

# The Epidemiology of Breast Cancer Among Young Women

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## Breast Cancer

- ❑ Breast cancer is the most commonly diagnosed cancer among women
- ❑ Second leading cause of cancer death among women
- ❑ About 5% invasive breast cancer cases occur among women aged <40 years
- ❑ Breast cancer in young women most often associated with family history and/or genetic mutations

## Who Gets Breast Cancer?

**Known Risk Factors include:**

- ❑ Increasing age
- ❑ Alcohol use
- ❑ Obesity
- ❑ Late menopause
- ❑ Early menarche
- ❑ Not breast feeding
- ❑ Late pregnancy
- ❑ Benign breast disease
- ❑ Hormone replacement therapy
- ❑ Family history of breast cancer
- ❑ Inherited genetic mutations (BRCA1 and BRCA2)

## What About Tobacco?

**New risk factor by recent studies:**

- ❑ **Appears to increase risk**
- ❑ **Smoking at early ages**
- ❑ **Second-hand smoke**
- ❑ **Data still preliminary**

## Percent of Women who Develop Breast Cancer at 10-year Intervals by Age

Age	10 years	20 years	30 years
30	0.43	1.86	4.13
40	1.45	3.75	6.87
50	2.38	5.60	8.66
60	3.45	6.71	8.65

\*NCI: SEER Cancer Statistics

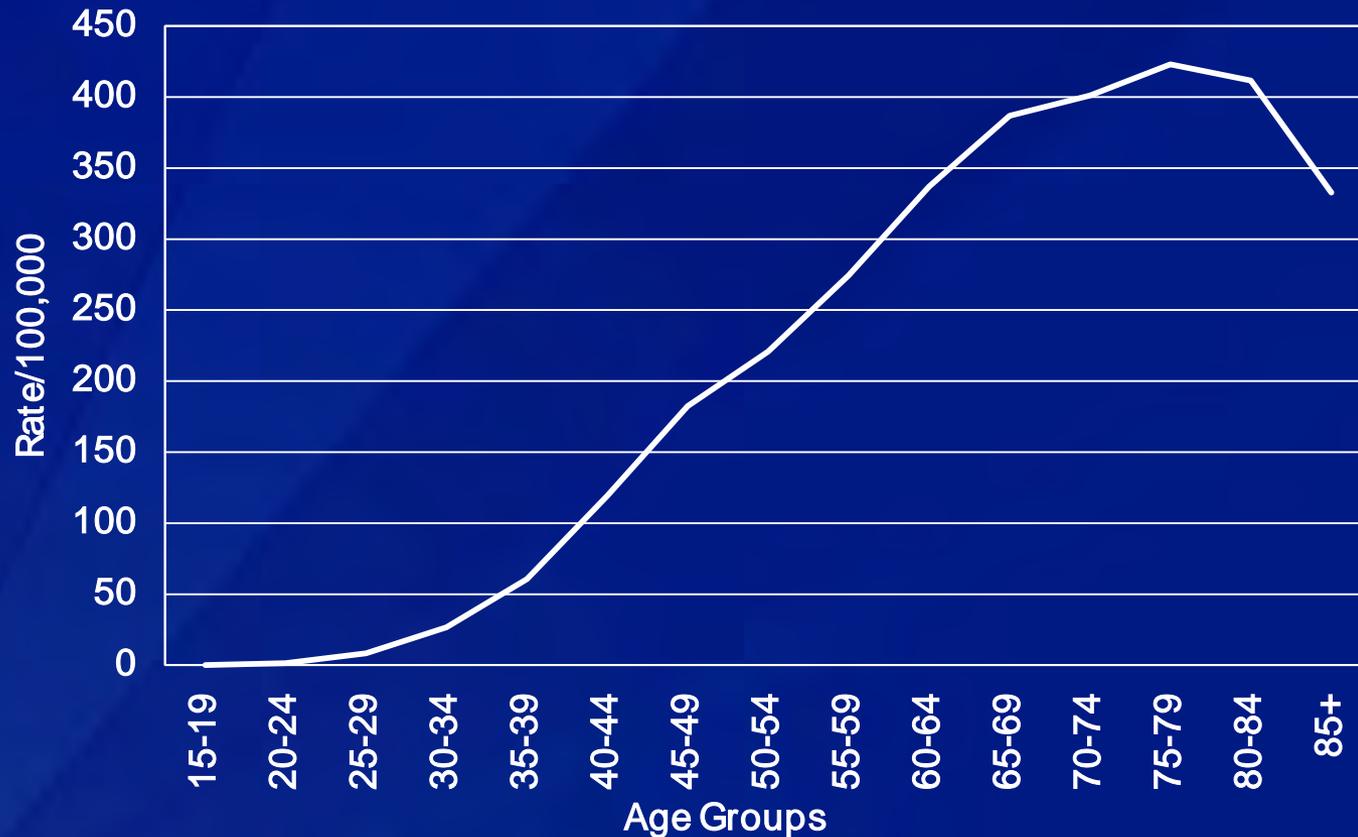
## Breast Cancer Incidence Counts, United States 2007

