

# Mortality

<b>An Overview: 2017</b>	
Total South Dakota Resident Deaths	7,991
Crude Death Rates per 100,000 Population	
South Dakota	918.9
United States (2016)	849.3
Age-Adjusted Death Rates per 100,000 Population	
South Dakota	736.1
United States (2016)	728.8

The remaining categories (Single-race Black, Single-race Asian, Single-race Pacific Islander, and Two or more races) are included in the totals, but are not shown specifically in any tables.

Table 45, below, displays the deaths, crude death rates, and age-adjusted death rates for the United States and South Dakota residents for the past 17 years.

The total number of South Dakota resident deaths in 2017, (7,991 deaths) is the highest number of deaths in the past 17 years.

Race is assigned based on standards set forth by the National Center for Health Statistics and the US Census Bureau in order for South Dakota’s race data to be comparable to other areas. All race data in this section are categorized in the following manner:

- Single-race white
- Single-race American Indian

**Table 45  
Resident Deaths, Crude Death Rates, and Age-Adjusted Death Rates,  
South Dakota and United States, 2001-2017**

Year	United States			South Dakota		
	Number	Crude Rate	Age-Adjusted Rate	Number	Crude Rate	Age-Adjusted Rate
2017	NA*	NA*	NA*	7,991	918.9	736.1
2016	2,744,248	849.3	728.8	7,838	905.7	718.6
2015	2,712,630	844.0	733.1	7,724	899.7	714.9
2014	2,626,418	823.7	724.6	7,500	879.1	709.9
2013	2,596,993	821.5	731.9	7,079	837.9	677.4
2012	2,543,279	810.2	732.8	7,283	873.9	706.8
2011	2,515,458	807.3	741.3	7,271	882.3	716.1
2010	2,468,435	799.5	747.0	7,087	870.4	713.4
2009	2,437,163	794.5	749.6	6,913	851.1	688.6
2008	2,471,984	813.0	758.3	7,056	877.0	712.1
2007	2,423,712	803.6	760.2	6,800	853.2	695.1
2006	2,426,264	810.4	776.5	7,038	892.6	732.6
2005	2,448,017	825.9	798.8	7,074	906.8	758.0
2004	2,397,615	816.5	800.8	6,811	879.7	742.3
2003	2,448,288	841.9	832.7	7,109	926.9	787.1
2002	2,443,387	847.3	845.3	6,886	903.5	771.8
2001	2,416,425	848.5	854.5	6,915	911.1	786.2

Note: \*U.S. 2017 data were not available at publication time.  
Crude death rates are per 100,000 population.  
Age-adjusted rates are computed with the 2000 standard.

Source: National Center of Health Statistics  
South Dakota Department of Health, Office of Health Statistics

Leading Causes of Death

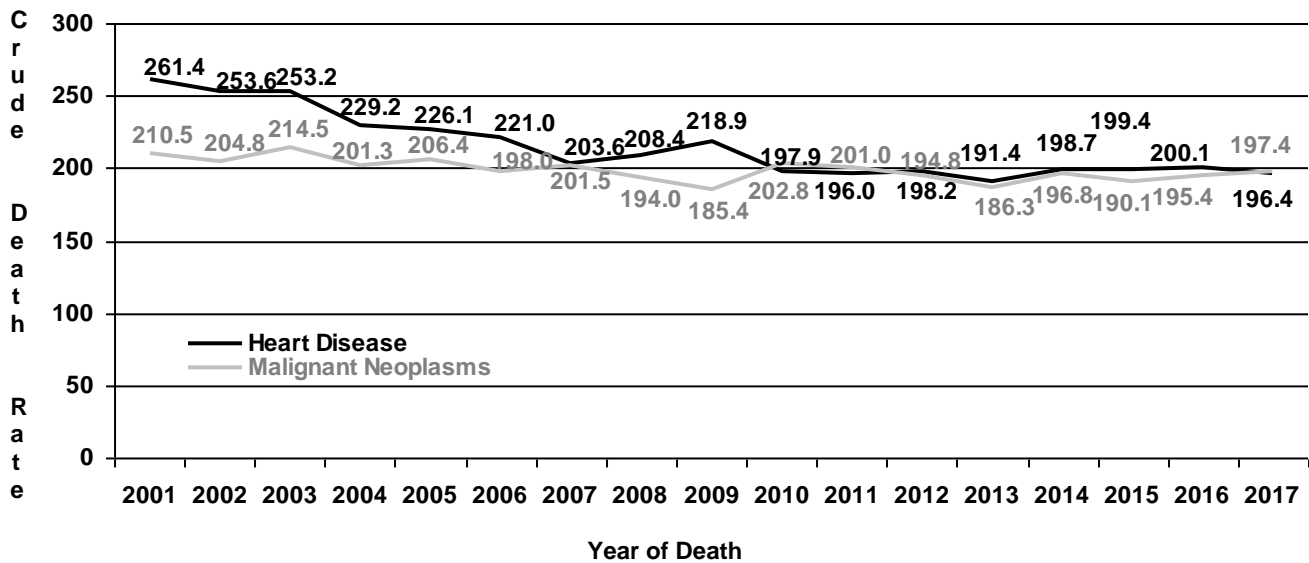
The five leading causes of death in 2017 for South Dakota residents were cancer, heart disease, accidents, chronic lower respiratory diseases, and Alzheimer’s disease.

