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# Cancer Statistics 2006

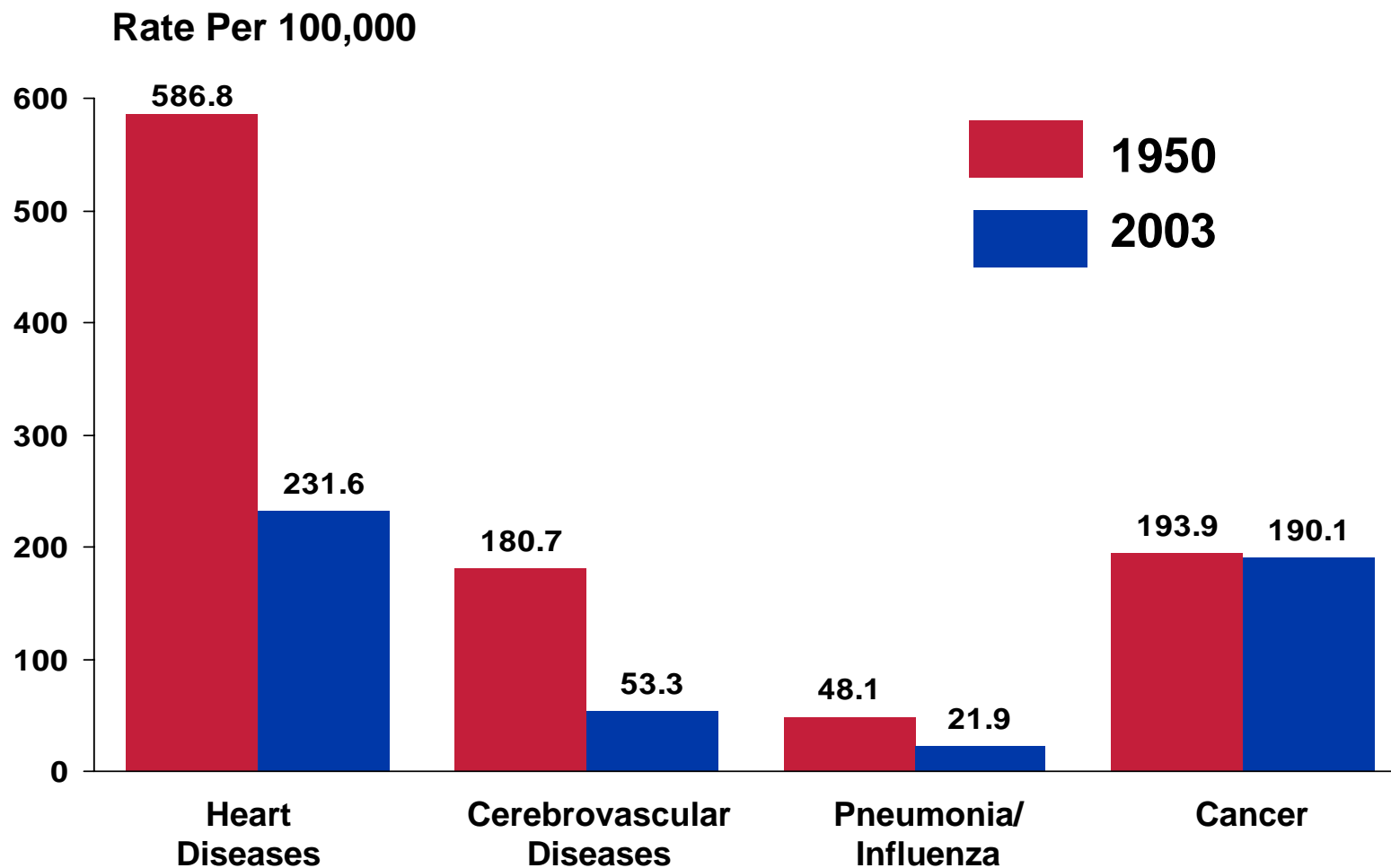
## US Mortality, 2003

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Rank	Cause of Death	No. of deaths	% of all deaths
1.	Heart Diseases	685,089	28.0
<b>2.</b>	<b>Cancer</b>	<b>556,902</b>	<b>22.7</b>
3.	Cerebrovascular diseases	157,689	6.4
4.	Chronic lower respiratory diseases	126,382	5.2
5.	Accidents (Unintentional injuries)	109,277	4.5
6.	Diabetes mellitus	74,219	3.0
7.	Influenza and pneumonia	65,163	2.7
8.	Alzheimer disease	63,457	2.6
9.	Nephritis	42,453	1.7
10.	Septicemia	34,069	1.4

Source: US Mortality Public Use Data Tape 2003, National Center for Health Statistics, Centers for Disease Control and Prevention, 2006.

## Change in the US Death Rates\* by Cause, 1950 & 2003

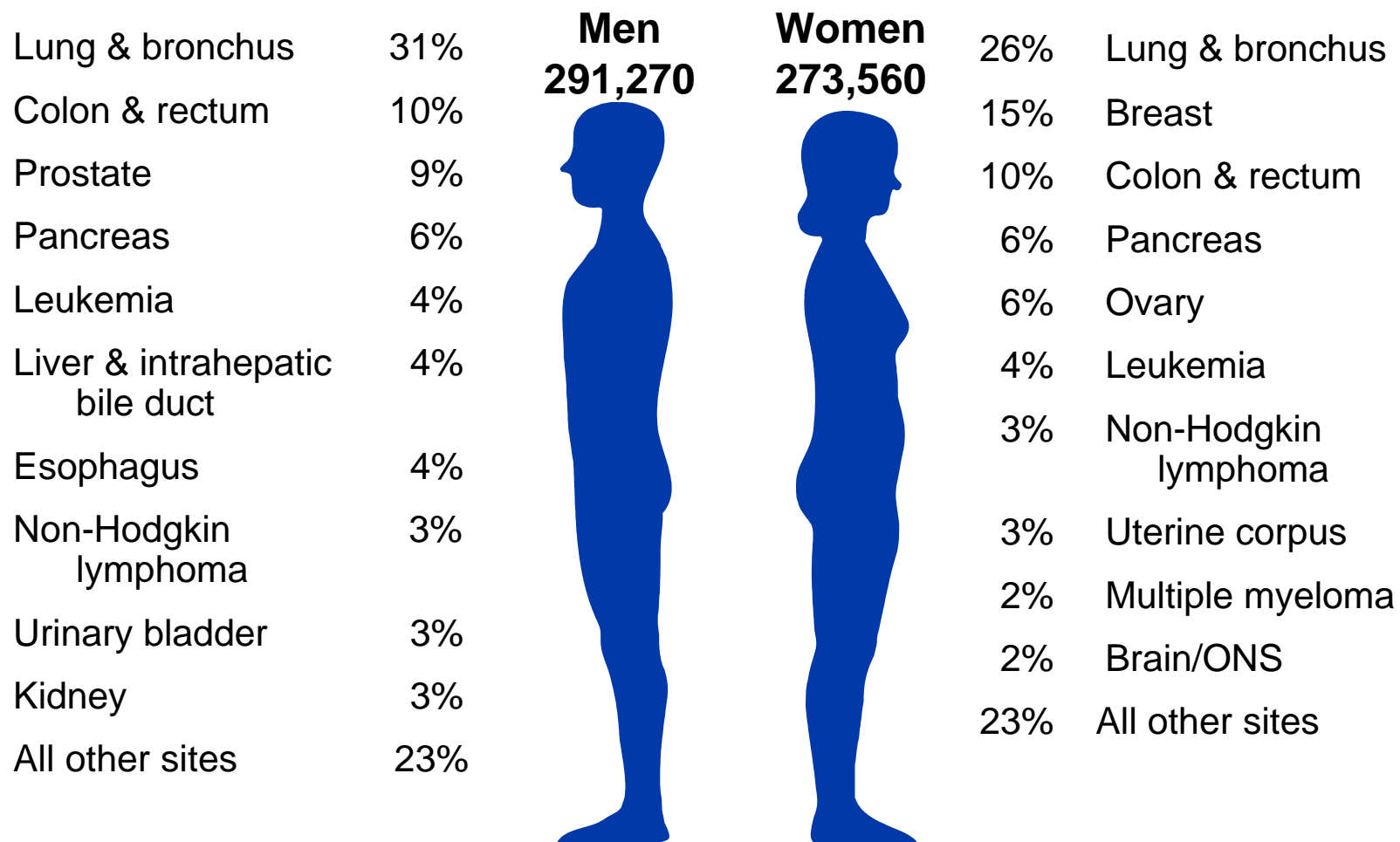


\* Age-adjusted to 2000 US standard population.

Sources: 1950 Mortality Data - CDC/NCHS, NVSS, Mortality Revised.

2003 Mortality Data: US Mortality Public Use Data Tape, 2003, NCHS, Centers for Disease Control and Prevention, 2006

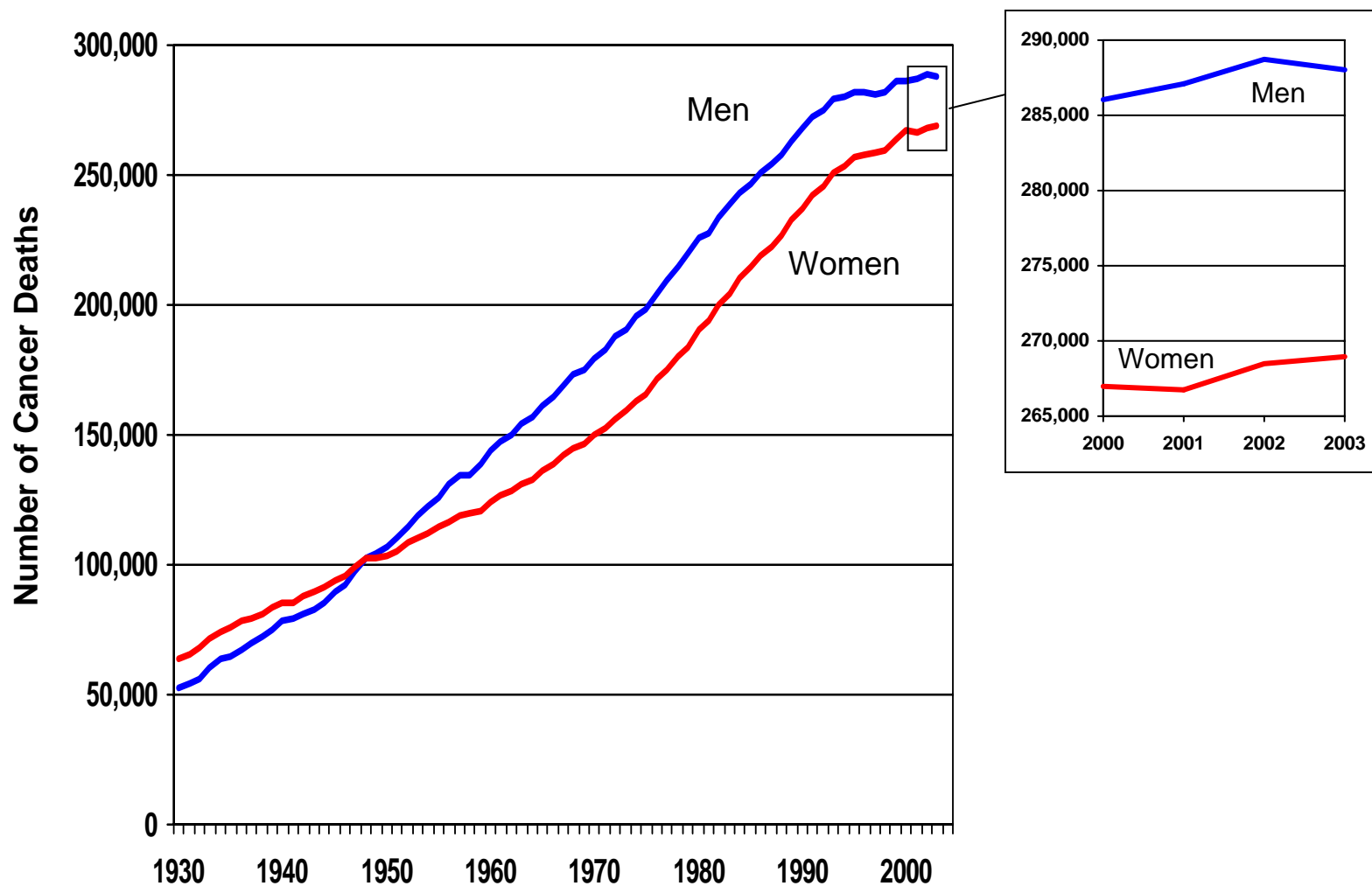
## 2006 Estimated US Cancer Deaths\*



ONS=Other nervous system.

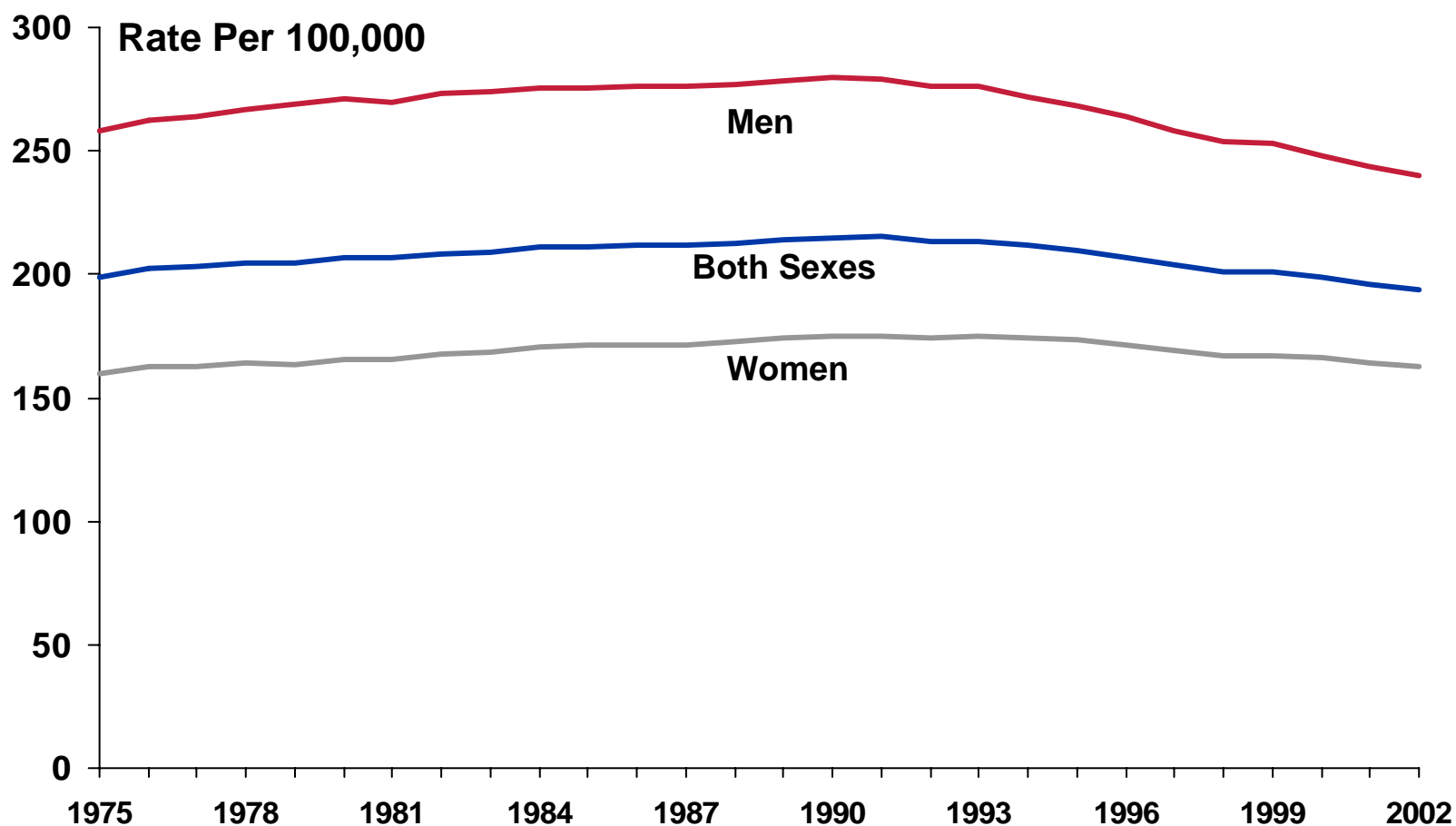
Source: American Cancer Society, 2006.

## Trends in the Number of Cancer Deaths Among Men and Women, US, 1930-2003



Source: US Mortality Public Use Data Tape, 2003, National Center for Health Statistics, Centers for Disease Control and Prevention, 2006.