<b>Age</b>	<b>All women</b>	<b>Women &lt;40</b>
Invasive	202,964	9,663
<i>In situ</i>	50,944	1,506

## Breast Cancer Death Counts, United States 2007

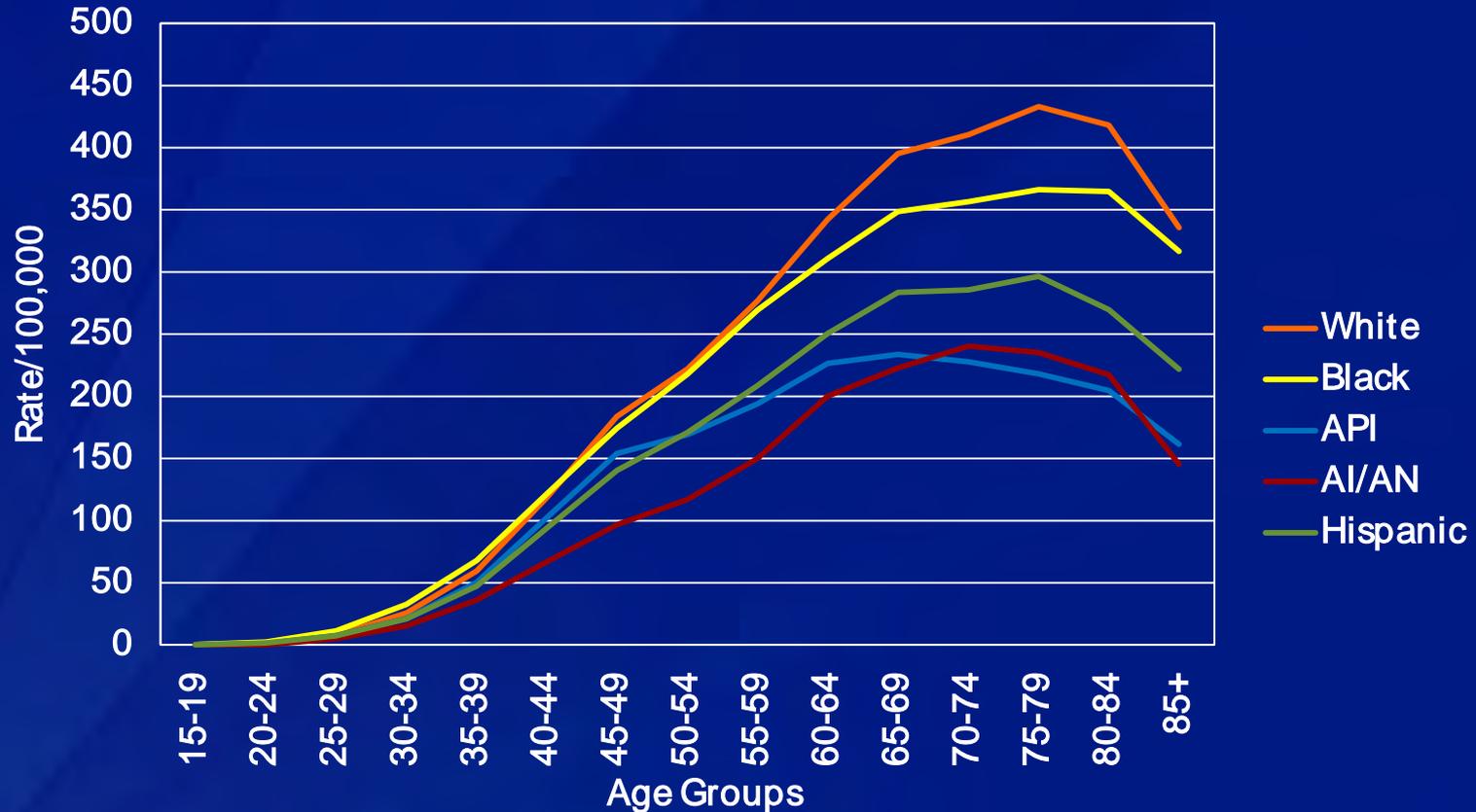
<b>Age</b>	<b>All women</b>	<b>Women &lt;40</b>
Invasive	40,598	1,080
<i>In situ</i>	-	-

