

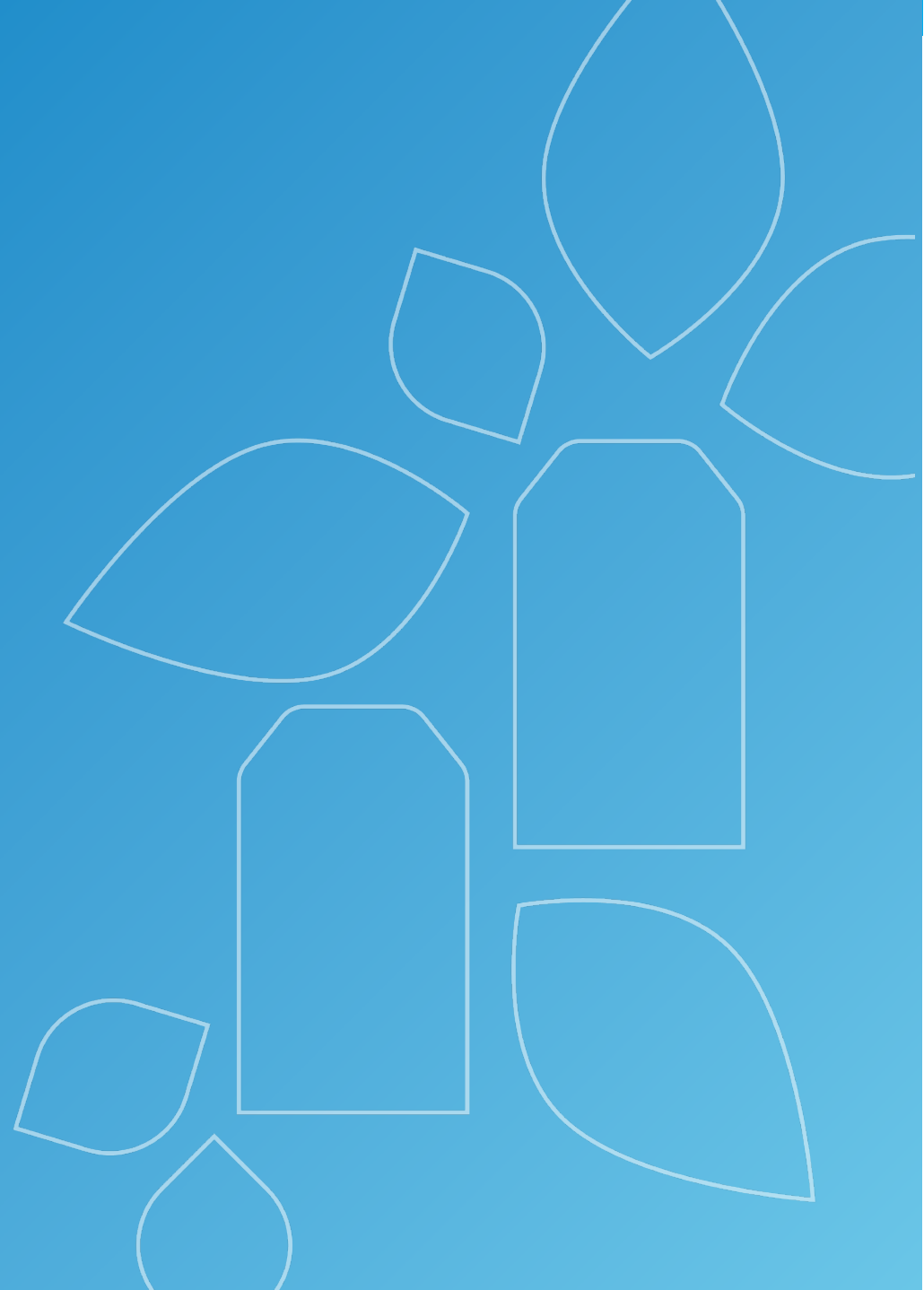


Southeastern Multidisciplinary Approaches to Cancer Symposium

Rising Rates of Breast Cancer in Young Women-Caring for the Whole Person

Presenter's Name

Title(s) and/or department name



Disclosures

I do not have any relevant financial relationships.

