

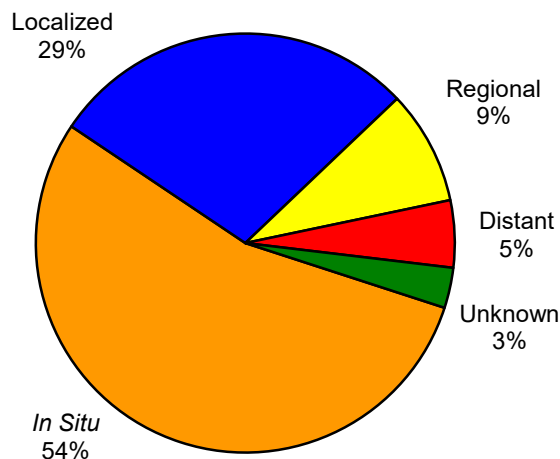
BLADDER

Table 12: Bladder Incidence and Mortality Summary, 2017

Bladder Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	193	155	38	48	29	19
		Age-Adjusted Rate	17.3	30.1	6.6	4.3	6.2	2.8
	White	# Cases / Deaths	188	153	35	46	28	18
		Age-Adjusted Rate	17.9	31.4	6.6	4.3	6.2	2.8
	American Indian	# Cases / Deaths	5	2	3	2	1	1
		Age-Adjusted Rate	14.6	6.1	17.3	7.7	15.4	6.3
United States	Total	Age-Adjusted Rate	19.2	33.4	8.2	4.3	7.3	2.1
	White	Age-Adjusted Rate	21.0	36.3	9.0	4.5	7.7	2.2
	American Indian	Age-Adjusted Rate	10.9	18.3	5.1	2.9	4.8	1.6

¹Includes *in situ* bladder; rates per 100,000 age-adjusted to 2000 US standard population and 2017 SD estimated population. US rates www.seer.cancer.gov Source: South Dakota Department of Health

Figure 15: Bladder Cancer Stage at Diagnosis, South Dakota, 2017



Source: South Dakota Department of Health

Descriptive Epidemiology

Stage at Diagnosis: Cancer is categorized as noninvasive and invasive. There were 105 noninvasive bladder cancers reported in 2017. There were 88 invasive. More than half, 54%, of bladder cancer cases in South Dakota were diagnosed at noninvasive, *in situ* stage. Nationally, 50% of the cases of urinary bladder cancer are diagnosed at the *in situ* stage. In South Dakota, 5% of the cases were not diagnosed until the disease had spread to distant sites. In the United States, distant stage accounted for 4% of the bladder cancers reported.

Incidence: In 2017, it was estimated that almost 79,030 cases of bladder cancer would be diagnosed in the United States. There were

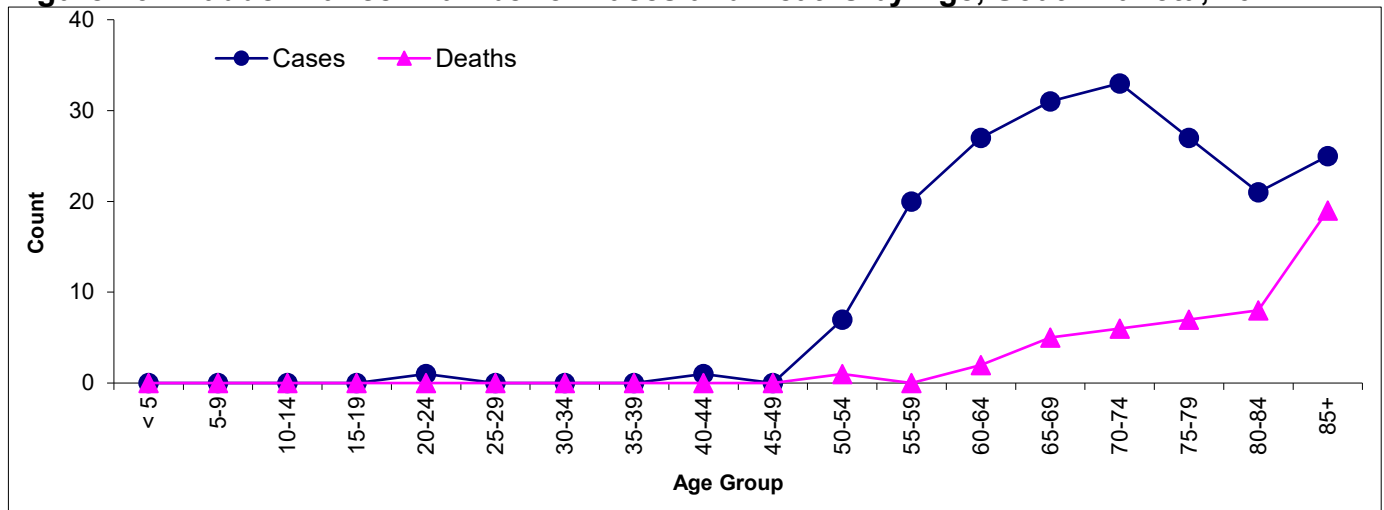
193 cases of bladder cancer reported in South Dakota. There were 155 men and 38 women diagnosed with bladder cancer in 2017. Statistically, men were diagnosed about four times as often as women. There were only five American Indian cases diagnosed in 2017. In the United States it was the sixth most frequent cancer. In South Dakota it was also the sixth most frequent cancer diagnosed.