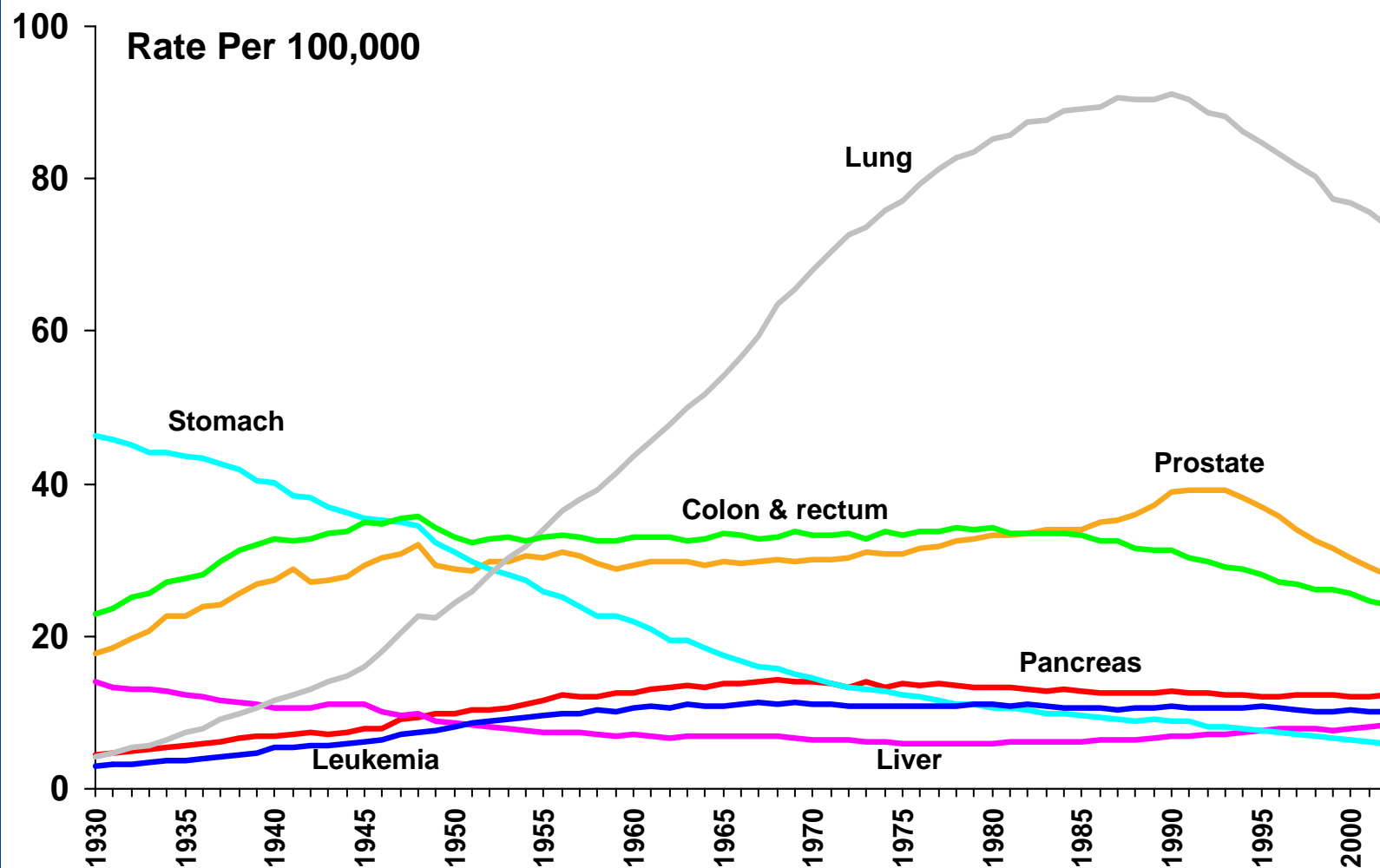
## Cancer Death Rates\*, All Sites Combined, All Races, US, 1975-2002



\*Age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results (SEER) Program ([www.seer.cancer.gov](http://www.seer.cancer.gov)) SEER\*Stat Database: Mortality - All COD, Public-Use With State, Total U.S. (1969-2002), National Cancer Institute, DCCPS, Surveillance Research Program, Cancer Statistics Branch, released April 2005. Underlying mortality data provided by NCHS ([www.cdc.gov/nchs](http://www.cdc.gov/nchs)).

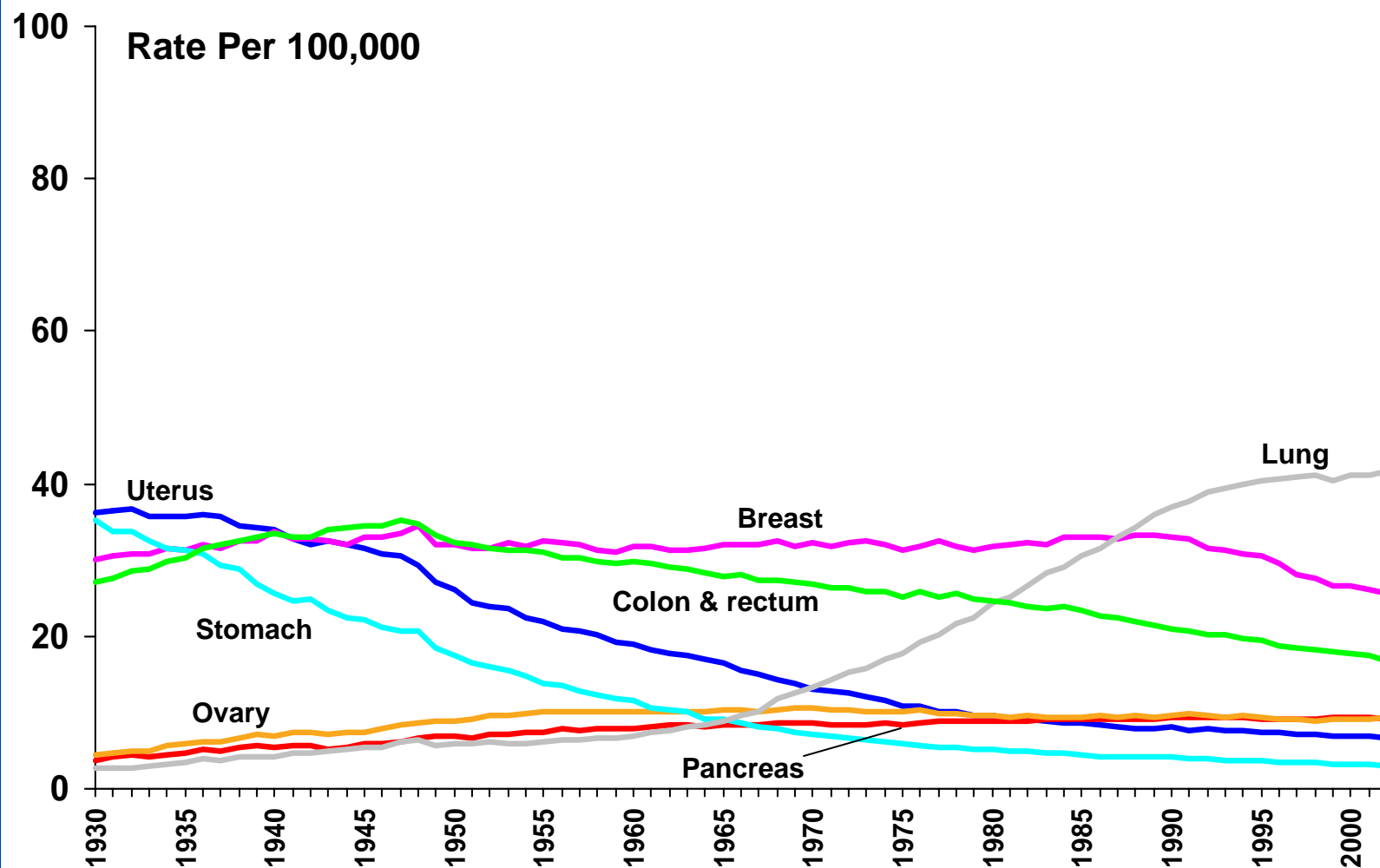
## Cancer Death Rates\*, for Men, US, 1930-2002



\*Age-adjusted to the 2000 US standard population.

Source: US Mortality Public Use Data Tapes 1960-2002, US Mortality Volumes 1930-1959, National Center for Health Statistics, Centers for Disease Control and Prevention, 2005.

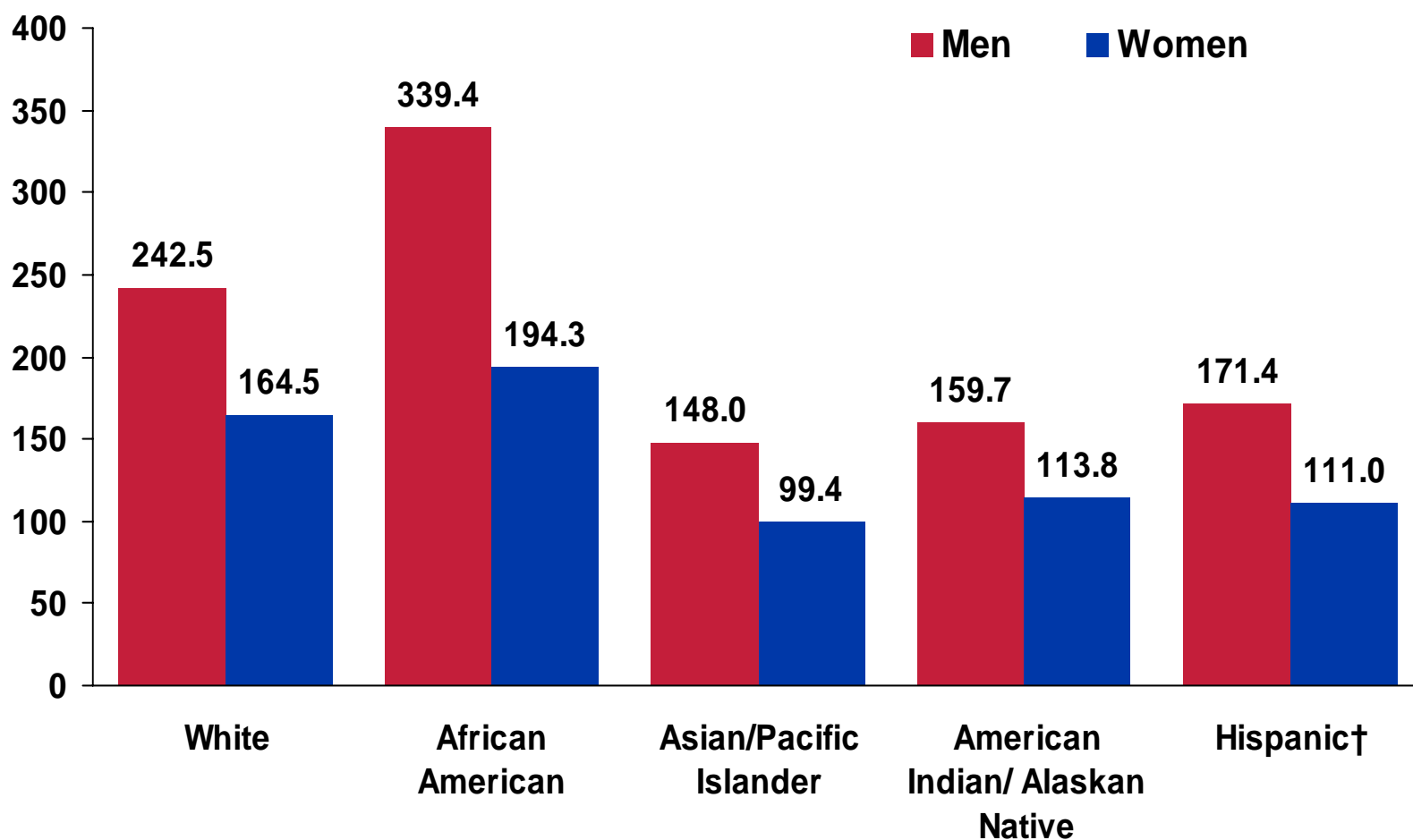
## Cancer Death Rates\*, for Women, US, 1930-2002



\*Age-adjusted to the 2000 US standard population.

Source: US Mortality Public Use Data Tapes 1960-2002, US Mortality Volumes 1930-1959, National Center for Health Statistics, Centers for Disease Control and Prevention, 2005.

## Cancer Death Rates\*, by Race and Ethnicity, US, 1998-2002



\*Per 100,000, age-adjusted to the 2000 US standard population.

†Hispanic is not mutually exclusive from whites, African Americans, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Sites in Which African American Death Rates\* Exceed White Death Rates\* for Men, US, 1998-2002

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Site	African American	White	Ratio of African American/White
All sites	339.4	242.5	1.4
Prostate	68.1	27.7	2.5
Larynx	5.2	2.3	2.3
Stomach	12.8	5.6	2.3
Myeloma	8.8	4.4	2.0
Oral cavity and pharynx	7.1	3.9	1.8
Esophagus	11.2	7.5	1.5
Liver and intrahepatic bile duct	9.5	6.2	1.5
Small intestine	0.7	0.5	1.4
Colon and rectum	34.0	24.3	1.4
Lung and bronchus	101.3	75.2	1.3
Pancreas	15.8	12.0	1.3

\*Per 100,000, age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

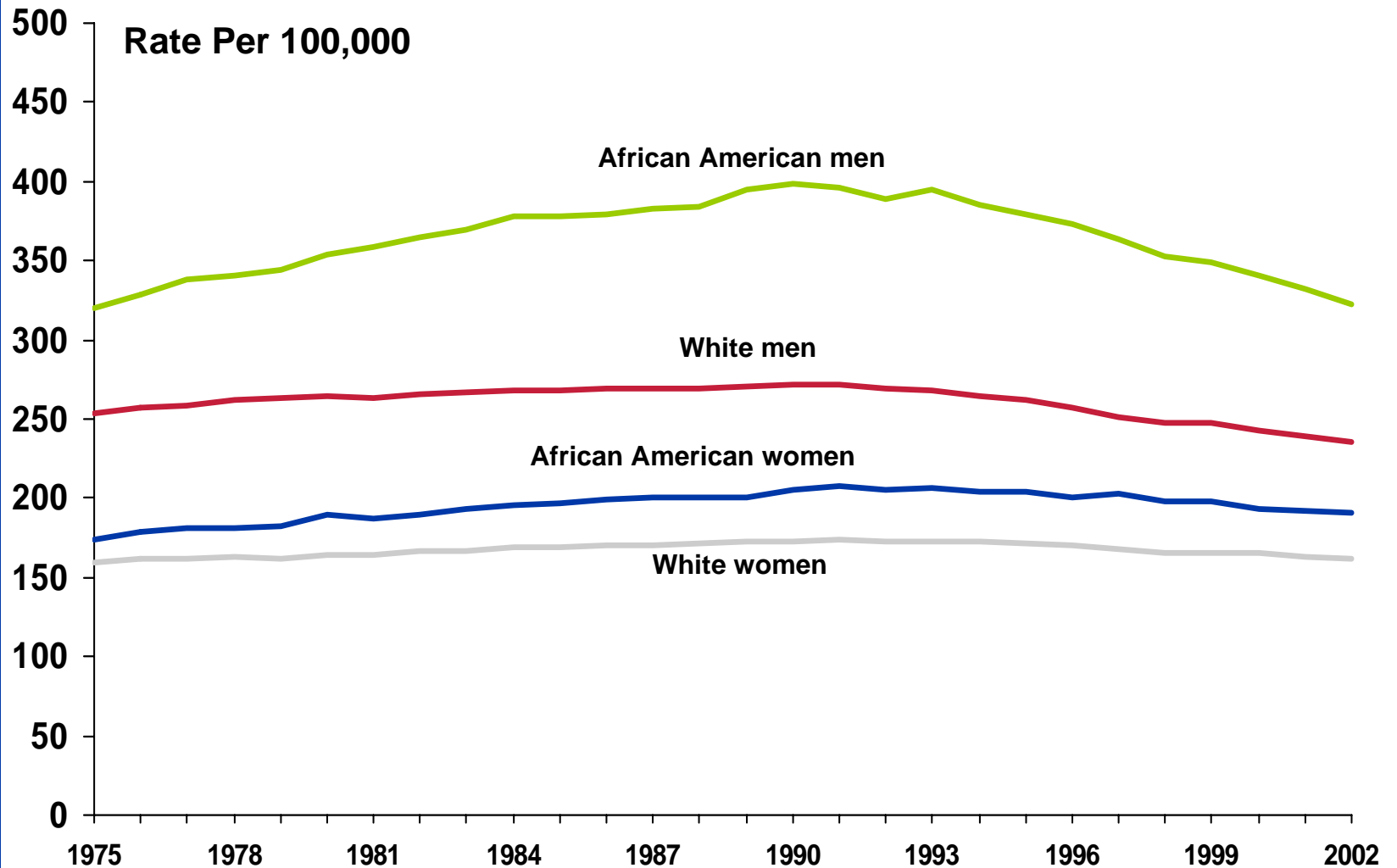
## Cancer Sites in Which African American Death Rates\* Exceed White Death Rates\* for Women, US, 1998-2002

<b>Site</b>	<b>African American</b>	<b>White</b>	<b>Ratio of African American/White</b>
All sites	194.3	164.5	1.2
Stomach	6.3	2.8	2.3
Myeloma	6.5	2.9	2.2
Uterine cervix	5.3	2.5	2.1
Esophagus	3.2	1.7	1.9
Larynx	0.9	0.5	1.8
Uterine corpus	7.0	3.9	1.8
Small intestine	0.5	0.3	1.7
Pancreas	12.6	9.0	1.4
Colon and rectum	24.1	16.8	1.4
Liver and intrahepatic bile duct	3.8	2.7	1.4
Breast	34.7	25.9	1.3
Urinary bladder	2.9	2.3	1.3
Gallbladder	1.0	0.8	1.3
Oral cavity and pharynx	1.9	1.6	1.2

\*Per 100,000, age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

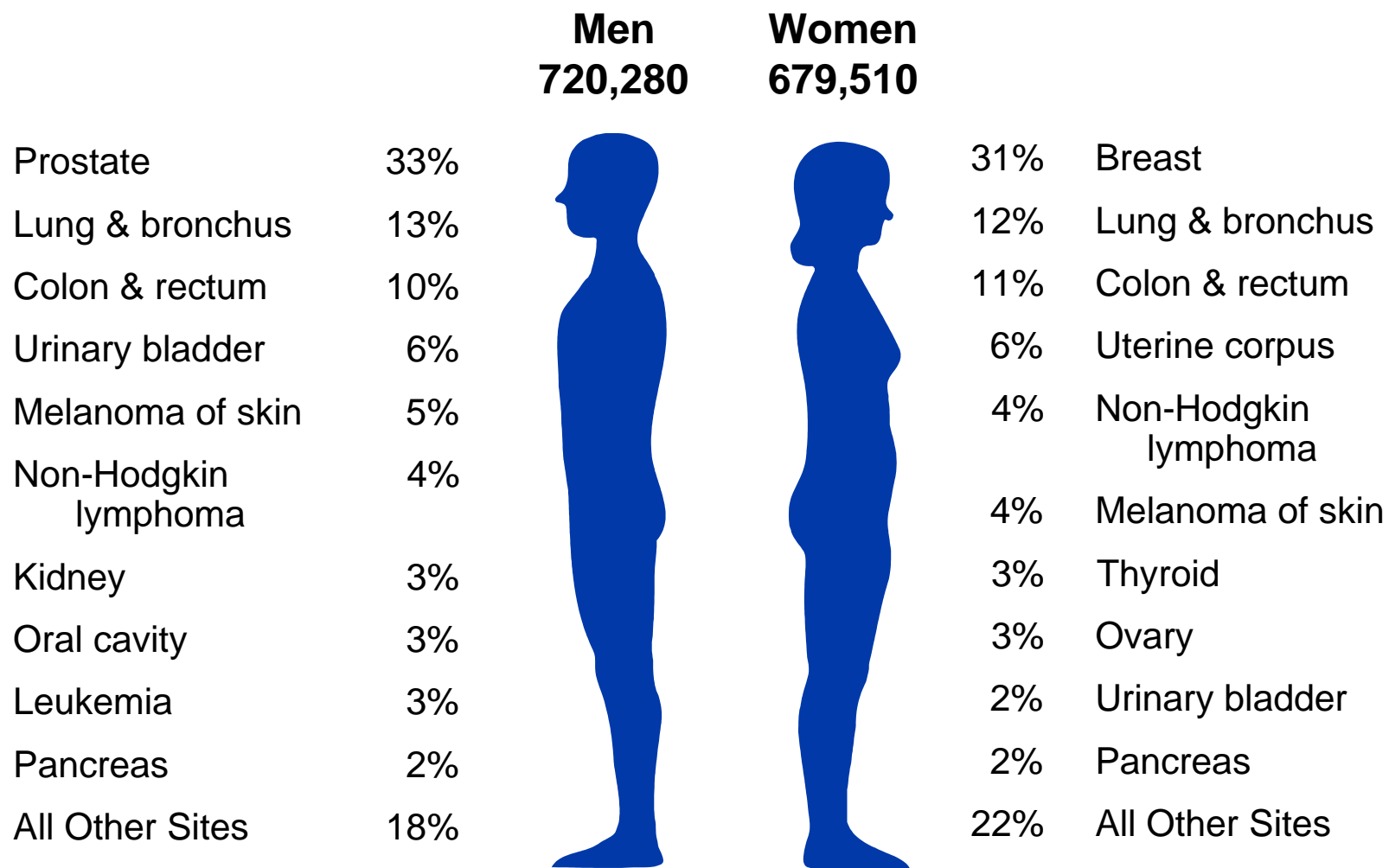
## Cancer Death Rates\* by Sex and Race, US, 1975-2002



\*Age-adjusted to the 2000 US standard population.