This presentation and/or comments will provide a balanced, non-promotional, and evidence-based approach to all diagnostic, therapeutic and/or research related content.



Cultural Linguistic Competency (CLC) & Implicit Bias (IB)

STATE LAW:

The California legislature has passed Assembly Bill (AB) 1195, which states that as of July 1, 2006, all Category 1 CME activities that relate to patient care must include a cultural diversity/linguistics component. It has also passed AB 241, which states that as of January 1, 2022, all continuing education courses for a physician and surgeon **must** contain curriculum that includes specified instruction in the understanding of implicit bias in medical treatment.

The cultural and linguistic competency (CLC) and implicit bias (IB) definitions reiterate how patients' diverse backgrounds may impact their access to care.

EXEMPTION:

Business and Professions Code 2190.1 exempts activities which are dedicated solely to research or other issues that do not contain a direct patient care component.

The following CLC & IB components will be addressed in this presentation:

- *Will discuss the fact that some populations have a higher percentage of certain kinds of breast cancer than do other groups, and there are differences in prognosis.*
- *Because of the above, there are implicit biases including race, socioeconomic status, etc., that need to be recognized and overcome.*

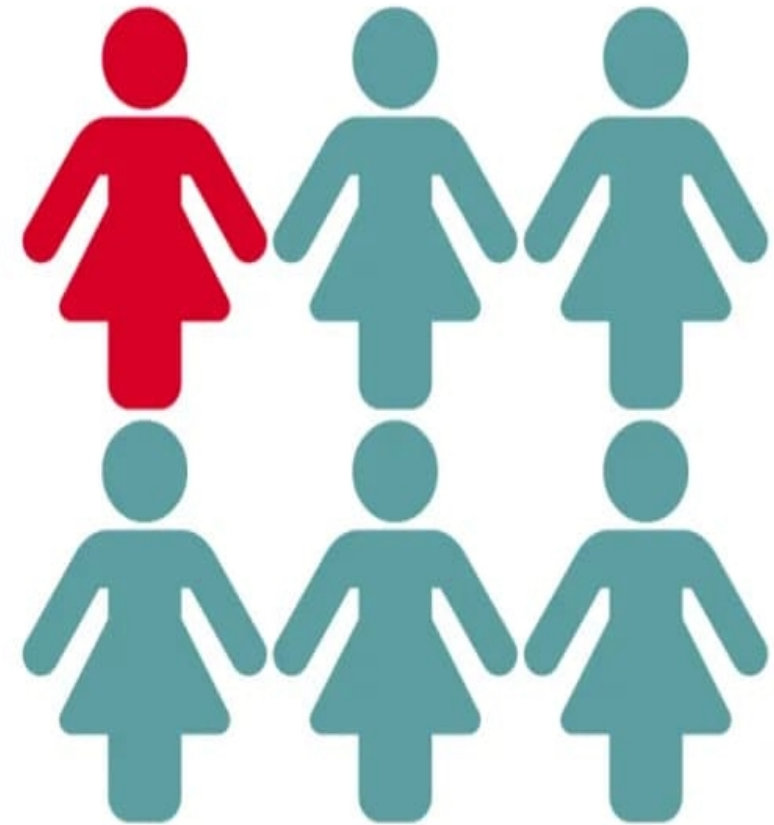


Trends & Predictions for female breast cancer

SEER estimates for 2026 :

320,000 new cases of female breast cancer

15% (about 1 in 6) younger than 50.

