

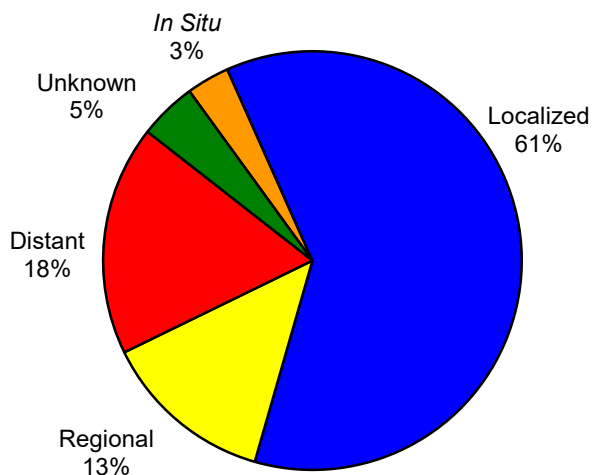
## KIDNEY AND RENAL PELVIS

**Table 17: Kidney and Renal Pelvis Incidence and Mortality Summary, 2017**

Kidney and Renal Pelvis Cancer			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	174	110	64	43	29	14
		Age-Adjusted Rate	16.8	21.9	12.8	3.9	5.6	2.4
	White	# Cases / Deaths	161	101	60	39	26	13
		Age-Adjusted Rate	16.9	21.7	13.2	3.8	5.3	2.5
	American Indian	# Cases / Deaths	11	8	3	3	3	0
		Age-Adjusted Rate	22.8	47.2	9.1	6.5	15.0	0.0
United States	Total	Age-Adjusted Rate	16.4	22.2	11.3	3.5	5.2	2.2
	White	Age-Adjusted Rate	16.9	22.8	11.7	3.7	5.3	2.3
	American Indian	Age-Adjusted Rate	18.8	25.6	13.2	4.9	7.4	2.9

Rates per 100,000 age-adjusted to 2000 US standard population and 2017 SD estimated population. US rates [www.seer.cancer.gov](http://www.seer.cancer.gov) Source: South Dakota Department of Health

**Figure 35: Kidney and Renal Pelvis Cancer Stage at Diagnosis, South Dakota, 2017**



Source: South Dakota Department of Health

### Descriptive Epidemiology

**Stage at Diagnosis:** As with all malignancies, early diagnosis is the key to better prognosis and possible cure. In 2017, 61% of the cases were diagnosed at a localized stage, with another 18% diagnosed at a distant stage. Unfortunately, symptoms do not always reflect the stage of the disease. Blood in the urine is one of the symptoms that frequently present at diagnosis. As with other cancers, renal cancer can spread through the blood-stream and/or lymphatic system. Survival rates associated with kidney cancer depend on how far the disease has progressed, the size of the tumor, and whether or not it has metastasized. The latest five-year survival rate for localized stage kidney cancer is 92.5%. The survival rate for distant stage is 12.0%.

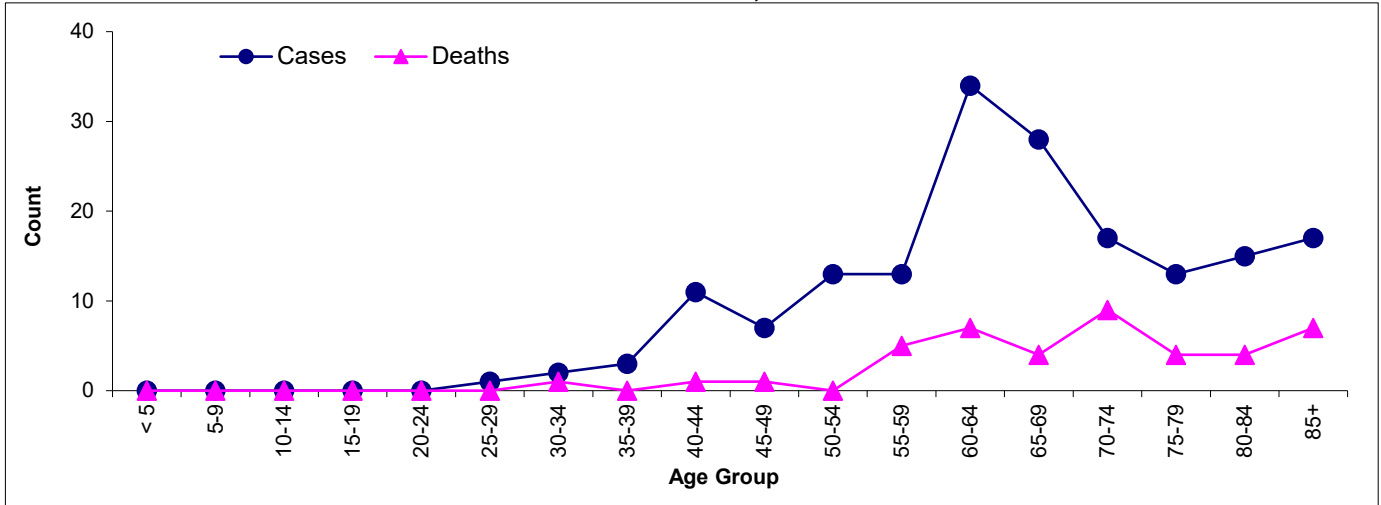
**Incidence:** In 2017, the American Cancer Society estimated there would be 63,990 new cases of kidney cancer in the United States. This accounts for 4.1% of all reported malignancies in the United States. In South Dakota there were 174 reported cases of kidney cancer in 2017, representing 3.7% of all cancer cases with an age-adjusted rate of 16.8 per 100,000 persons. Kidney cancer develops most often in people over 40. There is no known cause of this disease. Doctors can seldom explain why one person develops kidney cancer and another does not. The median age at diagnosis is 65 in South Dakota, and it was 64 in the United States.

