

Skin Cancer: Basal and Squamous Cell Carcinoma

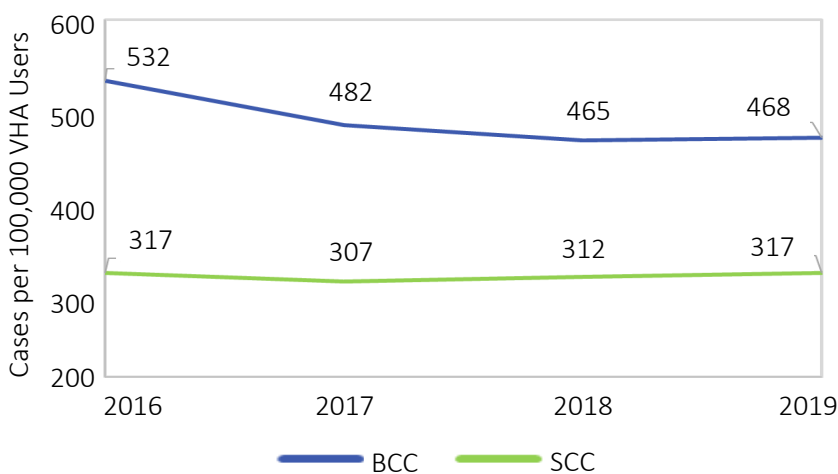
June 2020

Fact Sheet: Data on Veterans Using VA Health Care

CSPEAR provides timely epidemiologic information on VA health care users. This fact sheet presents summary data to inform a broad community of VA leaders, investigators, and clinicians as they consider how best to address the needs of Veterans.

Introduction: Basal Cell Carcinoma (BCC) and Squamous Cell Carcinoma (SCC), collectively referred to as keratinocyte carcinomas, are the most common types of non-melanoma skin cancer. BCC and SCC comprise 80% and 20% of keratinocyte carcinomas, respectively, and are most common in Whites, males, and those >70 years of age. Prolonged UV radiation is the predominant risk factor for BCC and SCC, while other risk factors include chronic arsenic exposure and immunosuppression. [1-4]

Prevalence of BCC and SCC for Fiscal Year (FY) 2016-2019



In the VHA, BCC prevalence decreased from 532 to 468 per 100,000 from FY16 to FY19. During the same time period, SCC prevalence remained relatively stable.

Race Category	Distribution of BCC and SCC, FY16-19	
	BCC (%)	SCC (%)
American Indian or Alaska Native (n= 554)	0.4	0.3
Asian (n= 126)	0.05	0.1
Black or African American (n= 1,417)	0.3	1.7
Multiracial (n= 749)	0.5	0.4
Native Hawaiian or Pacific Islander (n= 762)	0.5	0.5
Other (n= 7,723)	4.7	4.5
White (n= 155,353)	93.7	92.4

Of the 102,121 BCC cases, 93.71% were white. Of the 64,563 SCC cases, 92.41% cases were white.

Fast Facts

- Of 6,385,378 users of Veterans Health Administration (VHA) care in fiscal year (FY) 2019, 0.47% had a diagnosis of BCC and 0.32% had a diagnosis of SCC.
- The prevalence of BCC decreased between FY16-19 while SCC remained stable.
- There was a slightly higher proportion of SCC in those >65 years of age than BCC.
- Fluorouracil was the most common treatment for BCC and SCC.

Definitions

- **Case definition:** one BCC or SCC inpatient diagnosis code, or two BCC or SCC outpatient diagnosis codes within 90 days corresponding to the same site (e.g. nose, scalp, eyelid)
 - BCC ICD10 diagnosis codes: C44.01, C44.11x, C44.21X, C44.31X, C44.41, C44.51X, C44.61X, C44.71X, C44.81X, C44.91X
 - SCC ICD10 diagnosis codes: C44.02, C44.12x, C44.22X, C44.32X, C44.42, C44.52X, C44.62X, C44.72X, C44.82X, C44.92X.
- **Prevalence:** the number of VHA users who met the case definition criteria (new cases or disease condition remained) in a given fiscal year divided by the total number of VHA users in the same FY
- **Treatment rate:** Percentage of positive cases in a given FY with a record corresponding to the treatment in the same FY as the diagnosis

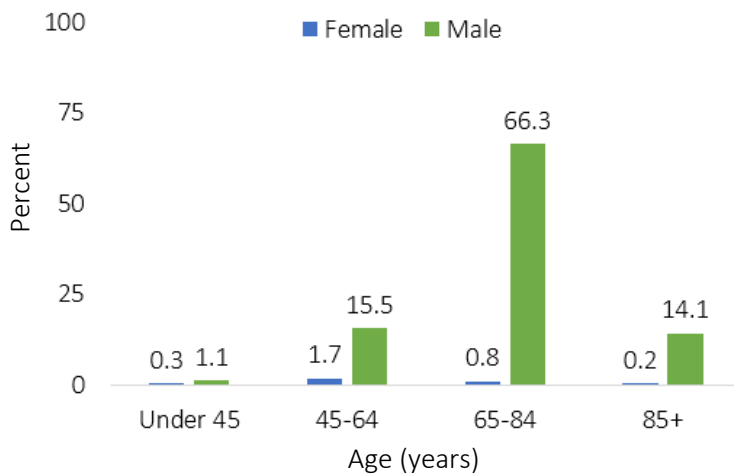
Visit [CSPEAR's website](#) or contact CSPEAR@va.gov for more information.

Suggested citation: VA Cooperative Studies Program Epidemiology Analytics Resource. Basal and Squamous Cell Carcinoma Fact Sheet: Data on Veterans Using VA Health Care. Cooperative Studies Program, Office of Research and Development, Department of Veterans Affairs. 2020.

