

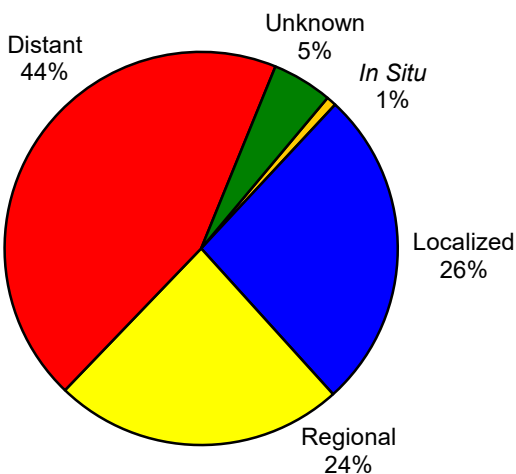
## LUNG AND BRONCHUS

**Table 19: Lung and Bronchus Incidence and Mortality Summary, 2017**

Lung and Bronchus Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	<b>Total</b>	# Cases / Deaths Age-Adjusted Rate	<b>602</b> <b>56.0</b>	306 61.1	296 53.0	<b>421</b> <b>38.4</b>	219 43.6	202 34.8
	<b>White</b>	# Cases / Deaths Age-Adjusted Rate	<b>560</b> <b>55.4</b>	284 60.2	276 52.8	<b>389</b> <b>37.7</b>	203 42.6	186 34.4
	<b>American Indian</b>	# Cases / Deaths Age-Adjusted Rate	<b>38</b> <b>80.1</b>	19 98.6	19 68.1	<b>30</b> <b>65.2</b>	14 71.9	16 58.2
United States	<b>Total</b>	Age-Adjusted Rate	<b>51.6</b>	57.9	47.0	<b>36.7</b>	44.5	30.6
	<b>White</b>	Age-Adjusted Rate	<b>53.3</b>	58.2	49.8	<b>37.5</b>	44.7	31.9
	<b>American Indian</b>	Age-Adjusted Rate	<b>37.0</b>	42.3	33.1	<b>30.6</b>	36.3	26.4

Rates per 100,000 age-adjusted to 2000 US standard population and 2017 SD estimated population.  
US rates [www.seer.cancer.gov](http://www.seer.cancer.gov) Source: South Dakota Department of Health

**Figure 42: Lung and Bronchus Cancer Stage at Diagnosis, South Dakota, 2017**



Source: South Dakota Department of Health

### Descriptive Epidemiology

**Stage at Diagnosis:** The presentation of lung cancer is extremely variable and depends on local manifestations of the tumor, distant metastases or associated paraneoplastic syndromes. In 2017, 26% of lung cancer patients were diagnosed at a localized stage. The more advanced the stage, the poorer the prognosis is for the patient. In 2017, 267 (44%) cases were diagnosed when the disease had progressed beyond the lung and metastasized to a distant location. Approximately 68% of cases in 2017 were diagnosed after the disease had progressed beyond the lung to lymph nodes, regional areas, or distant sites, such as brain or bone.

**Incidence:** Lung cancer is a major public health concern, with an estimated 222,500 new cases in

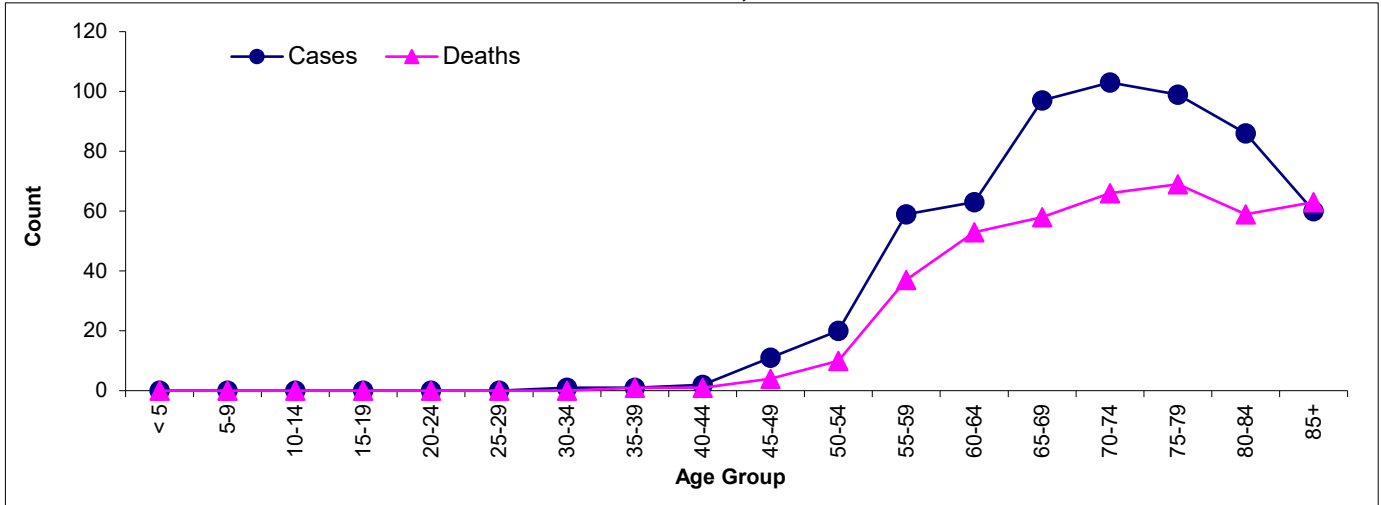
the United States in 2017. Despite the well documented link between tobacco product use and respiratory diseases, including cancer, the outcomes of such efforts to curb the use of tobacco products have been mixed. In South Dakota, there were 602 new invasive lung cancer cases diagnosed in 2017.

