

LUNG AND BRONCHUS

Table 19: Lung and Bronchus Incidence and Mortality Summary, 2010

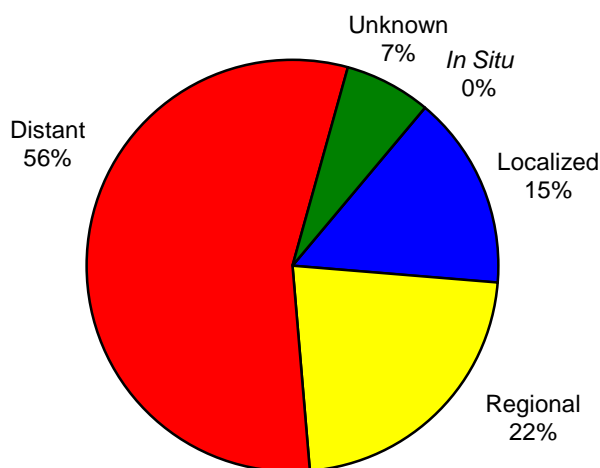
Lung & Bronchus Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths Age Adjusted Rate	546 57.9	296 69.6	250 49.1	434 45.6	261 62.3	173 33.5
	White	# Cases / Deaths Age Adjusted Rate	500 55.6	273 67.2	227 46.9	403 44.3	241 60.1	162 32.9
	American Indian	# Cases / Deaths Age Adjusted Rate	41 119.5	20 114.3	21 117.7	25 73.3	15 101.7	10 54.4
United States	Total	Age Adjusted Rate	* 59.2	* 71.2	* 50.4	* 48.5	* 62.0	* 38.6
	White	Age Adjusted Rate	* 60.5	* 71.1	* 52.9	* 49.2	* 61.8	* 39.8
	American Indian	Age Adjusted Rate	* 40.6	* 45.9	* 36.7	* 36.5	* 44.2	* 31.1

Rates per 100,000 age-adjusted to 2000 US standard population and 2010 SD census population.

* US Incidence and Mortality rates are from 2009, the 2010 rate is not available at this time. US rates www.seer.cancer.gov

Source: South Dakota Department of Health

Figure 42: Lung and Bronchus Cancer Stage at Diagnosis, South Dakota, 2010



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 2010, 15% of lung cancer patients were diagnosed at localized stage. The more advanced the stage, the poorer the prognosis is for the patient. In 2010, 304 (56%) cases were diagnosed when disease had progressed beyond the lung and metastasized to a distant location. Approximately 83% of cases in 2010 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 dilemma, with an estimated 222,520 new cases in

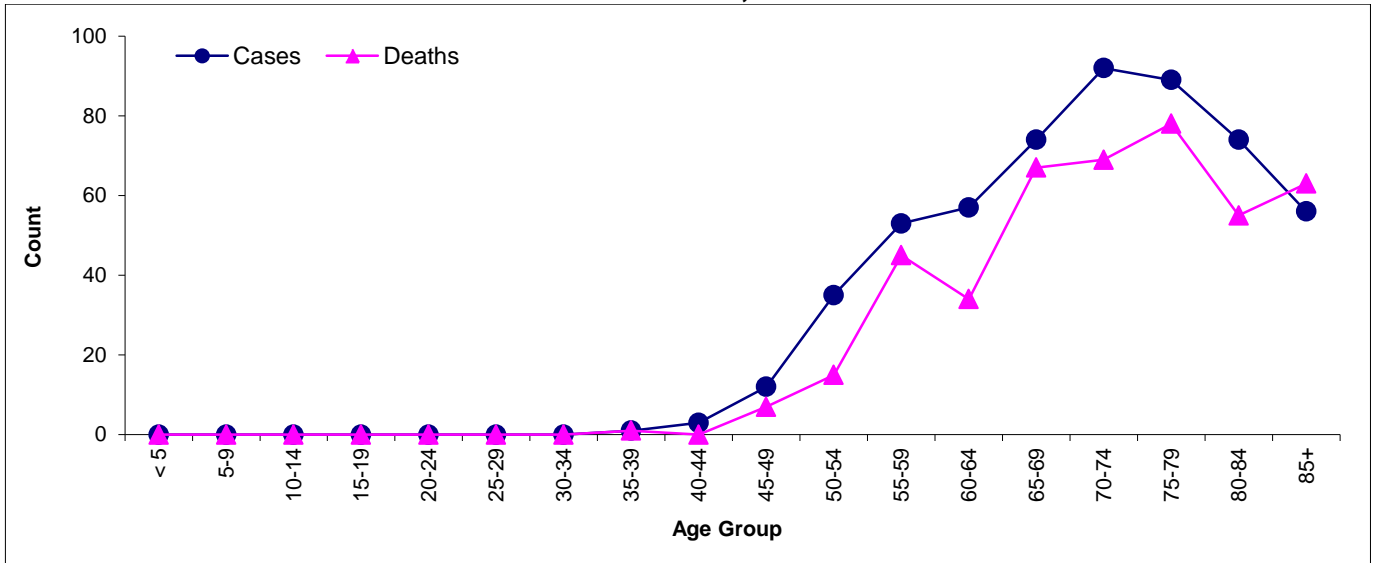
the United States in 2010. Despite the well documented link between tobacco product use and respiratory diseases, including cancer, the outcomes of such efforts to curb the use of tobacco products have been mixed. In South Dakota, there were 546 new invasive lung cancer cases diagnosed in 2010.