Cancer took over the leading cause of death in South Dakota accounting for 21.5 percent of South Dakota’s 2017 resident deaths. Cancer was the leading cause of death for females in 2017.

Heart disease was the second leading cause of death in 2017 and accounted for 21.4 percent of South Dakota resident deaths, a 3.2 percent decrease from 2016. Heart disease was the leading cause of death for whites and for males in 2017.

Acute myocardial infarction was the leading cause of heart disease deaths during the year, accounting for 33.4 percent of heart disease deaths.

**Figure 8**  
**South Dakota Resident Crude Death Rate Due to Malignant Neoplasms and Heart Disease by Year of Death, 2001-2017**



Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

Figure 8, above, compares the crude death rates of South Dakota resident heart disease and cancer since 2001. From 2016 to 2017 there was an increase in the cancer rate and a decrease in the heart disease rate.

Accidents were the third leading cause of death and accounted for 6.7 percent of 2017 South Dakota resident deaths and a 4.7 percent increase from 2016. Motor vehicle accidents accounted for 30.9 percent of accidental deaths.

Chronic lower respiratory disease accounted for 6.3 percent of South Dakota resident deaths and rose from the fifth leading cause of death in 2016 to fourth leading cause of death in 2017.

Alzheimer’s disease was the fifth leading cause of death accounting for 5.6 percent of all South Dakota resident deaths in 2017.

Table 46, below, displays the breakdown of accidental deaths, which were the third leading cause of deaths among South Dakotans. In 2017, 537 or 6.7 percent of deaths were due to accidents.

The highest type of motor vehicle death in 2017 was car occupant with 64 deaths. The highest death in the other causes of accidental death in 2017 was falls with 196 deaths.

**Table 46**  
**South Dakota Resident Leading Causes of Death Due to Accidents, 2013-2017**

	Total	Year of Death				
		2013	2014	2015	2016	2017
<b>Total Deaths</b>	<b>2,392</b>	<b>424</b>	<b>461</b>	<b>467</b>	<b>503</b>	<b>537</b>
<b>Motor Vehicle Accidents</b>	<b>744</b>	<b>149</b>	<b>151</b>	<b>143</b>	<b>135</b>	<b>166</b>
Car Occupant (V40-V49)	332	76	74	70	48	64
Occupant of Pick-Up Truck or Van (V50-V59)	134	25	31	25	28	25
Pedestrian (V01-V09)	69	16	12	10	15	16
Motorcycle Rider (V20-V29)	61	14	9	11	14	13
Occupant of Special All-Terrain Vehicle (V86)	33	5	5	9	9	5
Occupant of Heavy Transport Vehicle (V60-V69)	12	1	2	0	3	6
All Other Motor Vehicle Accidents	103	12	18	18	18	37
<b>Other Causes of Accidental Death</b>	<b>1,648</b>	<b>275</b>	<b>310</b>	<b>324</b>	<b>368</b>	<b>371</b>
Falls (W00-W19)	878	146	170	181	185	196
Accidental Poisoning (X40-X49)	296	44	58	57	67	70
Accidental Threats to Breathing (excl. drowning) (W75-W84)	128	29	24	20	27	28
Exposure to Smoke, Fire, and Flames ( X00-X09)	53	10	5	9	10	19
Accidental Drowning and Submersion (W65-W74, V90, V92)	50	11	8	13	10	8
Exposure to Excessive Natural Cold (X31)	49	9	8	5	14	13
Accidental Discharge of Firearms (W32-W34)	15	1	2	5	5	2
Air Transport Accidents (V95.0-V95.3, V95.8-V95.9, & V96-V97)	11	1	5	1	3	1
Contact with Agricultural Machinery (W30)	11	2	1	3	2	3
Struck by Thrown, Projected, or Falling Object (W20)	11	1	5	2	2	1
Explosion (W35-W40)	8	0	1	0	7	0
Exposure to Excessive Natural Heat (X30)	6	1	1	1	1	2
All Other Causes of Accidents	132	20	22	27	35	28

Source: South Dakota Department of Health, Office of Health Statistics

Table 47, on the next page, lists South Dakota resident leading causes of death for the last five years. Cancer and heart disease were the leading causes of death in 2017 and for each of the five prior years.

In 2017, causes six through ten were cerebrovascular disease, diabetes mellitus, influenza and pneumonia, suicide, and chronic liver disease and cirrhosis.

Accidents took the third place leading cause of death followed by chronic lower respiratory disease and Alzheimer's disease round out the top 5 causes in 2017.