# Age-Specific Female Breast Cancer Incidence, United States 2003-2007



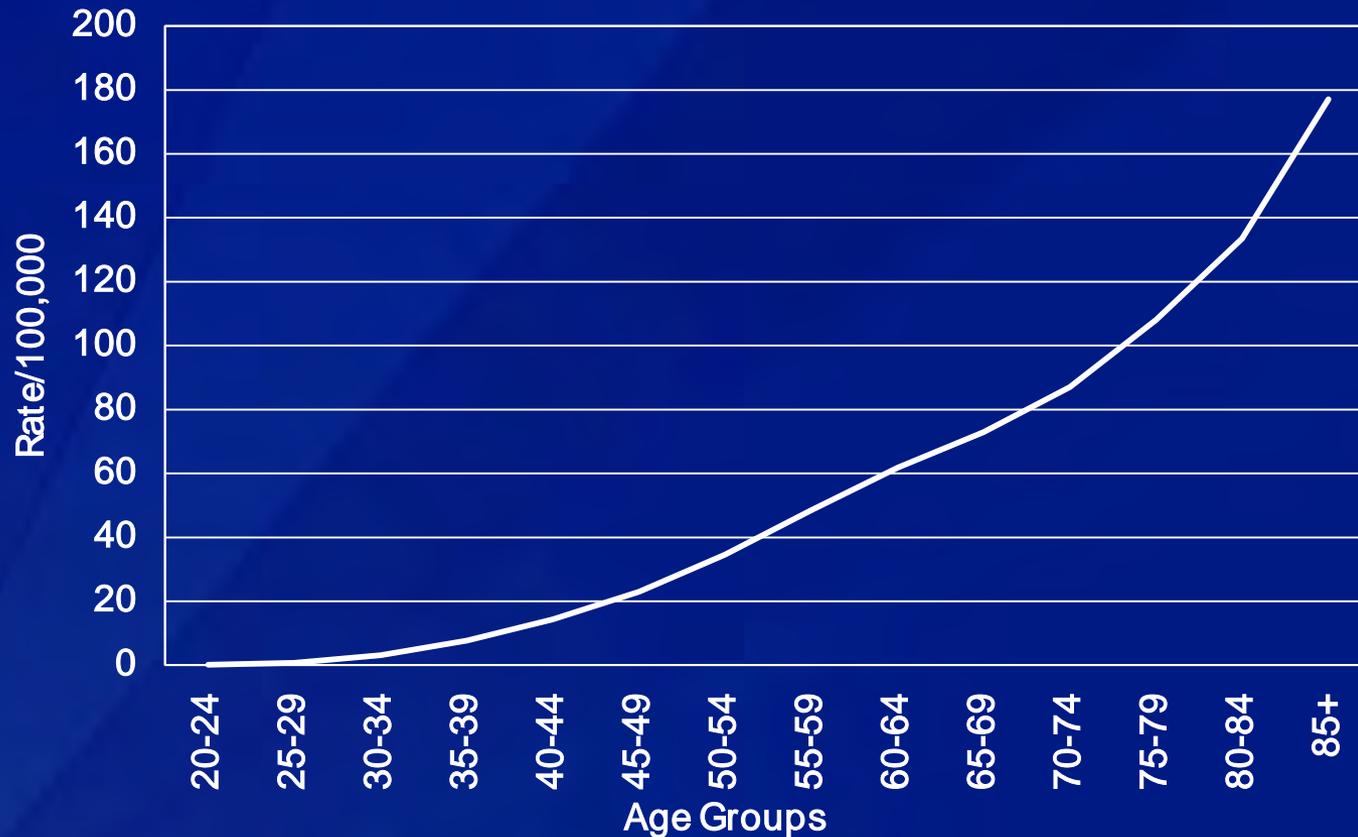
Rates are per 100,000 persons and are age adjusted to the 2000 U.S. standard population (19 age groups - Census P25 1130). Data are from selected statewide and metropolitan area cancer registries that meet the data quality criteria for all invasive cancer sites combined. Rates cover approximately 97% of the U.S. population.

# Age-Specific Female Breast Cancer Incidence by Race, United States 2003-2007



Rates are per 100,000 persons and are age adjusted to the 2000 U.S. standard population (19 age groups - Census P25-1130). Data are from selected statewide and metropolitan area cancer registries that meet the data quality criteria for all invasive cancer sites combined. Rates cover approximately 97% of the U.S. population. Hispanic origin is not mutually exclusive from race categories (white, black, Asian/Pacific Islander, American Indian/Alaska Native).