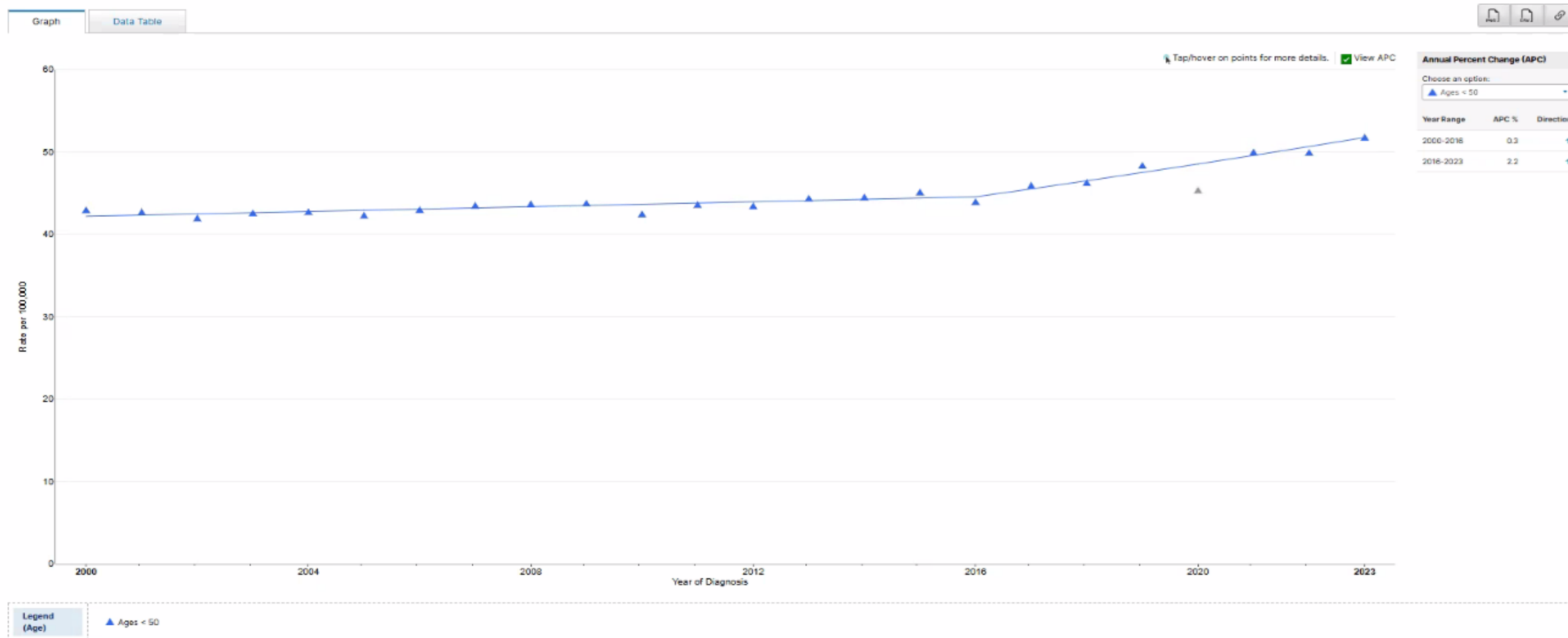


Younger Women Leading the Way...

Breast Recent Trends in SEER Age-Adjusted Incidence Rates, 2000-2023

By Age, Delay-adjusted SEER Incidence Rate, Female, All Races / Ethnicities, All Stages

 The 2020 incidence rate(s) were not used in the fit of the trend line(s) and are displayed on the graph as gray data points. [Impact of COVID on SEER Cancer Incidence 2020 data](#)



