

Table 7 : Cancer Deaths and Mortality Rates by County
South Dakota, 2013 and 2009-2013 Average

VII. CANCER MORTALITY

Cancer age-adjusted death rates for 2013 ranged from a low of 27.4 in Campbell County to a high of 299.7 in Sanborn County. South Dakota's age adjusted death rate was 153.7 in 2013 compared to a 5-year death rate of 161.6.

In 2013, four counties had a significantly lower rate than that of the entire state and one had a significantly higher rate. The five-year rates show seven counties having significantly lower rates and four counties with significantly higher rates. South Dakota's mortality rate for 2009-2013 was 161.6 per 100,000 persons.

The United States mortality rate for 2013 was 163.0 and the South Dakota mortality rate was 153.7 per 100,000 persons. South Dakota's mortality rate is significantly lower than the United States rate for 2013.

The South Dakota 2013 mortality rates are displayed in a state map on page 15 of this report.

County	2013		2009-2013 [^]		
	Deaths	Rate	Deaths	Rate	
South Dakota	1,574	153.7	1,602	161.6	
Aurora	4	80.5	7	156.3	
Beadle	40	155.7	39	158.6	
Bennett	3	99.6	5	162.6	
Bon Homme	16	113.9	16	143.9	
Brookings	52	183.1	46	165.0	
Brown	88	179.7	73	153.6	
Brule	8	109.6	13	172.4	
Buffalo	3	194.8	3	245.8	
Butte	18	116.5	26	192.1	
Campbell	*	27.4	▼	3	95.9
Charles Mix	14	109.0	23	180.8	
Clark	10	136.3	10	137.0	
Clay	22	174.7	21	173.1	
Codington	55	161.2	56	167.3	
Corson	8	207.7	9	237.3	
Custer	19	126.1	22	164.2	
Davison	47	176.7	41	151.6	
Day	8	76.3	▼	17	151.9
Deuel	9	116.6	8	112.2	
Dewey	8	180.2	10	225.5	
Douglas	7	121.9	9	166.5	
Edmunds	15	242.5	12	167.5	
Fall River	26	214.2	25	186.0	
Faulk	11	281.9	6	141.4	
Grant	13	114.7	16	142.3	
Gregory	9	116.3	13	169.5	
Haakon	6	168.7	6	172.3	
Hamlin	15	164.7	12	146.6	
Hand	16	210.1	8	131.2	
Hanson	3	102.4	5	151.2	
Harding	*	77.5	*	73.3	
Hughes	31	139.3	33	159.6	
Hutchinson	13	92.3	▼	19	134.0
Hyde	0	0.0	3	112.0	
Jackson	7	188.6	5	153.8	
Jerauld	6	128.2	6	167.4	
Jones	0	0.0	*	105.1	
Kingsbury	18	199.9	15	163.1	
Lake	20	112.5	26	152.1	
Lawrence	58	161.1	55	162.5	
Lincoln	37	90.0	▼	44	122.9
Lyman	5	91.5	6	134.2	
McCook	9	115.6	17	205.3	
McPherson	18	194.4	5	92.6	
Marshall	7	138.3	14	194.4	
Meade	38	123.3	40	149.6	
Mellette	3	121.5	5	237.7	
Miner	6	117.7	8	182.4	
Minnehaha	313	176.0	312	178.7	
Moody	12	159.7	14	171.3	
Oglala Lakota	22	282.5	▲	16	220.4
Pennington	183	145.4	186	157.4	
Perkins	6	93.8	10	183.2	
Potter	5	83.5	8	148.7	
Roberts	28	203.5	26	188.5	
Sanborn	11	299.7	6	155.3	
Spink	25	238.9	17	154.2	
Stanley	3	109.3	6	162.4	
Sully	3	129.0	4	182.9	
Todd	10	163.1	12	235.0	
Tripp	16	164.1	15	159.6	
Turner	21	171.5	19	151.8	
Union	23	131.7	28	162.2	
Walworth	18	190.0	15	145.2	
Yankton	43	145.9	41	136.6	
Ziebach	*	54.4	▼	*	90.0

* Counts less than three are suppressed. Mortality rates with counts less than 20 are generally considered unstable. ▲ Rate significantly higher; ▼ Rate significantly lower
^ Number of the cases and rates are averaged over the five-year period.

