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Prostate cancer statistics, 2025

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Abstract

Prostate cancer is the most common cancer among men in the United States, and the incidence of advanced disease is increasing rapidly. This article provides an overview of prostate cancer occurrence using population-based incidence and mortality data from the National Cancer Institute and the Centers for Disease Control and Prevention. Prostate cancer incidence trends have reversed from a decline of 6.4% per year during 2007 through 2014 to an increase of 3.0% annually during 2014 through 2021. The increasing trend is confined to distant-stage disease in men younger than 55 years and to regional/distant-stage disease in men aged 55–69 years but includes early stage disease in men aged 70 years and older. Over the past decade of data, distant-stage disease has increased by 2.6% annually in men younger than 55 years, 6.0% annually in men aged 55–69 years, and 6.2% annually in men aged 70 years and older. American Indian/Alaska Native, Asian American/Pacific Islander, and Hispanic men are less likely than Black and White men to be diagnosed with localized disease (64%–67% vs. 71%–72%). Compared with White men, American Indian/Alaska Native men have 12% higher prostate cancer mortality despite 13% lower incidence, whereas Black men have double the prostate cancer mortality, with 67% higher incidence. In summary, continued increases in the diagnosis of advanced prostate cancer and persistent racial disparities underscore the need for redoubled efforts to optimize early detection while limiting overdiagnosis and to understand and address barriers to equitable outcomes.

KEYWORDS
cancer screening, cancer statistics, cancer surveillance, prostate cancer, stage at diagnosis

INTRODUCTION

Prostate cancer is the most common cancer diagnosis in men, accounting for 30% of male cancers in 2025, and is the second leading cancer death in men behind lung cancer. Advancing age, African ancestry,[1] and a family history of the disease are the only established risk factors. Nevertheless, prostate cancer survival is the highest of any malignant cancer, in large part because of widespread adoption of routine screening with the prostate-specific antigen (PSA) test in the late 1990s and early 2000s, leading to the detection of asymptomatic disease. However, PSA screening also resulted in overdiagnosis,[2] which is concerning given the risk of physical impairment

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associated with prostate cancer treatment.[3] Subsequent recommendations against PSA testing by the US Preventive Services Task Force (USPSTF)[4,5] coincided with an increase in advanced prostate cancer diagnoses[6] that has continued through 2021,[7] despite advances in more nuanced screening and disease management.[8,9]

This article provides an overview of current prostate cancer statistics in the United States, including the estimated number of new cases and deaths in 2025 by age; incidence, survival, and mortality rates; and trends by age, race, and ethnicity based on incidence data through 2021 and mortality data through 2023. Prostate cancer screening prevalence for men aged 50 years and older is also presented nationally for 2023 and by state for 2020, as well as national trends dating back to 2005.

MATERIALS AND METHODS

Data sources

Population-based cancer incidence data in the United States are collected by the National Cancer Institute's (NCI's) Surveillance, Epidemiology, and End Results (SEER) program and the Centers for Disease Control and Prevention's (CDC's) National Program of Cancer Registries (NPCR). Combined SEER and NPCR data, as provided by the North American Association of Central Cancer Registries (NAACCR), are the source for national incidence trends, estimated prostate cancer diagnoses, case distribution by stage and age, and 5-year average annual incidence rates.[10] Incidence rates were based on all states with available data during 1998 through 2021, approaching 100% US population coverage for the most recent data years, and were adjusted for delays in case reporting based on state-level NAACCR delay factors, which differs from previously reported rates which used national delay factors.[7] Delay adjustment accounts for the additional time required for the complete registration of cases and more accurately reflects cancer trends in the most recent time period.[11] Racial misclassification for American Indian and Alaska Native (AIAN) persons has been reduced by restricting incidence rates to Purchased/Referred Care Delivery Area counties.

Historical incidence trends dating back to 1975 are based on data from the eight oldest SEER registries (Connecticut, Iowa, Hawaii, New Mexico, Utah, and the metropolitan areas of Atlanta, San Francisco-Oakland, and Seattle-Puget Sound), representing approximately 8% of the US population.[12] The SEER 21 catchment area (SEER 8 plus registries for Alaska Natives, rural and greater Georgia, San Jose-Monterey and greater California, Kentucky, Louisiana, New Jersey, Idaho, Illinois, New York, and Texas) achieved 46% population coverage and was the source for the lifetime probability of developing prostate cancer, contemporary 5-year relative survival, and trends in 2-year relative survival.[13]

US mortality data from 1975 to 2023 were obtained from the CDC's National Center for Health Statistics (NCHS).[14] Detailed information on decedent race and ethnicity is limited to deaths occurring from 1990 onward. Mortality rates for AIAN persons are based on the entire US population and were adjusted for racial misclassification using factors previously published by the NCHS.[15]

PSA testing prevalence at the state level was obtained from the 2020 Behavioral Risk Factor Surveillance System (BRFSS) public use data set.[16] Although there are more recent data for other screening modalities, the last time PSA testing was part of the core questionnaire, and thus included in the data from all states, was 2020. The BRFSS was designed to provide state prevalence estimates for health behaviors and is coordinated by the CDC and conducted by individual state health departments. The 2020 BRFSS data were collected from computer-assisted telephone (landline or cellular) interviews with adults aged 18 years and older. National PSA testing prevalence (2005–2023) was obtained from the NCHS' National Health Interview Survey (NHIS) and stratified by race/ethnicity (non-Hispanic Asian, AIAN, Black, White, and Hispanic) and age (40 years and older, 40–54 years, 55–69 years, and 70 years and older).[17] The NHIS is conducted by the CDC and designed to provide national prevalence estimates on health behaviors such as cancer screening. Data were primarily collected through computer-assisted in-person interviews of adults aged 18 years and older. However, in recent years, the survey has shifted primarily to telephone interviews related to the coronavirus disease 2019 pandemic (34% of sample adult interviews in 2019, 63% of sample adult interviews in 2021, and 55% of sample adult interviews in 2023 were at least partially telephone-based). The NHIS underwent a significant redesign in 2019, so estimates are not strictly comparable to prior years and are separated in our trend lines. Prevalence estimates were calculated using SAS-Callable SUDAAN version 9.4 (SAS Institute Inc.), which accounts for complex survey design, and were weighted to be state (BRFSS) or nationally (NHIS) representative.