**Table 47**  
**South Dakota Resident Leading Causes of Death, 2013-2017**

Cause of Death	Total			2013			2014			2015			2016			2017		
	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%
South Dakota (All Deaths)		38,132	100		7,079	100		7,500	100		7,724	100		7,838	100		7,991	100
Heart Disease (I00-I09, I11, I13, I20-I51)	1	8,464	22.2	1	1,617	22.8	1	1,695	22.6	1	1,712	22.1	1	1,732	22.1	2	1,708	21.4
Malignant Neoplasms (Cancer) (C00-C97)	2	8,293	21.7	2	1,574	22.2	2	1,679	22.4	2	1,632	21.1	2	1,691	21.6	1	1,717	21.5
Accidents (V01-X59, Y85-Y86)	3	2,392	6.3	3	424	6.0	3	461	6.1	4	467	6.0	3	503	6.4	3	537	6.7
Chronic Lower Respiratory Diseases (J40-J47)	4	2,285	6.0	6	413	5.8	4	440	5.9	3	500	6.5	5	427	5.4	4	505	6.3
Alzheimer's Disease (G30)	5	2,167	5.7	4	420	5.9	6	433	5.8	5	421	5.5	4	449	5.7	5	444	5.6
Cerebrovascular Diseases (I60-I69)	6	2,064	5.4	5	414	5.8	5	439	5.9	6	381	4.9	6	420	5.4	6	410	5.1
Diabetes Mellitus (E10-E14)	7	1,259	3.3	7	239	3.4	7	223	3.0	7	282	3.7	7	253	3.2	7	262	3.3
Influenza and Pneumonia (J09-J18)	8	991	2.6	8	186	2.6	8	180	2.4	8	213	2.8	8	195	2.5	8	217	2.7
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	814	2.1	9	147	2.1	9	141	1.9	9	173	2.2	9	161	2.1	9	192	2.4
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	696	1.8	10	121	1.7	10	128	1.7	10	137	1.8	10	158	2.0	10	152	1.9
All Other Causes	-	8,707	22.8	-	1,524	21.5	-	1,681	22.4	-	1,806	23.4	-	1,849	23.6	-	1,847	23.1

Note: Letter/number combinations following cause of death are ICD-10 codes.

Due to rounding disease-specific percentages may not sum to 100.

The asterisks (\*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision.

Source: South Dakota Department of Health, Office of Health Statistics

**Table 48**  
**South Dakota Resident Leading Causes of Death by Race, 2017**

Cause of Death	All Races					White					American Indian				
	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate
<b>South Dakota (All Deaths)</b>		<b>7,991</b>	<b>100</b>	<b>918.9</b>	<b>736.1</b>		<b>7,124</b>	<b>100</b>	<b>964.6</b>	<b>684.4</b>		<b>721</b>	<b>100</b>	<b>918.9</b>	<b>1,477.5</b>
Malignant Neoplasms (Cancer) (C00-C97)	1	1,717	21.5	197.4	157.0	2	1,589	22.3	215.2	154.3	3	98	13.6	124.9	213.4
Heart Disease (I00-I09, I11, I13, I20-I51)	2	1,708	21.4	196.4	150.0	1	1,591	22.3	215.4	145.1	2	103	14.3	131.3	241.4
Accidents (V01-X59, Y85-Y86)	3	537	6.7	61.7	56.2	5	405	5.7	54.8	45.1	1	111	15.4	141.4	174.4
Chronic Lower Respiratory Diseases (J40-J47)	4	505	6.3	58.1	45.4	3	463	6.5	62.7	43.5	7	31	4.3	39.5	79.8
Alzheimer's Disease (G30)	5	444	5.6	51.1	36.9	4	436	6.1	59.0	37.4	*	-	-	-	-
Cerebrovascular Diseases (I60-I69)	6	410	5.1	47.1	36.3	6	382	5.4	51.7	34.8	8	21	2.9	26.8	48.2
Diabetes Mellitus (E10-E14)	7	262	3.3	30.1	24.8	7	199	2.8	26.9	19.2	5	56	7.8	71.4	128.9
Influenza and Pneumonia (J09-J18)	8	217	2.7	25.0	19.0	8	197	2.8	26.7	17.6	9	18	2.5	22.9	44.7
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	192	2.4	22.1	22.7	9	142	2.0	19.2	19.1	6	44	6.1	56.1	55.6
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	152	1.9	17.5	17.0	*	-	-	-	-	4	63	8.7	80.3	112.4
Unspecified Dementia (F03)	*	-	-	-	-	10	102	1.4	13.8	8.6	*	-	-	-	-
Assault (homicide) (X85-Y09, Y87.1)	*	-	-	-	-	*	-	-	-	-	10	13	1.8	16.6	15.6
All Other Causes	-	1,847	23.1	212.4	-	*	1,618	22.7	219.1	-	-	163	22.6	207.8	-

Note: Letter / number combinations following cause of death are ICD-10 codes.