Rates per 100,000 age-adjusted to 2000 US standard population and SD 2013 estimated population. Source: South Dakota Department of Health

Table 8: Age-adjusted Mortality Rates by County for Selected Sites, 2013

	Colorectal		Lung and Bronchus		Female Breast		Prostate		Bladder		NHL	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
South Dakota	166	16.5	416	40.9	108	19.3	76	17.1	46	4.3	59	5.4
Aurora	0	0.0	0	0.0	3	93.3	0	0.0	0	0.0	0	0.0
Beadle	3	10.4	10	43.9	0	0.0	*	8.0	*	5.1	*	2.7
Bennett	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bon Homme	4	29.7	3	31.7	*	12.3	*	27.2	0	0.0	*	5.0
Brookings	7	27.6	15	53.9	0	0.0	*	8.6	*	2.8	5	17.4
Brown	12	24.2	32	64.9	5	18.3	*	10.2	*	4.0	*	1.8
Brule	*	25.3	*	13.6	*	60.0	*	37.4	0	0.0	0	0.0
Buffalo	*	136.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Butte	*	6.0	5	33.5	*	12.6	*	34.7	*	5.9	*	6.0
Campbell	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Charles Mix	*	17.4	5	38.2	*	15.7	*	29.8	0	0.0	0	0.0
Clark	*	18.5	4	57.3	0	0.0	0	0.0	0	0.0	0	0.0
Clay	*	15.3	6	55.7	*	14.9	0	0.0	*	6.1	0	0.0
Codington	8	25.7	17	48.9	*	11.5	*	11.8	*	5.5	*	2.9
Corson	*	60.2	*	21.5	0	0.0	*	43.9	0	0.0	*	21.8
Custer	*	8.2	4	25.1	*	25.5	0	0.0	0	0.0	*	8.6
Davison	6	25.6	16	57.5	3	12.5	*	7.8	0	0.0	3	9.9
Day	*	10.2	6	59.6	0	0.0	0	0.0	0	0.0	0	0.0
Deuel	0	0.0	3	37.2	0	0.0	*	26.8	0	0.0	*	12.1
Dewey	*	18.5	*	25.9	0	0.0	0	0.0	*	26.7	0	0.0
Douglas	*	17.0	*	41.9	*	27.9	0	0.0	0	0.0	*	8.2
Edmunds	*	8.9	4	76.7	0	0.0	*	63.3	0	0.0	0	0.0
Fall River	5	46.2	7	52.2	*	12.0	0	0.0	*	7.7	*	23.8
Faulk	*	14.6	*	25.0	*	115.3	*	90.6	0	0.0	0	0.0
Grant	*	10.4	5	46.7	0	0.0	0	0.0	0	0.0	0	0.0
Gregory	0	0.0	*	26.4	0	0.0	*	21.5	0	0.0	*	27.8
Haakon	*	53.9	0	0.0	0	0.0	0	0.0	*	27.4	0	0.0
Hamlin	*	20.4	4	43.5	*	11.2	3	82.1	0	0.0	*	24.4
Hand	*	8.4	3	43.0	*	42.7	*	23.9	*	16.1	3	25.3
Hanson	0	0.0	*	71.5	0	0.0	0	0.0	0	0.0	0	0.0
Harding	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hughes	7	31.3	5	20.8	*	8.7	*	9.5	0	0.0	*	4.7
Hutchinson	*	26.8	3	19.1	0	0.0	0	0.0	0	0.0	*	7.3
Hyde	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Jackson	0	0.0	*	53.3	0	0.0	0	0.0	0	0.0	0	0.0
Jerauld	*	20.5	0	0.0	*	52.9	0	0.0	0	0.0	*	16.3
Jones	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Kingsbury	3	30.0	5	54.0	*	17.2	0	0.0	0	0.0	*	9.5
Lake	3	18.3	5	27.4	*	13.4	*	20.6	*	7.4	*	4.5
Lawrence	6	18.4	9	26.1	5	25.1	3	22.0	*	4.8	4	10.9
Lincoln	4	10.1	11	28.0	3	11.2	3	13.7	*	2.1	0	0.0
Lyman	0	0.0	*	36.0	*	76.4	0	0.0	0	0.0	0	0.0
McCook	5	48.9	4	45.9	0	0.0	*	21.8	*	7.7	*	11.0
McPherson	*	11.2	*	46.8	*	79.4	*	29.3	0	0.0	0	0.0
Marshall	0	0.0	*	24.1	*	23.2	*	30.2	0	0.0	0	0.0
Meade	4	9.9	11	36.6	3	18.6	0	0.0	*	4.0	*	2.7
Mellette	*	33.7	*	30.1	0	0.0	0	0.0	*	57.8	0	0.0
Miner	0	0.0	*	50.2	0	0.0	*	53.5	0	0.0	0	0.0
Minnehaha	26	14.7	86	48.8	30	28.0	15	21.6	10	5.9	12	6.6
Moody	3	45.0	0	0.0	0	0.0	*	28.8	0	0.0	*	9.9
Oglala Lakota	*	8.3	7	90.8	0	0.0	0	0.0	*	16.4	0	0.0
Pennington	12	10.3	52	39.9	13	17.9	9	17.6	6	4.9	*	0.7
Perkins	0	0.0	0	0.0	*	74.5	*	38.3	0	0.0	*	10.7
Potter	0	0.0	*	24.1	0	0.0	*	43.1	0	0.0	0	0.0
Roberts	*	11.4	4	28.6	*	30.1	*	29.3	*	13.1	*	7.6
Sanborn	0	0.0	5	132.5	0	0.0	*	60.1	*	34.9	*	20.4
Spink	*	10.2	7	66.7	3	54.7	*	16.8	*	15.3	*	10.2
Stanley	0	0.0	0	0.0	0	0.0	*	73.8	0	0.0	0	0.0
Sully	0	0.0	*	37.0	0	0.0	0	0.0	0	0.0	0	0.0
Todd	4	54.1	0	0.0	0	0.0	*	74.8	0	0.0	0	0.0
Tripp	*	10.0	3	39.4	*	9.6	*	36.1	*	16.4	0	0.0
Turner	*	16.3	6	47.1	*	15.2	*	21.4	0	0.0	3	27.5
Union	4	20.4	6	32.1	4	43.2	0	0.0	*	5.6	0	0.0
Walworth	0	0.0	6	64.5	3	55.2	*	26.0	0	0.0	0	0.0
Yankton	3	8.4	9	32.0	*	10.3	*	7.5	*	5.4	*	2.8
Ziebach	*	54.4	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

