

What is lung cancer?

The lungs are spongy organs in the chest that bring air into the body through special airways. Lung cancer occurs when cells in the lungs or the airways of the lungs grow out of control. Cancer cells within the lungs may grow into surrounding tissues or spread to other parts of the body.

Risk factors¹

- ✓ Cigarette smoking is the number one risk factor for lung cancer. Other forms of tobacco use (cigar, pipe, etc.) also increase risks for developing the disease. Quitting smoking at any age can lower the risk of lung cancer.
- ✓ Additional risk factors include: occupational and environmental exposure to radon gas, secondhand smoke, asbestos, organic chemicals, radiation, and air pollution.

Signs and symptoms¹

- Symptoms of lung cancer may include: persistent cough, blood in sputum, chest pain, change in voice, and recurrent respiratory infections.

Early detection¹

- The only recommended screening test for lung cancer is [*low-dose computed tomography*](#) (also called a low-dose CT scan, or LDCT). The U.S. Preventive Services Task Force (USPSTF) recommended yearly lung cancer screening with LDCT for people who have a history of heavy smoking, smoke now or have quit within the past 15 years, and are between 55 and 80 years old.

Lung cancer facts in South Carolina

- Lung cancer is the *most commonly diagnosed cancer and the leading cause of cancer death among both men and women* in South Carolina, as well as nationally.¹

Incidence (rate of new cases):

Figure 1. Male Lung & Bronchus Cancer Incidence*, 2013-2017

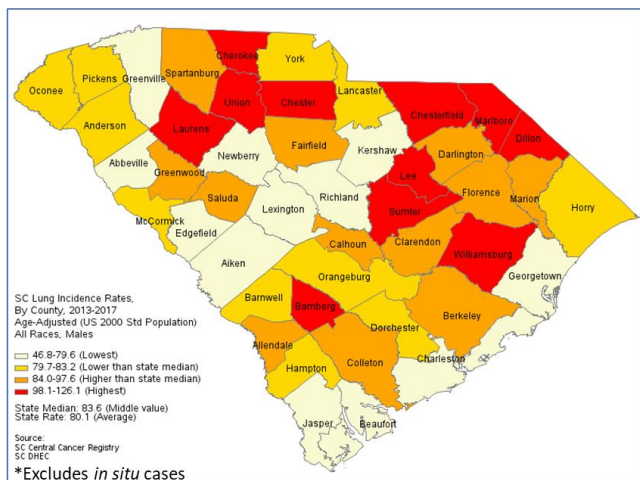
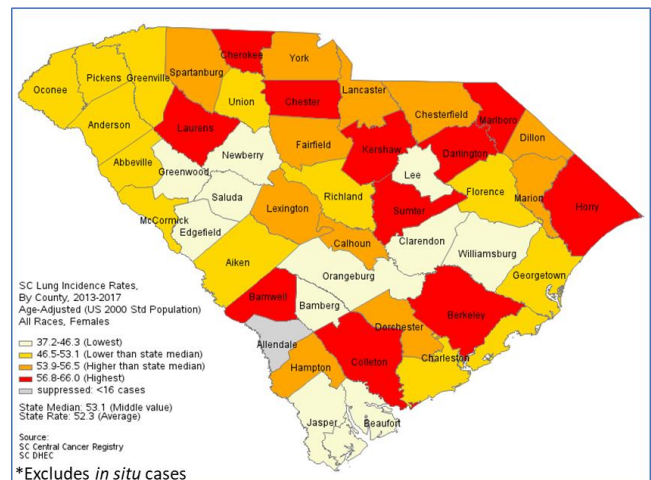


Figure 2. Female Lung & Bronchus Cancer Incidence*, 2013-2017



South Carolina Quick Facts

- Lung cancer is the *most commonly* diagnosed cancer overall.
- It is *also the most common* cause of cancer deaths.
- Men are *nearly twice as likely* to get lung cancer *and die from it than women*.
- White women are *29% more likely* to get lung cancer and *29% more likely* to die from it than black women.
- The mortality rate for men has declined by 45% since the mid 1990's. For women, the rate has declined by 15% over the same time period.