Due to rounding, disease-specific percentages may not sum to 100.

\* This cause was not one of the 10 leading causes of death for this race group.

The asterisks (\*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision.

Source: South Dakota Department of Health, Office of Health Statistics

## Race

Table 48, on the previous page, presents South Dakota resident leading causes of death by race as well as crude death rates and age-adjusted death rates.

In 2017, patterns for the 10 leading causes of death varied by race. Eight of the 10 leading causes were the same for whites and American Indians, but they differed by rank. For example, accidents were the fifth leading cause of death at 5.7 percent for the white population, but was the first leading cause of death for the American Indian population at 15.4 percent.

Heart disease deaths ranked second place for American Indians in 2017 while cancer ranked third.

Alzheimer's disease and unspecified dementia were in the 10 leading causes of death for the white population, but not the American Indian population. Among the 10 leading causes of death for the American Indian population, but not for the white population, were chronic liver disease and cirrhosis, and assault (homicide).

## Gender

Table 49, on the following page, presents South Dakota resident leading causes of death by gender as well as crude death rates and age-adjusted death rates.

In 2017, patterns for the 10 leading causes of death in South Dakota also varied by gender. Nine of the 10 leading causes were the same for South Dakota's men and women, but they differed in rank. Intentional self-harm (suicide) was among the 10 leading

causes of death for South Dakota's men, but not for women. Likewise, unspecified dementia was among the 10 leading causes of death for women, but not for men. Men were also more likely to die in accidents than women, while women were more likely to die from Alzheimer's disease than men.

**Table 49  
South Dakota Resident Leading Causes of Death by Gender, 2017**

Cause of Death	Total					Male					Female				
	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate	Rank	Deaths	%	Crude Rate	Age-Adjusted Rate
<b>South Dakota (All Deaths)</b>		<b>7,991</b>	<b>100</b>	<b>918.9</b>	<b>736.1</b>		<b>4,110</b>	<b>100</b>	<b>936.3</b>	<b>873.3</b>		<b>3,881</b>	<b>100</b>	<b>901.1</b>	<b>618.3</b>
Malignant Neoplasms (Cancer) (C00-C97)	1	1,717	21.5	197.4	157.0	2	885	21.5	201.6	179.5	1	832	21.4	193.2	140.8
Heart Disease (I00-I09, I11, I13, I20-I51)	2	1,708	21.4	196.4	150.0	1	920	22.4	209.6	190.7	2	788	20.3	183.0	115.8
Accidents (V01-X59, Y85-Y86)	3	537	6.7	61.7	56.2	3	322	7.8	73.4	72.1	6	215	5.5	49.9	40.6
Chronic Lower Respiratory Diseases (J40-J47)	4	505	6.3	58.1	45.4	4	252	6.1	57.4	52.7	4	253	6.5	58.7	40.3
Alzheimer's Disease (G30)	5	444	5.6	51.1	36.9	8	143	3.5	32.6	32.1	3	301	7.8	69.9	39.5
Cerebrovascular Diseases (I60-I69)	6	410	5.1	47.1	36.3	5	176	4.3	40.1	38.3	5	234	6.0	54.3	33.6
Diabetes Mellitus (E10-E14)	7	262	3.3	30.1	24.8	6	156	3.8	35.5	33.2	8	106	2.7	24.6	18.7
Influenza and Pneumonia (J09-J18)	8	217	2.7	25.0	19.0	9	95	2.3	21.6	21.0	7	122	3.1	28.3	17.1
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	192	2.4	22.1	22.7	7	154	3.7	35.1	35.5	*	-	-	-	-
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	152	1.9	17.5	17.0	10	92	2.2	21.0	20.3	10	60	1.5	13.9	13.9
Unspecified Dementia (F03)	*	-	-	-	-	*	-	-	-	-	9	67	1.7	15.6	8.7
All Other Causes	-	1,847	23.1	212.4	-	-	915	22.3	208.4	-	-	903	23.3	209.7	-

Note: Letter/number combinations following cause of death are ICD-10 codes. Due to rounding, disease-specific percentages may not sum to 100.

\*This cause was not one of the 10 leading causes of death for this gender.

The asterisks (\*) preceding the cause of death codes indicate they are not part of the International Classification of Diseases, Tenth Revision