Projected new cases and deaths in 2025

The most recent year for which incidence and mortality data are available lags from 2 to 4 years behind the current year because of the time required for data collection, compilation, quality control, and dissemination. Therefore, the American Cancer Society projects the numbers of new cancer cases and deaths in the United States in the current year to estimate the contemporary cancer burden. These estimates cannot be used for tracking cancer occurrence over time because they are model-based, and the methodology changes every few years (most recently in 2021) to incorporate improvements in statistical methods, increased cancer registration coverage, and covariate information. The methods for projecting the number of new prostate cancer cases and deaths that will occur in 2025 overall and by age are described in detail elsewhere.[18,19]

Statistical analysis

Prostate cancer cases were classified according to the *International Classification of Diseases for Oncology* (code C61).[20] All statistics

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presented herein by race are exclusive of Hispanic ethnicity for improved accuracy of classification. The NCI's SEER*Stat software (version 8.4.4) was used to calculate age-adjusted (2000 US standard population using 19 age groups) prostate cancer incidence and mortality rates, expressed per 100,000, and rate ratios with accompanying 95% confidence intervals (CIs).[21] Incidence and mortality trends were quantified using the NCI's Joinpoint regression program (version 5.3.0.0).[22] Trends were described as increasing or decreasing when the annual percent change was statistically significant based on a two-sided p value < .05 and otherwise were described as stable. The lifetime probability of developing cancer was obtained from the NCI's DevCan software (version 6.9.1).[23]

SELECTED FINDINGS

Incidence

Over the course of a lifetime, one in eight men (12.8%, Table 1) in the United States will develop prostate cancer, with an estimated 313,780 new cases of prostate cancer in the United States in 2025. The risk of developing prostate cancer escalates rapidly with age, from 0.2% before age 50 years to 6.5% in men aged 70–79 years. Approximately 90% of diagnoses but only one half of deaths occur in men before their 80th birthday (Table 2).

Black men have the highest incidence rate of any racial or ethnic group (191.5 per 100,000; Figure 1); it is 67% higher than that of White men, who have the second highest rate, and about two-fold that of AIAN men (99.1 per 100,000) and Hispanic men (92.9 per 100,000). Asian American and Pacific Islander (AAPI) men have the lowest rate of any racial or ethnic group (63.1 per 100,000); however, prostate cancer incidence rates vary widely by subgroup within the broad AAPI category. For example, rates are lowest in Cambodian and Laotian men but more than five times higher among Samoan men, who have similar rates to White men.[24] Similarly, prostate cancer incidence varies widely by Hispanic origin, with one analysis finding first-generation Cuban and Puerto Rican men have similar rates compared to White men, while first-generation Mexican men have 40% lower rates.[25] Black men also have the lowest median age at diagnosis at 65 years compared with 67–69 years for other groups.[26] In addition, Black men have higher prostate cancer incidence than White men at every age, with the incidence rate ratio (IRR) ranging from 1.30 (95% CI, 1.27–1.34) in men aged 80–84 years to 3.18 (95% CI, 2.92–3.45) in those aged 40–44 years.[27] Reasons for racial disparities in incidence are unclear but to some extent include genetic factors associated with African ancestry,[1,28] perhaps moderated by epigenetic factors related to the social determinants of health,[29,30] and yet unknown environmental and age-related factors. Differences in PSA testing prevalence may also be contributing to differences in prostate cancer incidence by race and ethnicity because prior research has found an association between prostate cancer incidence and PSA testing patterns.[31,32]

The prostate cancer incidence rate increased steadily by 1.5% per year from 1975 to 1986, followed by a sudden 11.5% per year increase from 1986 to 1992 after the rapid uptake of first-time PSA

TABLE 2 Projected new prostate cancer cases and deaths by age, 2025.[a]

Age, years	Cases	Deaths
<50	3300	90
50–59	51,900	1190
60–69	133,040	5890
70–79	96,590	11,140
≥80	28,950	17,460
All ages	313,780	35,770

[a]These are model-based estimates that should be interpreted with caution and not compared with those for previous years. Estimates are rounded to the nearest 10.

TABLE 1 Probability of developing prostate cancer over selected age intervals by race: United States, 2018–2021.[a]

Age, years	All races	White	Black	AIAN[b]	AAPI	Hispanic
Birth to 49	0.2% (1 in 461)	0.2% (1 in 489)	0.5% (1 in 185)	0.1% (1 in 1113)	0.1% (1 in 1605)	0.1% (1 in 839)
50–59	1.8% (1 in 56)	1.8% (1 in 57)	3.6% (1 in 28)	0.9% (1 in 109)	0.8% (1 in 133)	1.1% (1 in 88)
60–69	5.3% (1 in 19)	5.1% (1 in 19)	8.8% (1 in 11)	3.1% (1 in 32)	2.7% (1 in 37)	3.8% (1 in 26)
70–79	6.5% (1 in 15)	6.4% (1 in 16)	9.3% (1 in 11)	4.3% (1 in 23)	3.9% (1 in 26)	5.2% (1 in 19)
80–89	4.0% (1 in 25)	4.0% (1 in 25)	5.5% (1 in 18)	3.2% (1 in 31)	2.7% (1 in 37)	3.6% (1 in 28)
Lifetime risk	12.8% (1 in 8)	12.6% (1 in 8)	16.9% (1 in 6)	6.1% (1 in 16)	8.8% (1 in 11)	10.4% (1 in 10)

Abbreviations: AAPI, Asian American and Pacific Islander individuals; AIAN, American Indian and Alaska Native individuals.