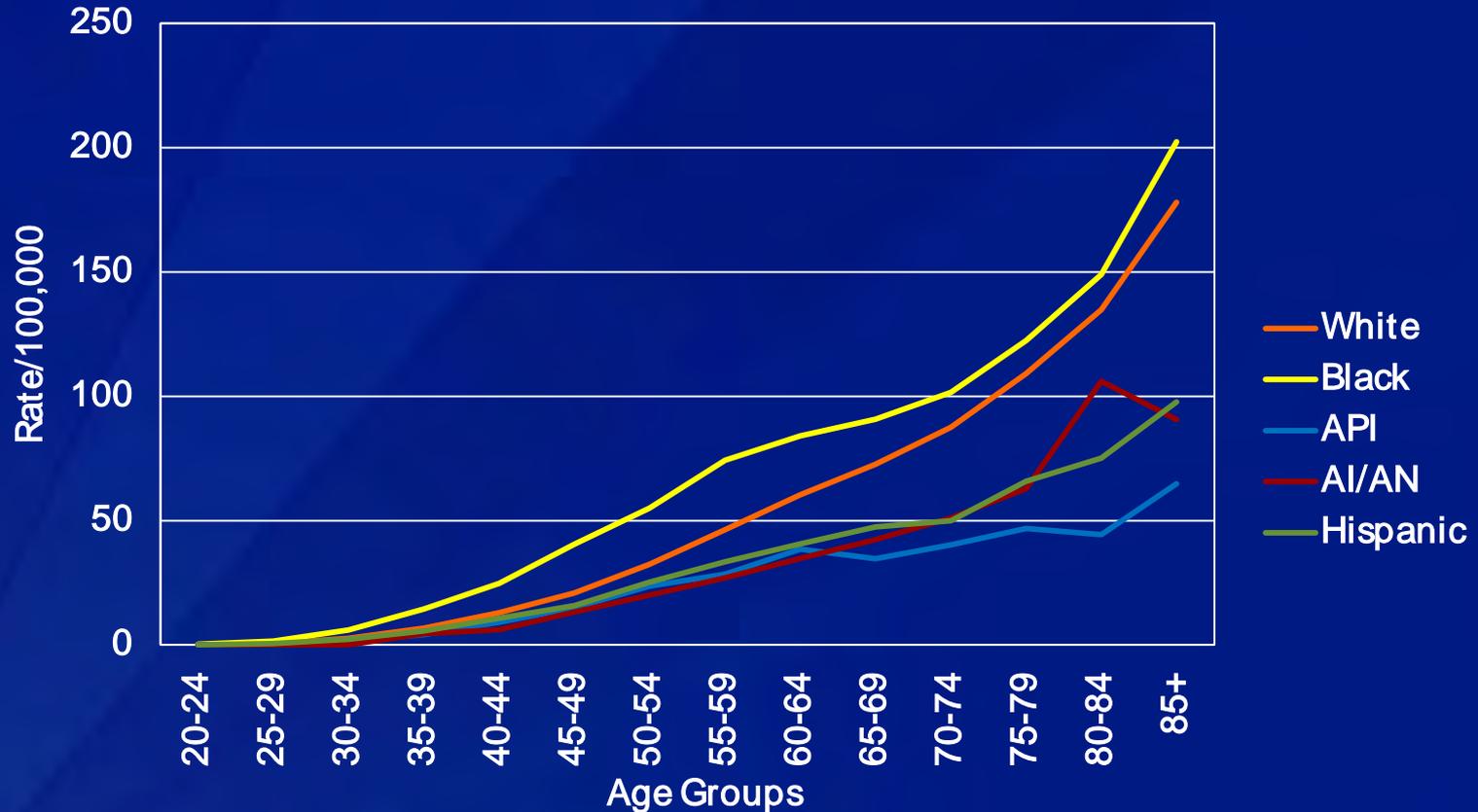
# Age-Specific Female Breast Cancer Death Rates, United States 2003-2007



Data are from the National Vital Statistics System (NVSS).