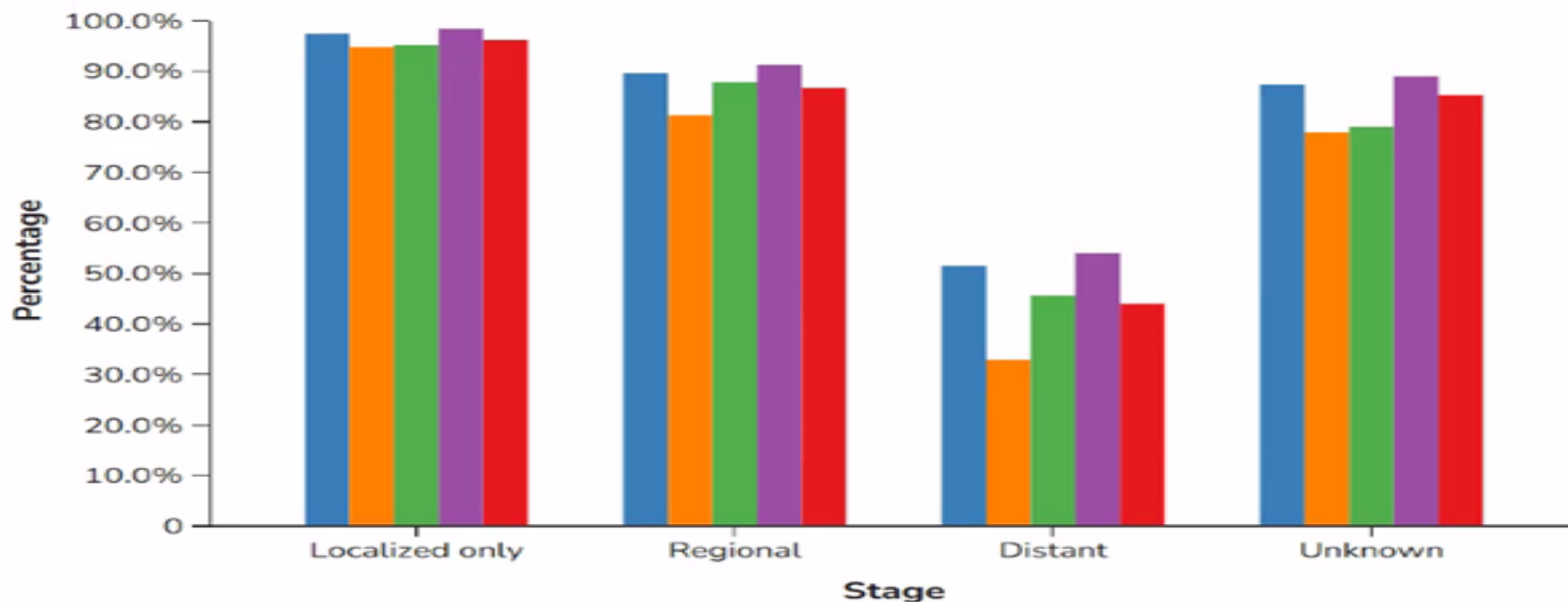
Younger women leading the rise ...

SEER also estimates a continued rise of 1% per year for women over 50, but a higher rate of 1.4% for women under 50.

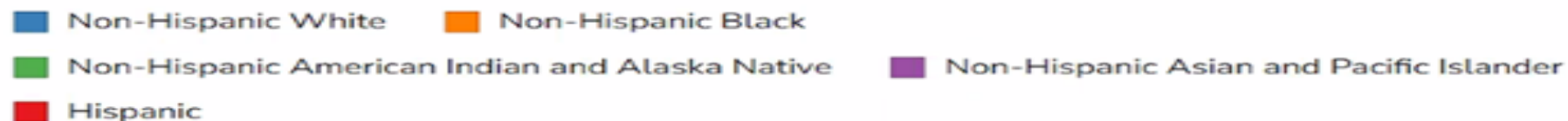
AN ALARMING STATISTIC: Between 2004 and 2017, the rate of metastatic breast cancer in women < 40 rose by 3.5% each year.

Young Black Women Hardest Hit

Figure 5. Female breast cancer 5-year survival rates^d among women younger than 45 years, by racial and ethnic group and stage at diagnosis, United States, 2018–2022



Race or Ethnicity



Why? Genetics, for one

A report last month in *Cancer*, including 785 women with breast cancer age 50 and under, stated:

“Black women experience disproportionately higher incidence and mortality from early-onset breast cancer, in part because of higher prevalence of aggressive triple-negative breast cancer (TNBC). Both early-onset breast cancer and TNBC are associated with worse breast cancer outcomes...