[a]For people free of cancer at the beginning of the age interval, excludes data for 2020. Percentages and "1 in" numbers may not be equivalent because of rounding.

[b]Data for AIAN individuals are restricted to Purchased/Referred Care Delivery Area Counties.

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.8.0. National Cancer Institute, Statistical Research and Applications Branch; 2024 (seer.cancer.gov/devcan).

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screening and detection of prevalent asymptomatic disease.[32] The rate fell precipitously thereafter as the pool of latent disease dwindled, but it remained approximately 40% higher than the pre-PSA screening incidence rate of the mid-1980s. Some of this excess has been attributed to overdiagnosis, which accounts for an estimated 23%–42% of screen-detected cancers.[33,34]

Prostate cancer incidence declined by 6.4% per year from 2007 to 2014, but increased by 3.0% per year through 2021 (Table 3).[27] Over the past 5 data years (2017–2021), the rate has increased by 2.4% annually for localized-stage, 4.6% annually for regional-stage, and 4.8% annually for distant-stage disease, although trends vary by age group (Table 3). For example, rates for localized stage decreased in men younger than 40 years, were stable in those aged 40–69 years, and increased only in men aged 70 and older, among whom PSA testing may be ticking up.[35] Regional-stage disease rates also decreased in young men and were stable in those aged 40–54 years, but increased in men aged 55–69 years by 3.4% annually and in older men by 7.5% annually. In contrast, distant-stage diagnoses increased in all men, ranging from 2.6% to 2.9% per year in men aged 20–54 years to 5% per year in men aged 55 years and older. Trends by race and ethnicity are largely similar except for Hispanic men, who have slower increases in incidence than other men and now have lower rates compared to AIAN men (Figure 2).

Survival

The 5-year relative survival rate for prostate cancer is 98% (Figure 3), and the 15-year relative survival rate is 97%, largely because 83% of men are diagnosed with local-stage or regional-stage disease (Figure 4), for which relative survival approaches 100%. High incidence and survival has resulted in a high prevalence of disease; an estimated 3.5 million men in the United States had a history of prostate cancer as of January 1, 2022, which is over four times more than for any other cancer in men.[36] Longevity after diagnosis highlights the importance of potential treatment-related side effects in patient-provider discussions about disease management.[37,38]

Given the indolent nature of many prostate cancers, active surveillance is recommended for very-low-risk and low-risk disease (Table 4).[39] One study of low-risk patients found an increase from 26.5% of patients in 2014 to 59.6% in 2021.[40] Active surveillance involves the routine use of PSA, digital rectal examination, and magnetic resonance imaging to monitor for disease progression, delaying, or avoiding, the adverse effects of active treatment for some men with low-risk disease.[8,39]

For men with intermediate-risk, high-risk, or very-high-risk prostate cancer, treatment is usually recommended, including radiation therapy, radical prostatectomy, and androgen-deprivation therapy (Table 4).[41] The 2-year relative survival rate for distant-stage prostate cancer improved from 55% in the middle 2000s to 66% in 2019–2020[13] because of improvements in disease management.[42,43] For example, abiraterone or enzalutamide (androgen receptor signaling inhibitors) used in combination with androgen-deprivation therapy resulted in survival time of 22-31 months longer than androgen-deprivation therapy alone among men with metastatic prostate cancer.[44]

Survival is highest for White men (99%; Figure 3) and lowest for AAPI and Hispanic men (94%), partly reflecting a lower proportion of early stage diagnosis among the latter populations (Figure 4). AIAN men are most likely to be diagnosed with distant-stage disease (12% vs. 8% among White men), probably at least in part reflecting lower screening prevalence compared with other men.[45] The 5-year survival rate for all men diagnosed with distant-stage disease ranges from 36% in Black men to 43% for AAPI men. However, there is wide variation within these broadly defined racial groups; for example, 5-

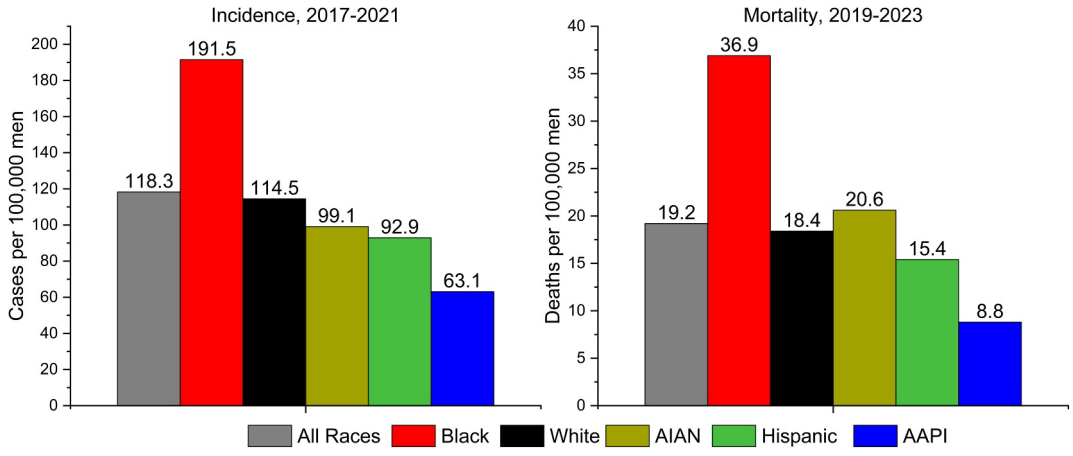

FIGURE 1 Prostate cancer incidence and mortality rates by race and ethnicity, United States. All rates are age-adjusted to the 2000 US standard population. Incidence rates are adjusted for delays in case reporting. For AIAN individuals, incidence rates are limited to Purchased/Referred Care Delivery Area counties, and mortality rates (entire United States) are adjusted for misclassification on death certificates. Racial groups are exclusive of Hispanic ethnicity. AAPI indicates Asian American and Pacific Islander; AIAN, American Indian and Alaska Native. *Source*: Incidence, North American Association of Central Cancer Registries, 2024; mortality, National Center for Health Statistics, 2025.

