

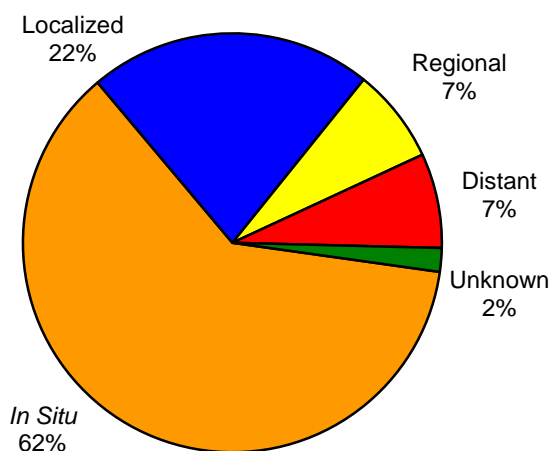
BLADDER

Table 12: Bladder Incidence and Mortality Summary, 2016

Bladder Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	220	160	60	47	37	10
		Age-Adjusted Rate	20.5	32.8	10.6	4.3	8.2	1.4
	White	# Cases / Deaths	212	156	56	45	35	10
		Age-Adjusted Rate	20.9	33.7	10.5	4.3	8.2	1.5
	American Indian	# Cases / Deaths	6	3	3	1	1	0
		Age-Adjusted Rate	15.9	21.4	12.8	2.6	6.5	0.0
United States	Total	Age-Adjusted Rate	19.0	32.9	8.3	4.4	7.5	2.1
	White	Age-Adjusted Rate	20.8	35.9	9.0	4.6	8.0	2.2
	American Indian	Age-Adjusted Rate	9.5	16.8	4.2	3.1	5.6	1.4

¹Includes *in situ* bladder; rates per 100,000 age-adjusted to 2000 US standard population and 2016 SD estimated population. US rates www.seer.cancer.gov Source: South Dakota Department of Health

Figure 15: Bladder Cancer Stage at Diagnosis, South Dakota, 2016



Source: South Dakota Department of Health

Descriptive Epidemiology

Stage at Diagnosis: Cancer is categorized as noninvasive and invasive. There were 135 noninvasive bladder cancers reported in 2016. There were 84 invasive. More than half, 62%, 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 2016, it was estimated that almost 77,000 cases of bladder cancer would be diagnosed in the United States. There were

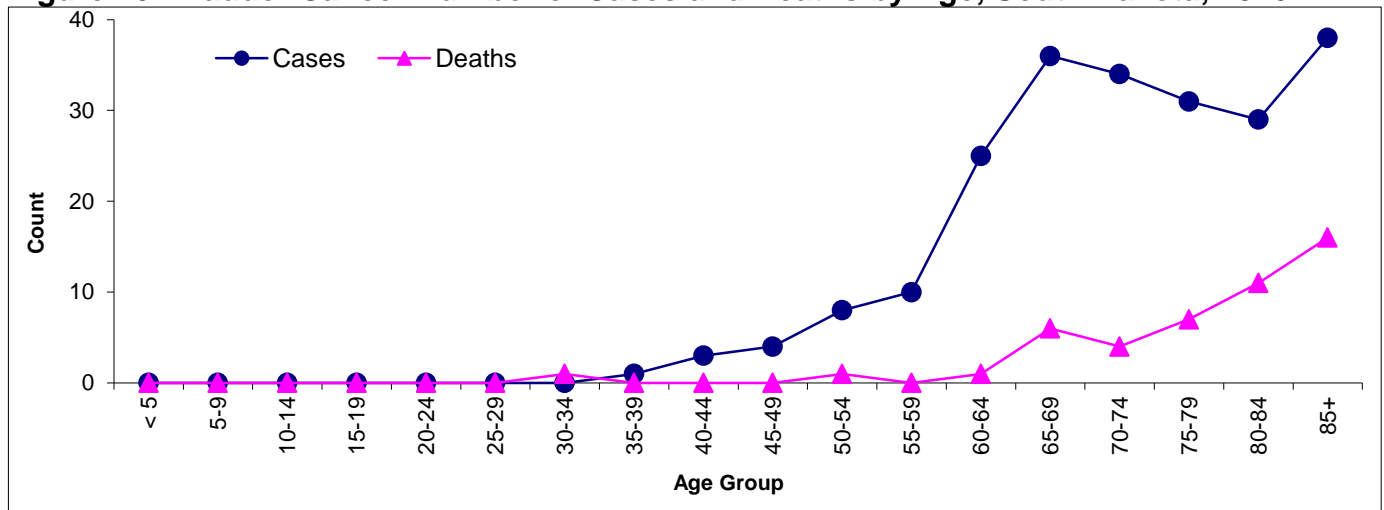
220 cases of bladder cancer reported in South Dakota. There were 160 men and 60 women diagnosed with bladder cancer in 2016. Statistically, men were diagnosed about three times as often as women. There were only six American Indian cases diagnosed in 2016. In the United States it was the eighth most frequent cancer. In South Dakota it was 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 2016, the South Dakota mortality rate was 4.3 compared to the US rate of 4.4.