... Importantly, the underuse of genetic testing among Black women is due to patient, provider, and system-level factors, and remains an unmet clinical need.”

ASCO recommends germline testing in all newly diagnosed women younger than 65, and in women older than 65 based on family history, Ashkenazi Jewish heritage, diagnosis of TNBC and candidacy for PARP inhibitors.



Genetics Testing

Estimating the prevalence of mutations like BRCA 1 & 2

Older estimates report similar prevalence of mutations in Blacks and Whites, (6-8%), but some recent findings are provocative:

THE INSPIRE STUDY (CITY OF HOPE Duarte and Upland California) studied at a cohort of 2401 unselected breast cancer patients (enrolled from July 2020 to October 2023). **JAMA network and the National Library of Medicine*

It found BRCA 1 & 2 may be more common in Black women with breast cancer than in White women (8.1% vs. 4.8%).



What Else is Going On?

- **Low parity**
- **Delayed childbearing**
- **Lifestyle Issues**
- **Environmental exposures**
- **Food Risks?**
- **Racial Disparities**
- **Educational deficiencies**



Low parity

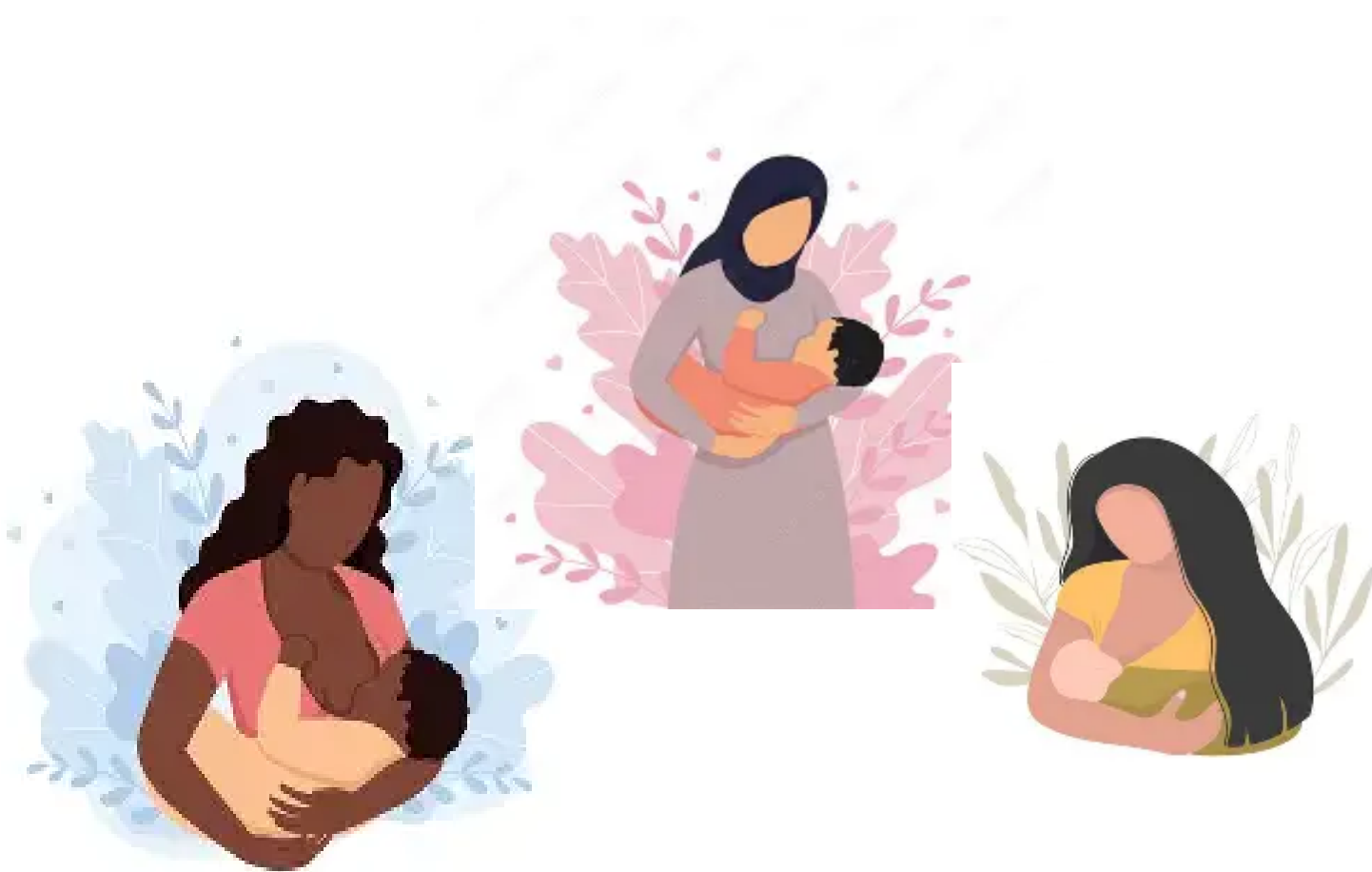


The US Census Bureau:

**Percentage of women
15 to 44 who did not
become pregnant in 2024
reached an all-time high:**

54% vs 42% in 1998

Delayed childbearing and fewer women breastfeeding



Early full-term pregnancy causes maturation of breast cells, making them less susceptible to genetic mutations, decreasing risk for breast cancer

Breastfeeding Lowers the Risk

The Breast Cancer Research Foundation:

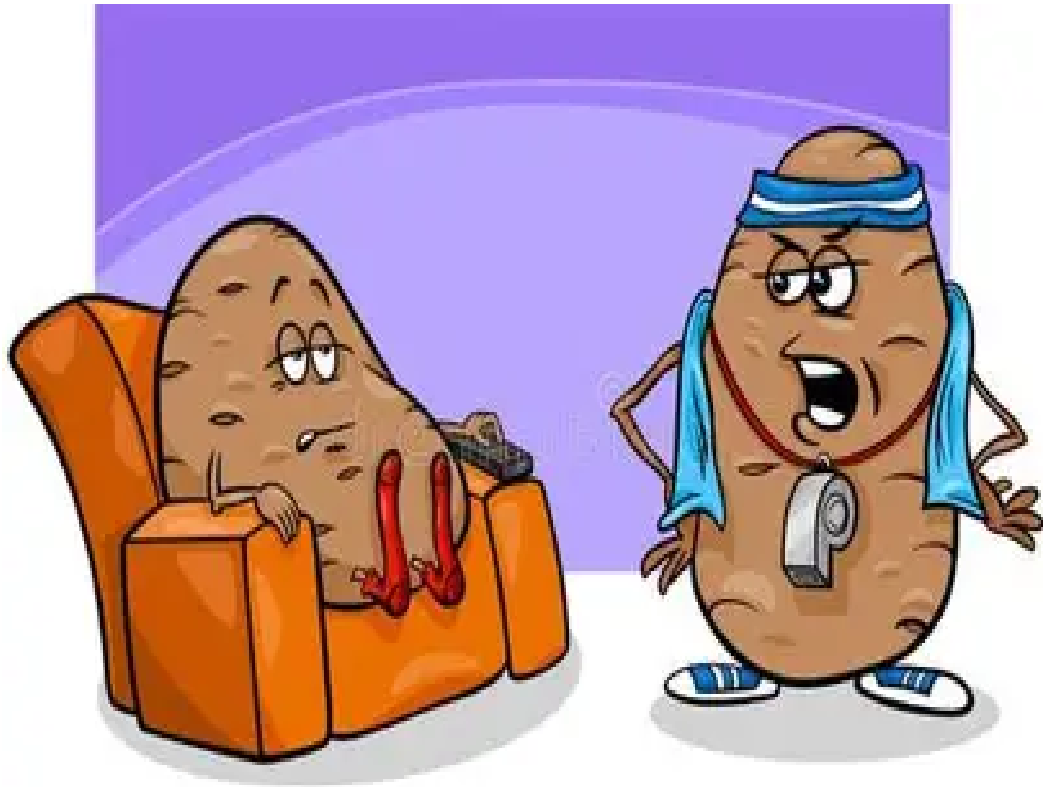
**Women who breast-fed for 12+ months
had a 26-28% lower risk of breast cancer**

– Particularly for HR-negative and TNBC

What about Lifestyle?