**Mortality:** This cancer was the tenth leading cause of cancer death for South Dakota in 2017. In the United States, it was the 13th leading cause of death with a median age of death of 72 years.

**Risk and Associated Factors:** Cigarette smoking increases the risk of developing kidney cancer. The risk seems to increase by the amount one smokes. Obesity is associated with risk, as are exposures to occupational substances such as aniline dyes, benzene, and naphthalene.

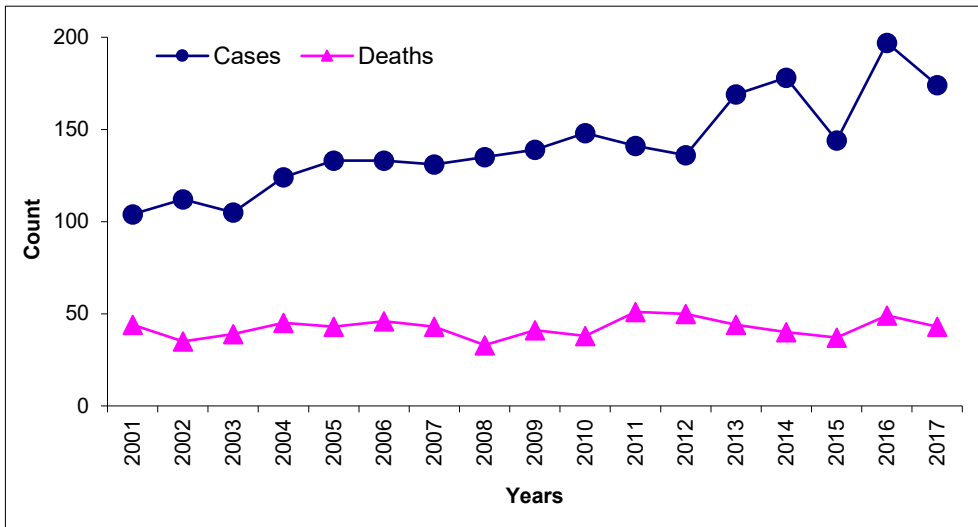
**Prevention and Early Detection:** The main preventive measure is to stop smoking and maintain a healthy weight. It is difficult to diagnose kidney cancer until it becomes symptomatic. There are no known screenings recommended at this time.

**Figure 36: Kidney and Renal Pelvis Cancer Number of Cases and Deaths by Age, South Dakota, 2017**



Source: South Dakota Department of Health

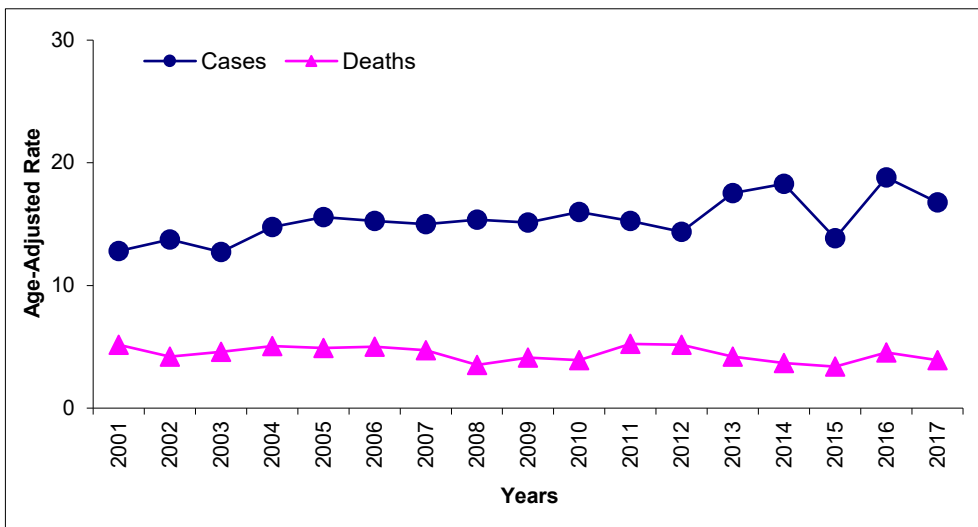
**Figure 37: Kidney and Renal Pelvis Cancer Cases and Deaths by Year, South Dakota, 2001 - 2017**



The incidence peak for kidney and renal pelvis cancer occurred in 2016

Source: South Dakota Department of Health

**Figure 38: Kidney and Renal Pelvis 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