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TABLE 3 Trends in prostate cancer incidence by stage at diagnosis and age: United States, 1998–2021.

	Trend 1		Trend 2		Trend 3		Trend 4		Trend 5		AAPC	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2017–2021	2012–2021
All stages												
All ages	1998–2001	3.1[a]	2001–2004	−5.4	2004–2007	3.1	2007–2014	−6.4[a]	2014–2021	3.0[a]	3.0[a]	0.8
20–39	1998–2009	6.7[a]	2009–2012	−16.6	2012–2021	−3.4[a]					−3.4[a]	−3.4[a]
40–54	1998–2009	2.5[a]	2009–2014	−7.7[a]	2014–2021	−0.1					−0.1	−1.8
55–69	1998–2009	−0.2	2009–2014	−7.0[a]	2014–2021	2.8[a]					2.8[a]	0.5
≥70	1998–2001	1.4	2001–2004	−6.0	2004–2007	0.7	2007–2014	−7.0[a]	2014–2021	4.1[a]	4.1[a]	1.5[a]
Localized												
All ages	1998–2008	0.1	2008–2014	−8.4[a]	2014–2021	2.4[a]					2.4[a]	−0.1
20–39	1998–2009	7.2[a]	2009–2021	−9.7[a]							−9.7[a]	−9.7[a]
40–54	1998–2009	3.0[a]	2009–2014	−8.7[a]	2014–2021	−0.7					−0.7	−2.5[a]
55–69	1998–2008	0.6	2008–2014	−7.5[a]	2014–2021	1.9					1.9	−0.3
≥70	1998–2007	−0.3	2007–2014	−8.8[a]	2014–2021	3.5[a]					3.5[a]	0.7
Regional												
All ages	1998–2010	0.5	2010–2013	−6.1	2013–2021	4.6[a]					4.6[a]	3.3[a]
20–39	1998–2005	18.2[a]	2005–2021	−5.5[a]							−5.5[a]	−5.5[a]
40–54	1998–2008	3.9[a]	2008–2014	−6.0[a]	2014–2021	0.9					0.9	−0.7
55–69	1998–2009	1.4[a]	2009–2013	−5.6	2013–2021	3.4[a]					3.4[a]	2.4[a]
≥70	1998–2003	−4.8[a]	2003–2013	−0.5	2013–2021	7.5[a]					7.5[a]	6.6[a]
Distant												
All ages	1998–2003	−4.7[a]	2003–2011	−0.2	2011–2016	7.4[a]	2016–2021	4.8[a]			4.8[a]	6.0[a]
20–39	1998–2021	2.9[a]									2.9[a]	2.9[a]
40–54	1998–2003	−0.7	2003–2021	2.6[a]							2.6[a]	2.6[a]
55–69	1998–2002	−4.7[a]	2002–2010	−0.0	2010–2013	4.5[a]	2013–2016	8.1[a]	2016–2021	5.0[a]	5.0[a]	6.0[a]
≥70	1998–2003	−5.3[a]	2003–2011	−0.6	2011–2016	7.9[a]	2016–2021	4.9[a]			4.9[a]	6.2[a]

Abbreviations: AAPC, average annual percent change; AAPI, Asian American and Pacific Islander people; AIAN, American Indian and Alaska Native people; APC, annual percent change.

[a]The APC or AAPC is significantly different from zero ($p < .05$). Trends were analyzed using the Joinpoint Regression Program, version 5.2.0.

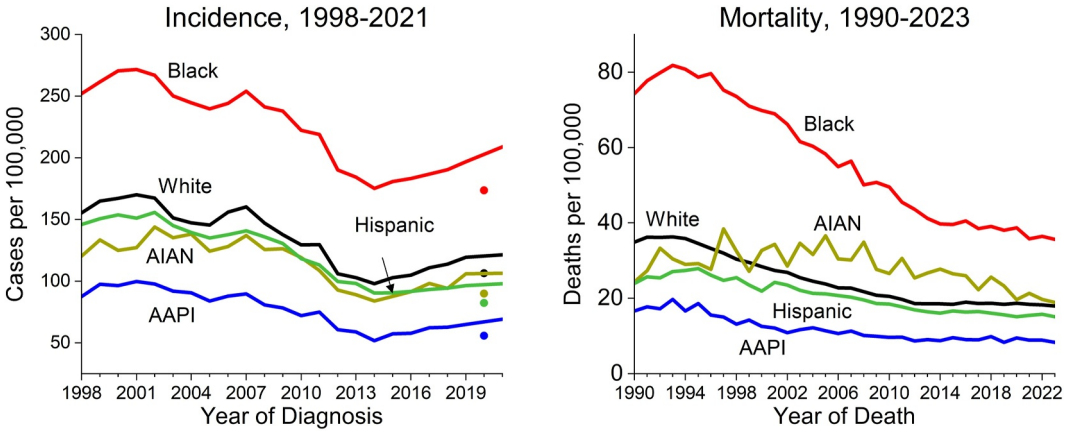

FIGURE 2 Trends in prostate cancer incidence and mortality by race, United States. Rates are age-adjusted to the 2000 US standard population. Incidence rates are adjusted for delays in case reporting, and 2020 incidence data are separated from the trendline because of the coronavirus disease 2019 pandemic. For AIAN individuals, incidence data are restricted to Purchased/Referred Care Delivery Area counties, and mortality data (entire United States) are adjusted for misclassification on death certificates. AAPI indicates Asian American and Pacific Islander; AIAN, American Indian and Alaska Native. *Source*: Incidence, North American Association of Central Cancer Registries, 2024; mortality, National Center for Health Statistics, 2025.