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.

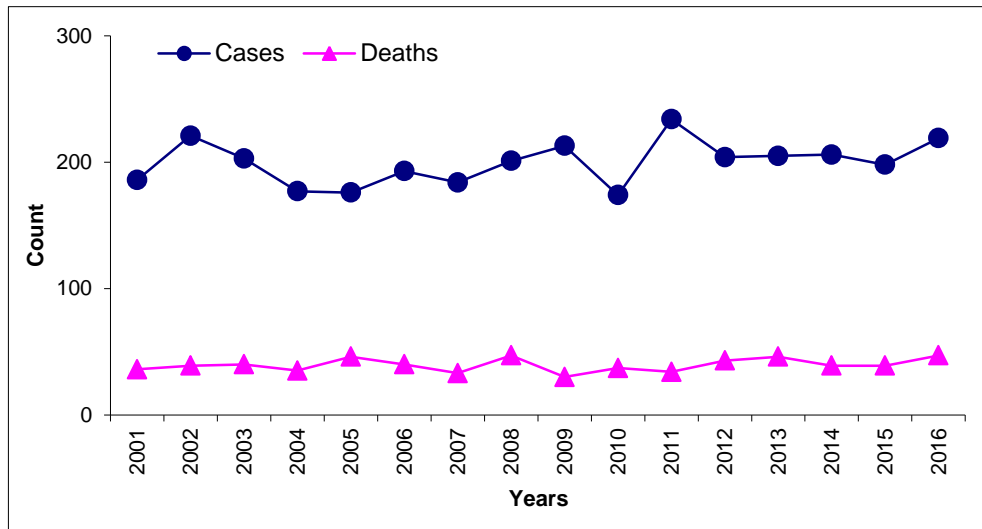
Prevention and Early Detection: Avoiding exposure to chemicals and cigarette smoking are two of the most common recommendations for prevention.

Figure 16: Bladder Cancer Number of Cases and Deaths by Age, South Dakota, 2016



Source: South Dakota Department of Health

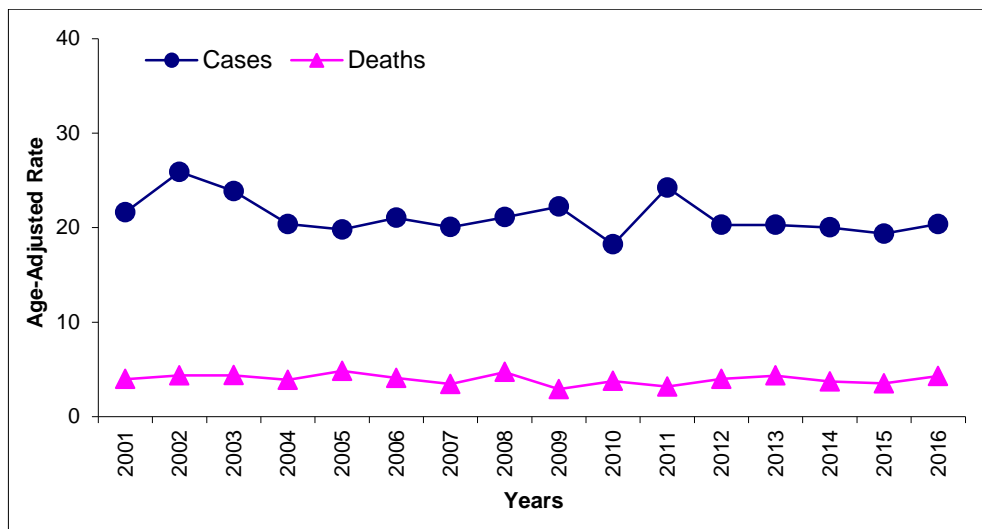
Figure 17: Bladder Cancer Cases and Deaths by Year, South Dakota, 2001 - 2016



Bladder cancer cases increased from 2015 but not as high as 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 - 2016



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