Mortality: Advances in intravesical therapy and in the treatment of advanced disease with chemotherapy have reduced the percentage of mortality from bladder cancer. In South Dakota, ages from 75 and above have the highest mortality. In 2017, the South Dakota and US mortality rate was 4.3.

Risk and Associated Factors: Bladder cancer was one of the first malignancies associated with industrialization. Cigarette smoking increases the risk of bladder cancer by two times that of a nonsmoker. Work exposure to certain chemicals also increases risk. Some of those with the highest risk are makers of rubber, leather, textiles, paint products, and printing compounds.

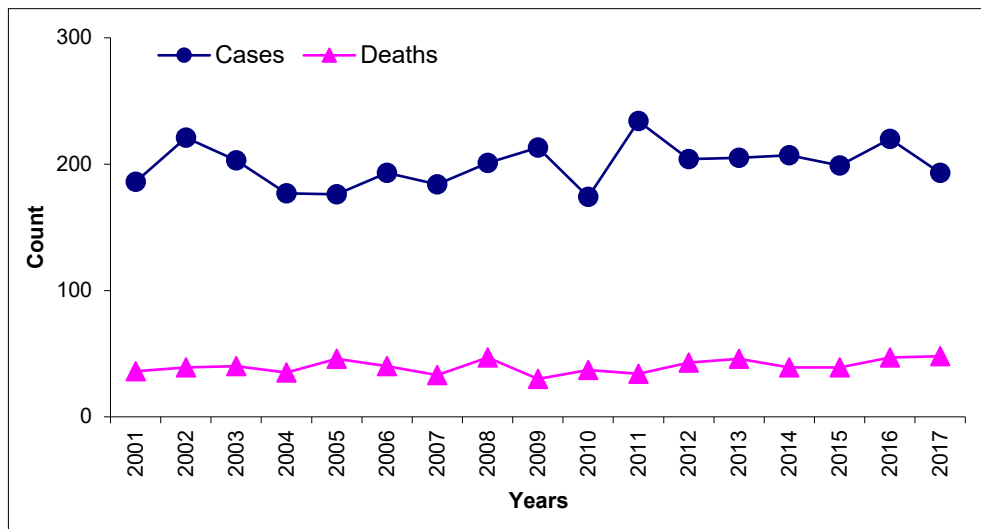
Prevention and Early Detection: Avoiding exposure to chemicals and cigarette smoking are two of the most common recommendations for prevention.

Figure 16: Bladder Cancer Number of Cases and Deaths by Age, South Dakota, 2017



Source: South Dakota Department of Health

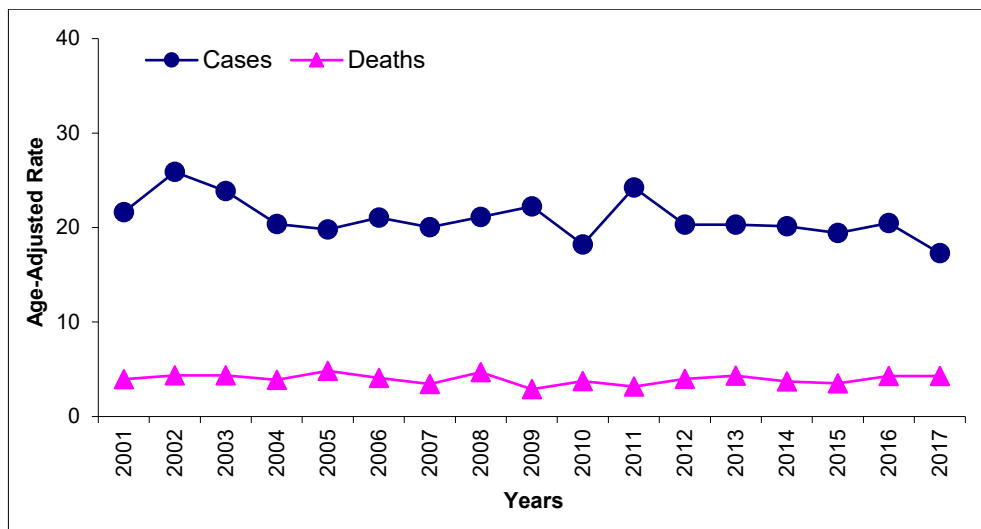
Figure 17: Bladder Cancer Cases and Deaths by Year, South Dakota, 2001 - 2017



Bladder cancer cases were at an all-time high in 2011 with 234 cases.

Source: South Dakota Department of Health

Figure 18: Bladder Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2017



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