Note: * Counts less than 3 are suppressed. Mortality rates with counts less than 20 are generally considered unstable. Rates per 100,000 age-adjusted to the 2000 US standard population and 2013 SD estimated population.

Source: South Dakota Department of Health

Table 9: Age-adjusted Mortality Rates by Site, Gender, and Race, South Dakota, 2013

	TOTAL		MALE		FEMALE		WHITE		AMERICAN INDIAN	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Total	1,574	153.7	840	184.3	734	129.7	1,461	151.3	91	240.9
Oral Cavity	18	1.7	12	2.6	6	1.1	15	1.5	2	6.1
Lip	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Tongue	5	0.5	4	0.7	1	0.2	5	0.5	0	0.0
Salivary Gland	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Floor of Mouth	1	0.1	0	0.0	1	0.2	1	0.1	0	0.0
Gum and Other Mouth	4	0.3	2	0.4	2	0.3	4	0.3	0	0.0
Nasopharynx	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Hypopharynx	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Tonsil	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Oropharynx	3	0.3	2	0.5	1	0.2	1	0.1	1	3.1
Other Oral Cavity and Pharynx	4	0.4	3	0.7	1	0.2	3	0.3	1	3.1
Digestive System	395	39.3	222	48.6	173	30.3	357	37.5	31	73.4
Esophagus	44	4.4	38	8.4	6	1.1	42	4.5	2	5.4
Stomach	24	2.4	13	2.8	11	1.9	23	2.5	0	0.0
Small Intestine	5	0.4	4	0.8	1	0.1	5	0.5	0	0.0
Colorectal	166	16.5	89	19.9	77	13.2	148	15.6	17	41.8
Colon Excluding Rectum	131	13.0	67	15.1	64	10.9	117	12.2	13	32.7
Rectum and Rectosigmoid	35	3.5	22	4.8	13	2.4	31	3.3	4	9.1
Anus, Anal Canal and Anorectum	3	0.3	1	0.2	2	0.4	3	0.3	0	0.0
Liver and Intrahepatic Bile Duct	38	3.9	26	6.0	12	2.2	31	3.4	6	13.3
Gallbladder	3	0.3	0	0.0	3	0.6	3	0.4	0	0.0
Other Biliary	2	0.2	2	0.4	0	0.0	2	0.2	0	0.0
Pancreas	109	10.6	49	10.1	60	10.5	99	10.2	6	13.0
Retroperitoneum	1	0.1	0	0.0	1	0.3	1	0.2	0	0.0
Peritoneum, Omentum and Mesentery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Respiratory	423	41.6	241	52.9	182	32.9	396	41.2	24	64.6
Nose, Nasal Cavity and Middle Ear	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Larynx	6	0.6	1	0.3	5	0.8	6	0.6	0	0.0
Lung and Bronchus	416	40.9	239	52.4	177	32.1	389	40.5	24	64.6
Pleura	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Mediastinum and Other Resp Organs	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Bones and Joints	4	0.4	1	0.2	3	0.6	4	0.5	0	0.0
Soft Tissue	16	1.8	11	2.6	5	1.2	16	2.0	0	0.0
Skin	31	3.0	23	5.0	8	1.5	29	3.1	0	0.0
Melanoma of the Skin	21	2.1	13	2.7	8	1.5	20	2.2	0	0.0
Other Nonepithelial Skin	10	0.9	10	2.3	0	0.0	9	0.9	0	0.0
Breast	109	10.5	1	0.2	108	19.3	107	11.0	2	3.5
Breast, Female	108	19.3			108	19.3	106	20.3	2	6.6
Breast, Male	1	0.2	1	0.2			1	0.2	0	0.0
Female	66	11.2			66	11.2	54	12.5	9	41.4
Vulva	4	0.8			4	0.8	2	0.5	2	9.1
Vagina	0	0.0			0	0.0	0	0.0	0	0.0
Cervix Uteri	8	1.6			8	1.6	4	0.9	2	6.0
Corpus and Uterus, NOS	17	2.6			17	2.6	15	3.5	1	6.4
Corpus Uteri	11	1.7			11	1.7	9	1.5	1	6.4
Uterus, NOS	6	0.9			6	0.9	6	1.0	0	0.0
Ovary	36	5.9			36	5.9	32	5.7	4	19.9
Other Female Genital Organs	1	0.2			1	0.2	1	0.2	0	0.0