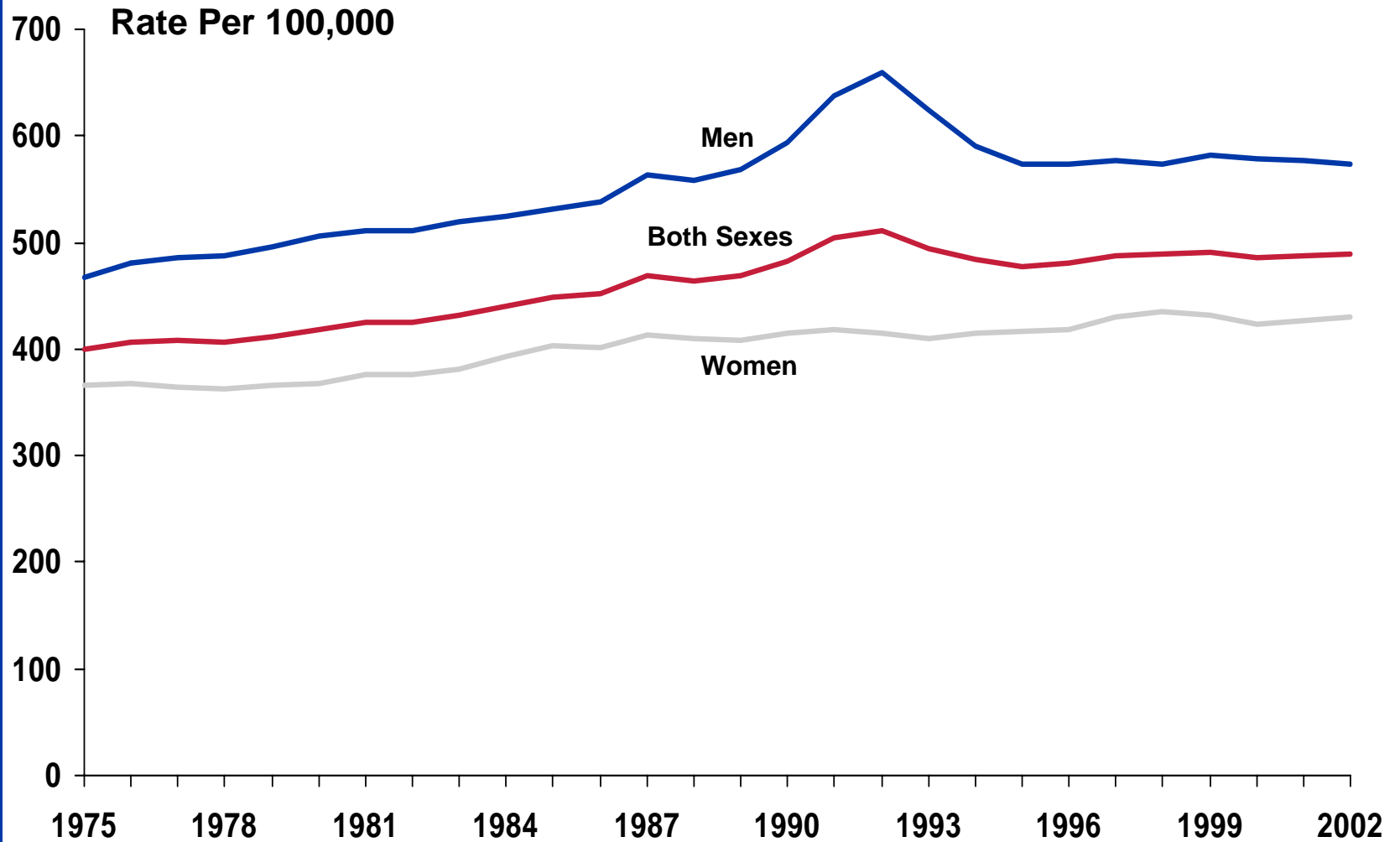
Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## 2006 Estimated US Cancer Cases\*



\*Excludes basal and squamous cell skin cancers and in situ carcinomas except urinary bladder.  
Source: American Cancer Society, 2006.

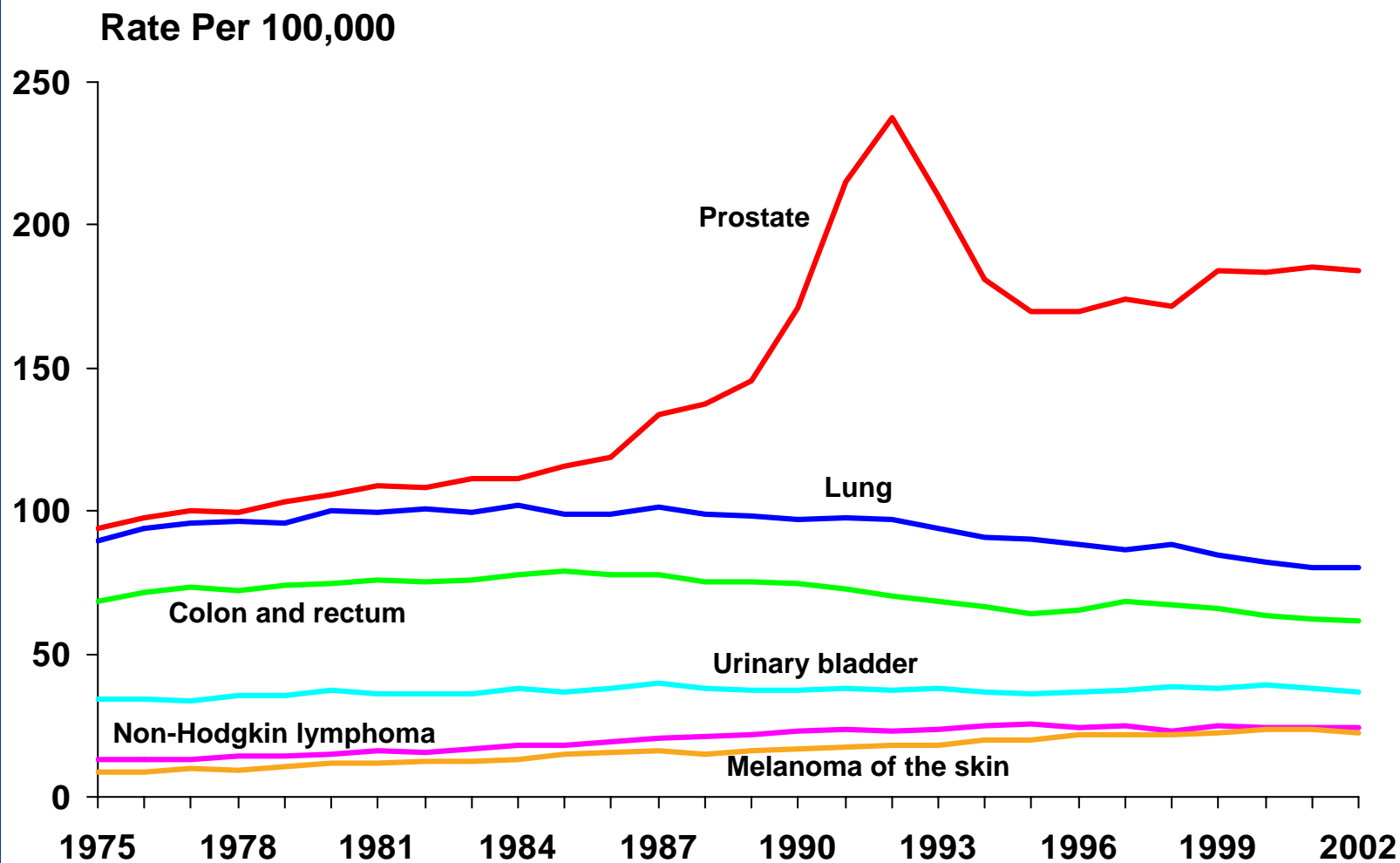
## Cancer Incidence Rates\*, All Sites Combined, All Races, 1975-2002



\*Age-adjusted to the 2000 US standard population and adjusted for delay in reporting.

Source: Surveillance, Epidemiology, and End Results Program, 1973-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

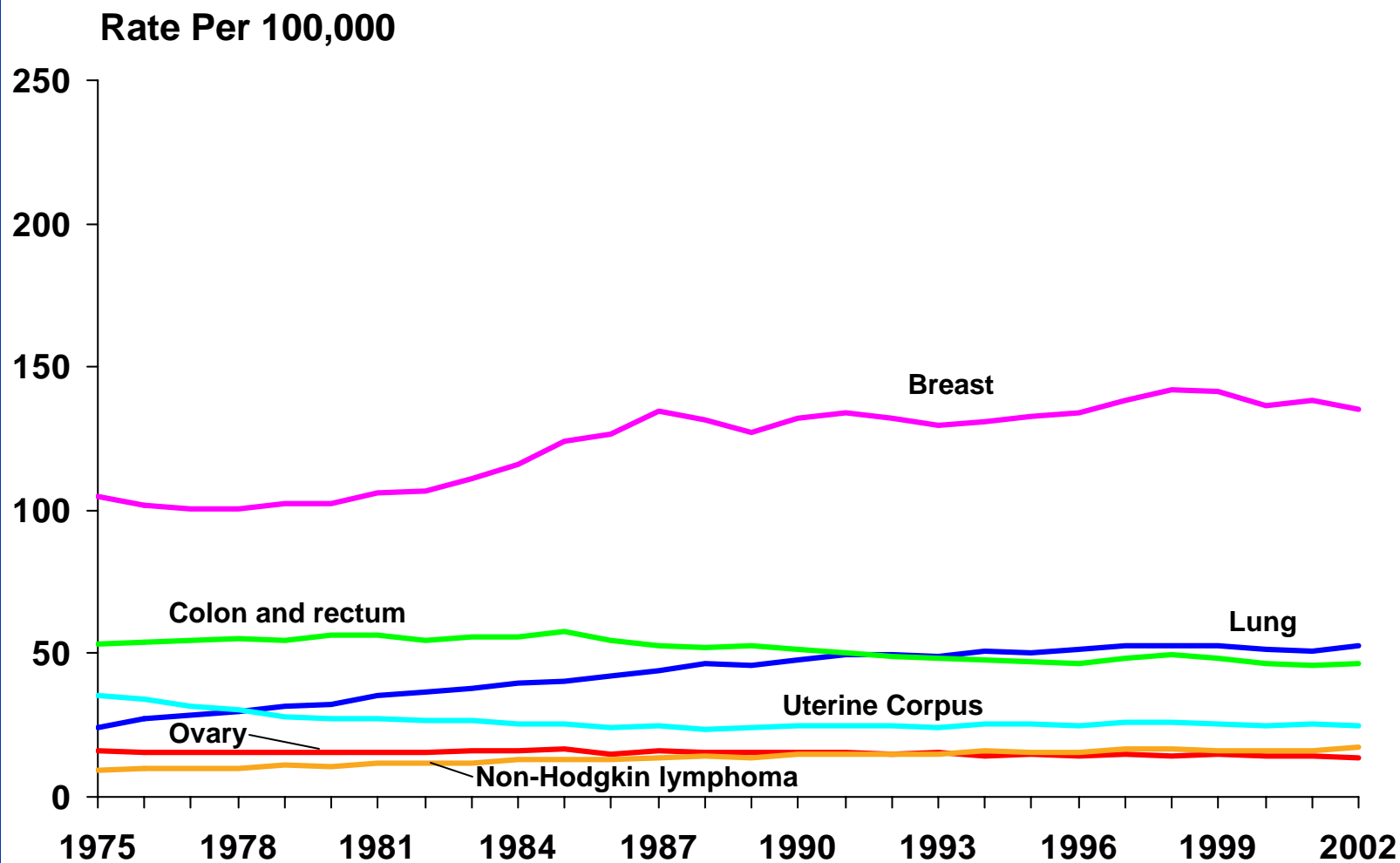
## Cancer Incidence Rates\* for Men, 1975-2002



\*Age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Incidence Rates\* for Women, 1975-2002

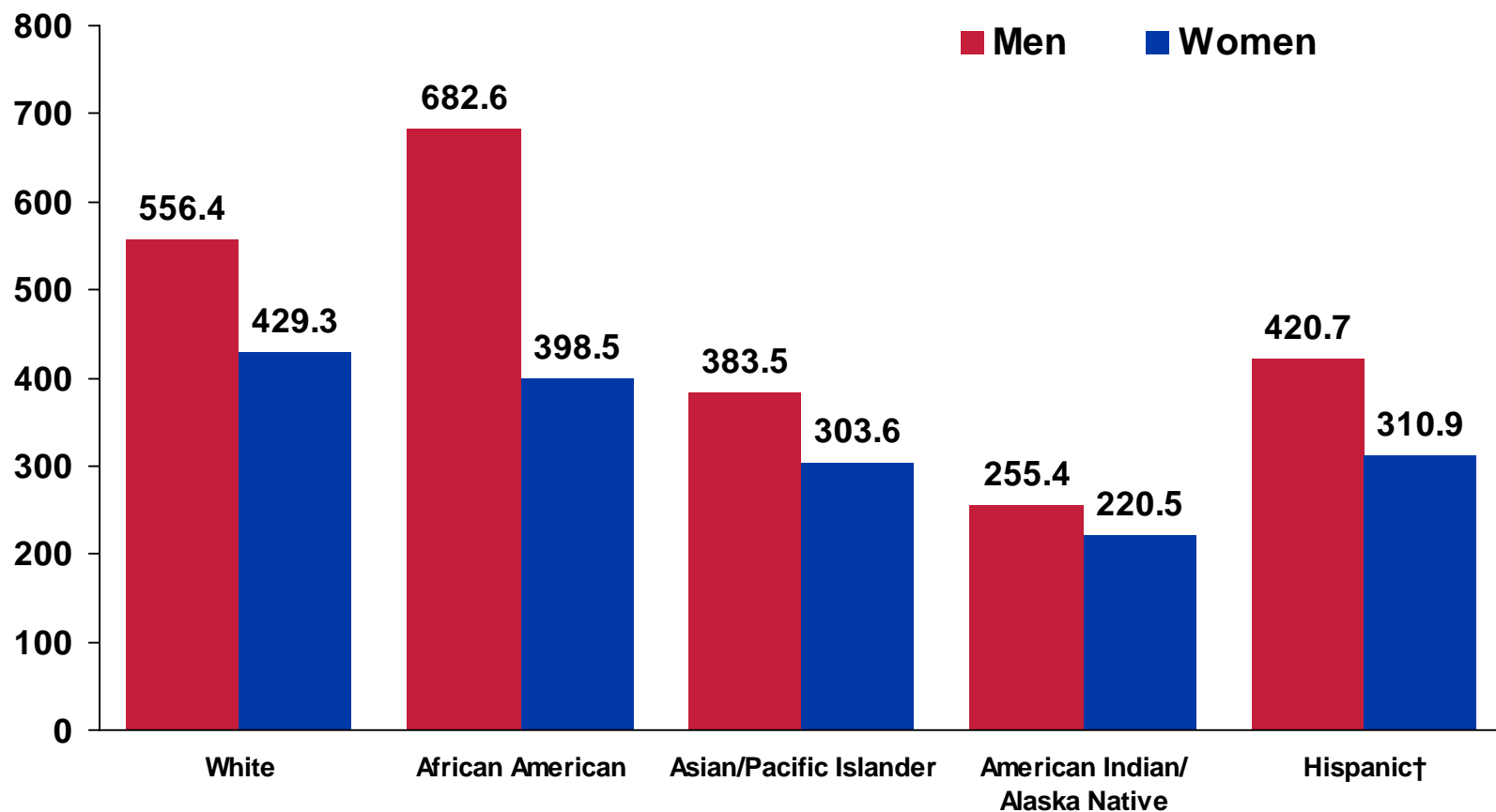


\*Age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Incidence Rates\* by Race and Ethnicity, 1998-2002

Rate Per 100,000



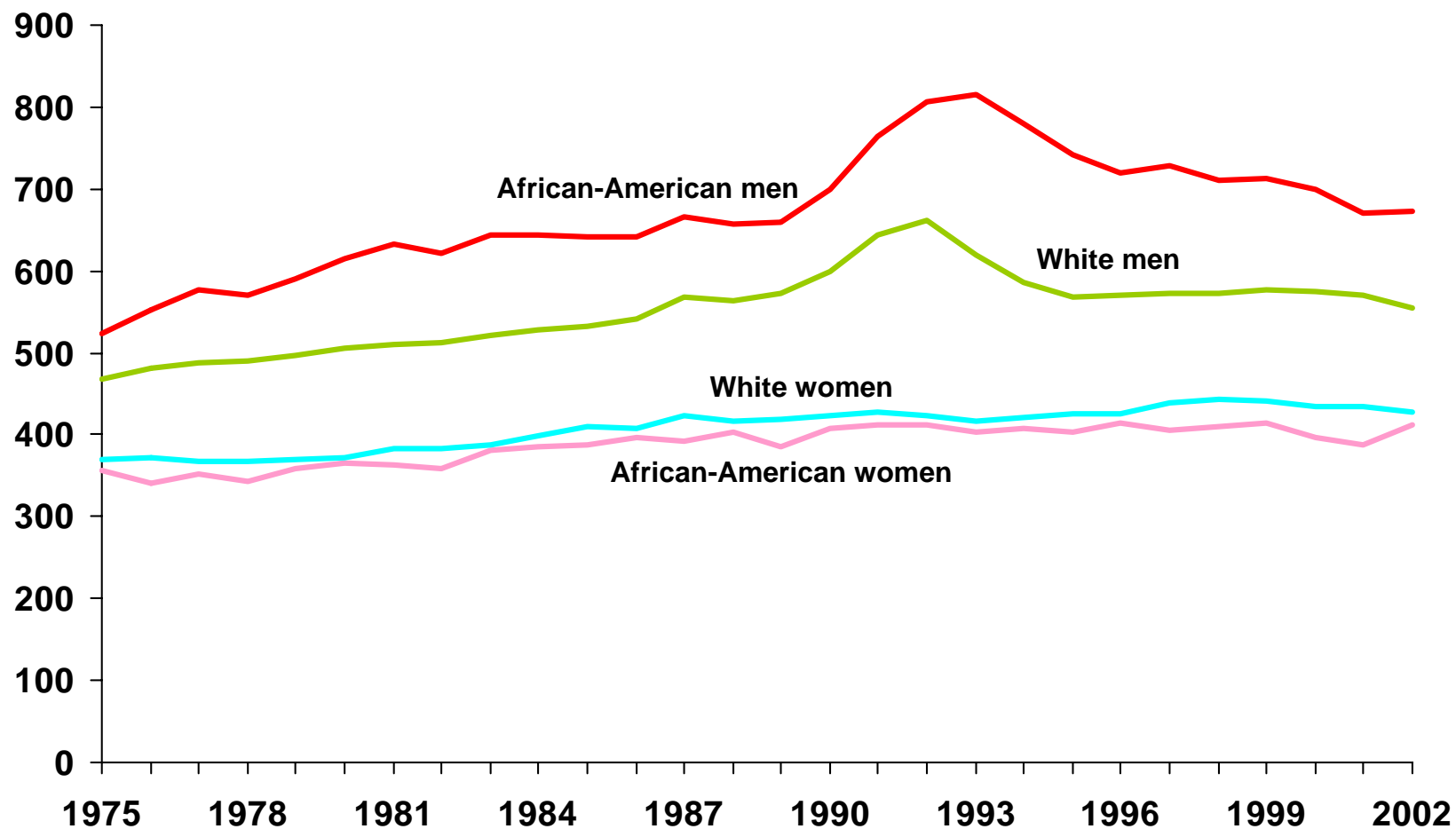
\*Age-adjusted to the 2000 US standard population.