Source: South Dakota Department of Health, Office of Health Statistics

**Table 50**  
**South Dakota Resident Five Leading Causes of Death by Age Group, 2013-2017**

Rank	All Ages	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90 & over
1	Heart Disease 8,464	Accidents 61	Accidents 115	Accidents 274	Accidents 239	Malignant Neoplasms (Cancer) 235	Malignant Neoplasms (Cancer) 986	Malignant Neoplasms (Cancer) 1,803	Malignant Neoplasms (Cancer) 2,280	Heart Disease 2,532	Heart Disease 2,328
2	Malignant Neoplasms (Cancer) 8,293	Assault (Homicide) 17	Intentional Self-harm (Suicide) 103	Intentional Self-harm (Suicide) 175	Intentional Self-Harm (Suicide) 133	Heart Disease 211	Heart Disease 644	Heart Disease 1,194	Heart Disease 1,463	Malignant Neoplasms (Cancer) 2,135	Alzheimer's Disease 993
3	Accidents 2,392	Malignant Neoplasms (Cancer) 14	Assault (Homicide) 16	Assault (Homicide) 35	Chronic Liver Disease and Cirrhosis 79	Accidents 207	Accidents 286	Chronic Lower Respiratory Disease 347	Chronic Lower Respiratory Disease 635	Alzheimer's Disease 928	Malignant Neoplasms (Cancer) 734
4	Chronic Lower Respiratory Diseases 2,285	Congenital Malformations, Deformations, and Chromosomal Anomalies 11	Malignant Neoplasms (Cancer) 12	Malignant Neoplasms (Cancer) 22	Malignant Neoplasms (Cancer) 71	Chronic Liver Disease and Cirrhosis 152	Chronic Liver Disease and Cirrhosis 209	Diabetes Mellitus 235	Cerebrovascular Disease 307	Cerebrovascular Disease 801	Cerebrovascular Disease 642
5	Alzheimer's Disease 2,167	Influenza and Pneumonia 4	Heart Disease 5	Heart Disease 16	Heart Disease 70	Intentional Self-Harm (Suicide) 144	Diabetes Mellitus 130	Accidents 218	Diabetes Mellitus 276	Chronic Lower Respiratory Disease 797	Chronic Lower Respiratory Disease 386

Source: South Dakota Department of Health, Office of Health Statistics



Age

Table 50, on the previous page, lists the five leading causes of death by age group for the last five years combined. Excluding infants, accidents were the leading cause of death for South Dakotans through age 39.

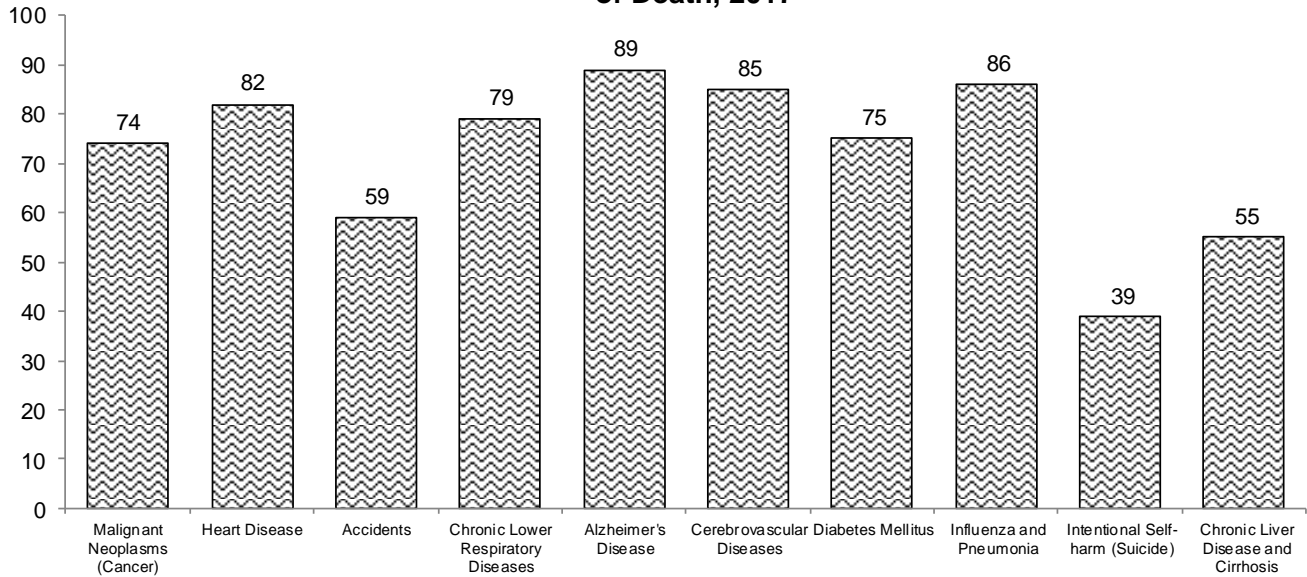
The leading cause of death for persons 40-79 was cancer. Heart disease was the leading cause of death for persons aged 80 and older.

Median Age

Figure 9, below, presents data on the median age at death for the 10 leading causes of death for South Dakota residents in 2017. The median age for

the 10 leading causes of death in 2017 remained quite similar to the median ages of death in 2016.

**Figure 9**  
**Median Age at Death for South Dakota Residents for the Leading Causes of Death, 2017**



Source: South Dakota Department of Health, Office of Health Statistics

Table 51, below, shows the median age at death for each of the past five years by race and gender. When looking at race, American Indians have the lowest median

age at death at 57, while whites have the highest at 81. Males' median age at death is 75, while females is 83.

