2022 SC Prostate Cancer Fact Sheet

What is Prostate Cancer?

Cancer is a disease that causes cells in the body to divide and grow out of control. When cancer starts in the tissue of the prostate gland, it is called prostate cancer. Cancer cells in the prostate may grow into surrounding tissues or spread to other parts of the body. All men are at risk for prostate cancer.[1]

Risk Factors

1. Age: Prostate cancer is rare in individuals under 40 years old; however, the chance of developing prostate cancer increases exponentially after 50 years of age.[1]
2. Race: Prostate cancer occurs more often in African American men as compared to any other race. Prostate cancer also occurs less among Hispanics as compared to their non-Hispanic counterparts.[1] South Carolina ranks 5th in the proportion of the population which is African American and 29th in the proportion of the population which is Hispanic.[3]
3. Genetics: A family history of prostate cancer increases an individual's risk. People with a father or brother with prostate cancer are more than two times as likely to develop prostate cancer as compared to those with no family history of prostate cancer.[1]

Signs and Symptoms[1]

Most prostate cancers are found early through screening. Symptoms rarely arise from early-stage prostate cancer. Symptoms in more advanced stages of prostate cancer are:

- Problems urinating, including a slow or weak urinary stream or the need to urinate more often
- Blood in urine or semen
- Trouble getting an erection
- Pain in the hips, back, chest, or other areas from cancer that has spread to bones
- Weakness or numbness in the legs or feet
- Loss of bladder or bowel control

Screening Recommendations[1]

The U.S. Preventive Services Task Force (USPSTF) and the American Cancer Society (ACS) emphasize that the decision to undergo periodic prostate-specific antigen (PSA)-based screening for prostate cancer should be an individual one. The doctor-patient discussion regarding screening should begin at age 40 for the highest risk men, multiple first-degree relatives with prostate cancer, at age 45 for high-risk men, one first-degree relative with prostate cancer or African American, and at age 50 for average risk men. The discussion should include the potential pros and cons of screening, so the individual can make an informed decision.

1. Pros of Screening: small potential benefit of reducing the chance of death from prostate cancer.
2. Cons of Screening: false-positive results that require additional testing and possible prostate biopsy; overdiagnosis and overtreatment; and treatment complications, such as incontinence and erectile dysfunction.

Incidence Rate (rate of new cases, 2015–2019):

- Prostate cancer incidence is higher in South Carolina compared to the U.S.* (113.0 vs. 106.2 new cases per 100,000 men, respectively).[9]

- Figure 1 displays prostate cancer incidence rates in South Carolina's 46 counties. Prostate cancer incidence rates are highest in Williamsburg (185.3 per 100,000), McCormick (163.6 per 100,000), and Lee (152.7 per 100,000).[7]

- Figure 3 illustrates that prostate cancer incidence rates among blacks are about 1.73 times higher than that of whites (96.4 vs. 166.8, respectively).[9]