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year relative survival among AAPI ethnic groups ranges from 97% in Japanese men to 58% in Tongan men.[46]

Mortality

There will be an estimated 35,770 prostate cancer deaths in 2025, 80% of which will occur in men aged 70 and older and nearly one half of those aged 80 years and older (Table 2). Racial disparities in mortality are more striking than for incidence. For example, AIAN men have 12% higher mortality than White men despite lower incidence (Figure 1). Factors contributing to this include previously noted later stage diagnosis as well as higher prevalence of comorbidities and barriers to receipt of high-quality treatment.[47]

Mortality rates among Black men (36.9 deaths per 100,000; Figure 1) are nearly double those of any other racial or ethnic group and are higher than the rates among White men at every age (Figure 5), with mortality rate ratios ranging from 1.61 (95% CI, 1.57–1.66) in those aged 85 years and older to 3.33 (95% CI, 2.03–5.41) in those aged 40–44 years (see Table S1). Some factors that may be driving higher mortality among Black men beyond higher incidence include the tendency for more aggressive disease,[48] higher prevalence of comorbidities like diabetes and/or hypertension,[49–51] less receipt of guideline-concordant care and curative-intent treatment,[52–54] and less access to high-volume centers.[55,56] Research has shown that Black men and White men with the same stage and grade of prostate cancer who are treated equally have equivalent outcomes.[54,57,58] A contemporary meta-analysis found that, after

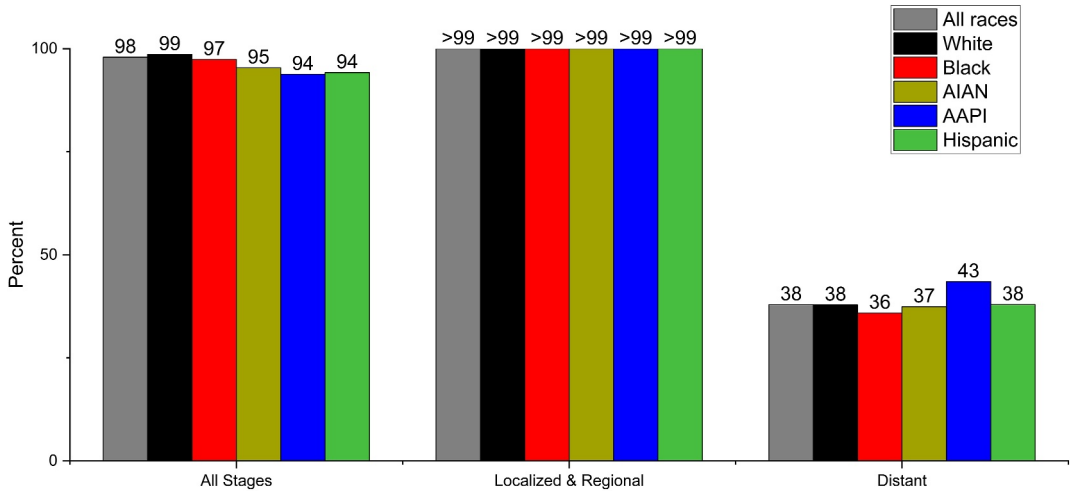

FIGURE 3 Five-year relative survival for prostate cancer by stage and race, 2015–2021. Based on cases diagnosed during 2015–2021, followed through 2022. Racial groups are exclusive of Hispanic ethnicity. AAPI indicates Asian American and Pacific Islander; AIAN, American Indian and Alaska Native. *Source*: Surveillance, Epidemiology, and End Results 21, 2025.

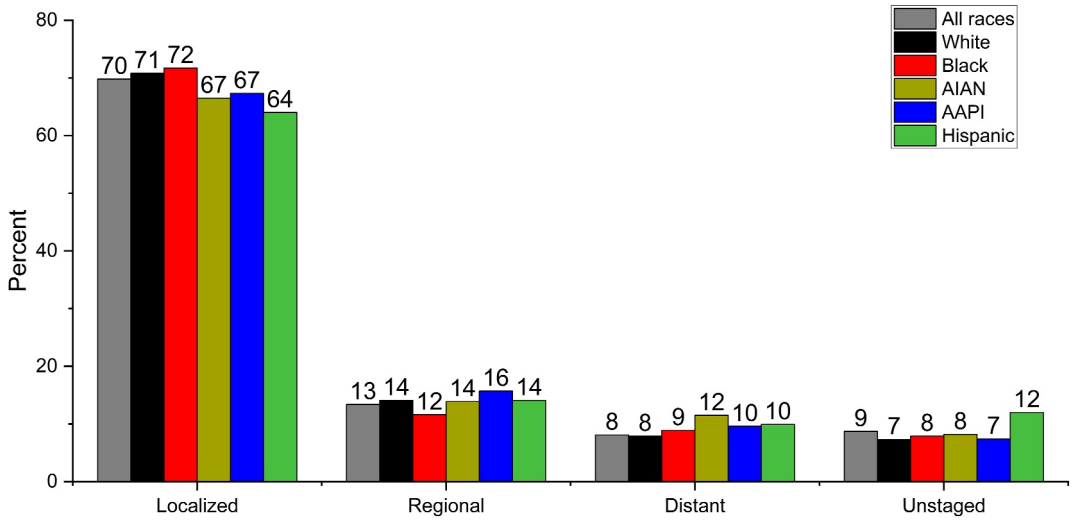

FIGURE 4 Stage distribution for prostate cancer by race and ethnicity, 2017–2021. Racial groups are exclusive of Hispanic ethnicity. Stage categories may not sum to 100% because of rounding. AAPI indicates Asian American and Pacific Islander; AIAN, American Indian and Alaska Native. *Source*: North American Association of Central Cancer Registries, 2024.

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TABLE 4 National Comprehensive Cancer Network prostate cancer treatment guidelines.