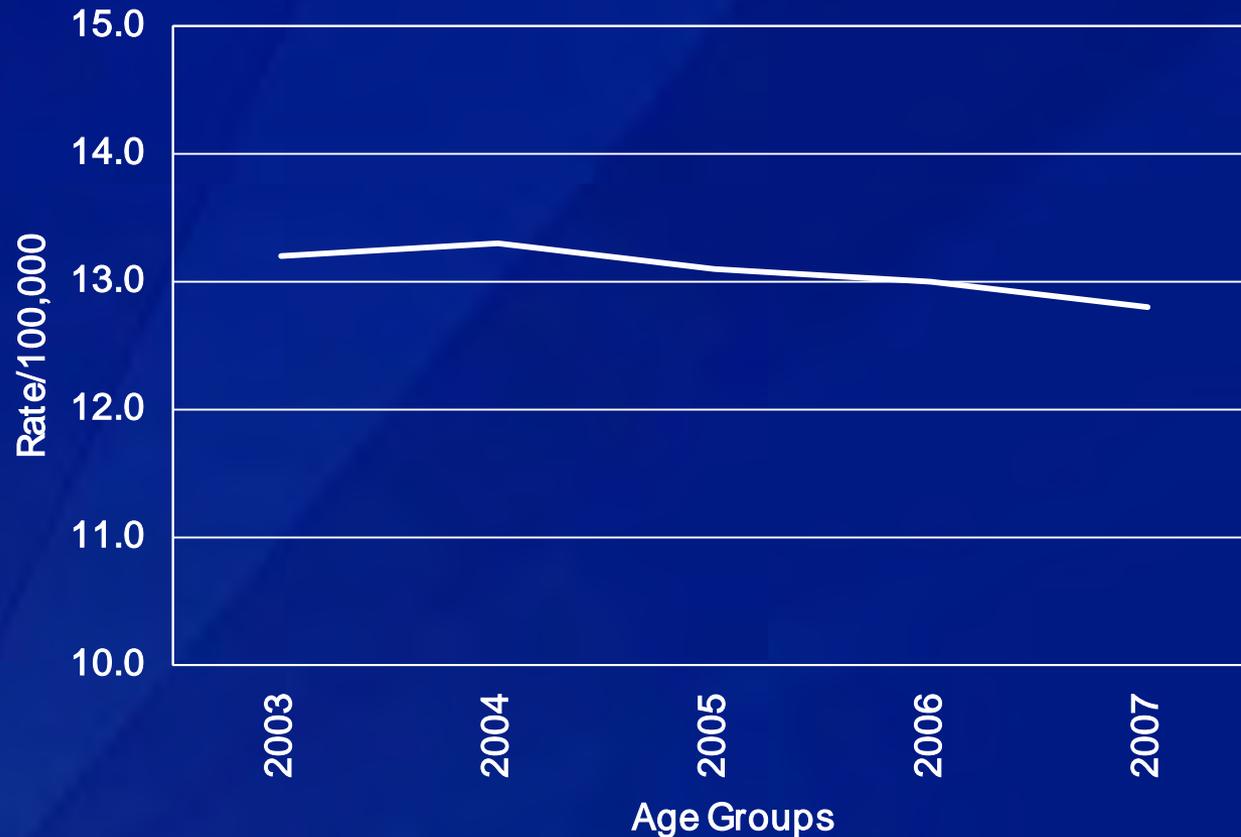
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# Age-Specific Female Breast Cancer Death Rates by Race, United States 2003-2007



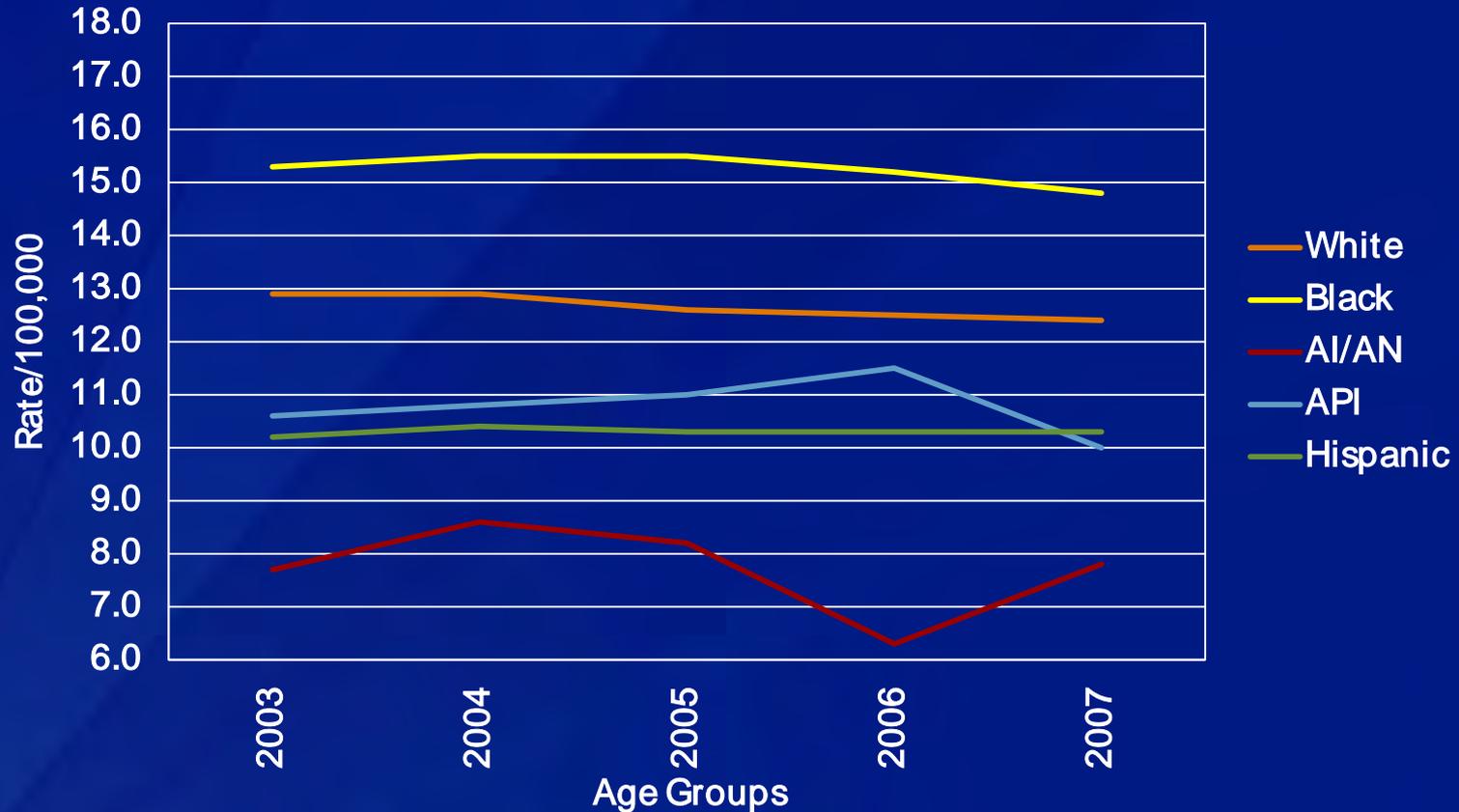
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# Female Breast Cancer Incidence among Women <40 by Year, United States 2003-2007