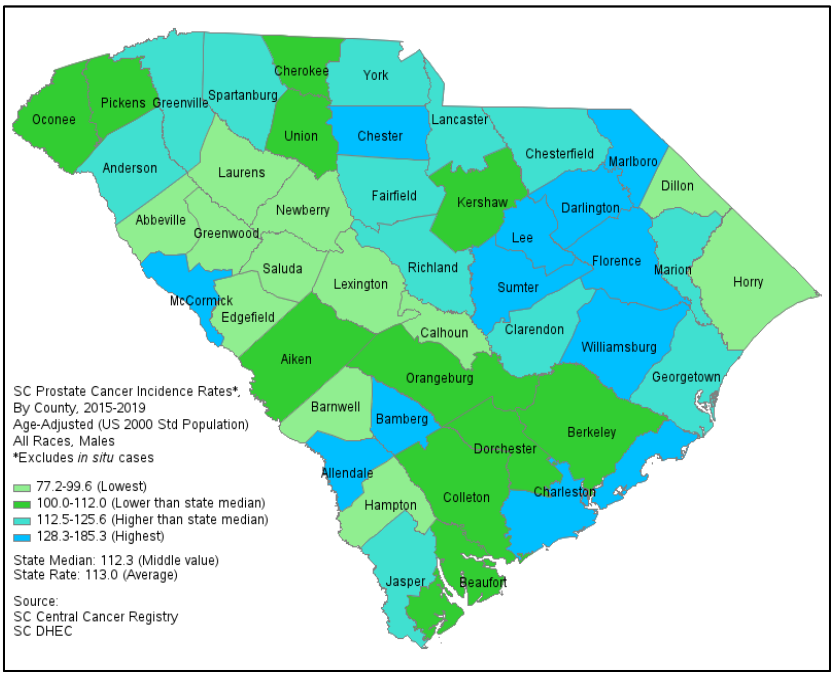


Figure 1: Prostate Cancer Incidence, 2015-2019

Mortality Rate (2015-2019):

- Prostate cancer mortality rates are higher in South Carolina when compared to the US (21.0 vs. 18.9 per 100,000 men, respectively).[5]

- Figure 2 displays prostate cancer mortality rates in South Carolina's 46 counties. Lee (43.6 per 100,000), Allendale (39.8 per 100,000), and Williamsburg (37.1 per 100,000) counties have the highest mortality rates for prostate cancer.[7]

- Figure 4 illustrates that prostate cancer mortality rate is 2.43 time higher in blacks than whites (40.8 vs. 16.8, respectively).[5]

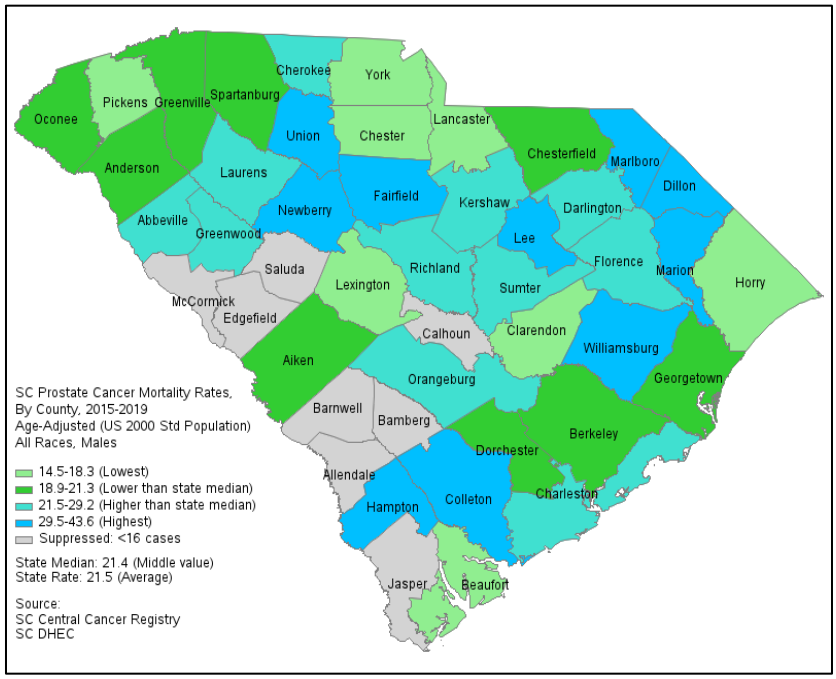


Figure 2: Prostate Cancer Mortality, 2015-2019

*U.S. data from 2014-2018 as 2019 data not available

Survival

- In the United States, 98% of people with newly diagnosed prostate cancer cases will survive for at least 5 more years.[1]
- Between 2015 and 2019, approximately 18% of prostate cancer cases were diagnosed in the late-stage.[9]
- Figure 5 illustrates that black men are 1.63 times more likely to be diagnosed with late-stage prostate cancer as compared to their white counterparts.[7]

Screening[6]

- As of 2020, 32.8% of men in South Carolina who are 40 or older have had a PSA screening within the past two years.
- Figure 6 illustrates that 26.6% of black men aged 40 or older have had a PSA screening within the past two years, and 34.8% of white men aged 40 or older have had a PSA screening within the past two years.
- Males screening rate of prostate cancer over the past two years in the state of South Carolina among men 40 years or older has decreased from 46% in 2014 to 32.8% in 2020.