Risk of progression and recurrence	Clinical characteristics		Life expectancy, yrs	Recommended initial treatment options
Very low	Has all of the following: • cT1c • Grade group 1 • PSA <10 ng/mL • Less than three prostate biopsy fragments/cores positive, ≤50% cancer in each fragment/core • PSA density <0.15 ng/mL/g		≥10	Active surveillance
			<10	Observation
Low	Has all of the following but does not qualify for very low risk: • cT1–cT2a • Grade group 1 • PSA <10 ng/mL		≥10	Active surveillance (preferred for most patients), radiation therapy, or radical prostatectomy
			<10	Observation
Intermediate	Has all of the following: • No high-risk group features • No very-high-risk group features • Has one or more IRFs: ◦ cT2b ◦ cT2c Grade group 2 or 3 PSA 10–20 ng/mL	*Favorable intermediate* Has all of the following: • One IRF • Grade group 1 or 2 • <50% biopsy cores positive (e.g., less than six of 12 cores)	≥10	Active surveillance, radiation therapy, or radical prostatectomy
			<10	Observation (preferred) or radiation therapy
		Unfavorable intermediate Has one or more of the following: • Two or three IRFs • Grade group 3 • ≥50% biopsy cores positive (e.g., six or more of 12 cores)	≥10	Radical prostatectomy or radiation therapy with ADT
			5–10	Radiation therapy with ADT or observation
High	Has one or more high-risk features but does not meet criteria for very high risk: • cT3–cT4 • Grade group 4 or 5 • PSA >20 ng/mL		>5 or symptomatic	Radiation therapy with ADT or radical prostatectomy
			≤5 and asymptomatic	Radiation therapy with or without ADT or observation
Very high	Has at least two of the following: • cT3–cT4 • Grade group 4 or 5 • PSA >40 ng/mL		>5 or symptomatic	Radiation therapy with ADT and ARSI or radical prostatectomy
			≤5 and asymptomatic	Radiation therapy with or without ADT or observation

Abbreviations: ADT, androgen-deprivation therapy; ARSI, androgen receptor signaling inhibitor; cT, clinical tumor classification; IRF, intermediate risk factor; PSA, prostate-specific antigen.

Source: National Comprehensive Cancer Network Guidelines Version 2.2025 Prostate Cancer (https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf).

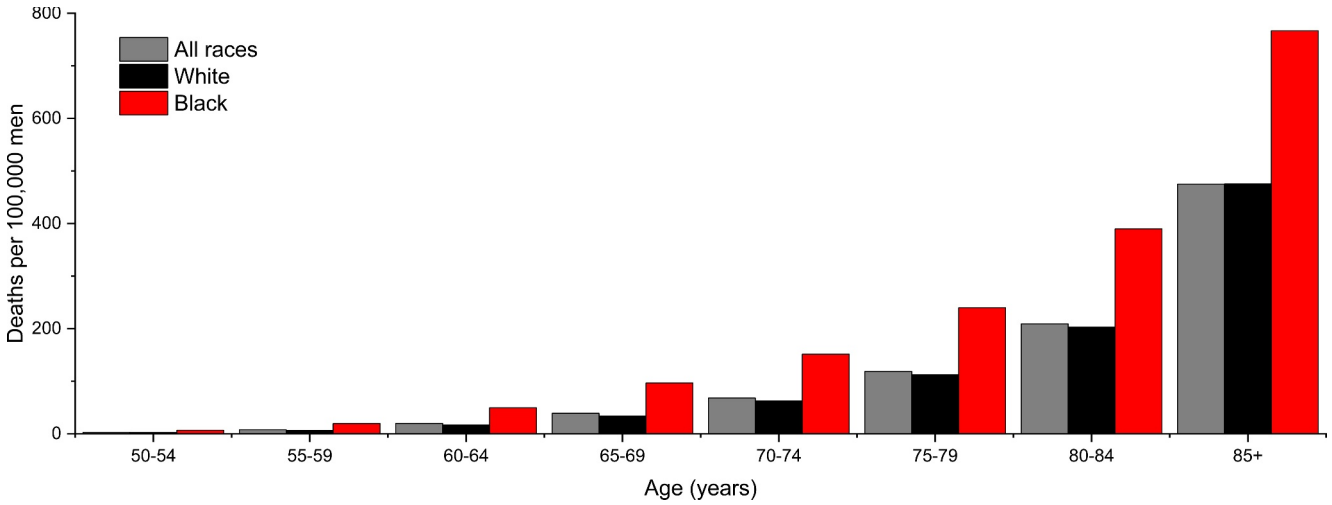

FIGURE 5 Prostate cancer mortality by race and age, United States, 2019–2023. All rates are age-adjusted to the 2000 US standard population. For rate values by 5-year age group from 40–44 to 85+, see Table S1. Racial groups are exclusive of Hispanic ethnicity. AAPI indicates Asian American and Pacific Islander; AIAN, American Indian and Alaska Native. *Source*: National Center for Health Statistics, 2025.

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TABLE 5 Prostate cancer incidence (2017–2021) and mortality (2019–2023) rates and screening prevalence (2020) by state, United States.