Lifestyle Factor #1: Couch Potatoes Beware



Recent American Cancer Society report cited physical inactivity as accounting for 7% of breast cancer cases, adding to the increased incidence in younger women.

ACS recommends 150-300 min/wk of moderate physical activity or 75-100 min of vigorous activity – including brisk walking, jogging, swimming or cycling.



Benefits of Exercise re: Breast Cancer Risk

**The most active women
– both pre- and post-
menopausal --
had a 12% to 21% lower risk
of breast cancer than those
who were the least active.**



Exercise lowers levels of estrogen and growth factors that can promote cancer growth. It also has anti-inflammatory effects – reducing the chronic inflammation linked to cancer progression.

Lifestyle Factor #2: The Proof about Alcohol



“Even one alcoholic drink per day increases breast cancer risk, and binge and heavy drinking (8 or more drinks per week) has increased in women aged 30–49 years, especially among those with higher education and income and without children.”

****ACS report by Rebecca L. Siegel and colleagues***

How much is too much?

Per the Surgeon General:
Women who drink **LESS**
than one drink per week
have a lifetime risk of
breast cancer of about **11.3%**

Drinking one drink
per day raises
the risk to **13.1%**
Two drinks: **15.3%**
Progression is linear

What's in one drink?

12 fl. oz
regular beer



about
5% alcohol



8–9 fl. oz
malt liquor
in a 12 oz. glass



about
7% alcohol



5 fl. oz
table wine



about
12% alcohol



1.5 fl. oz shot
80-proof spirits
hard liquor—
whisky, gin, rum,
vodka, tequila, etc.



about
40% alcohol

Lifestyle Factor #3: Blowing Smoke



A 2017 report pooled data from 14 studies to conclude that smoking for more than 10 years before the birth of a first child carried an 18% higher risk of breast cancer compared to never-smokers.

Gaudet et al., Int J Epidemiol 2017

ALARM! Combining heavy smoking with heavy alcohol use increased the risk by 85%



What about Environmental Exposures?

Despite decades of research, evidence is limited with only a few well-established risk factors.



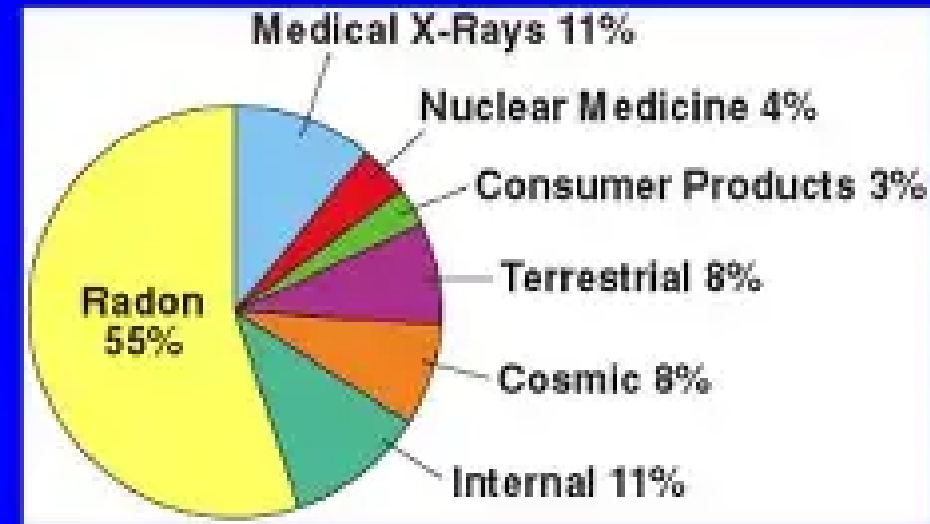
Ionizing Radiation

Naturally occurring:
Radon and other sources

Man-made:
X-Rays, mammograms,
DEXA scans, CT scans,
Fluoroscopy and
nuclear medicine studies.