Economic Burden[8]

- Primary diagnoses of prostate cancer for inpatient hospitalizations cost more than $36.3 million dollars in South Carolina during 2020.
  - ✓ Inpatient hospitalizations: 524
  - ✓ Average Charge: $62,807
  - ✓ Average Length of Stay: 3.09 days

Racial Differences

Figure 3: Prostate Cancer Incidence Rate by Race, SC 2015-2019

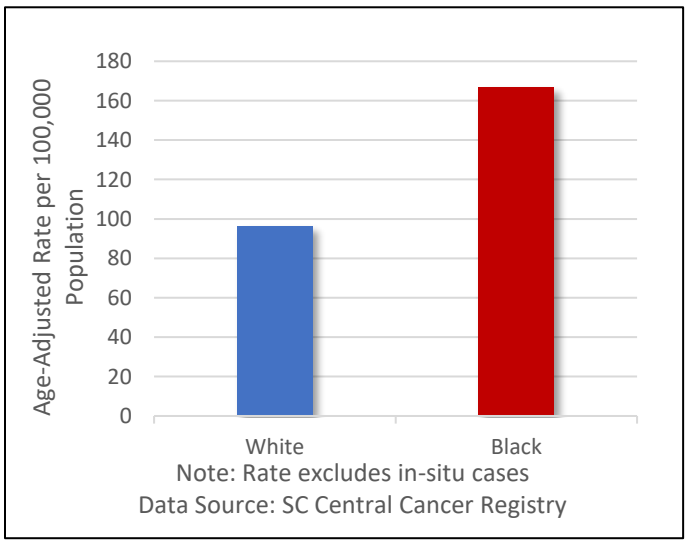


Figure 4: Prostate Cancer Mortality Rate by Race, SC 2015-2019

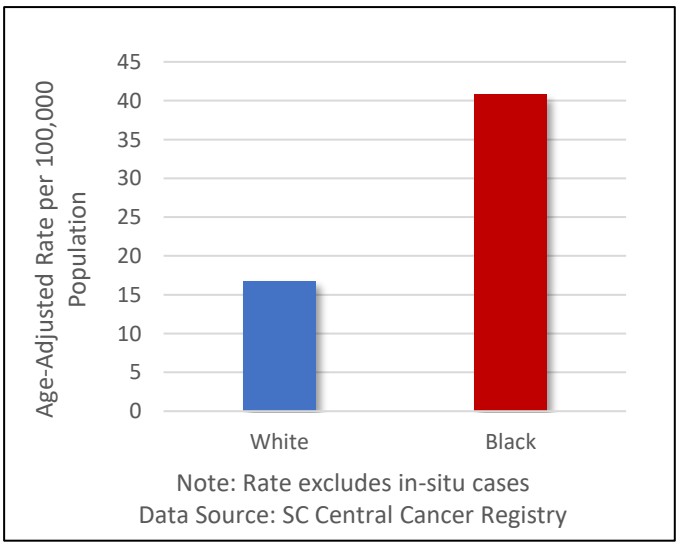


Figure 5: Prostate Cancer Diagnosed at Late-Stage by Race, SC 2015-2019

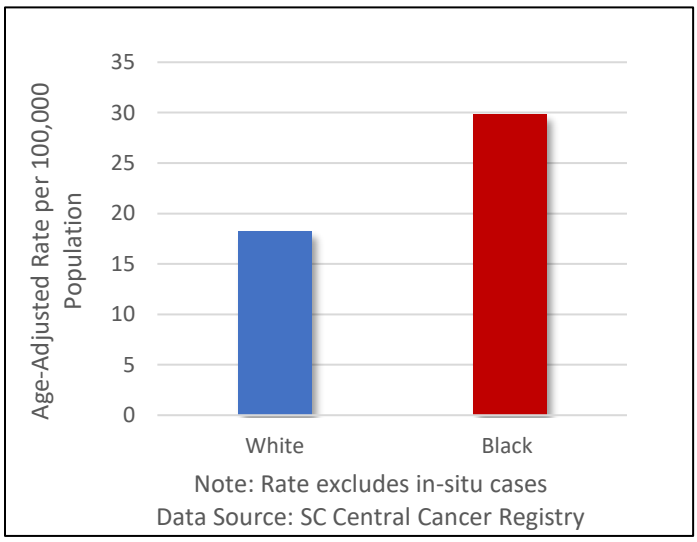
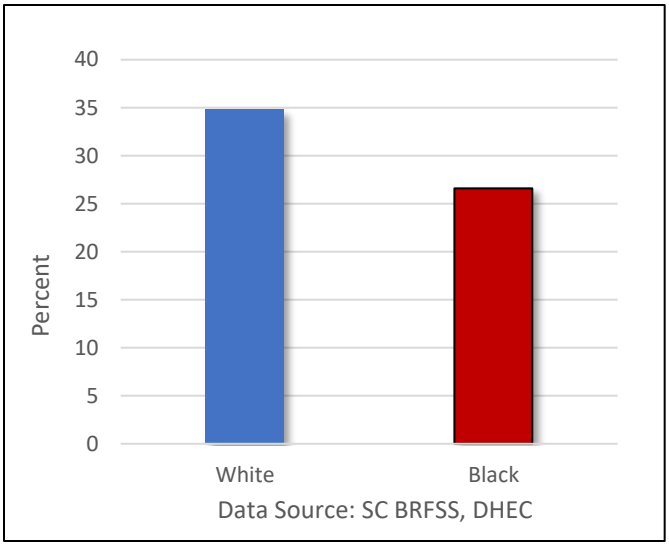


Figure 6: Prevalence of PSA Test Within Last Two Years for Men Aged 40+ by Race, SC 2015-2019



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3. *US States by Race 2022*. World Population Review. (2022). Retrieved March 14, 2022.
4. National Program of Cancer Registries and Surveillance, Epidemiology and End Results Program SEER*Stat Database: NPCR and SEER Incidence – U.S. Cancer Statistics Public Use Research Database, 2020 Submission (2001-2018). United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Released June 2021.
5. Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: Mortality - All COD, Aggregated With State, Total U.S. (1990-2019) <Katrina/Rita Population Adjustment>, National Cancer Institute, DCCPS, Surveillance Research Program, released April 2021.
