

Table 21: Myeloma Incidence and Mortality Summary, 2010

Myeloma §			Incidence			Mortality		
			Total	Male	Female	Total	Male	Female
South Dakota	Total	# Cases / Deaths	52	29	23	35	15	20
		Age Adjusted Rate	5.6	6.9	4.4	3.7	3.8	3.6
	White	# Cases / Deaths	52	29	23	35	15	20
Age Adjusted Rate		5.9	7.3	4.7	3.9	4.0	3.8	
American Indian	# Cases / Deaths	0	0	0	0	0	0	
	Age Adjusted Rate	0.0	0.0	0.0	0.0	0.0	0.0	
United States	Total	Age Adjusted Rate	* 5.6	* 6.9	* 4.6	* 3.3	* 4.2	* 2.6
	White	Age Adjusted Rate	* 5.2	* 6.6	* 4.1	* 3.1	* 4.0	* 2.4
	American Indian	Age Adjusted Rate	* 3.5	* 2.7	* 3.9	* 3.3	* 3.4	* 3.3

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

§ can include NOS, multiple, plasma cell and solitary. * US Incidence and Mortality rates are from 2009, the 2010 rate is not available at this time. US rates www.seer.cancer.gov Source: South Dakota Department of Health

Descriptive Epidemiology

Stage at Diagnosis: Stage of disease for myeloma is always distant per the SEER Summary Staging Manual.

Incidence: Myeloma is a systemic malignancy of plasma cells that is highly treatable, but rarely curable. It is potentially curable when it presents as a solitary plasmacytoma of the bone or as an extramedullary plasmacytoma. In South Dakota during 2010, myeloma accounted for 1.3% of total cancer cases reported. Median age at diagnosis in South Dakota was 73 and the United States was 69. The national incidence rate is higher in men (7.4) than women (4.7). In South Dakota the incidence rate is also higher in men (6.9) than women (4.4). Myeloma is more common among the elderly. African Americans have approximately twice the incidence and mortality rates of whites.

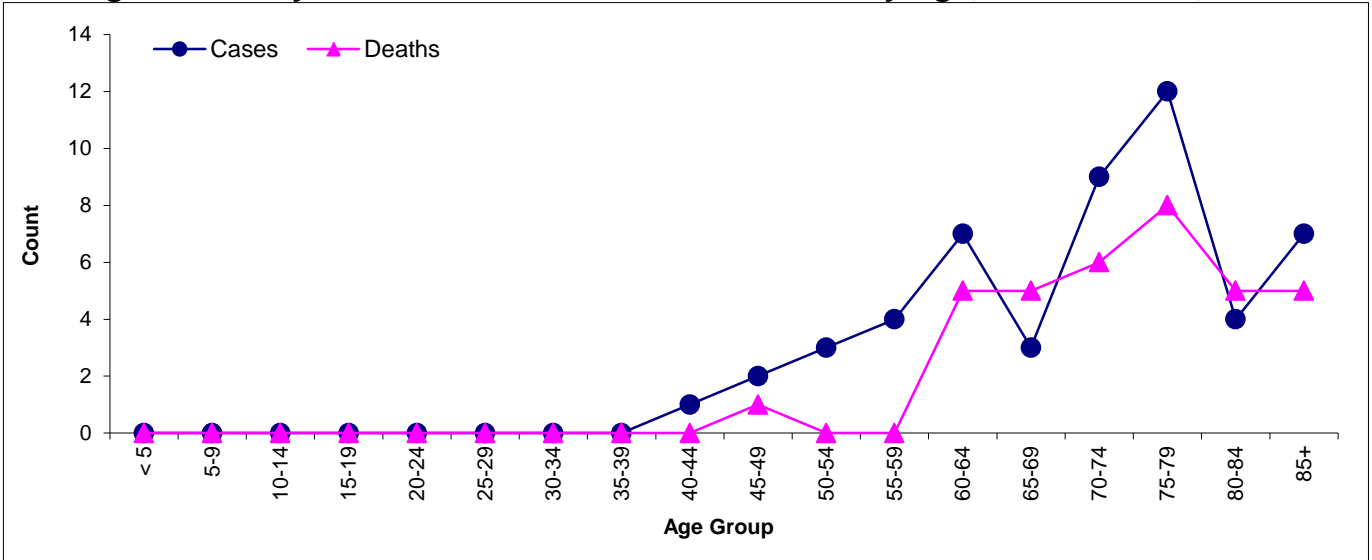
Mortality: The median survival prior to the common use of chemotherapy was about seven months. After the introduction of chemotherapy, prognosis improved significantly with a median survival of 24 to 30 months and a 10-year survival of 3%. During 2010, there were 35 deaths attributed to myeloma in South Dakota. Fifteen were male and 20 were female. The mortality rate for South Dakota is 3.7. For men the rate is 3.8 and for women it is 3.6. These

rates compare to United States mortality rates in 2009 of 3.3, 4.2 for men and 2.6 for women.