- The South Carolina lung cancer incidence rate is higher than the national rate (64.4 vs 56.4, respectively). South Carolina ranks 16th nationally.^{2,3}
- Compared to the US, incidence rates for lung cancer in South Carolina are higher for men (80.1 vs. 65.0 cases/100,000) and for women 52.3 vs. 49.8 cases/100,000).^{2,3}
- Figures 1 & 2 display lung cancer incidence rates among men and women in South Carolina's 46 counties.² Counties in dark red have the highest incidence rates of lung cancer. Williamsburg (126.1/100,000), Union (119.5/100,000), and Bamberg (111.2/100,000) counties have the highest incidence rates among men. Kershaw (66.0/100,000), Chester (65.9/100,000), and Colleton (62.9/100,000) have the highest incidence rates for lung cancer among women.²
- In South Carolina, black men experience higher incidence rates for lung cancer than white men (2013-2017: 86.2 cases vs. 78.9 cases per 100,000 men, respectively). Conversely, lung cancer incidence rates are higher for white women compared to black women (2013-2017: 56.5 cases vs. 40.3 cases per 100,000 women, respectively) (Figure 6).

Mortality:

- The South Carolina lung cancer mortality rate is higher than the national rate (44.8 vs 40.2, respectively). South Carolina ranks 17th nationally.^{2,3}

Figure 3. Male Lung & Bronchus Cancer Mortality, 2013-2017

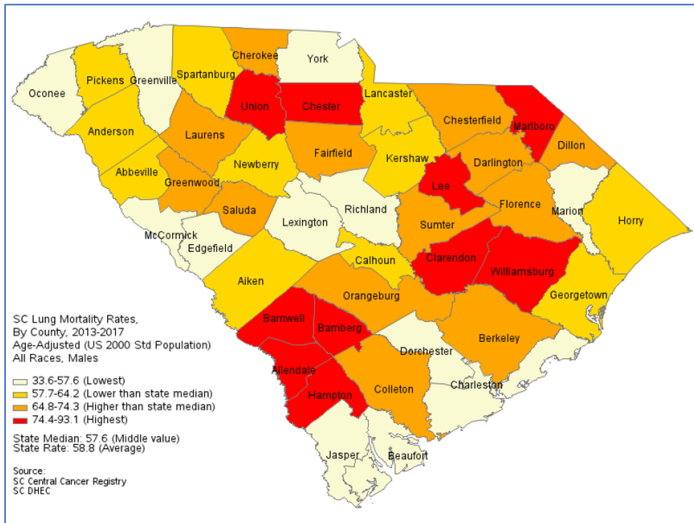
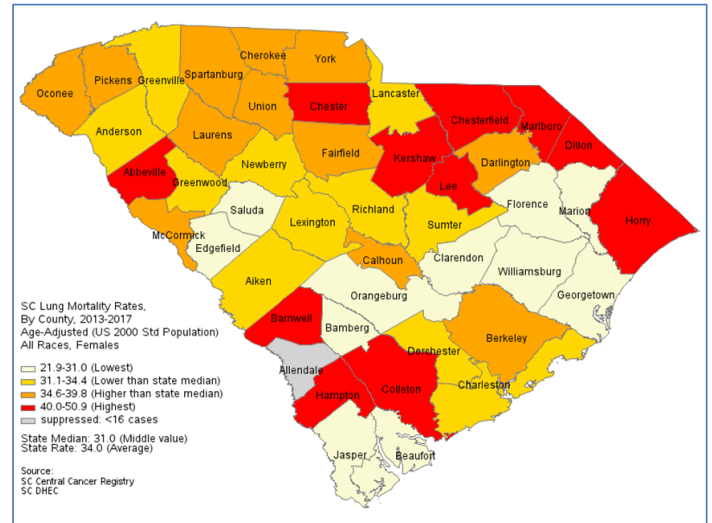


