDITIONAL INFORMATION

[California Department of Public Health](#)

Center for Healthy Communities

Chronic Disease Surveillance and Research Branch

E-mail: [BRFSShelp@cdph.ca.gov](mailto:BRFSShelp@cdph.ca.gov) | Web: <https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CDSRB/Pages/BRFSS.aspx>