6. South Carolina Behavioral Risk Factor Surveillance System, Bureau of Population Health Data Analytics and Informatics, Dept. of Health & Environmental Control, 2018.
7. South Carolina Central Cancer Registry, Office of Public Health Statistics and Information Services, based on combined data from 2015-2019.
8. South Carolina Revenue and Fiscal Affairs Office, Hospital Discharge Patient-Level Dataset.
9. Surveillance, Epidemiology, and End Results (SEER) Program (www.seer.cancer.gov) SEER*Stat Database: 1996-2020ytd SC Cancer Incidence Data. Based file run date 11/23/21. SC Central Cancer Registry, Bureau of Chronic Disease & Injury Prevention, SC Dept. of Health & Environmental Control. 02/25/2022

For more information on cancer prevention and management, please contact:
Division of Cancer Prevention and Control, SC DHEC. 2100 Bull Street, Columbia, SC 29201 | 803.898.1615 | http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/

American Cancer Society: www.cancer.org | 1.800.227.2345

For more information on cancer data and statistics for South Carolina, please contact:
South Carolina Central Cancer Registry, SC DHEC. 2600 Bull Street, Columbia, SC 29201 | 803.898.8000 | cancer.registry@dhec.sc.gov

Centers for Disease Control and Prevention: https://www.cdc.gov/cancer/colorectal/