†Hispanic is not mutually exclusive from whites, African Americans, Asian/Pacific Islanders, and American Indians.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Incidence Rates\* by Sex and Race, All Sites, 1975-2002

Rate Per 100,000



\*Age-adjusted to the 2000 US standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Lifetime Probability of Developing Cancer, by Site, Men, 2000-2002\*

Site	Risk
All sites†	1 in 2
Prostate	1 in 6
Lung and bronchus	1 in 13
Colon and rectum	1 in 17
Urinary bladder‡	1 in 28
Non-Hodgkin lymphoma	1 in 46
Melanoma	1 in 52
Kidney	1 in 64
Leukemia	1 in 67
Oral Cavity	1 in 73
Stomach	1 in 82

\* For those free of cancer at beginning of age interval. Based on cancer cases diagnosed during 2000 to 2002.

† All Sites exclude basal and squamous cell skin cancers and in situ cancers except urinary bladder.

‡ Includes invasive and *in situ* cancer cases

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.0 Statistical Research and Applications Branch, NCI, 2005. <http://srab.cancer.gov/devcan>

## Lifetime Probability of Developing Cancer, by Site, Women, US, 2000-2002\*

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Site	Risk
All sites†	1 in 3
Breast	1 in 8
Lung & bronchus	1 in 17
Colon & rectum	1 in 18
Uterine corpus	1 in 38
Non-Hodgkin lymphoma	1 in 55
Ovary	1 in 68
Melanoma	1 in 77
Pancreas	1 in 79
Urinary bladder‡	1 in 88
Uterine cervix	1 in 135

\* For those free of cancer at beginning of age interval. Based on cancer cases diagnosed during 2000 to 2002.

† All Sites exclude basal and squamous cell skin cancers and in situ cancers except urinary bladder.

‡ Includes invasive and *in situ* cancer cases

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.0 Statistical Research and Applications Branch, NCI, 2005. <http://srab.cancer.gov/devcan>

## Cancer Survival\*(%) by Site and Race,1995-2001

<b>Site</b>	<b>White</b>	<b>African American</b>	<b>% Difference</b>
All Sites	66	56	10
Breast (female)	90	76	14
Colon	65	55	10
Esophagus	16	10	6
Leukemia	49	38	11
Non-Hodgkin lymphoma	61	52	9
Oral cavity	62	40	22
Prostate	100	97	3
Rectum	65	56	9
Urinary bladder	83	64	19
Uterine cervix	75	66	9
Uterine corpus	86	62	24

\*5-year relative survival rates based on cancer patients diagnosed from 1995 to 2001 and followed through 2002.  
 Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Five-year Relative Survival (%)\* during Three Time Periods By Cancer Site

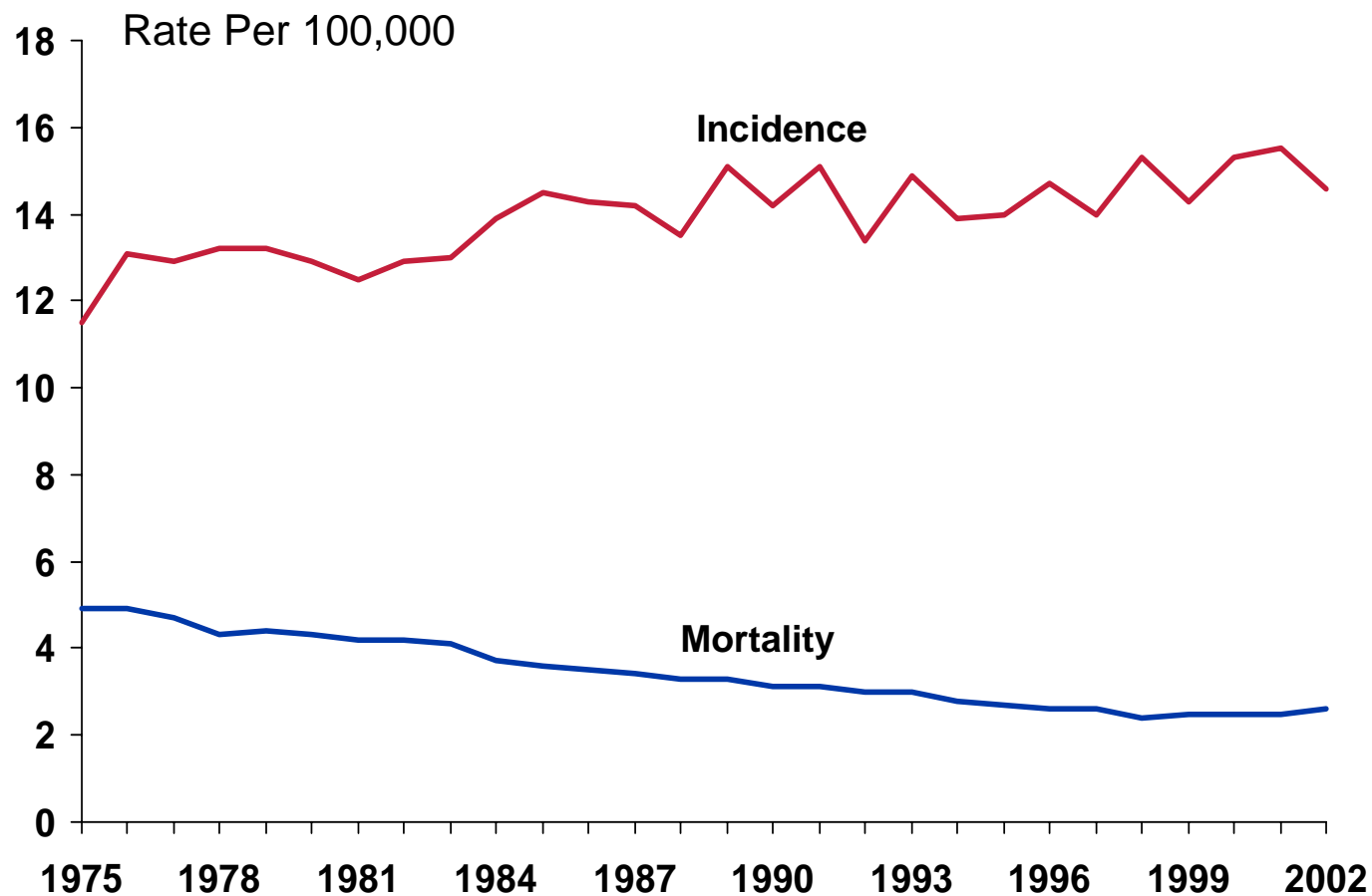
Site	1974-1976	1983-1985	1995-2001
All sites	50	53	65
Breast (female)	75	78	88
Colon	50	58	64
Leukemia	34	41	48
Lung and bronchus	12	14	15
Melanoma	80	85	92
Non-Hodgkin lymphoma	47	54	60
Ovary	37	41	45 <sup>†</sup>
Pancreas	3	3	5
Prostate	67	75	100
Rectum	49	55	65
Urinary bladder	73	78	82

\*5-year relative survival rates based on follow up of patients through 2002.

†Recent changes in classification of ovarian cancer have affected 1995-2001 survival rates.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Incidence & Death Rates\* in Children 0-14 Years, 1975-2002



\*Age-adjusted to the 2000 Standard population.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Incidence Rates\* in Children 0-14 Years, by Site, 1998-2002

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<b>Site</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
All sites	15.6	14.3	15.0
Leukemia	4.9	4.2	4.6
Acute Lymphocytic	3.9	3.4	3.6
Brain/ONS	3.6	3.3	3.5
Soft tissue	1.1	0.9	1.0
Non-Hodgkin lymphoma	1.2	0.6	1.0
Kidney and renal pelvis	0.8	1.0	0.9
Bone and Joint	0.6	0.6	0.6
Hodgkin lymphoma	0.6	0.5	0.5

\*Per 100,000, age-adjusted to the 2000 US standard population.

ONS = Other nervous system

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Cancer Death Rates\* in Children 0-14 Years, by Site, US, 1998-2002

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Site	Male	Female	Total
All sites	2.7	2.3	2.5
Leukemia	0.8	0.7	0.8
Acute Lymphocytic	0.4	0.3	0.4
Brain/ONS	0.8	0.7	0.7
Non-Hodgkin lymphoma	0.1	0.1	0.1
Soft tissue	0.1	0.1	0.1
Bone and Joint	0.1	0.1	0.1
Kidney and Renal pelvis	0.1	0.1	0.1

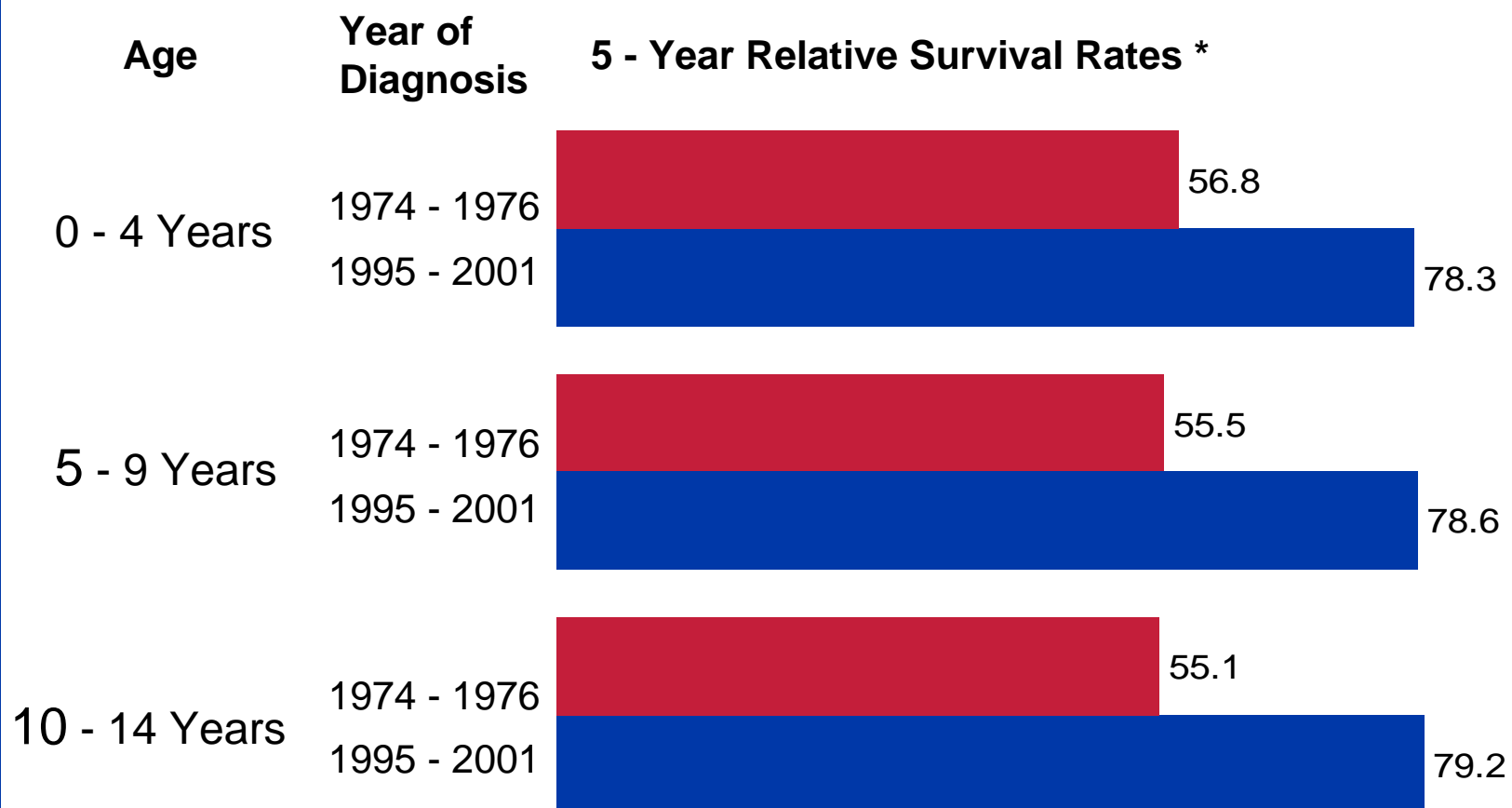
\*Per 100,000, age-adjusted to the 2000 US standard population.

ONS = Other nervous system

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

## Trends in Survival, Children 0-14 Years, All Sites Combined 1974-2001

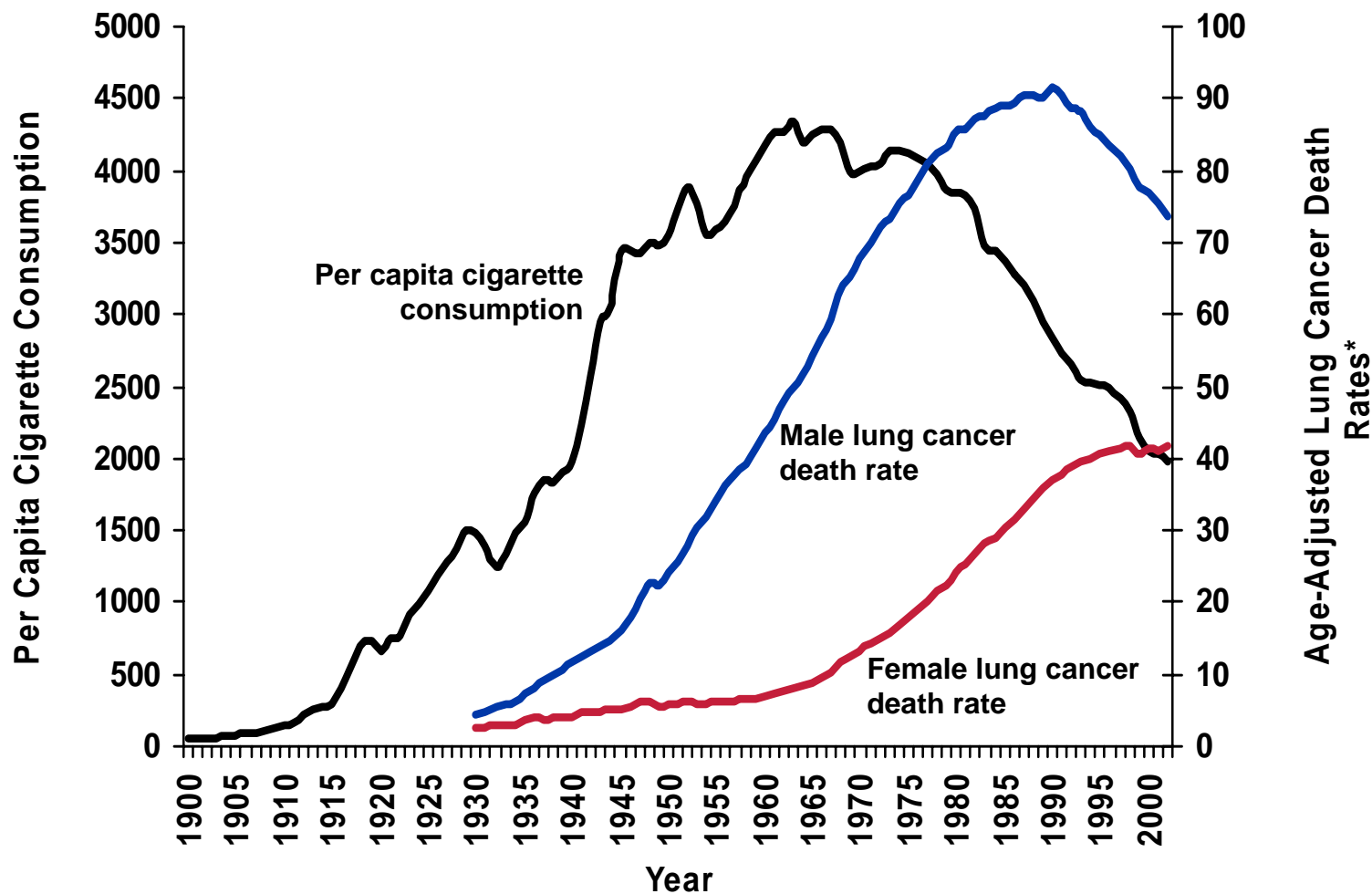
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\*5-year relative survival rates, based on follow up of patients through 2002.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2002, Division of Cancer Control and Population Sciences, National Cancer Institute, 2005.