Mortality: There were 434 lung cancer deaths in South Dakota in 2010. Incidence and mortality rates have significantly increased during the last century. Lung cancer accounts for approximately 27.6% of all United States deaths attributed to cancer. In South Dakota, lung cancer accounts for 26.3% of deaths from cancer. Lung cancer is the leading cause of cancer deaths in both men and women.

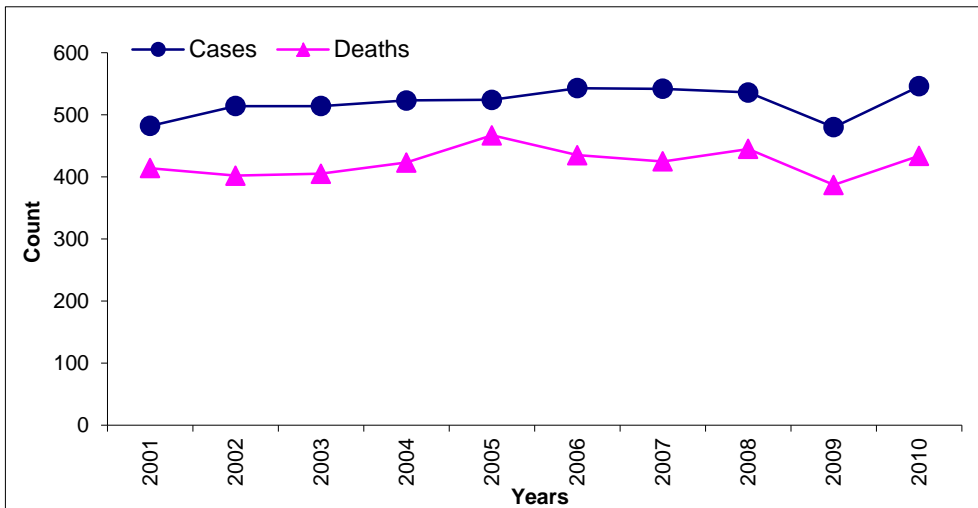
Risk and Associated Factors: Cigarette smoking is by far the most important risk factor for lung cancer. Approximately 90% of lung cancer in men and 80% in women are attributed to cigarette smoking. The lifetime risk of lung cancer in nonsmokers is estimated to be less than 1%. Other risk factors include second hand smoke, and occupational or environmental exposures to substances such as arsenic, benzene, and asbestos.

Prevention and Early Detection: Efforts at early detection by screening have not been effective in reducing mortality rates significantly. Chest x-ray, analysis of cells in sputum and bronchial fiber optic examination are methods used in early diagnosis and detection. The best prevention of lung cancer is to stop smoking or never smoke.

Figure 43: Lung and Bronchus Cancer Number of Cases and Deaths by Age, South Dakota, 2010



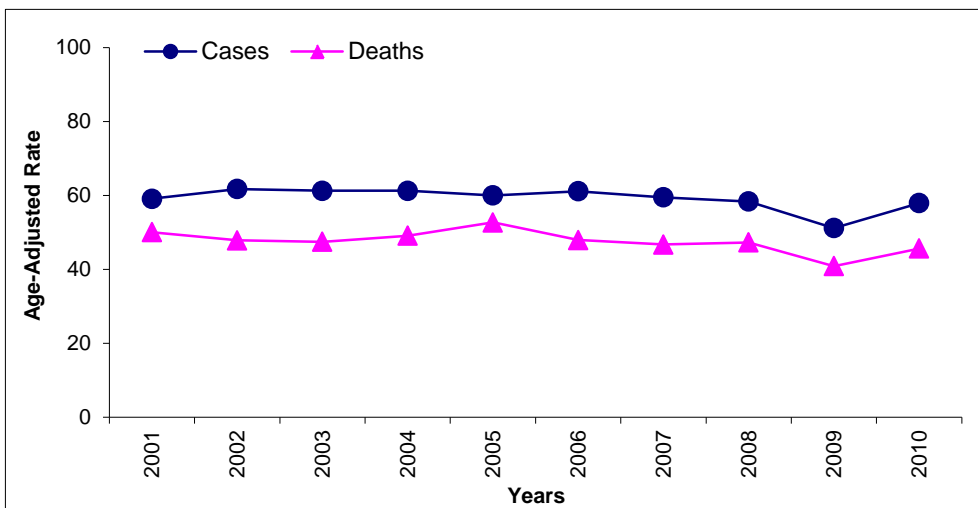
Source: South Dakota Department of Health



Source: South Dakota Department of Health

Figure 44: Lung and Bronchus Cancer Cases and Deaths by Year, South Dakota, 2001 - 2010

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 - 2010