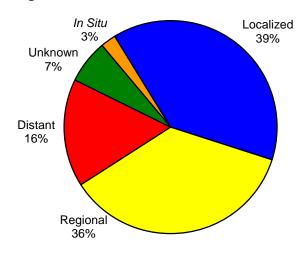
Colorectal Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	459	237	222	165	89	76
		Age Adjusted Rate	48.8	56.1	42.9	16.4	20.9	12.7
	White	# Cases / Deaths	434	228	206	158	86	72
		Age Adjusted Rate	48.7	57.1	41.7	16.4	21.1	12.5
	American Indian	# Cases / Deaths	22	7	15	7	3	4
		Age Adjusted Rate	55.1	47.7	65.1	16.9	11.7	18.3
United States	Total	Age Adjusted Rate	* 45.1	* 52.5	* 39.1	* 15.7	* 19.1	* 13.1
	White	Age Adjusted Rate	* 44.4	* 51.8	* 38.5	* 15.3	* 18.6	* 12.7
	American Indian	Age Adjusted Rate	* 37.9	* 40.1	* 36.1	* 16.7	* 16.6	* 16.4

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

Figure 27: Colorectal Cancer Stage at Diagnosis, South Dakota, 2010



Source: South Dakota Department of Health

## **Descriptive Epidemiology**

Stage at Diagnosis: The prognosis of the patient is greatly influenced by the stage of disease at diagnosis. In 2010, 39% (182) of the cases of colorectal cancer were diagnosed at localized stage. Localized is defined as when the disease is still confined to the colon. The remaining 246 invasive cases (52%) were diagnosed after the disease had spread beyond the colon. Of those 246 cases, 77 were diagnosed at distant stage when the disease had spread further involving other organs. The SEER National Cancer Institute website states that the 5-year survival rate for those who have distant stage at diagnosis is 11.9%.

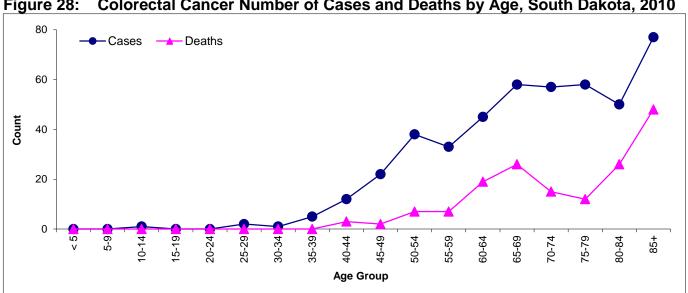
Incidence: Colorectal cancer accounted for 11.7% of all cases reported in South Dakota in 2010. The median age at diagnosis was 69. There were 237 men and 222 women diagnosed with colorectal cancer in 2010 in South Dakota. Overall, colorectal cancer is the fourth most diagnosed cancer. When reviewed by gender, it is the third most diagnosed cancer with 11.8% of the cancers reported in males and 11.5% of the cancers reported in females.

Mortality: Overall incidence and mortality rates for colorectal cancer are decreasing. The overall 5-year survival rate for 2002-2008 from SEER was 64.3% for men and women. In 2010, there were a total of 165 deaths that were attributed to colorectal cancer in South Dakota. Of that number there were 89 men and 76 women. Of that number, 158 were white and seven were American Indian. The median age at death was 78. The SEER National Cancer Institute website states that the United States mortality rate in 2009 was 15.7.

**Risk and Associated Factors:** Studies have shown that diets high in fat and low in fiber result in an increased risk for colon cancer. Also, diets that are low in fresh fruit and vegetables increase the risk factor. Obesity is also listed as a risk factor.

**Prevention and Early Detection:** Doctors believe that most colon cancers develop in colon polyps. Therefore, removing benign colon polyps can prevent colorectal cancer. Colon polyps are initially benign but over years can become cancerous. Screening guidelines suggest having a colonoscopy every ten years beginning at the age of 50.

<sup>\*</sup> US Incidence and Mortality rates are from 2009, the 2010 rate is not available at this time. US rates <a href="www.seer.cancer.gov">www.seer.cancer.gov</a> Source: South Dakota Department of Health



Colorectal Cancer Number of Cases and Deaths by Age, South Dakota, 2010 Figure 28:

Source: South Dakota Department of Health

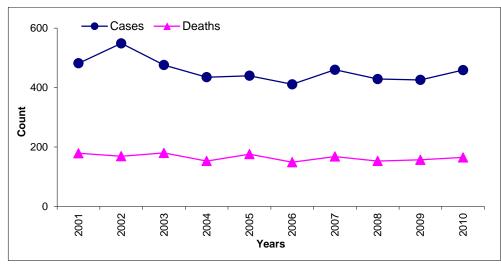


Figure 29: Colorectal **Cancer Cases and Deaths** by Year, South Dakota, 2001 - 2010

The incidence peak for colorectal cancer occurred in 2002. Incidences of colorectal cancer appear to escalate after age 50.

Source: South Dakota Department of Health

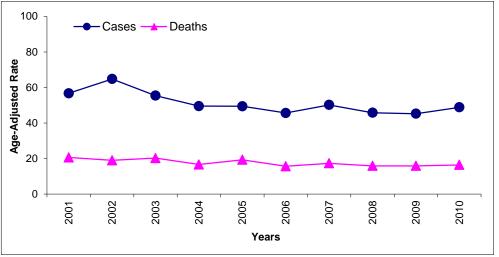


Figure 30: Colorectal Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2010

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