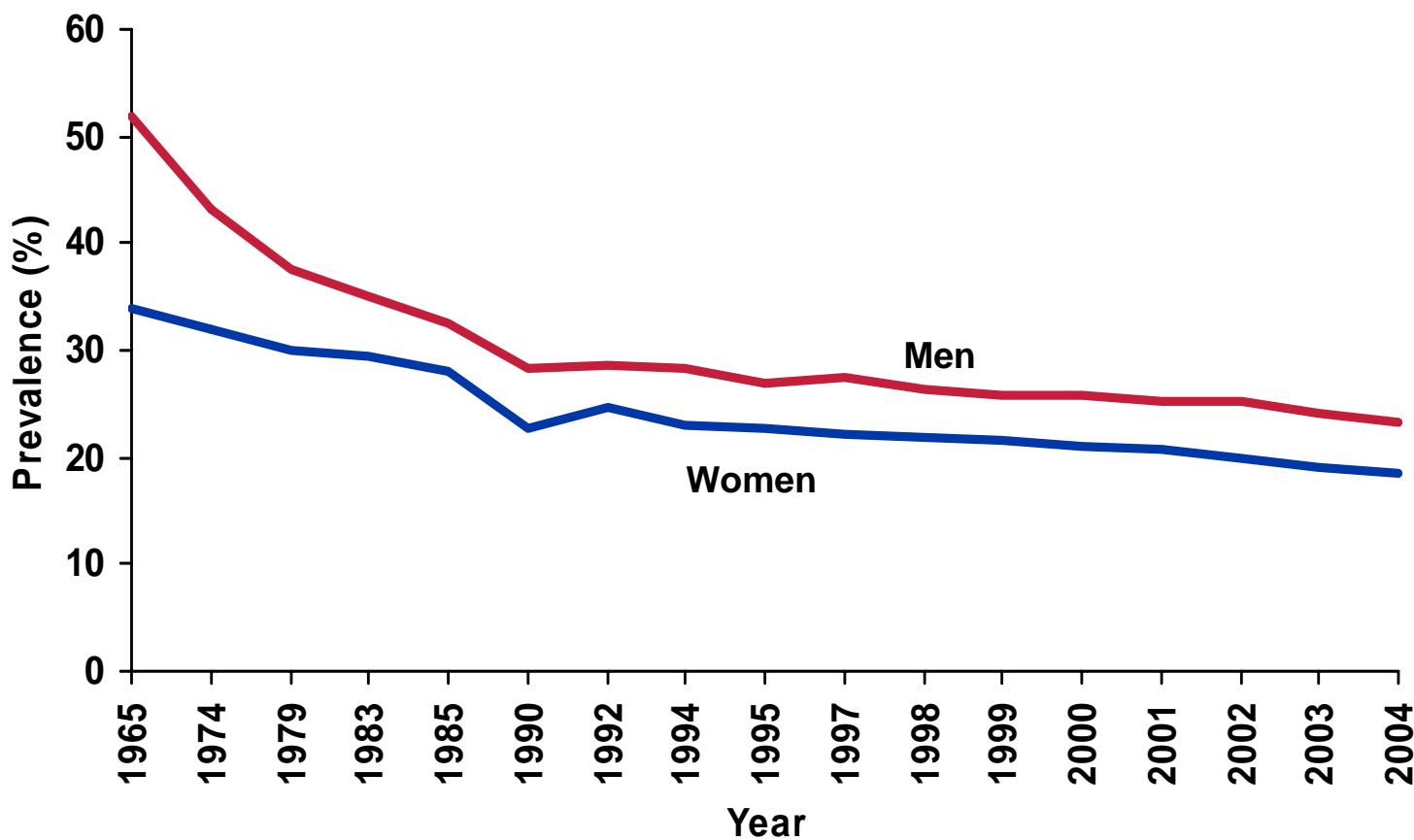
## Tobacco Use in the US, 1900-2002



\*Age-adjusted to 2000 US standard population.

Source: Death rates: US Mortality Public Use Tapes, 1960-2002, US Mortality Volumes, 1930-1959, National Center for Health Statistics, Centers for Disease Control and Prevention, 2005. Cigarette consumption: US Department of Agriculture, 1900-2002.

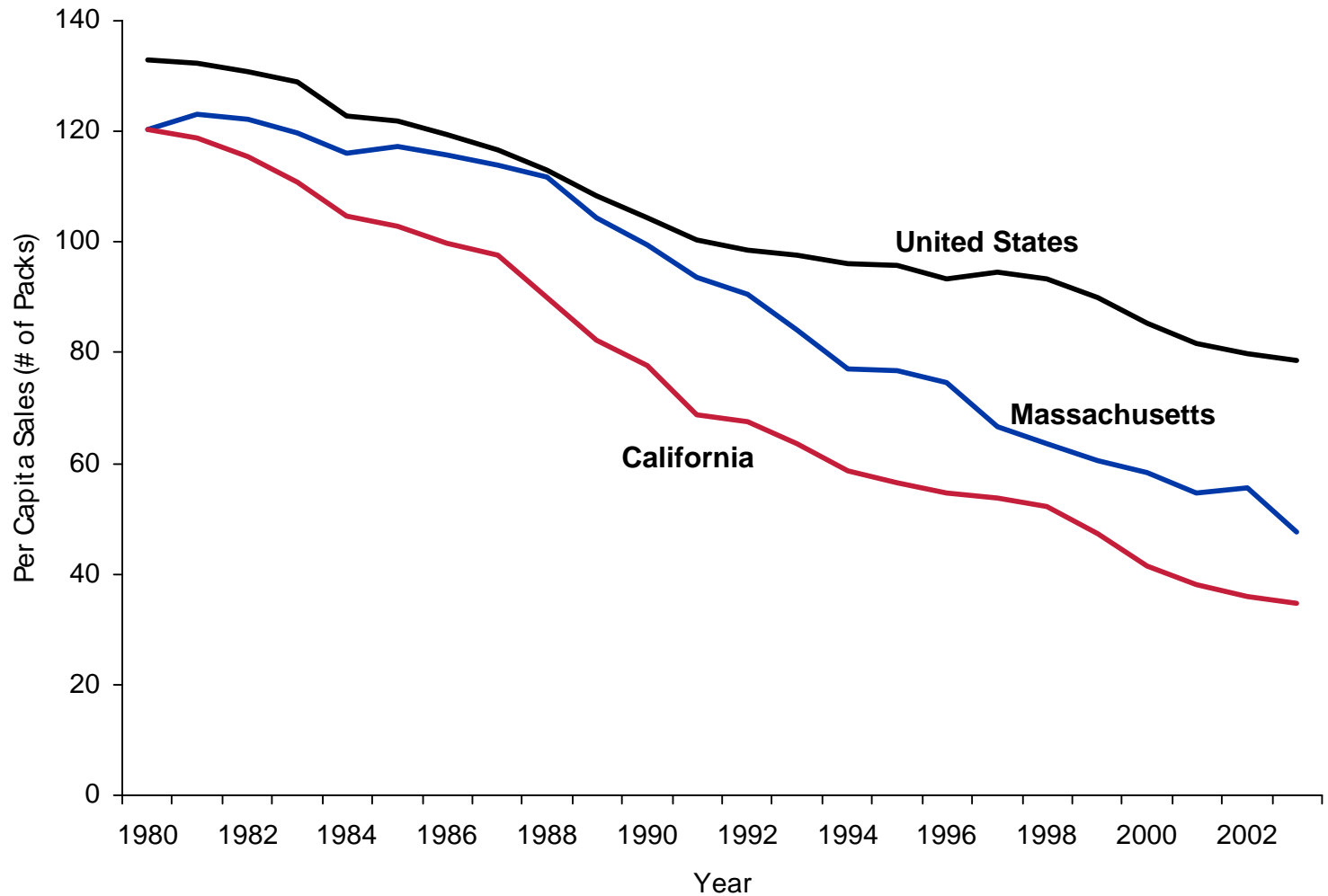
## Trends in Cigarette Smoking Prevalence\* (%), by Gender, Adults 18 and Older, US, 1965-2004



\*Redesign of survey in 1997 may affect trends.

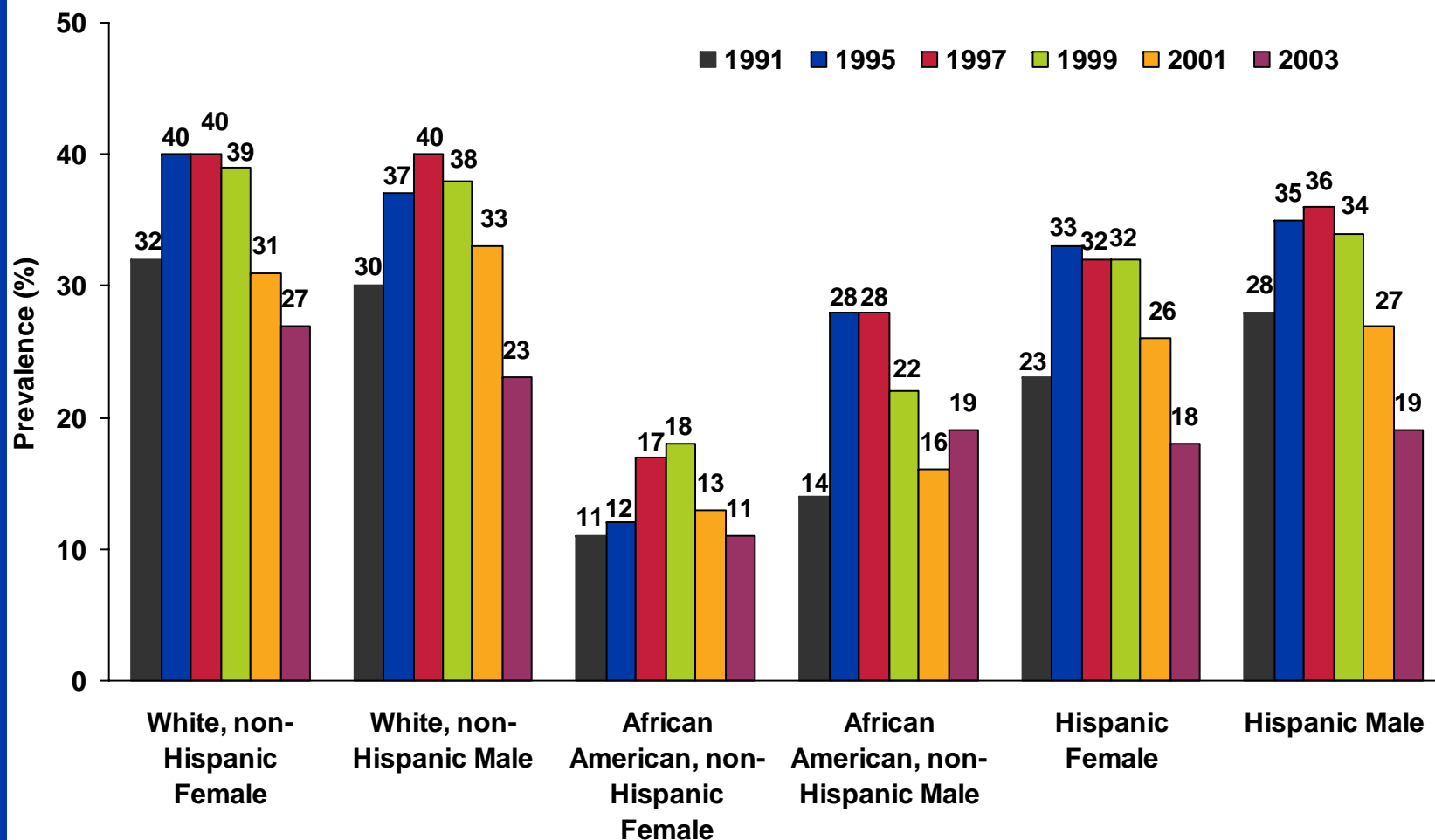
Source: National Health Interview Survey, 1965-2004, National Center for Health Statistics, Centers for Disease Control and Prevention, 2005.

## Trends in per capita cigarette consumption for selected states and the average consumption across all states, 1980-2003



Data from: Orzechowski W, Walker RC. The tax burden on tobacco: historical compilation 2003: Volume 36. Arlington (VA): Orzechowski and Walker; 2003.

## Current\* Cigarette Smoking Prevalence (%), by Gender and Race/Ethnicity, High School Students, US, 1991-2003

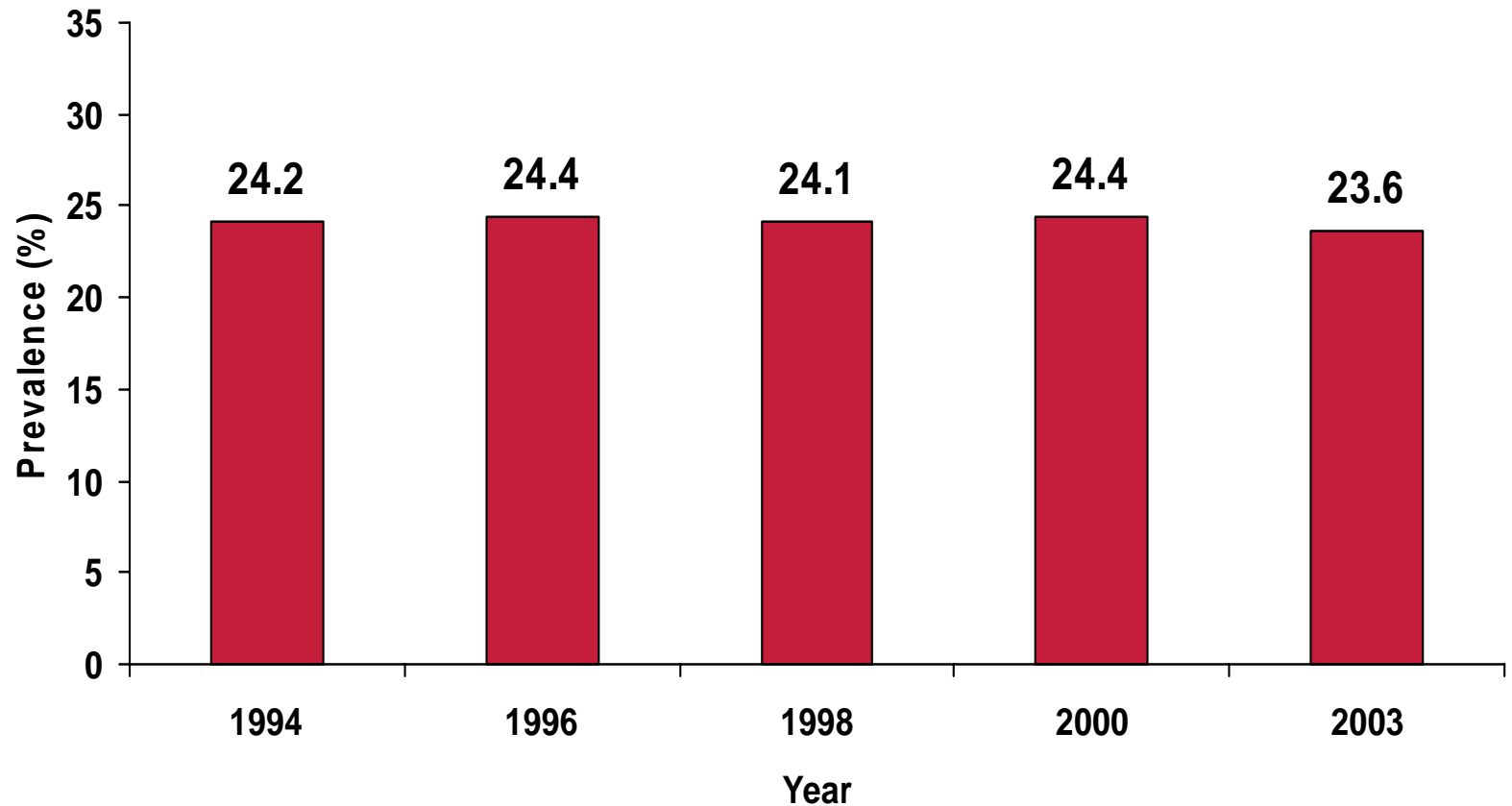


\*Smoked cigarettes on one or more of the 30 days preceding the survey.

Source: Youth Risk Behavior Surveillance System, 1991, 1995, 1997, 1999, 2001, 2003, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2004.