**Table 51**  
**Median Age at Death for South Dakota Residents by Race, Gender and Year of Death, 2013-2017**

Year of Death	Total Median Age	White	American Indian	Male	Female
2017	79	81	57	75	83
2016	79	81	58	75	83
2015	80	81	56	76	83
2014	80	81	58	76	83
2013	80	81	59	75	83

Source: South Dakota Department of Health, Office of Health Statistics

Table 52, below, shows the median age at death for South Dakota residents for the leading causes of death by race and gender. In 2017, the median age at death was 79 for all South Dakotans; for white residents the median age was 81, compared to 57 for American Indians. The overall median age at death remained the same for whites and decreased for American Indians when

compared to their overall median age at death in 2017. The median age at death in 2017 for South Dakota resident males and females was 75 and 83, respectively. The median age at death for both males and females remained the same from 2016 to 2017.

**Table 52**  
**Median Age at Death for South Dakota Residents for the Leading Causes of Death**  
**by Race and Gender, 2017**

Cause of Death	Median Age at Death in Years				
	All	Race		Gender	
	Total Deaths	White	American Indian	Male	Female
<b>South Dakota (All Deaths)</b>	<b>79</b>	<b>81</b>	<b>57</b>	<b>75</b>	<b>83</b>
Malignant Neoplasms (Cancer) (C00-C97)	74	74	67	74	74
Heart Disease (I00-I09, I11, I13, I20-I51)	82	83	66	77	87
Accidents (V01-X59, Y85-Y86)	59	68	36	56	71
Chronic Lower Respiratory Diseases (J40-J47)	79	80	70	78	80
Alzheimer's Disease (G30)	89	89	*	87	90
Cerebrovascular Diseases (I60-I69)	85	86	62	81	88
Diabetes Mellitus (E10-E14)	75	79	62	75	75
Influenza and Pneumonia (J09-J18)	86	87	71	82	88
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	39	46	26	41	*
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	55	*	48	57	52
Assault (homicide) (X85-Y019, Y87.1)	*	*	30	*	*
Unspecified Dementia (F03)	*	90	*	*	92

Note: Letter / number combinations following cause of death are ICD-10 codes.

\*This cause was not one of the 10 leading causes of death for this race or gender.

The asterisks (\*) preceding the cause-of-death codes indicate that they are not part of the International Classification of Diseases, Tenth Revision.

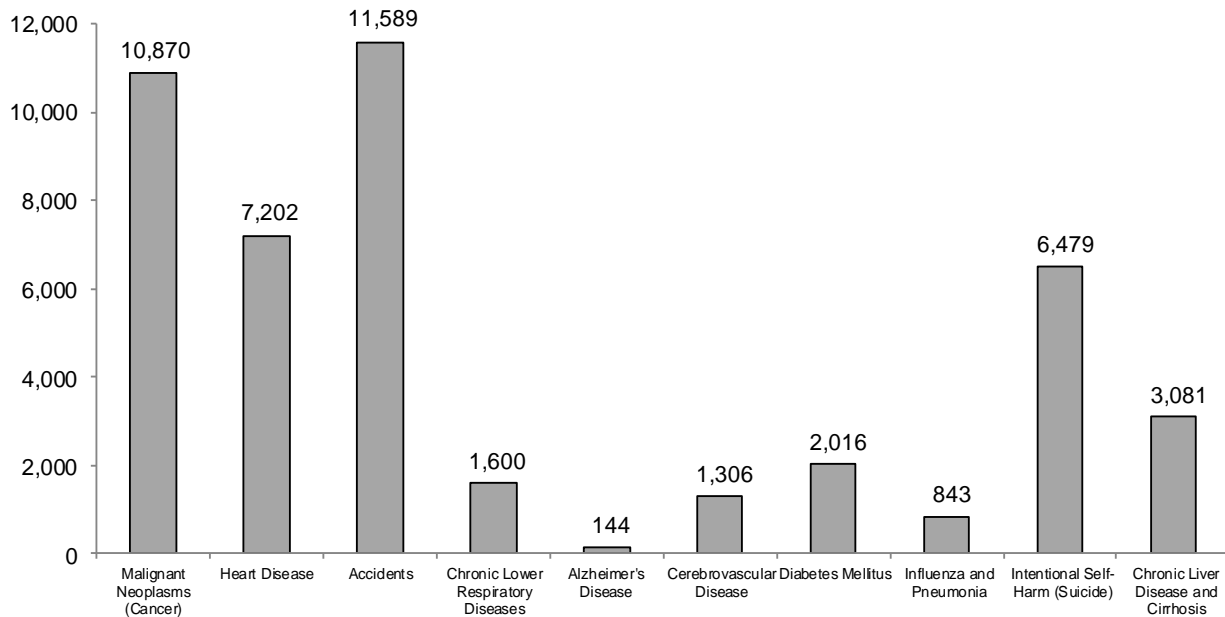
Source: South Dakota Department of Health, Office of Health Statistics

### Years of Potential Life Lost

Figure 10, on the next page, depicts the years of potential life lost (YPLL) before age 75 for each of these causes.