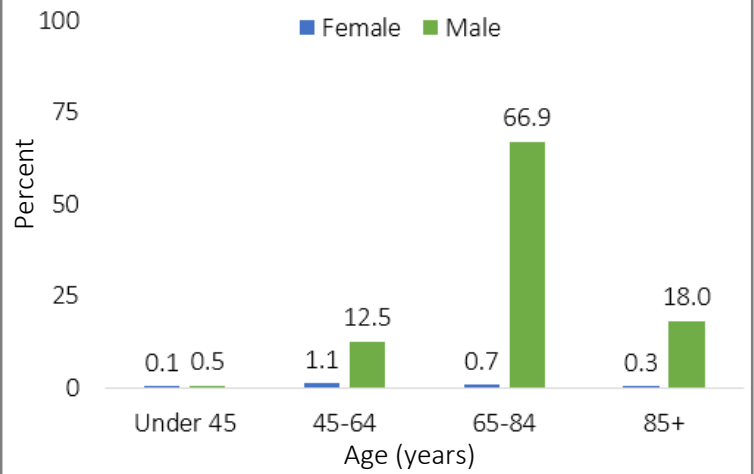


U.S. Department of Veterans Affairs
Veterans Health Administration
Cooperative Studies Program

Distribution of Sex and Age Category for BCC

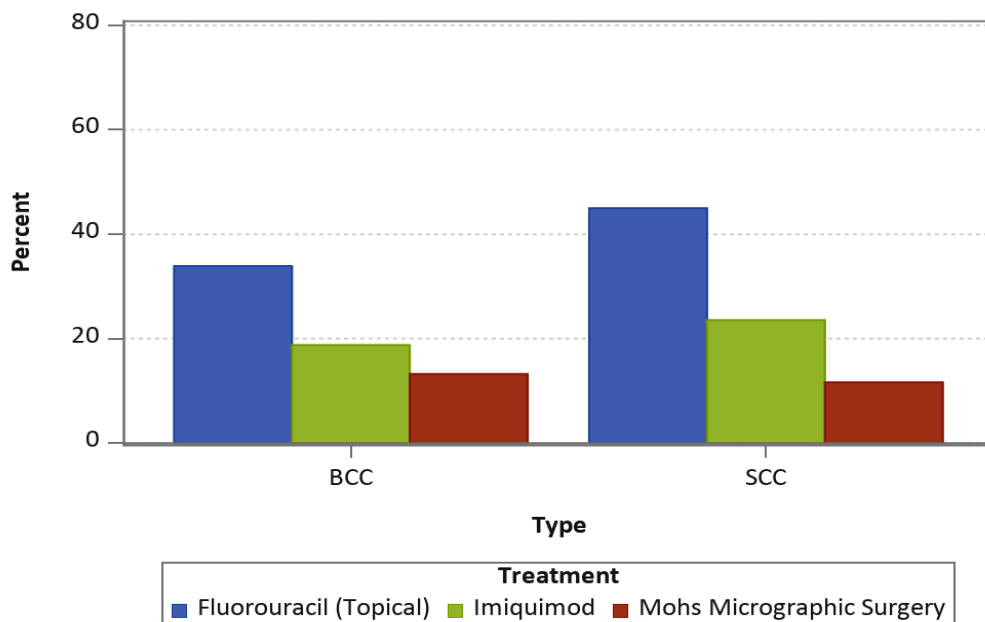


Distribution of Sex and Age Category for SCC



For BCC, females represented approximately 3% of all cases, and approximately 2% for SCC cases for FY2016-FY2019. There was a similar proportion of cases in the 65-84 age group for both BCC and SCC, but slightly more BCC cases were in those aged <65 and more SCC cases were in those aged >85.

Utilization of Treatment for BCC and SCC (FY2016-2019 Combined)



For BCC cases, 33.9% received Fluorouracil (Topical), 18.8% received Imiquimod, and 13.2% received Mohs Micrographic Surgery.

Among SCC cases, 50% received Fluorouracil, 23.6% received Imiquimod, and 11.7% received Mohs Micrographic Surgery.

Treatment categories were not mutually exclusive.

Summary of Data Sources and Analysis

Data were obtained from the VA Corporate Data Warehouse, which contains demographic, diagnosis, and treatment characteristics for patients diagnosed or treated in the VA as well as the total numbers of VHA users in each fiscal year 2016-2019. The distribution of BCC and SCC are presented by race, sex, and age for fiscal years 2016-2019 combined.

Notes: This work was conducted under the Epidemiology of Cancer in Veterans (EpiCAN) research protocol (IRB# 2009). It was supported with resources and the use of facilities at the VA Cooperative Studies Program Epidemiology Center in Durham, NC. The contents do not represent the views of VA or the US Government.

References and Resources

1. American Cancer Society. [Cancer Facts & Figures 2019](#). American Cancer Society. Atlanta, GA. 2019.
2. Rogers HW, et al. [Incidence Estimate of Nonmelanoma Skin Cancer in the United States, 2006](#). Arch Dermatol. 2010 Mar;146(3):283-7.
3. Firnhaber JM. [Diagnosis and treatment of Basal cell and squamous cell carcinoma](#). Am Fam Physician. 2012 Jul 15;86(2):161-8. PMID: 22962928.
4. Priyadharsini N, et al. [Keratinocyte Carcinomas: Current Concepts and Future Research Priorities](#). Clin Cancer Res. 2019;25(8):2379-2391.

Visit <https://www.research.va.gov/topics/cancer.cfm> for information about VA research on cancer and other key topics relating to Veterans' health.