**Table 9: Age-adjusted Mortality Rates by Site, Gender, and Race, South Dakota, 2013
(continued)**

	TOTAL		MALE		FEMALE		WHITE		AMERICAN INDIAN	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
Male	79	17.8	79	17.8			73	17.3	4	34.0
Penis	2	0.4	2	0.4			2	0.4	0	0.0
Prostate	76	17.1	76	17.1			70	16.6	4	34.0
Testis	1	0.3	1	0.3			1	0.3	0	0.0
Other Male Genital Organs	0	0.0	0	0.0			0	0.0	0	0.0
Urinary	92	8.7	64	14.0	28	4.7	87	8.7	5	12.2
Bladder	46	4.3	38	8.7	8	1.2	44	4.3	2	7.2
Kidney and Renal Pelvis	44	4.2	26	5.3	18	3.2	41	4.2	3	5.0
Ureter	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Urinary Organs	2	0.2	0	0.0	2	0.3	2	0.2	0	0.0
Eye and Orbit	2	0.2	0	0.0	2	0.4	2	0.3	0	0.0
Brain and CNS	55	5.4	34	6.9	21	4.2	53	5.7	1	1.1
Brain	53	5.3	34	6.9	19	3.9	51	5.5	1	1.1
Meninges and CNS	2	0.2	0	0.0	2	0.3	2	0.2	0	0.0
Endocrine	5	0.5	3	0.6	2	0.4	4	0.4	1	4.2
Thyroid	4	0.4	2	0.5	2	0.4	3	0.4	1	4.2
Other Endocrine	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Lymphomas	60	5.5	28	5.9	32	5.0	58	5.6	1	1.7
Hodgkin's Disease	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Non-Hodgkin's Lymphomas	59	5.4	27	5.7	32	5.0	57	5.5	1	1.7
Multiple Myeloma	32	3.0	21	4.6	11	1.9	30	2.9	2	5.1
Leukemia	89	8.9	51	12.0	38	6.4	86	9.0	2	6.6
Acute Lymphocytic	9	1.0	7	1.7	2	0.3	8	1.0	1	2.1
Chronic Lymphocytic	22	2.1	9	2.2	13	2.1	22	2.3	0	0.0
Other Lymphocytic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Acute Myeloid	37	3.6	22	5.1	15	2.5	36	3.7	0	0.0
Acute Monocytic	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Chronic Myeloid	5	0.4	3	0.7	2	0.3	5	0.5	0	0.0
Other Myeloid/Monocytic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other Acute Leukemia	7	0.7	4	1.0	3	0.5	7	0.8	0	0.0
Other Leukemia	8	0.8	5	1.2	3	0.7	7	0.8	1	4.5
Mesothelioma	11	1.0	9	1.8	2	0.4	11	1.1	0	0.0
Immunoproliferative Diseases	1	0.1	1	0.2	0	0.0	1	0.1	0	0.0
Ill-Defined and Unspecified Sites	86	8.3	39	8.2	47	8.4	78	8.0	7	23.9

Rates per 100,000 age-adjusted to the 2000 US standard population and 2013 SD estimated population.