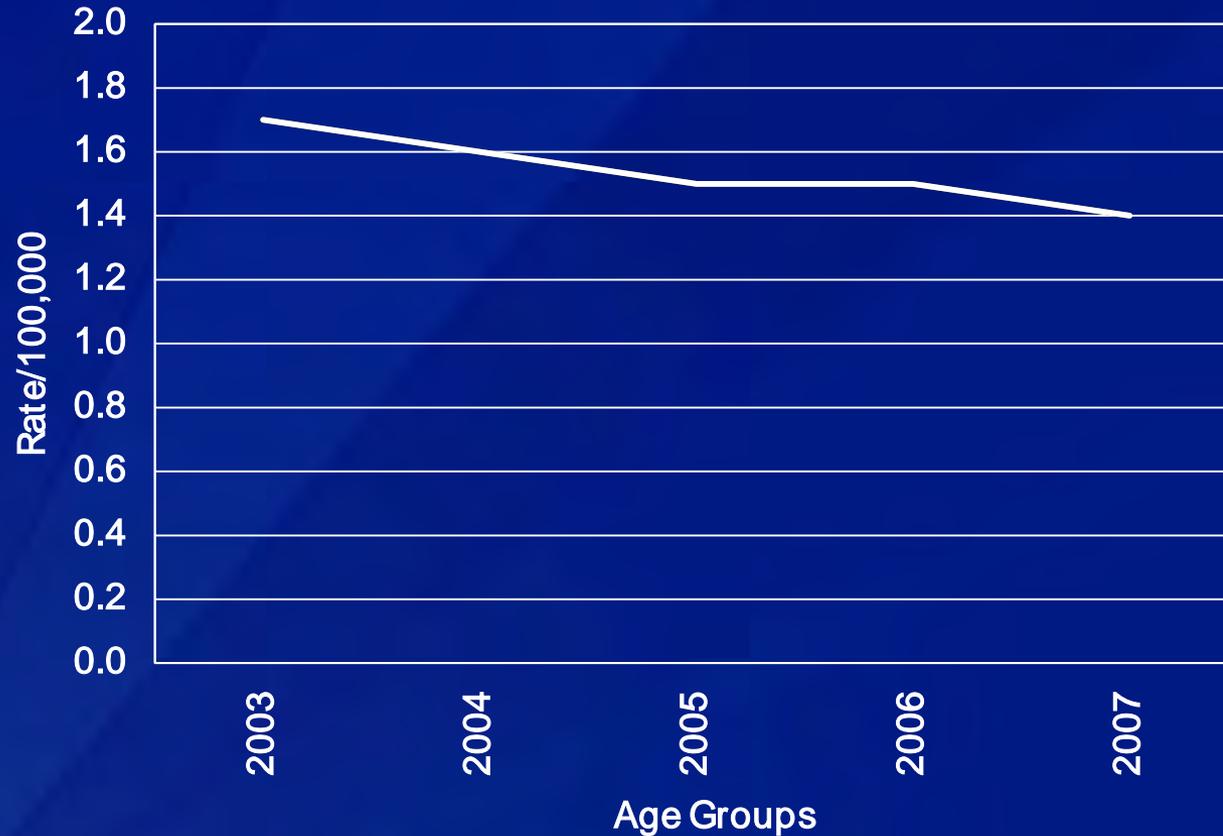
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# Female Breast Cancer Incidence among Women <40 by Year, United States 2003-2007