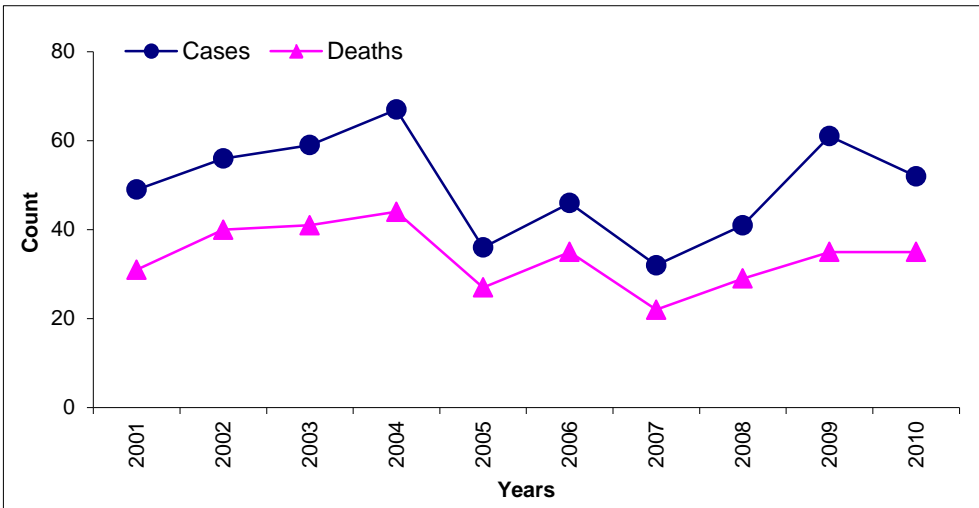
Risk and Associated Factors: The etiology of myeloma is relatively unknown. There are many research studies evaluating the exposure of individuals with myeloma to various substances.

Early Detection and Prevention: There is no known test for screening for early detection. Some cases of myeloma progress very slowly, and they are referred to as smoldering or indolent myeloma. The presence of plasma cells and proteinuria do not automatically lead to myeloma, but it can be an early symptom. This disease is often asymptomatic in early stages of the disease. Myeloma is most often diagnosed clinically by radiological procedures and through cytology.

Figure 50: Myeloma Number of Cases and Deaths by Age, South Dakota, 2010



Source: South Dakota Department of Health



Source: South Dakota Department of Health

Figure 51: Myeloma Cancer Cases and Deaths by Year, South Dakota, 2001 - 2010

The incidence count for myeloma cancers took a sharp drop from 2004 to 2005.

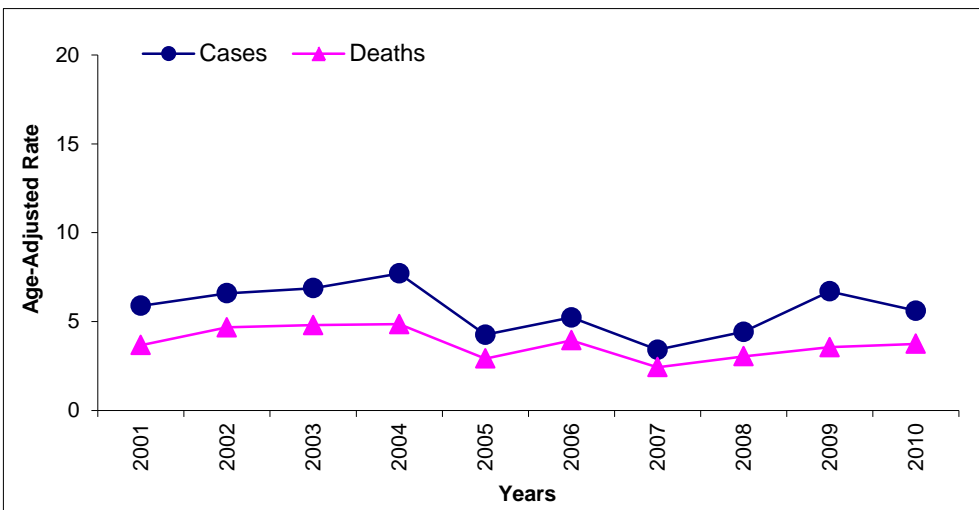


Figure 52: Myeloma Cancer Age-Adjusted Rates, Cases, and Deaths by Year, South Dakota, 2001 - 2010

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