All can increase cancer risk

Ionizing Radiation: Sources



NCI: Breast tissue is most vulnerable during in utero development, puberty, pregnancy and early adulthood. Exposures during these periods can have long-lasting effects on breast cancer risk.

Environmental exposures 101

It is believed that low-dose ionizing radiation – radon gas or CT scans – may explain about 1% of breast cancers in the U.S.

Researches from the ongoing Sisters Study – led by the National Institute of Environmental Health Sciences -- reported that living near industrial facilities that emit pollutants has been linked to higher breast cancer rates.

They also report that women who regularly used hair straighteners and permanent dyes were 9% more likely to develop breast cancer.

Not so for semi-permanent or temporary dyes.



What about Food? Possibly...



Aside from Alcohol, no specific foods have been shown **DEFINITELY** to cause breast cancer....but

A meta-analysis of 17 observational studies reported that the highest consumption of ultra-processed foods – soft drinks, packaged snacks, instant noodles, frozen meals, candy and most fast foods – was associated with a 25% greater risk of breast cancer.

Global Health Research and Policy (2025)

How high are the Steaks?

The American Cancer Society reports that eating red and processed meats does increases colon cancer risk.

More research is needed to determine whether these increase the risk of breast cancer.



Racial disparities

Despite having a 5% lower breast cancer incidence than White women, Black women have a 38% higher mortality rate, according to ACS's 2024-2025 Facts and Figures report.

They have the lowest survival rates at every stage, and are more likely to be diagnosed at later stages and younger ages.

Why?

Aggressive tumors

Systemic inequities in healthcare access

Bias

Social determinants of health.



There's More to the Story...

Consequences of Implicit bias:

Delays in imaging

Less access to specialized cancer centers

Lower rates of guideline-recommended treatments.

Example: Black women are less likely to receive radiation therapy for early-stage breast cancer, 70% vs 82%.*

** (Cancer, Feb 2010, Volume 116)*

Under-representation in Clinical Trials:

Black women have been under-represented in trials that might identify toxicities affecting them specifically, hindering adherence to treatments.



.... And The Unfortunate Reality



The Kaiser Family Foundation reports people of color are more likely to be uninsured or under-insured, limiting access to specialized care.

Systemic biases driven by decades of structural racism may manifest as racial segregation and under-funded community healthcare facilities, creating unequal access to top-tier cancer centers and specialists.

Educating Providers and Younger patients

Discussing or recognizing symptoms in younger patients is a challenge for both patients and practitioners.

A woman under 40 may be told she does not need a mammogram, or her mammogram may be difficult to interpret because of dense breast tissue.

A cancer may go undiagnosed in its earliest stages.

Consequently, younger women tend to present with larger tumors and more advanced stage at diagnosis. They tend to have a higher incidence of Her2 overexpressing and triple negative cancers – limiting treatment options and increasing the risk of recurrence.

LOOK, LISTEN, TAKE ACTION!



The Good and Not-So-Good News:

GOOD

Despite the rising incidence of breast cancer in recent years,
MORTALITY decreased steadily by 44% from 1989 to 2022.

Three quarters of this improvement can be attributed to advances including targeted therapies, hormone blockers and immunotherapies.

The rest is attributed to earlier detection by more widespread use of screening mammograms.

BAD

Breast cancer death rates stopped declining for women 20-39 after 2010. This is highlighted by an increase in Stage IV breast cancers in this group – a group whose incidence is on the rise.

The future?

Emerging liquid biopsies such as miRNA panels have been shown to detect breast cancer including pre-malignant and early- stage breast cancers. Current challenges include cost, sensitivity/specificity, standardization and validation in large cohorts – but there is hope on the horizon



Thank you!



OZZIE

12/12/12 – 6/5/26