**Mortality:** There were 421 lung cancer deaths in South Dakota in 2017. Incidence and mortality rates have significantly increased during the last century. Lung cancer accounts for approximately 22.4% of all United States deaths attributed to cancer. In South Dakota, lung cancer accounts for 24.0% of deaths from cancer. Lung cancer is the leading cause of cancer deaths in both men and women.

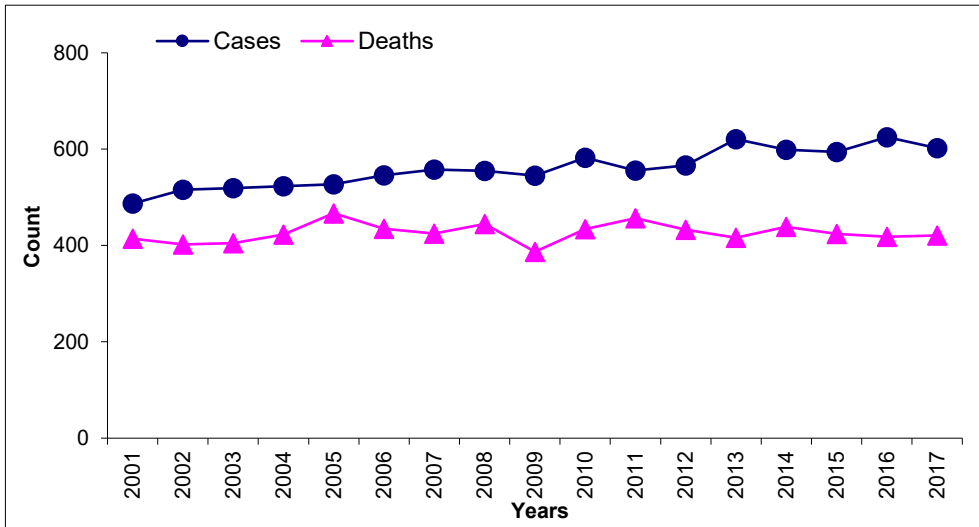
**Risk and Associated Factors:** Cigarette smoking is the number one risk factor for lung cancer and is linked to approximately 90% of lung cancers. Other risk factors include secondhand smoke exposure, occupational or environmental exposures to substances such as radon, arsenic, benzene, and asbestos, a personal or family history of lung cancer, and previous radiation therapy to the chest.

**Prevention and Early Detection:** The USPSTF recommends annual screening for lung cancer with low-dose computed tomography (LDCT) in adults aged 55 to 80 years who have a 30 pack/year smoking history and currently smoke or have quit within the past 15 years. Screening should be discontinued once a person has not smoked for 15 years or develops a health problem that substantially limits life expectancy or the ability or willingness to have curative lung surgery.

**Figure 43: Lung and Bronchus Cancer Number of Cases and Deaths by Age, South Dakota, 2017**



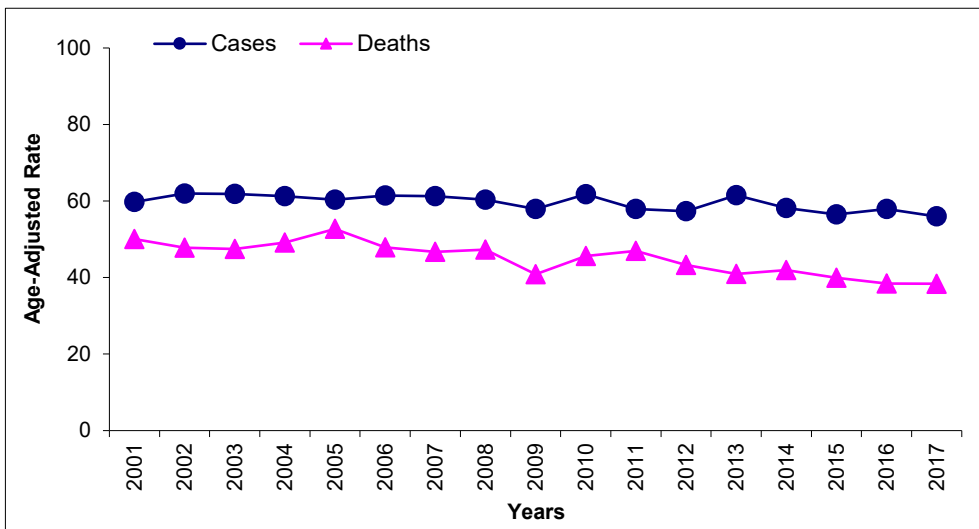
Source: South Dakota Department of Health



Source: South Dakota Department of Health

**Figure 44: Lung and Bronchus Cancer Cases and Deaths by Year, South Dakota, 2001 - 2017**

The number of cases and deaths associated with lung and bronchus cancer remain constant.



Rates per 100,000 age-adjusted to 2000 US standard population and SD estimated populations.  
Source: South Dakota Department of Health

**Figure 45: Lung and Bronchus Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2017**