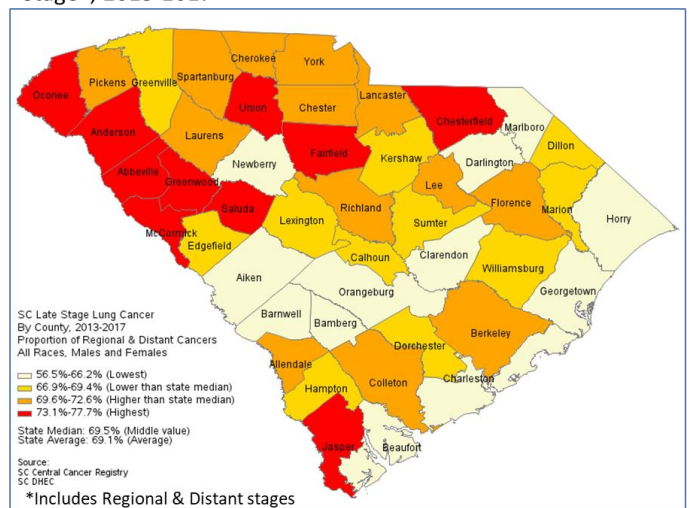
Figure 4. Female Lung & Bronchus Cancer Mortality, 2013-2017



The lung cancer mortality rate (2013-2017) among men is higher in South Carolina when compared to the U.S. (58.8 vs. 49.3/100,000).³ The lung cancer mortality rate for South Carolina women is slightly higher than the U.S. rate (34.0 vs. 33.2/100,000).³

- Figures 3 & 4 display lung cancer mortality rates for men and women among South Carolina's 46 counties.² Counties in dark red have the highest mortality rates. Bamberg (93.1/100,000), Marlboro (90.2/100,000), and Union (83.5/100,000) counties have the highest mortality rates among men. Marlboro (50.9/100,000), Colleton (47.7/100,000), and Chesterfield (42.3/100,000) have the highest mortality rates among women.²
- Black men experience higher lung cancer mortality rates than white men (2013-2017: 64.6 cases vs. 57.8 cases per 100,000 men, respectively). White women experience higher lung cancer mortality rates than black women

Figure 5. Lung & Bronchus Cancer Cases Diagnosed at Late Stage*, 2013-2017



(2013-2017: 36.7 cases vs. 26.0 cases per 100,000 women, respectively) (Figure 7).

Survival:

- Nationally, the five-year relative survival rate for lung cancer is 57% when diagnosed in the earliest stages of the disease.¹ In South Carolina, approximately 22% of all lung cancers are diagnosed in the earliest stages of this disease, and the five-year relative survival is 55%.²
- Figure 5 shows percentage of lung cancers diagnosed at late stage in each of the 46 counties in South Carolina. Oconee, Anderson, and McCormick counties have the highest percentage of late stage lung cancers.²
- Blacks are *more likely* to be diagnosed with late stage lung cancer than whites (72% and 68%, respectively) (Figure 8).²

Tobacco use:

- In 2019, Centers for Disease Control and Prevention reported about 17.6 percent of adults in South Carolina were current smokers (U.S. average = 16.0%).^{4,5}
- Current smoking was more prevalent among men and those who were less educated or had lower income levels. There were no significant differences in smoking prevalence among whites and blacks. Current smoking was more prevalent among males than females (Figure 9)⁴

Economic burden:

- Primary diagnoses of lung cancer for inpatient hospitalizations cost more than \$140.6 million dollars in South Carolina during 2018:
 - ✓ Inpatient hospitalizations: 1,899 people
 - ✓ Average length of stay: 5.5 days
 - ✓ Average charge per stay: \$69,616.⁶

Racial differences:

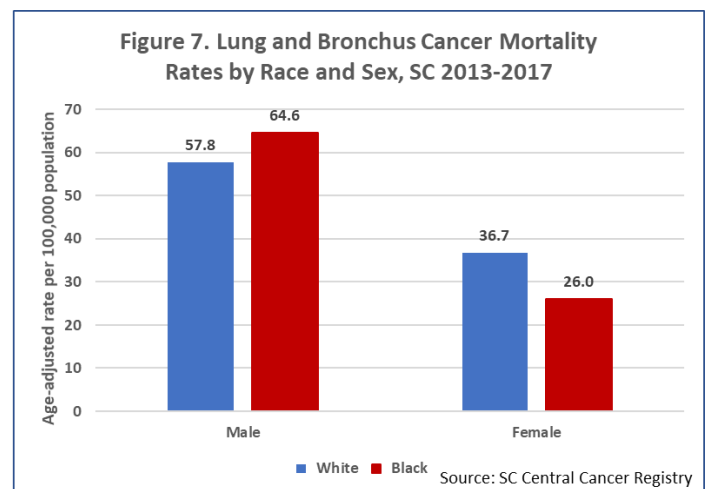
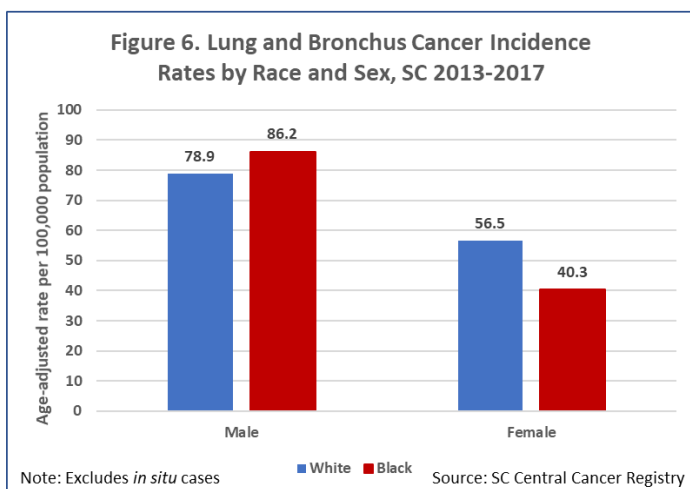


Figure 8. Lung and Bronchus Cancer Cases Diagnosed at Late Stage by Race, SC 2013-2017

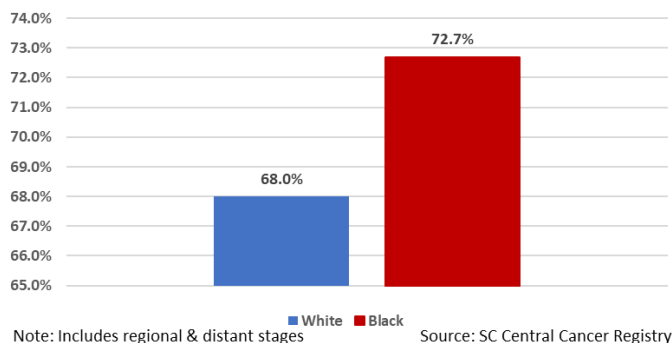
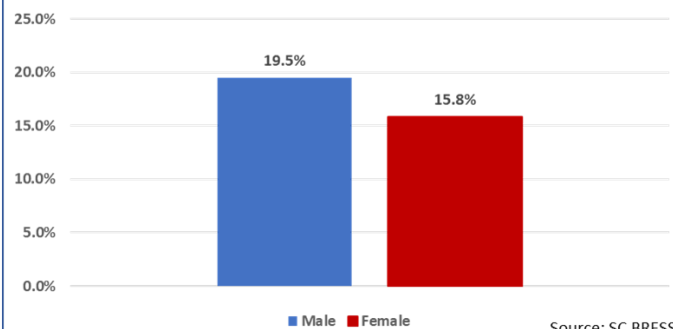


Figure 9. Prevalence of Current Smoking among Adults (ages 18+) by Sex, SC 2019



¹ American Cancer Society, Cancer Facts & Figures 2020. Atlanta: American Cancer Society; 2020.

² South Carolina Central Cancer Registry, Bureau of Population Health Data Analytics & Informatics, Dept. of Health & Environmental Control, based on combined data from 2013-2017.

³ National Program of Cancer Registries and Surveillance, Epidemiology, and End Results SEER*Stat Database: NPCR and SEER Incidence - U.S. Cancer Statistics 2001-2017 Public Use Research Database, 2019 Submission (2001-2017), United States Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Released June 2020. Accessed at www.cdc.gov/cancer/uscs/public-use.

⁴ South Carolina Behavioral Risk Factor Surveillance System, Bureau of Population Health Data Analytics & Informatics, Dept. of Health & Environmental Control, 2019.

⁵ Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2019.

⁶ South Carolina Revenue and Fiscal Affairs Office, Hospital Discharge Patient-Level Dataset

For more information on cancer prevention and management, please contact:

Division of Cancer Prevention and Control (DHEC): <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/lung/>

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October 2020