

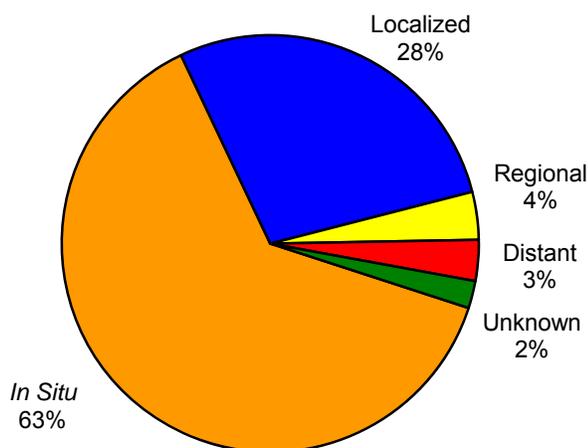
## BLADDER

**Table 12: Bladder Incidence and Mortality Summary, 2013**

Bladder Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	189	140	49	46	38	8
		Age Adjusted Rate	18.9	30.9	9.0	4.3	8.7	1.2
	White	# Cases / Deaths	186	138	48	44	36	8
		Age Adjusted Rate	19.7	32.0	9.5	4.3	8.5	1.2
	American Indian	# Cases / Deaths	2	2	0	2	2	0
		Age Adjusted Rate	3.8	8.1	0.0	7.2	18.0	0.0
United States	Total	Age Adjusted Rate	19.2	33.7	8.1	4.4	7.7	2.1
	White	Age Adjusted Rate	20.9	36.6	8.7	4.7	8.1	2.2
	American Indian	Age Adjusted Rate	8.0	12.5	4.5	2.3	3.2	1.8

<sup>1</sup>Includes *in situ* bladder; Rates per 100,000 age-adjusted to 2000 US standard population and 2013 SD estimated population. US rates [www.seer.cancer.gov](http://www.seer.cancer.gov) Source: South Dakota Department of Health

**Figure 15: Bladder Cancer Stage at Diagnosis, South Dakota, 2013**



Source: South Dakota Department of Health

### Descriptive Epidemiology

**Stage at Diagnosis:** Cancer is categorized as noninvasive and invasive. There were 119 noninvasive bladder cancers reported in 2013. There were 70 invasive. More than half, 63%, 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, 3% 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 2013, it was estimated that over 72,570 cases of bladder cancer would be diagnosed in the United States. There were 189

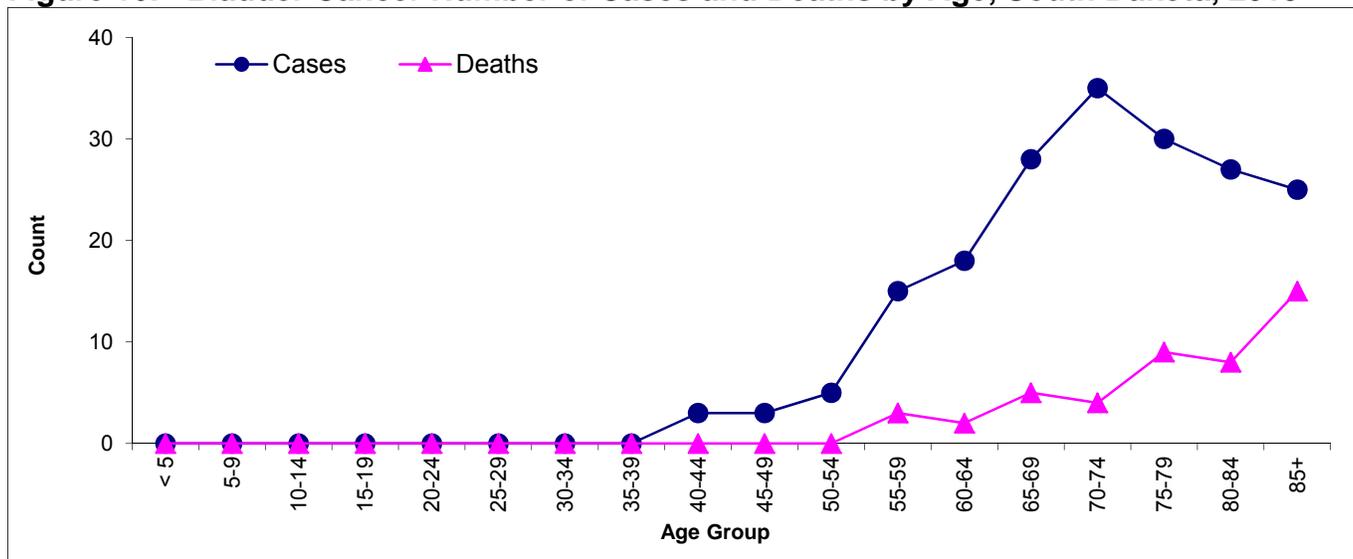
cases of bladder cancer reported in South Dakota. There were 140 men and 49 women diagnosed with bladder cancer in 2013. Statistically, men were diagnosed about three times as often as women. There were only two American Indian cases diagnosed in 2013. In the United States it was the fifth most frequent cancer. In South Dakota it was the sixth most frequent cancer diagnosed.