## Trends in Consumption of Five or More Recommended Vegetable and Fruit Servings for Cancer Prevention, Adults 18 and Older, US, 1994-2003

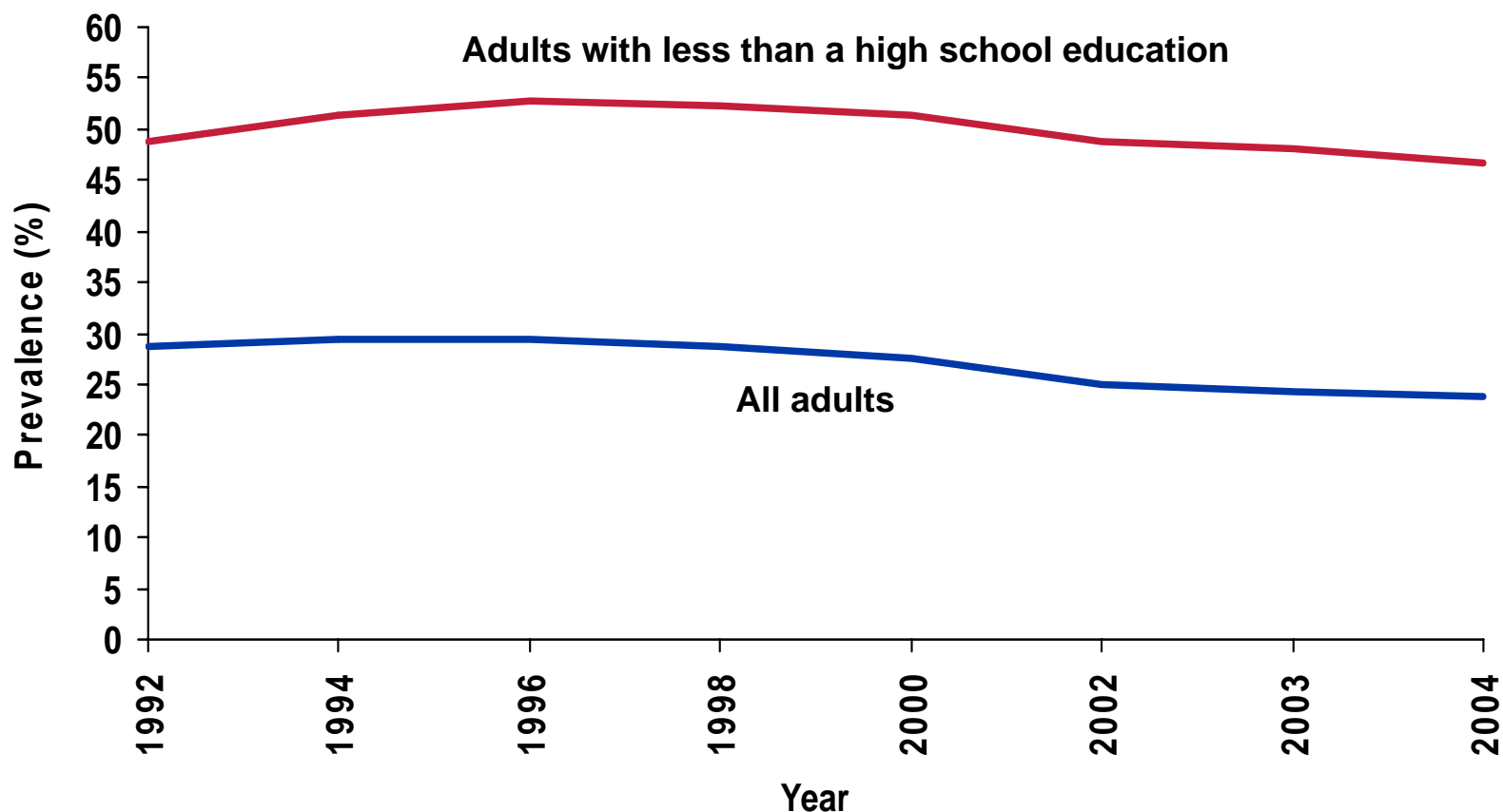
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Note: Data from participating states and the District of Columbia were aggregated to represent the United States.

Source: Behavioral Risk Factor Surveillance System CD-ROM (1984-1995, 1996, 1998) and Public Use Data Tape (2000, 2003), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1997, 1999, 2000, 2001, 2004.

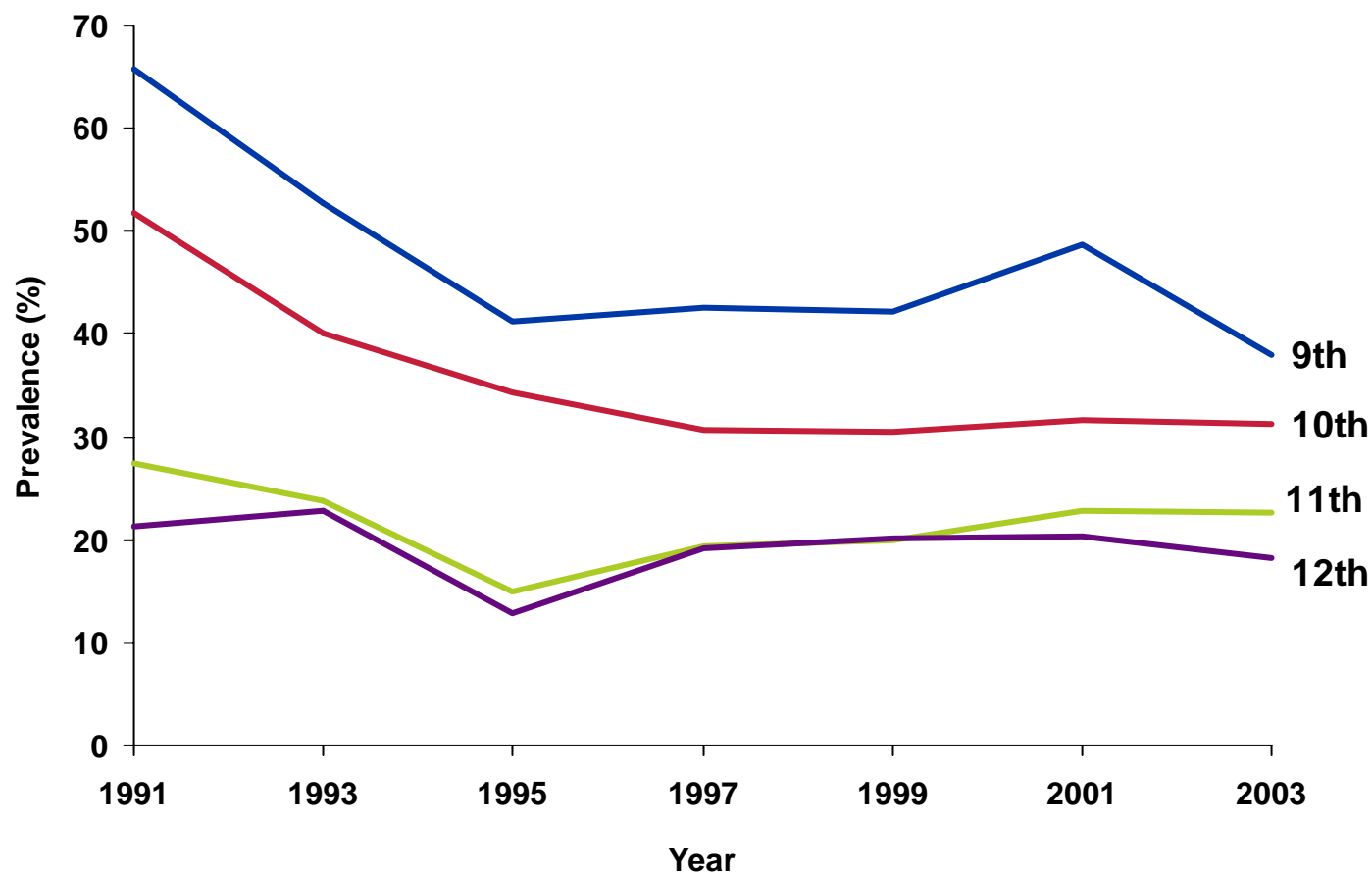
## Trends in Prevalence (%) of No Leisure-Time Physical Activity, by Educational Attainment, Adults 18 and Older, US, 1992-2004



Note: Data from participating states and the District of Columbia were aggregated to represent the United States. Educational attainment is for adults 25 and older.

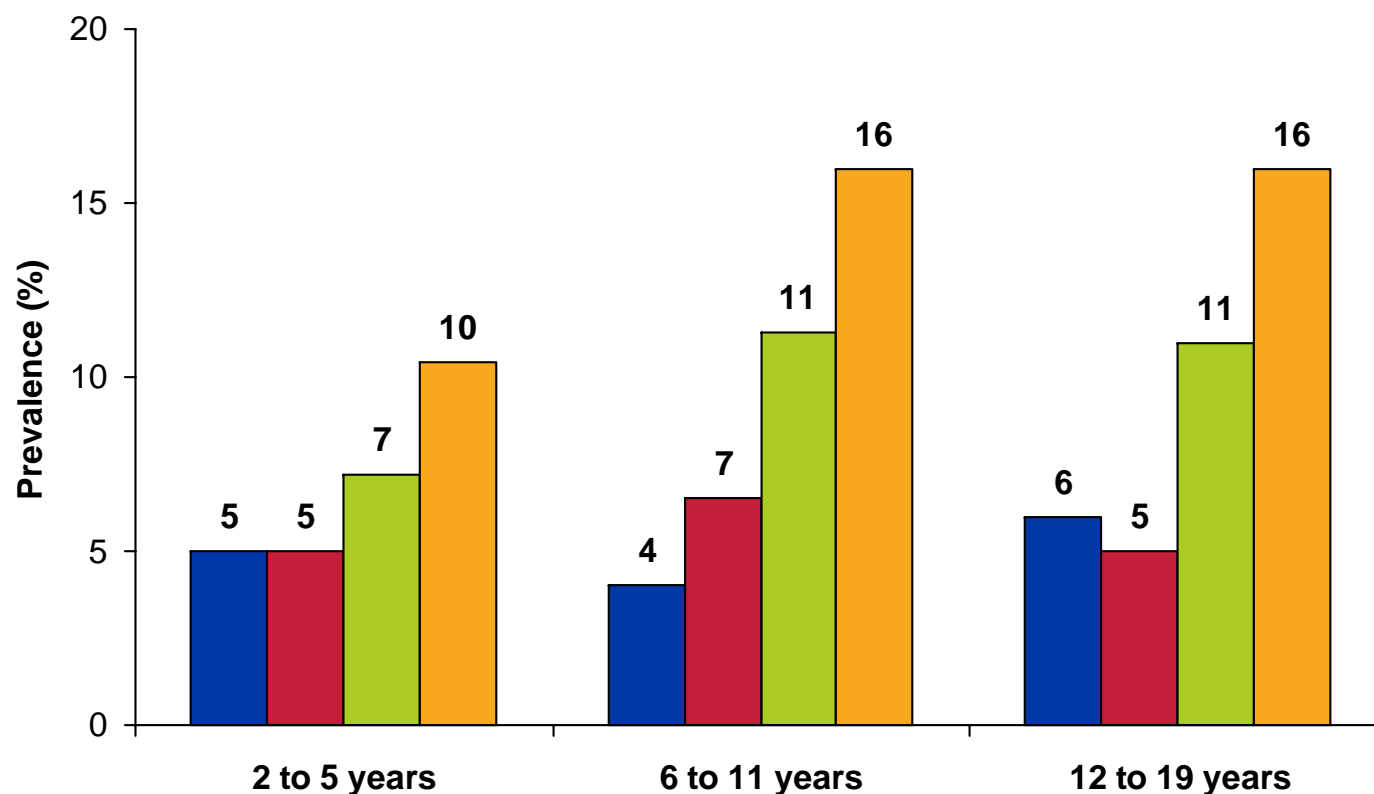
Source: Behavioral Risk Factor Surveillance System CD-ROM (1984-1995, 1996, 1998) and Public Use Data Tape (2000, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1997, 1999, 2000, 2001, 2003, 2005.

## Trends in Prevalence (%) of High School Students Attending PE Class Daily, by Grade, US, 1991-2003



Source: Youth Risk Behavior Surveillance System, 1991-2003, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2004. MMWR 2004;53(36):844-847.

## Trends in Overweight\* Prevalence (%), Children and Adolescents, by Age Group, US, 1971-2002

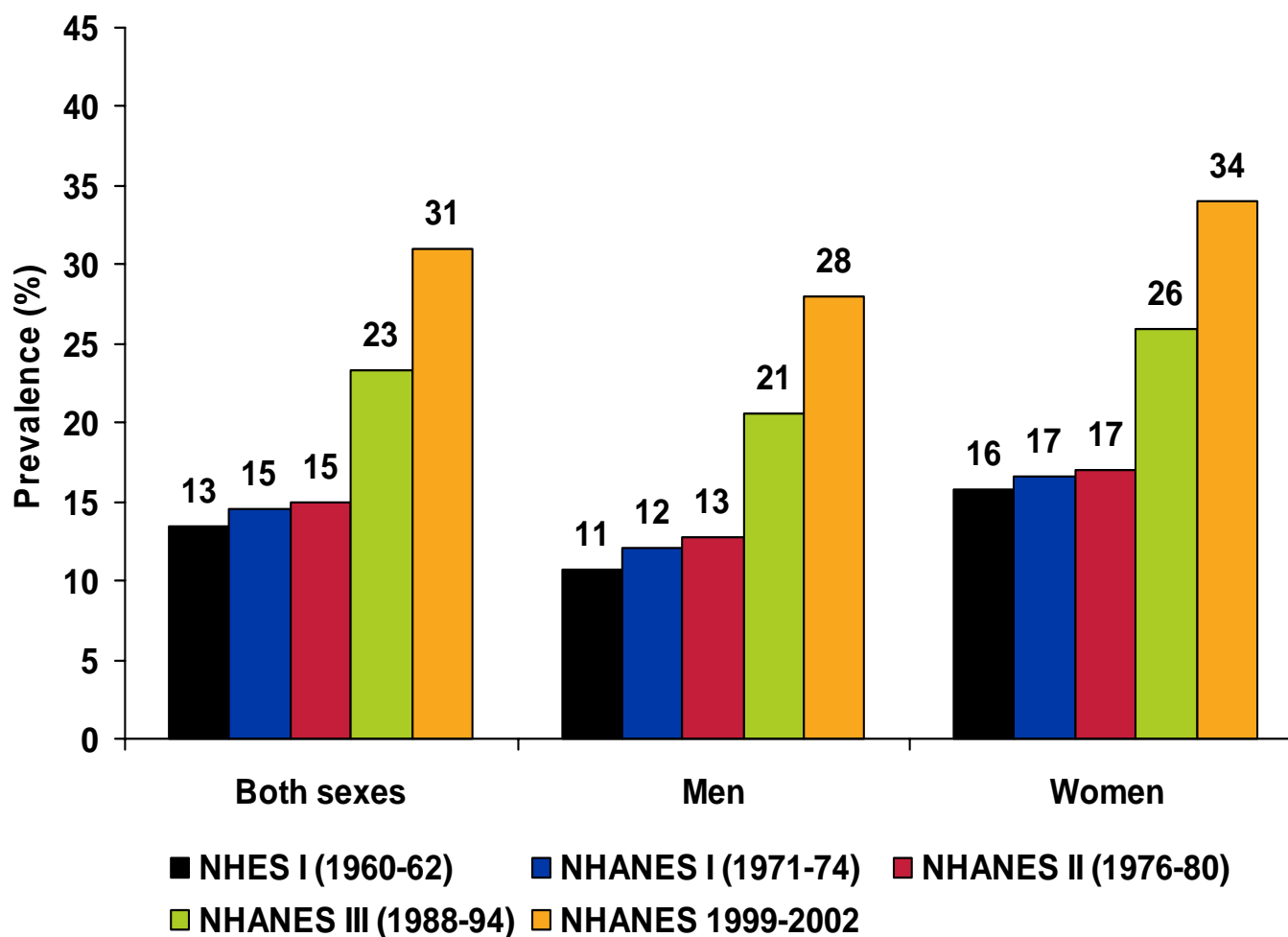


■ NHANES I (1971-74) ■ NHANES II (1976-80) ■ NHANES III (1988-94) ■ NHANES 1999-2002

\*Overweight is defined as at or above the 95<sup>th</sup> percentile for body mass index by age and sex based on reference data.

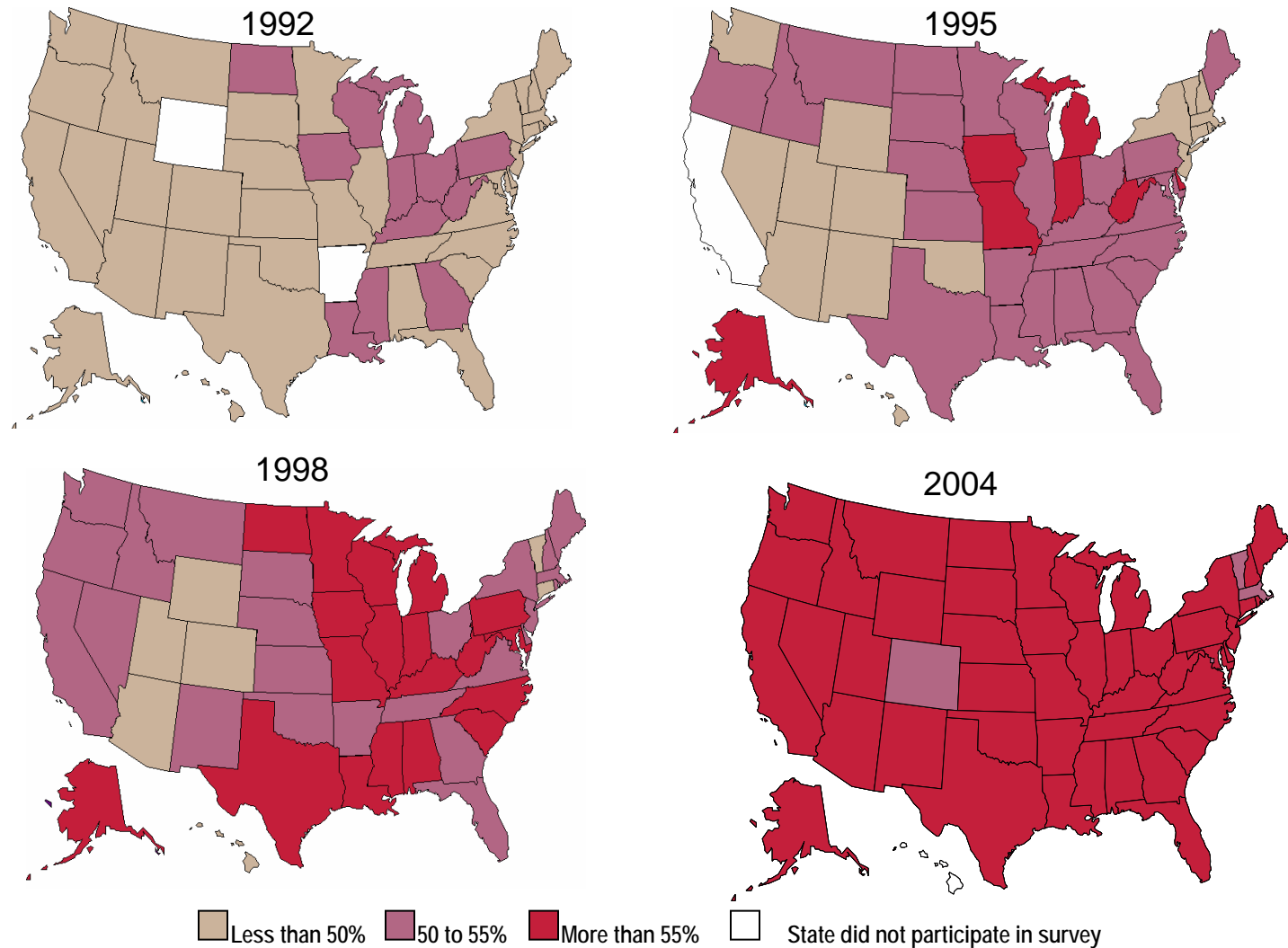
Source: National Health and Nutrition Examination Survey, 1971-1974, 1976-1980, 1988-1994, 1999-2002, National Center for Health Statistics, Centers for Disease Control and Prevention, 2002, 2004.