Source: South Dakota Department of Health

Table 9 shows death and age-adjusted death rates by SEER recode primary sites (Appendix D), gender and race. Approximately 1,600 persons die from cancer in South Dakota each year with little or no change in counts. Overall more males than females die from cancer.

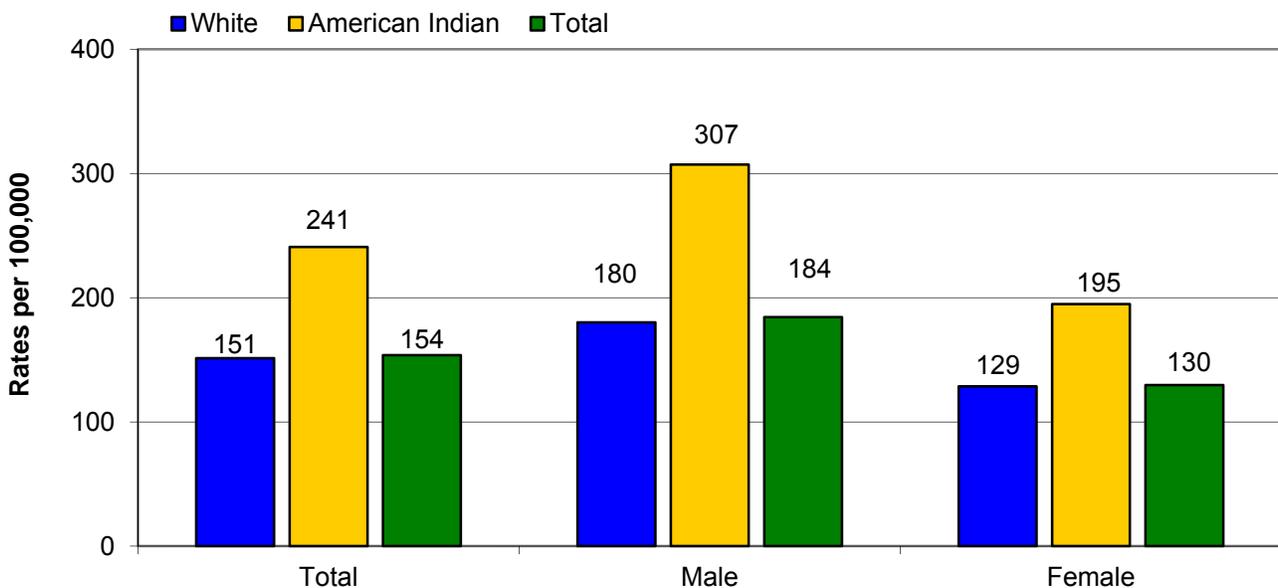
Table 10: Percentage of Cancer Deaths by Age Groups and Selected Primary Sites, South Dakota, 2013

Age Group	0-19	20-34	35-49	50-64	65-74	75-84	85+
All Sites	0%	1%	4%	23%	24%	29%	20%
Bladder	0%	0%	0%	11%	20%	37%	33%
Female Breast	0%	0%	9%	29%	16%	20%	26%
Colorectal	0%	0%	8%	23%	19%	27%	23%
Corpus and Uterus, NOS	0%	0%	0%	12%	24%	18%	47%
Meninges, Brain and CNS	4%	5%	5%	33%	25%	16%	11%
Kidney and Renal Pelvis	0%	0%	0%	34%	18%	27%	20%
Leukemia	0%	3%	6%	12%	25%	30%	24%
Lung and Bronchus	0%	0%	1%	23%	27%	36%	13%
Melanoma of the Skin	0%	0%	10%	48%	19%	14%	10%
Non-Hodgkin's Lymphoma	0%	0%	3%	15%	17%	27%	37%
Pancreas	1%	0%	2%	24%	35%	26%	13%
Prostate	0%	0%	1%	11%	28%	24%	37%

Source: South Dakota Department of Health

Overall, in 2013 more persons 75 to 84 years of age died from cancer in South Dakota than any other age group (Table 10). However, there would be cause for concern if too many people die from cancer at a young age.

Figure 8: All Sites Cancer Mortality Rates by Race, and Gender, South Dakota, 2013



Note: Rates per 100,000 age-adjusted to 2000 US standard population and 2013 SD estimated population.
Source: South Dakota Department of Health

Figure 8 illustrates that American Indian males had a higher death rate than any other group. In 2012 American Indian females had a higher death rate than their male counterparts. American Indian males and females had higher death rates than whites.