**Mortality:** Over half (63%) of all bladder cancer cases reported in South Dakota were noninvasive in 2013. 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 70 and above have the highest mortality. In 2013, the South Dakota mortality rate was 4.3 compared to the US rate which was 4.4.

**Risk and Associated Factors:** Bladder cancer was one of the first malignancies associated with industrialization. Cigarette smoking increases the risk for 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.

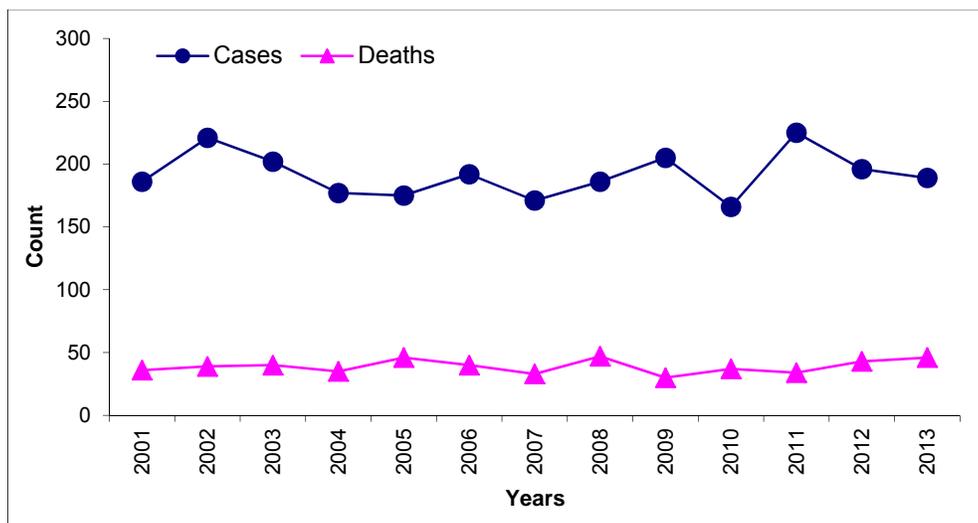
**Prevention and Early Detection:** Avoiding exposure to chemicals and cigarette smoking are two of the most common suggestions for prevention.

**Figure 16: Bladder Cancer Number of Cases and Deaths by Age, South Dakota, 2013**



Source: South Dakota Department of Health

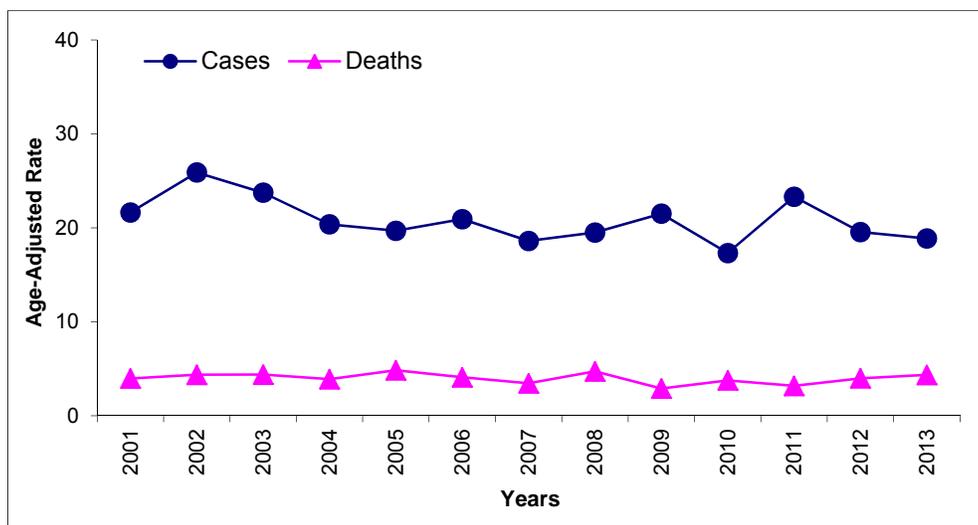
**Figure 17: Bladder Cancer Cases and Deaths by Year, South Dakota, 2001 - 2013**



Bladder cancer cases declined in 2012 and 2013 after tying an all-time high of 221 cases in 2011 the same number as in 2002.

Source: South Dakota Department of Health

**Figure 18: Bladder Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2013**



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