In 2017, accidents led in YPLL with 11,589 followed by cancer with 10,870 years of potential life lost.

**Figure 10**  
**South Dakota Resident Years of Potential Life Lost (YPLL)**  
**Before Age 75 for the Leading Causes of Death, 2017**

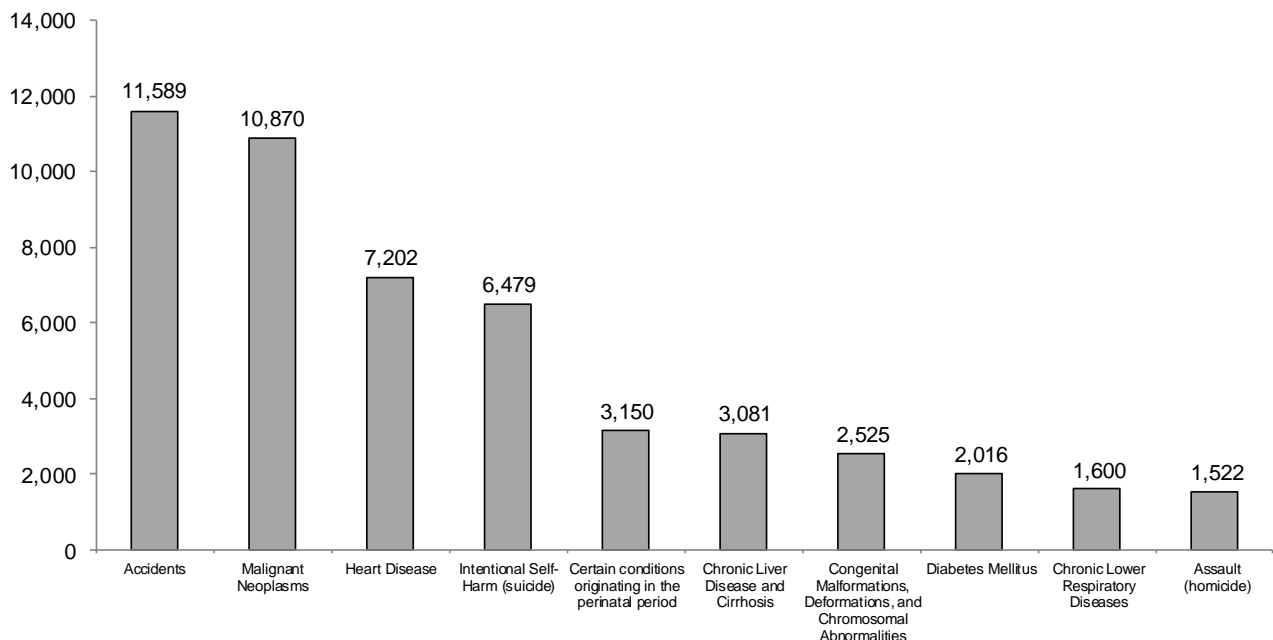


Note: This data is not comparable to the age-adjusted data in Figure 11 on the next page.  
 Source: South Dakota Department of Health, Office of Health Statistics

Figure 10a, below, shows the years of potential life lost (YPLL) before age 75 for each of the causes in order from highest YPLL to lowest YPLL.

Accidents, cancer, and heart disease led in the most YPLL in South Dakota for 2017. This is the second year accidents surpassed cancer for the most YPLL.

**Figure 10a**  
**South Dakota Resident Years of Potential Life Lost (YPLL)**  
**Before Age 75 for the Leading Causes of Death (in Descending Order), 2017**



Note: This data is not comparable to the age-adjusted data in Figure 11 on the next page.  
 Source: South Dakota Department of Health, Office of Health Statistics