	Incidence[a]			Mortality[a]			Screening,[a] aged 50 years and older	
State	All races	White	Black	All races	White	Black	All races, %	Rank
Alabama	118.0	96.9	184.7	19.9	16.7	37.0	37	2
Alaska[b]	106.0	110.3	184.5	21.7	21.7	—	28	38
Arizona	87.9	90.4	139.0	17.7	17.0	35.7	29	34
Arkansas[c]	123.7	112.8	214.4	20.0	18.2	39.4	35	7
California	101.5	107.3	161.5	20.3	22.0	44.1	27	42
Colorado	102.6	102.4	150.7	22.0	21.6	43.4	28	38
Connecticut	134.1	132.0	215.7	19.1	18.7	35.6	30	29
Delaware	133.7	117.2	193.7	20.0	18.2	35.5	30	29
District of Columbia	141.1	111.9	172.1	27.5	10.7	45.0	29	34
Florida	121.9	120.4	185.7	16.7	15.3	33.4	36	6
Georgia	141.0	117.9	215.7	21.7	17.8	39.8	34	9
Hawaii	103.3	118.0	134.3	14.8	19.8	37.6	26	46
Idaho	123.3	124.2	183.4	21.7	22.3	—	28	38
Illinois	122.4	117.8	188.8	19.0	17.8	39.3	30	29
Indiana[c]	106.8	102.7	185.8	20.6	19.8	40.0	27	42
Iowa	129.5	128.8	227.4	19.6	19.5	43.0	29	34
Kansas	126.6	122.6	183.8	18.0	17.6	33.0	33	12
Kentucky	116.5	111.8	211.8	18.4	17.6	38.1	31	23
Louisiana	143.5	126.0	202.8	19.4	15.9	33.6	33	12
Maine	108.0	108.3	204.0	21.4	21.4	—	25	48
Maryland	140.5	123.7	203.1	20.4	16.4	38.4	33	12
Massachusetts	119.9	116.9	195.7	18.3	18.0	34.9	31	23
Michigan	116.6	108.5	173.7	19.1	17.8	34.5	31	23
Minnesota	120.0	122.5	180.6	19.7	19.9	26.5	25	48
Mississippi	139.0	113.8	206.5	24.8	19.2	42.8	34	9
Missouri	99.4	95.3	142.2	19.2	18.4	34.2	32	18
Montana	135.9	134.0	231.9	22.0	21.9	—	29	34
Nebraska	126.6	129.8	219.0	19.2	19.4	35.0	32	18
Nevada	98.2	100.3	163.6	20.7	21.3	40.7	27	42
New Hampshire	120.2	119.5	161.2	19.8	20.0	46.8	30	29
New Jersey	146.8	144.3	240.7	16.1	15.6	33.4	33	12
New Mexico	90.1	97.7	126.8	19.7	19.2	44.0	22	51
New York	133.6	129.3	209.9	15.4	14.6	28.2	34	9
North Carolina	135.0	123.0	213.5	20.6	17.6	39.8	37	2
North Dakota	124.0	120.5	144.9	17.7	17.9	—	31	23
Ohio	123.1	117.8	180.3	19.5	18.5	34.9	32	18
Oklahoma	107.1	100.7	182.9	20.7	20.0	42.9	31	23
Oregon	101.8	97.6	174.9	21.4	21.9	36.1	27	42
Pennsylvania	112.8	106.4	177.8	18.5	17.4	38.8	33	12

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TABLE 5 (Continued)

State	Incidence[a]			Mortality[a]			Screening,[a] aged 50 years and older	
	All races	White	Black	All races	White	Black	All races, %	Rank
Rhode Island	121.0	118.0	152.3	18.3	18.4	29.6	30	29
South Carolina	115.4	100.4	173.7	21.3	17.6	40.4	32	18
South Dakota	130.2	129.6	140.8	20.8	20.7	—	37	2
Tennessee	117.8	109.9	187.8	19.9	18.2	39.1	32	18
Texas	114.8	118.8	190.5	18.4	18.3	35.8	28	38
Utah	124.0	125.2	189.1	22.5	23.2	33.0	26	46
Vermont	109.8	109.2	174.7	21.7	22.0	—	22	51
Virginia	113.0	99.0	184.5	20.6	18.8	36.7	33	12
Washington	106.3	106.4	168.1	21.2	22.0	38.9	24	50
West Virginia	102.3	101.2	168.5	18.8	18.7	29.0	35	7
Wisconsin	126.1	123.7	209.6	21.7	21.4	41.7	31	23
Wyoming	115.8	118.6	101.4	19.3	19.4	—	37	2
Puerto Rico[d]	140.3	—	—	19.3[e]	—	—	48	1
United States[f]	118.3	114.5	191.5	19.2	18.4	36.9	Median, 31	

Note: Racial groups are exclusive of Hispanic ethnicity.

[a]All rates are per 100,000 and age-adjusted to the 2000 US standard population. Incidence rates are adjusted for delays in case reporting using state level delay factors. Screening estimates are age-adjusted to the year 2000 US population standard using two age groups: 50–64 years and 65 years and older. Prostate cancer screening is defined among males who have not been diagnosed with prostate cancer.

[b]Based on cases diagnosed during 2016–2020.

[c]Based on cases diagnosed during 2015–2019.

[d]Data are not adjusted for delays.

[e]Data are from 2018 to 2022, obtained from statecancerprofiles.cancer.gov.

[f]Does not include Puerto Rico.

Source: Incidence, North American Association of Central Cancer Registries, 2024; mortality, National Center for Health Statistics, 2025; screening, Behavioral Risk Factor Surveillance System, 2020.