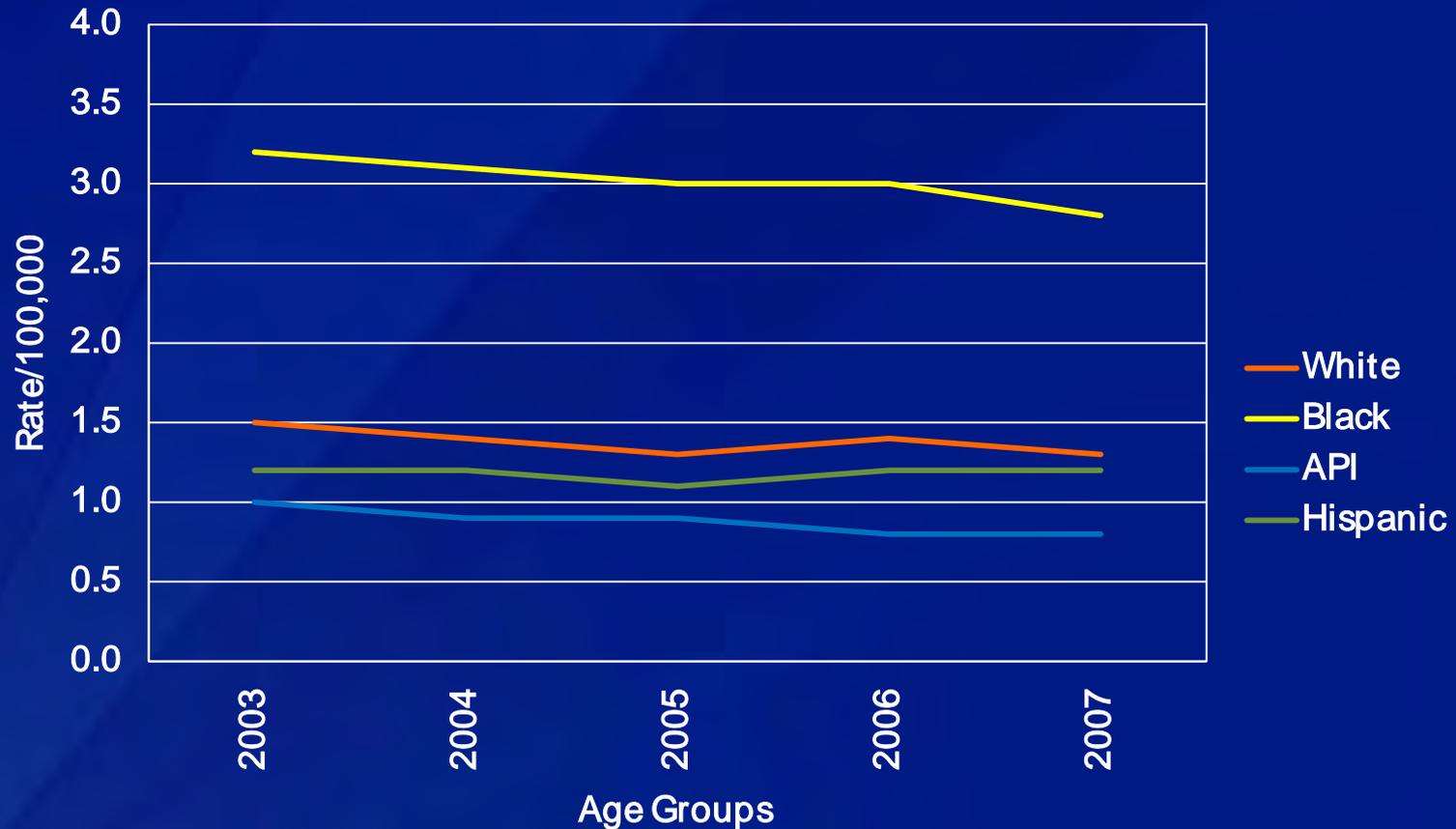
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# Female Breast Cancer Death Rates among Women <40 by Year, United States 2003-2007