## Trends in Obesity\* Prevalence (%), By Gender, Adults Aged 20 to 74, US, 1960-2002†



\*Obesity is defined as a body mass index of 30 kg/m<sup>2</sup> or greater. † Age adjusted to the 2000 US standard population. Source: National Health Examination Survey 1960-1962, National Health and Nutrition Examination Survey, 1971-1974, 1976-1980, 1988-1994, 1999-2002, National Center for Health Statistics, Centers for Disease Control and Prevention, 2002, 2004.

## Trends in Overweight\* Prevalence (%), Adults 18 and Older, US, 1992-2004



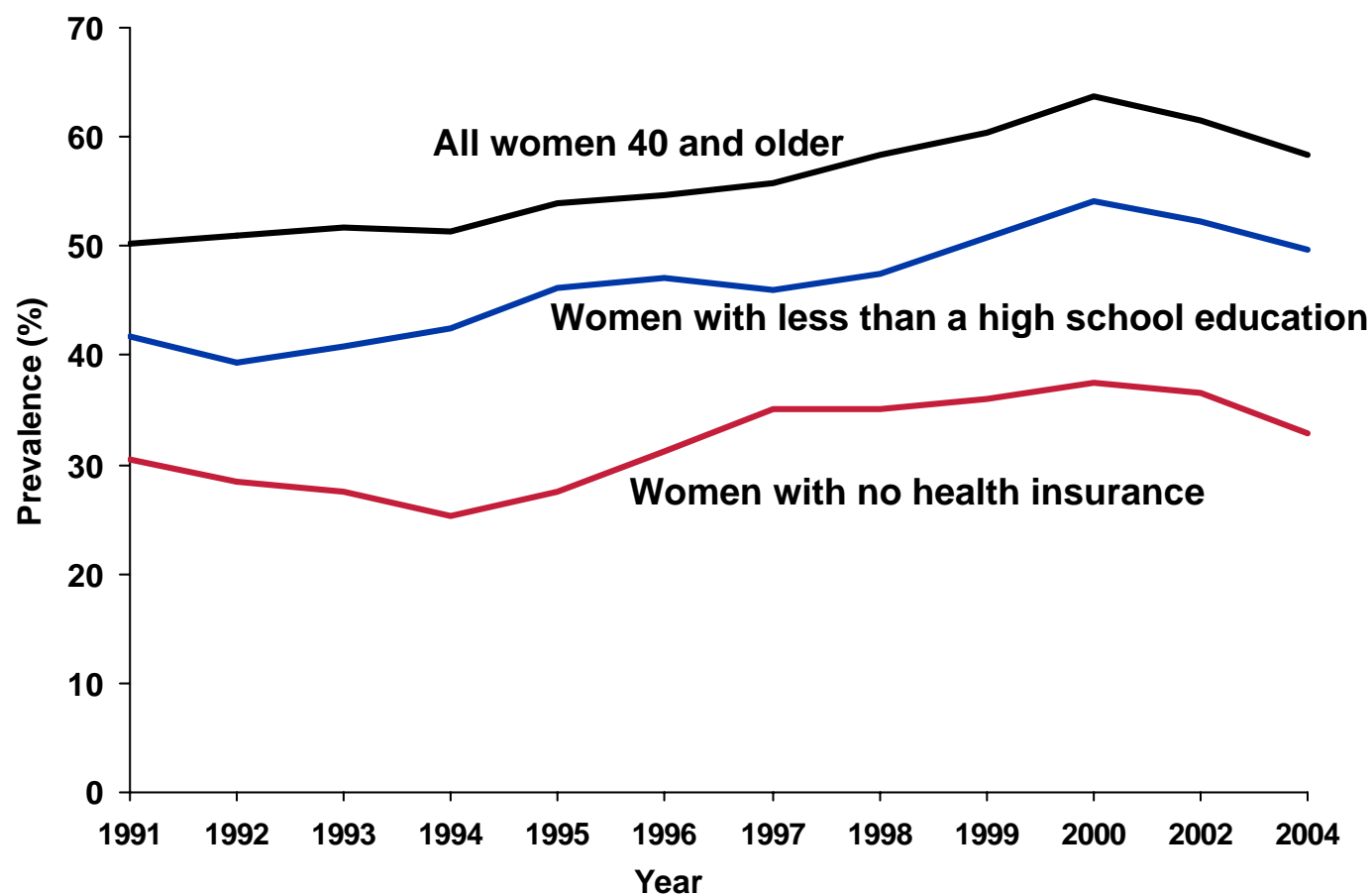
\*Body mass index of 25.0 kg/m<sup>2</sup> or greater. Source: Behavioral Risk Factor Surveillance System, CD-ROM (1984-1995, 1998) and Public Use Data Tape (2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1997, 2000, 2005.

## Screening Guidelines for the Early Detection of Breast Cancer, American Cancer Society

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- Yearly mammograms are recommended starting at age 40.
- A clinical breast exam should be part of a periodic health exam, about every three years for women in their 20s and 30s, and every year for women 40 and older.
- Women should know how their breasts normally feel and report any breast changes promptly to their health care providers. Breast self-exam is an option for women starting in their 20s.
- Women at increased risk (e.g., family history, genetic tendency, past breast cancer) should talk with their doctors about the benefits and limitations of starting mammography screening earlier, having additional tests (i.e., breast ultrasound and MRI), or having more frequent exams.

## Mammogram Prevalence (%), by Educational Attainment and Health Insurance Status, Women 40 and Older, US, 1991-2004



\*A mammogram within the past year. Note: Data from participating states and the District of Columbia were aggregated to represent the United States.

Source: Behavior Risk Factor Surveillance System CD-ROM (1984-1995, 1996-1997, 1998, 1999) and Public Use Data Tape (2000, 2002, 2004), National Centers for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 1997, 1999, 2000, 2000, 2001, 2003, 2005.

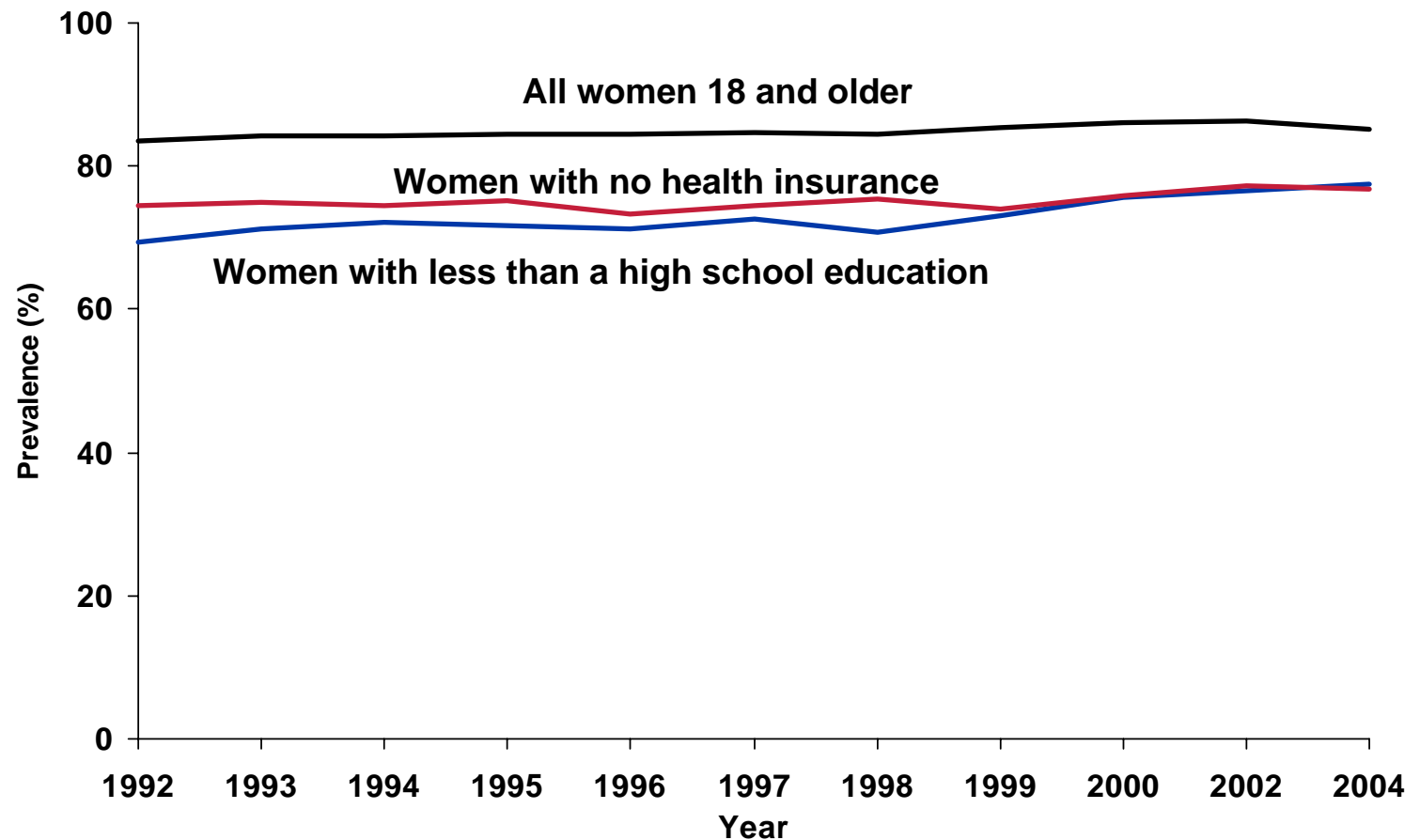


## Screening Guidelines for the Early Detection of Cervical Cancer, American Cancer Society

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- Screening should begin approximately three years after a woman begins having vaginal intercourse, but no later than 21 years of age.
- Screening should be done every year with regular Pap tests or every two years using liquid-based tests.
- At or after age 30, women who have had three normal test results in a row may get screened every 2-3 years. However, doctors may suggest a woman get screened more frequently if she has certain risk factors, such as HIV infection or a weakened immune system.
- Women 70 and older who have had three or more consecutive Pap tests in the last ten years may choose to stop cervical cancer screening.
- Screening after a total hysterectomy (with removal of the cervix) is not necessary unless the surgery was done as a treatment for cervical cancer.

## Trends in Recent\* Pap Test Prevalence (%), by Educational Attainment and Health Insurance Status, Women 18 and Older, US, 1992-2004



\* A Pap test within the past three years. Note: Data from participating states and the District of Columbia were aggregated to represent the United States. Educational attainment is for women 25 and older. Source: Behavior Risk Factor Surveillance System CD-ROM (1984-1995, 1996-1997, 1998, 1999) and Public Use Data Tape (2000, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Center for Disease Control and Prevention, 1997, 1999, 2000, 2000, 2001, 2003, 2005.

## Screening Guidelines for the Early Detection of Colorectal Cancer, American Cancer Society

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Beginning at age 50, men and women should follow one of the following examination schedules:

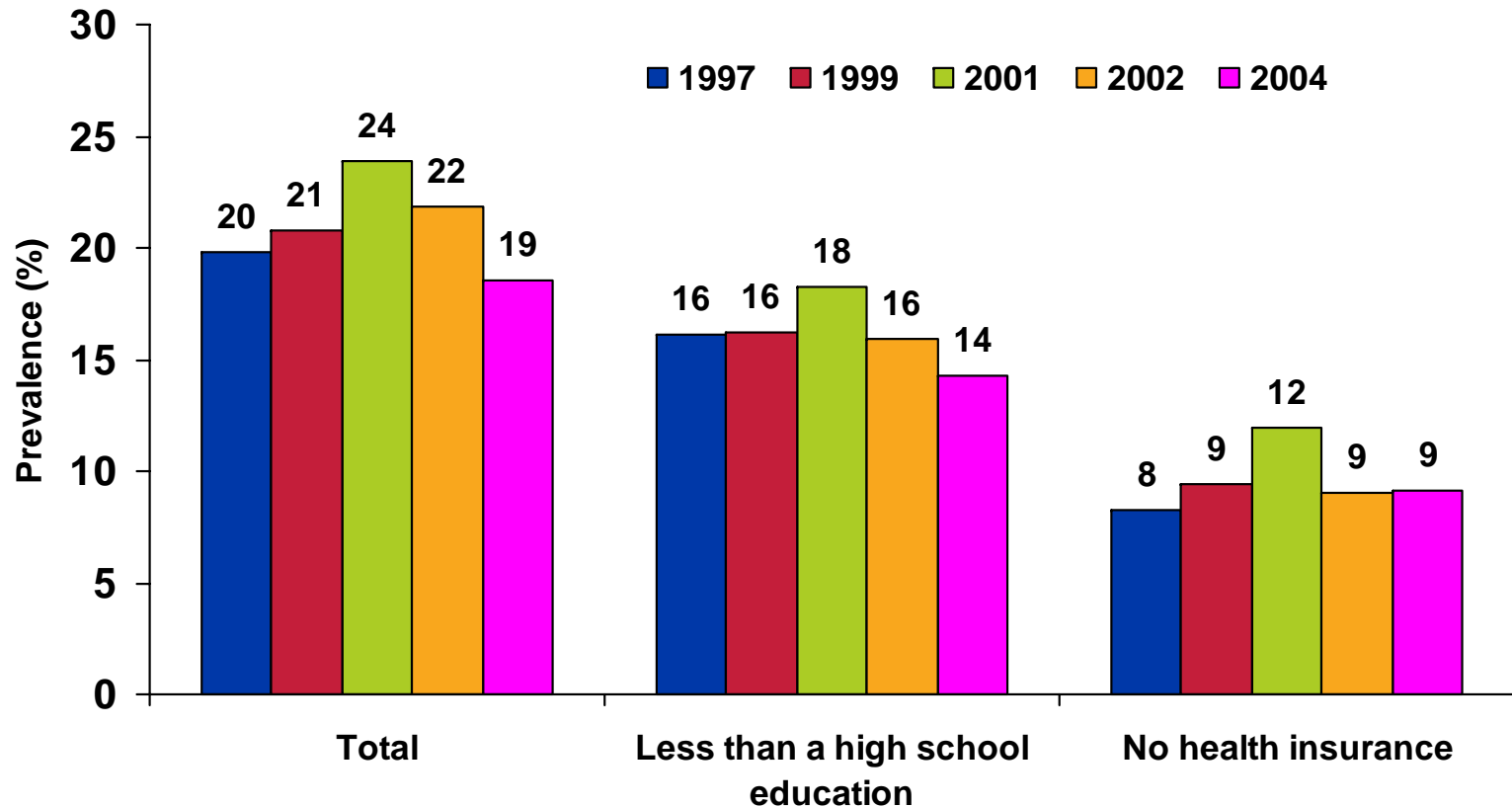
- A fecal occult blood test (FOBT) every year
- A flexible sigmoidoscopy (FSIG) every five years
- Annual fecal occult blood test and flexible sigmoidoscopy every five years\*
- A double-contrast barium enema every five years
- A colonoscopy every ten years

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\*Combined testing is preferred over either annual FOBT or FSIG every 5 years alone.

People who are at moderate or high risk for colorectal cancer should talk with a doctor about a different testing schedule

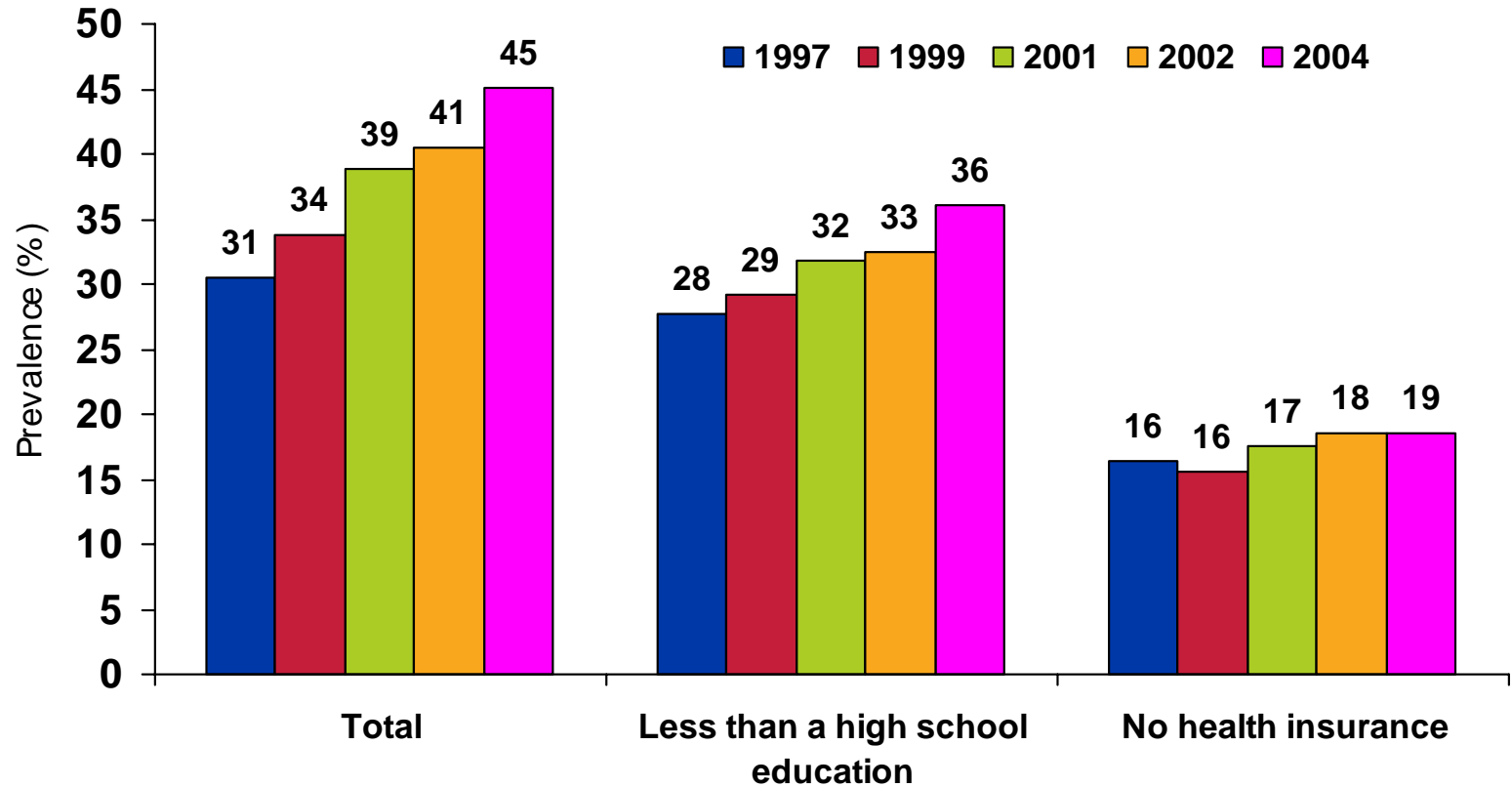
## Trends in Recent\* Fecal Occult Blood Test Prevalence (%), by Educational Attainment and Health Insurance Status, Adults 50 Years and Older, US, 1997-2004




\*A fecal occult blood test within the past year. Note: Data from participating states and the District of Columbia were aggregated to represent the United States.