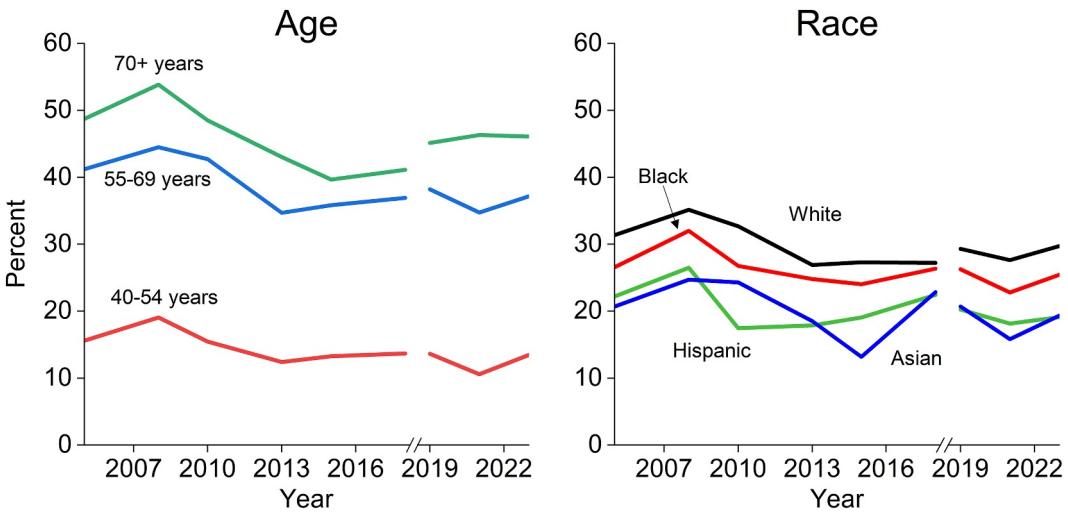

FIGURE 6 Trends in prostate-specific antigen testing within the last year by age and race, 2005–2023. Estimates are age-adjusted to the year 2000 US population standard using three age groups: 40–54, 55–69, and ≥70 years. The National Health Interview Survey underwent a significant redesign in 2019, preventing comparability to prior years. Prostate cancer screening is defined among males who have not been diagnosed with prostate cancer. Estimates were unstable for American Indian and Alaska Native individuals for most data years and thus are not shown. *Source*: National Health Interview Surveys, 2005–2023.

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accounting for social determinants of health, prostate cancer-specific mortality was 14% lower among Black men than among White men.[59]

Prostate cancer mortality also varies by state (Table 5), with the highest death rates in Washington DC (27.5 deaths per 100,000) and Mississippi (24.8 per 100,000), which have a high proportion of Black residents. Notably, Washington DC has both the second highest mortality rate for Black men (45.0 per 100,000) and the lowest mortality rate for White men (10.7 per 100,000) while ranking 37th and 28th, respectively, in incidence. Prostate cancer mortality is generally highest in White men in the western United States, whereas, for Black men, the geographic pattern is more varied, with high rates in New Hampshire (46.8 deaths per 100,000), Washington D.C. (45.0 per 100,000), and California (44.1 per 100,000). State differences in prostate cancer incidence and mortality reflect demographic variation, such as race/ethnicity, socioeconomic status, and rurality,[60,61] as well as differential access to high-quality health care.[62–64]

Prostate cancer mortality rates increased until 1993 and have since declined by more than 50% through 2023, in part because of earlier detection through PSA screening and improved treatment.[65,66] However, rapid declines of 3.5% per year from 1993 to 2012 have decelerated to 0.6% per year during 2012–2023, and rates have stabilized among men aged 55–69 years (see Table S2). Declines in prostate cancer mortality have been steeper among Black men (2.9% per year) than among White men (1.9% per year) since 2001, with rates among White men declining by only 0.2% per year since 2012 (Figure 2). Consequently, the Black–White disparity in prostate cancer mortality has declined from a peak of a 2.5 times higher rate in Black men in 2001 (mortality rate ratio, 2.51; 95% CI, 2.44–2.59) to two times higher in 2023 (mortality rate ratio, 1.98; 95% CI, 1.92–2.05), still a wider gap than the 72% disparity in incidence in 2021.[27]

Prostate cancer screening

PSA is a blood biomarker produced by both prostate epithelial cells and prostate cancer.[67] Serum PSA concentration was first approved by the US Food and Drug Administration in 1986 to monitor disease progression but has been used to screen for prostate cancer since the late 1980s.[68,69] PSA screening can detect prostate cancer 5 to 7 years before it would be detected by digital rectal examination or cause symptoms,[33] but it also results in overdiagnosis (tumors that would never progress to cause symptoms or death).[70] Reducing these harms through more targeted screening including genetic testing for risk assessment and conservative management of low-risk disease has been the focus of contemporary early detection research.[8,9]

In 2018, the USPSTF updated its prostate cancer screening recommendation for men aged 55–69 years to informed decision-making regarding "periodic PSA-based screening," including a discussion with their clinician about the benefits and harms of screening.[71] This recommendation is similar to American Cancer Society guidelines since 2010, which recommend that asymptomatic men with at least a 10-year life expectancy make an informed decision with their health care provider about whether to be screened beginning at age 50 years for men at average risk, age 45 years for Black men, and as early as age 40 years for men at even higher risk.[72] Although evidence is limited, a recent review supports screening Black men at age 45 years at potentially more frequent intervals than other men depending on baseline PSA level.[73]

Among men aged 50 years and older, 37% report having a PSA test within the past year.[45] Screening is highest among White men, gay men, those with higher education and income, and those with private insurance or Medicare insurance (aged 65 years and older). Screening peaked in 2008 at 44% before declining to 34% in 2013. Interestingly, PSA testing has consistently been higher in men aged 70 years and older than in those aged 55–69 years (24% higher in 2023; Figure 6), despite USPSTF recommendations against screening in this age group. In part, this may be because Medicare has covered PSA testing for all men aged 50 years and older since 2000.[74] In fact, one study published in 2021 found that, among men with private insurance, screening was highest in the recommended screening age group.[35] This could be because of stricter coverage requirements for private insurers compared with Medicare,[75] in which the beneficiaries have higher prevalence of screening than men with private insurance within the recommended screening age group.[45]

CONCLUSIONS

After declining for much of the late 2000s and early 2010s, prostate cancer incidence rates have increased for nearly a decade, with the diagnosis of distant-stage disease increasing in men of every age, including by nearly 3% annually in those younger than 55 years. Black men continue to have the greatest burden, with mortality twice that of any other racial or ethnic group, whereas AIAN men have higher mortality than White men despite lower incidence. Increases in advanced diagnosis and persistent disparities highlight the need for redoubled efforts to optimize early detection and address barriers to equitable outcomes, including improved access to high-quality health care for all men.

CONFLICT OF INTEREST STATEMENT

Tyler B. Kratzer, Natalia Mazzitelli, Jessica Star, William L. Dahut, Ahmedin Jemal, and Rebecca L. Siegel are employed by the American Cancer Society, which receives grants from private and corporate foundations, including foundations associated with companies in the health sector, for research outside of the submitted work. The authors are not funded by or key personnel for any of these grants, and their salary is solely funded through American Cancer Society funds. The authors disclosed no conflicts of interest.

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Additional supporting information can be found online in the Supporting Information section at the end of this article.

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