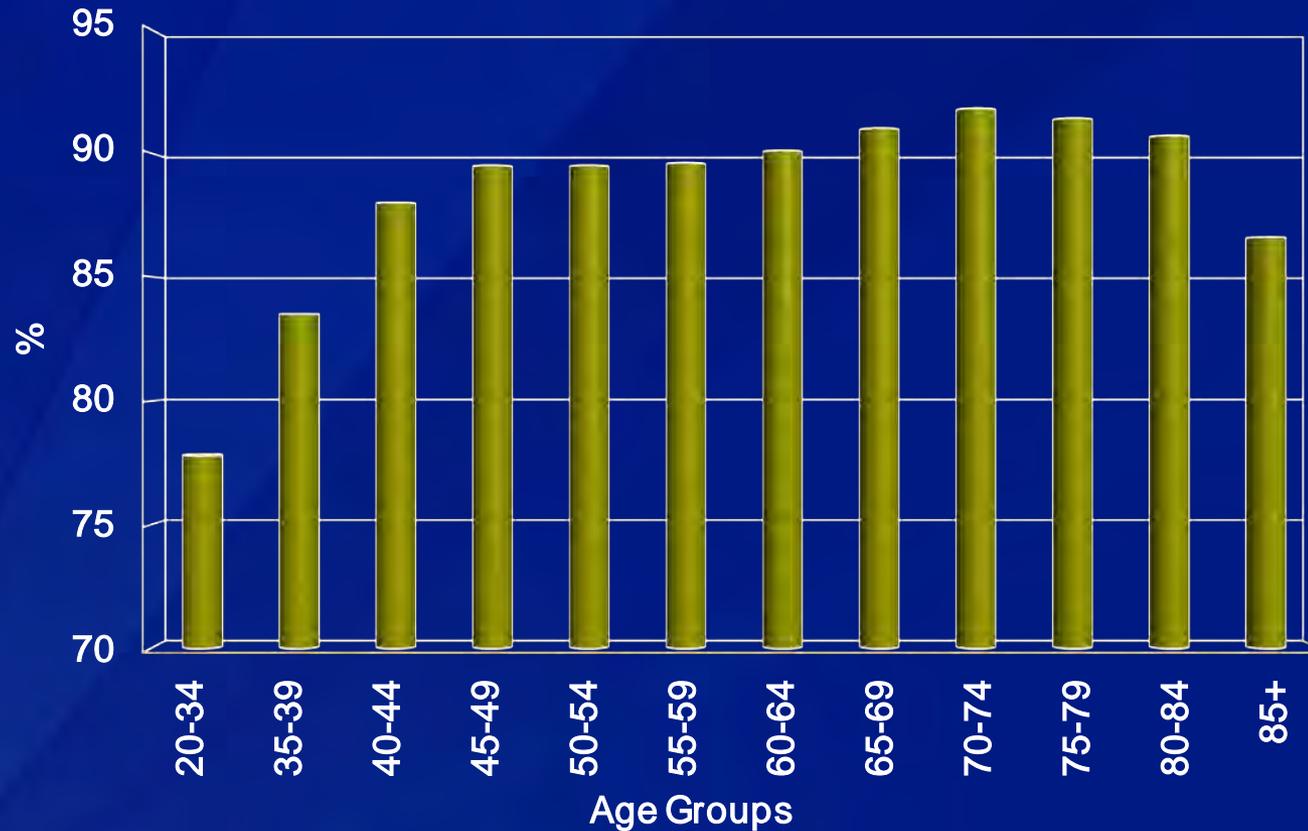
Data are from the National Vital Statistics System (NVSS).

# Female Breast Cancer Death Rates among Women <40 by Year, United States 2003-2007



Data are from the National Vital Statistics System (NVSS).  
AI/AN to small to report.

# Age-Specific 5-Year Relative Survival Rates



# Diagnostic Dilemma for Breast Cancer in Young Women

- ❑ Diagnostic work-up more difficult because there is no good tool for young women due to breast density
- ❑ Fibrocystic changes difficult to distinguish from cancer
- ❑ Younger women often present with more aggressive disease

# Surveillance Dilemma for Breast Cancer in Young Women

- ❑ Unable to identify high-risk subpopulations
- ❑ Limitations on genetic data
- ❑ Incomplete tumor marker data
- ❑ Small numbers prohibit more detailed stratification

## Where Do We Go From Here?

- ❑ While magnitude in numbers may be small, impact on young women diagnosed with breast cancer is huge
- ❑ Support for those diagnosed with cancer is critical
- ❑ Knowledge family history is key
- ❑ Healthcare providers and young women need to be aware and take appropriate interventions for primary prevention and early detection
- ❑ What are the appropriate interventions?

## Thus.....

- ❑ We look forward to your dialogue regarding directions and priorities
- ❑ Must have appropriate messages
- ❑ Clearly identify target audiences

# THANK YOU!

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**For more information please contact Centers for Disease Control and Prevention**

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