Source: Behavioral Risk Factor Surveillance System CD-ROM (1996-1997, 1999) and Public Use Data Tape (2001, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention and Prevention, 1999, 2000, 2002, 2003, 2005.

## Trends in Recent\* Flexible Sigmoidoscopy or Colonoscopy Prevalence (%), by Educational Attainment and Health Insurance Status, Adults 50 Years and Older, US, 1997-2004



\*A flexible sigmoidoscopy or colonoscopy within the past five years. Note: Data from participating states and the District of Columbia were aggregated to represent the United States.  
Source: Behavioral Risk Factor Surveillance System CD-ROM (1996-1997, 1999) and Public Use Data Tape (2001, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention and Prevention, 1999, 2000, 2002, 2003, 2005.



## Screening Guidelines for the Early Detection of Prostate Cancer, American Cancer Society

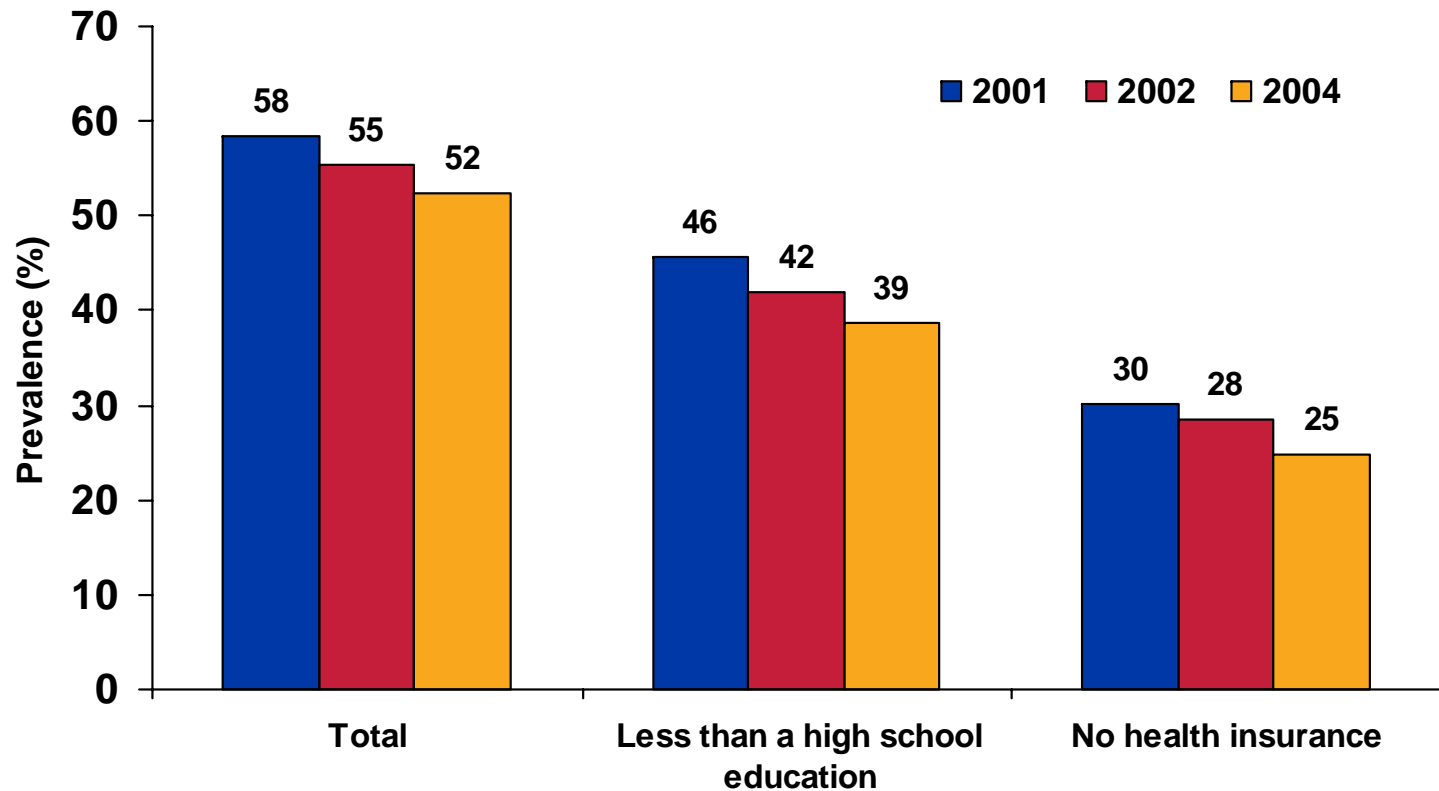
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The prostate-specific antigen (PSA) test and the digital rectal examination (DRE) should be offered annually, beginning at age 50, to men who have a life expectancy of at least 10 years.

Men at high risk (African-American men and men with a strong family history of one or more first-degree relatives diagnosed with prostate cancer at an early age) should begin testing at age 45.

For men at average risk and high risk, information should be provided about what is known and what is uncertain about the benefits and limitations of early detection and treatment of prostate cancer so that they can make an informed decision about testing.

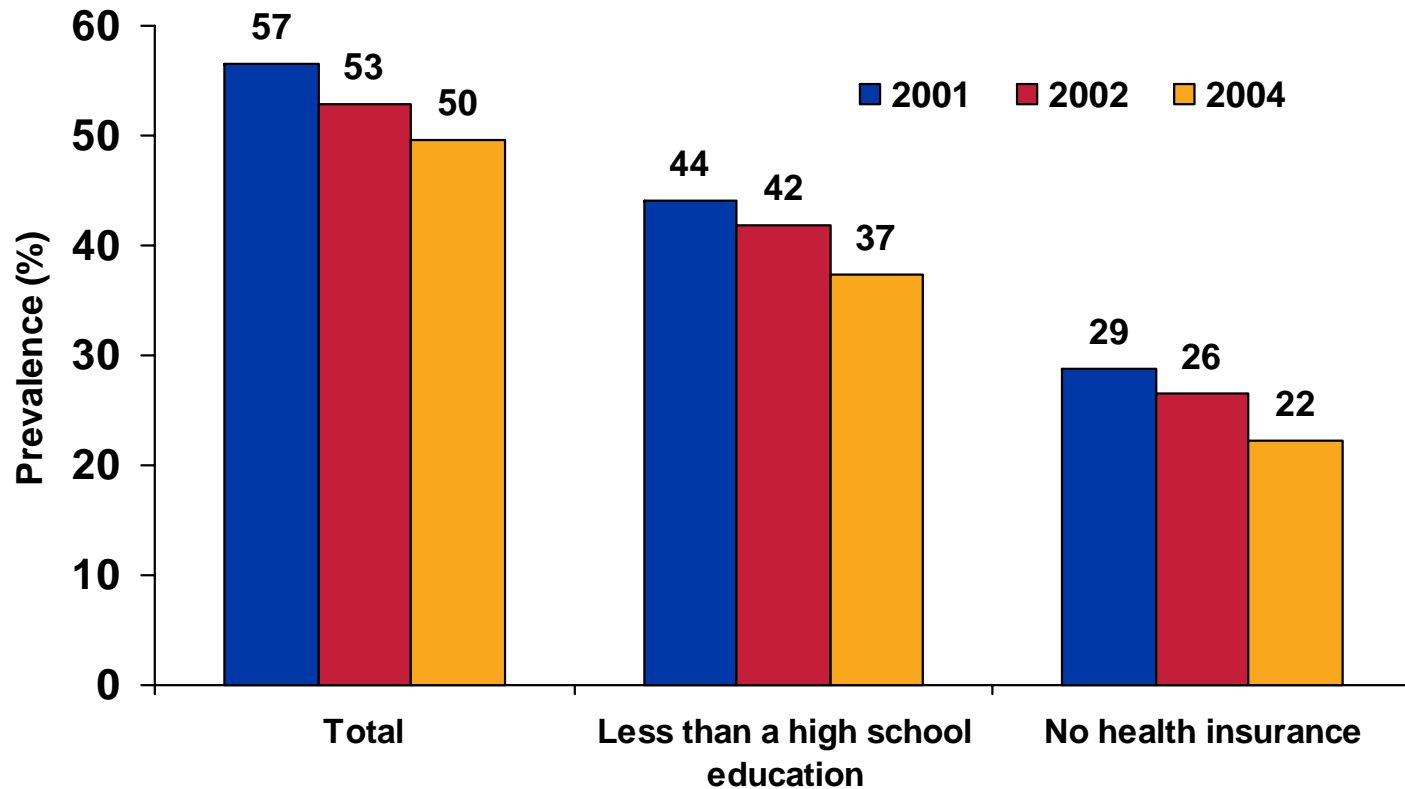
## Recent\* Prostate-Specific Antigen (PSA) Test Prevalence (%), by Educational Attainment and Health Insurance Status, Men 50 Years and Older, US, 2001-2004



\*A prostate-specific antigen (PSA) test within the past year. Note: Data from participating states and the District of Columbia were aggregated to represent the United States.

Source: Behavioral Risk Factor Surveillance System Public Use Data Tape (2001, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2002, 2003, 2005.

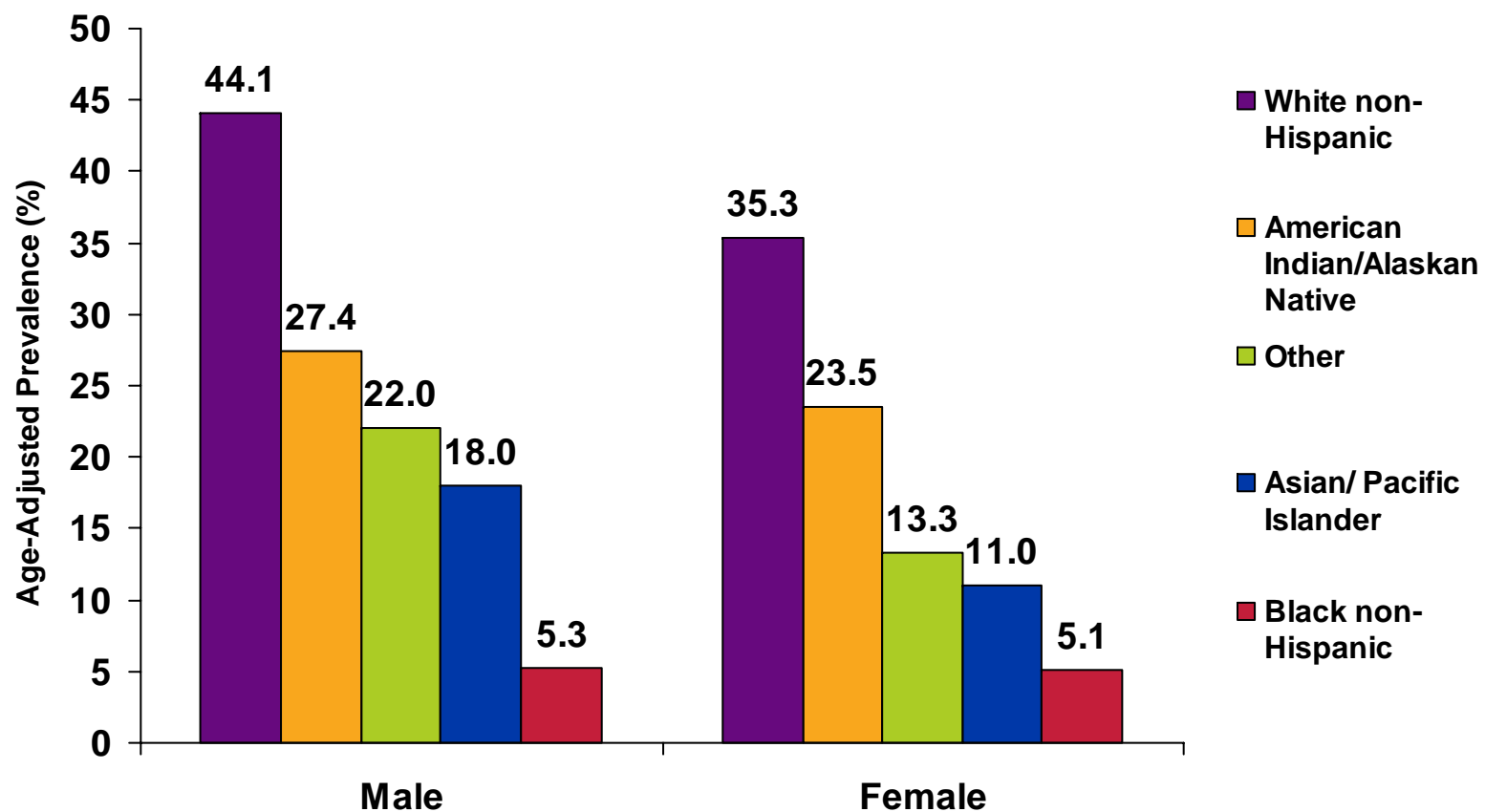
## Recent\* Digital Rectal Examination (DRE) Prevalence (%), by Educational Attainment and Health Insurance Status, Men 50 Years and Older, US, 2001-2004



\*A digital rectal examination (DRE) within the past year. Note: Data from participating states and the District of Columbia were aggregated to represent the United States.

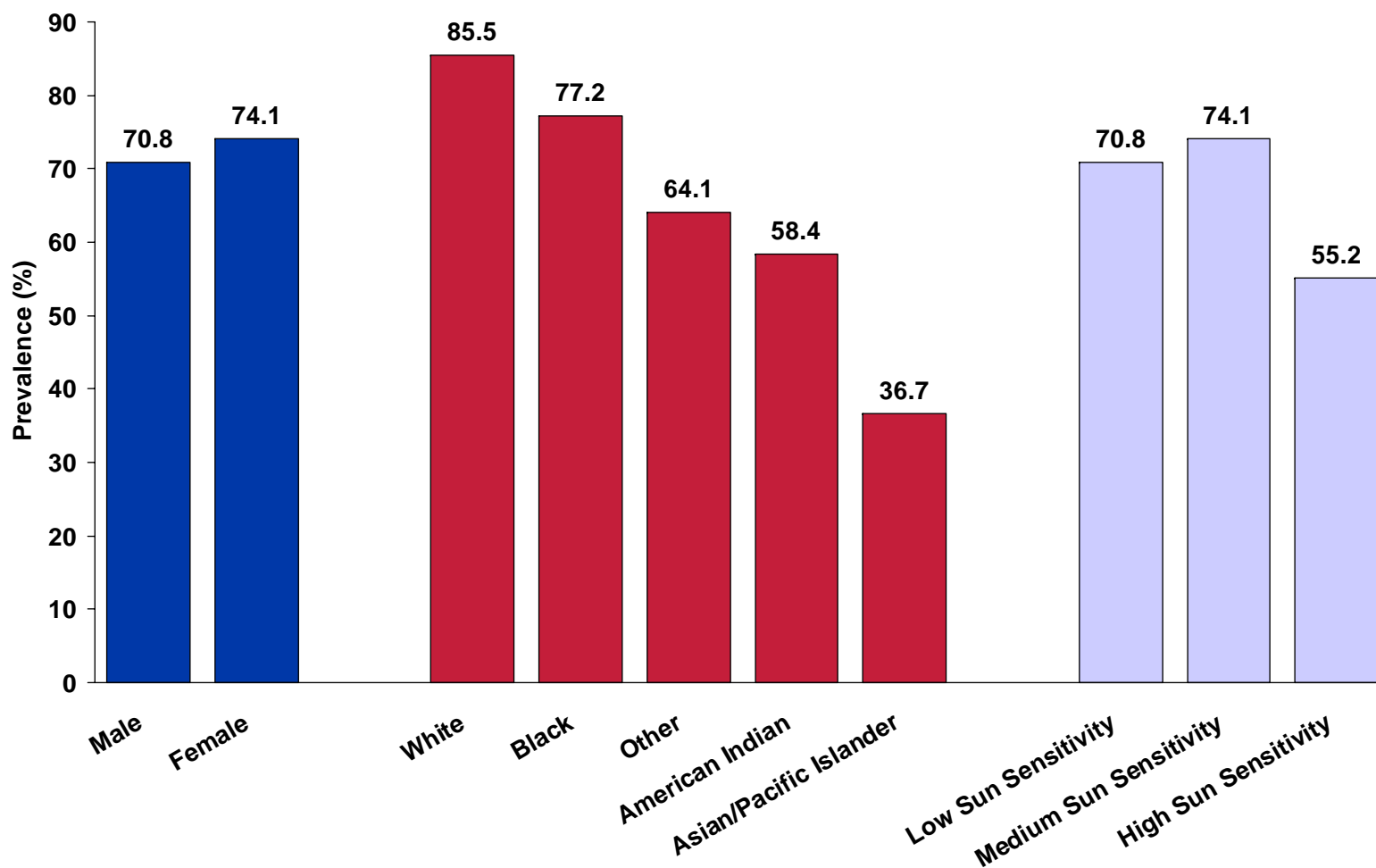
Source: Behavioral Risk Factor Surveillance System Public Use Data Tape (2001, 2002, 2004), National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2002, 2003, 2005.

## Sunburn\* Prevalence (%) in the Past Year, Adults 18 and Older, US, 1999



\*Reddening of any part of the skin (regardless of size) for more than 12 hours. Source: Saraiya et al. Am J Prev Med 2002;23(2). Note: The overall prevalence of sunburn among adult males is 39.7% and among females is 28.8%. Behavioral Risk Factor Surveillance System CD-ROM, 1999. National Center for Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 2000.

## Sunburn\* Prevalence (%) During the Past Summer, Youth 11-18, US, 1998



\*Any reddening of the skin that lasts for at least 12 hours from either exposure to the sun or from a tanning booth or sunlamp. Note: Prevalence estimates for racial/ethnic categories other than white may not be stable due to small sample sizes and have wide confidence intervals. Source: Davis et al. Pediatrics 2002;110(1).