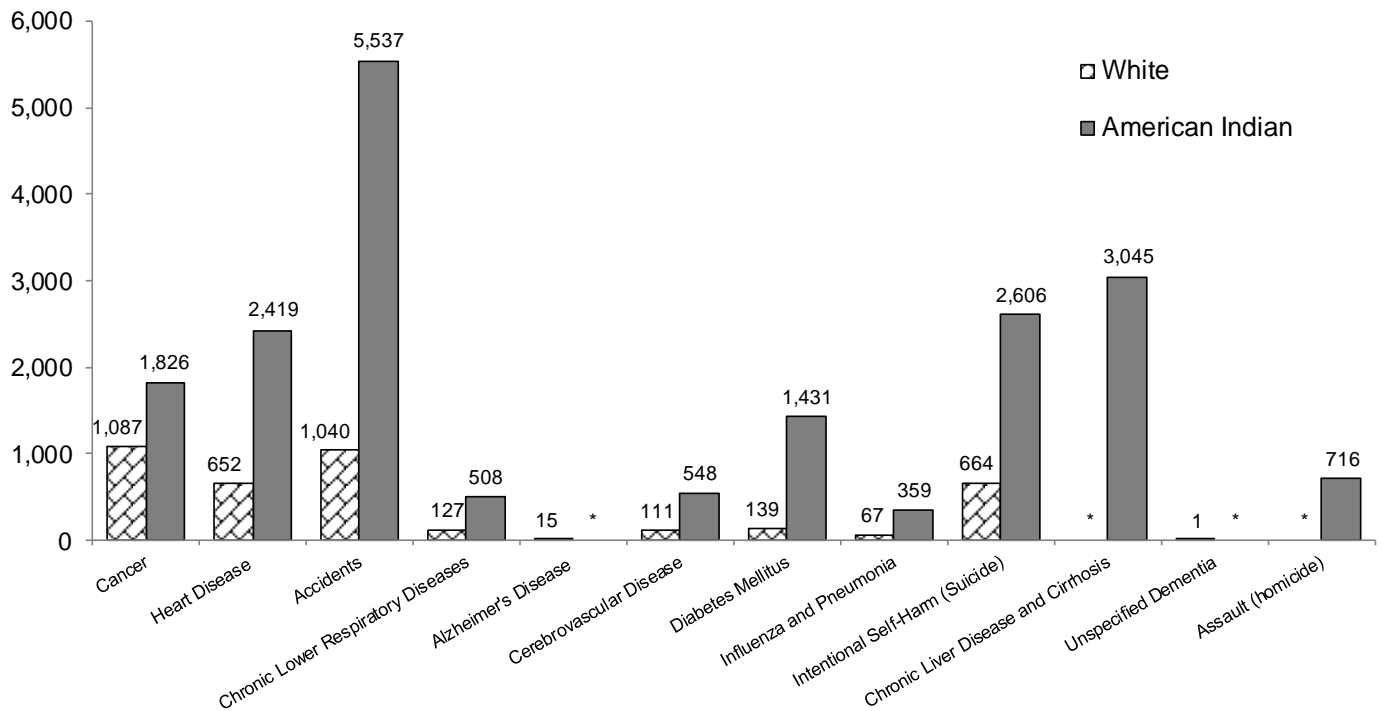
Figure 11, below, illustrates the years of potential life lost (YPLL) before age 75 per 100,000 population for the top 10 causes of death by race. When comparing YPLL by race, American Indians exceeded whites substantially in YPLL for the leading causes of death.

American Indians' largest YPLL was accidents with 5,537 years while whites' largest YPLL was cancer with 1,087 years.

Whites' second largest YPLL was accidents with 1,040 years while American Indians' second largest YPLL was chronic liver disease and cirrhosis with 3,045 years.

American Indians' and whites' third largest YPLL was suicide with 2,606 years and 664 years, respectively. Suicide was the third largest YPLL for American Indians, which still exceeded whites' largest YPLL (cancer with 1,087 years).

**Figure 11**  
**Age-Adjusted Years of Potential Life Lost (YPLL) Before Age 75 for the**  
**Leading Causes of Death by Race, 2017**



Note: Years of potential life lost are age-adjusted per 100,000 population.

\*This cause was not one of the 10 leading causes of death for this race group.

Source: South Dakota Department of Health, Office of Health Statistics

**Place of Death**

Table 53, on the next page, displays the 10 leading causes of death by place where death occurred in 2017.

Overall, nursing home, long term care, and hospice facility had the highest occurrence of deaths with 39.7 percent. Hospital followed closely with 34.2 percent.

**Table 53**  
**South Dakota Resident Deaths by Cause of Death and Place of Death, 2017**

Cause of Death	Total		Hospital		Nursing Home/Long Term Care/Hospice Facility		Residence		All Other Reported Entries	
	Num	%	Num	%	Num	%	Num	%	Num	%
<b>South Dakota (All Deaths)</b>	<b>7,991</b>	<b>100</b>	<b>2,736</b>	<b>34.2</b>	<b>3,169</b>	<b>39.7</b>	<b>1,717</b>	<b>21.5</b>	<b>368</b>	<b>4.6</b>
Malignant Neoplasms (Cancer) (C00-C97)	1,717	100	460	26.8	703	40.9	508	29.6	46	2.7
Heart Disease (I00-I09, I11, I13, I20-I51)	1,708	100	572	33.5	596	34.9	485	28.4	55	3.2
Accidents (V01-X59, Y85-Y86)	537	100	209	38.9	90	16.8	85	15.8	152	28.3
Chronic Lower Respiratory Diseases (J40-J47)	505	100	173	34.3	195	38.6	127	25.1	10	2.0
Alzheimer's Disease (G30)	444	100	19	4.3	396	89.2	23	5.2	6	1.4
Cerebrovascular Diseases (I60-I69)	410	100	160	39.0	212	51.7	35	8.5	3	0.7
Diabetes Mellitus (E10-E14)	262	100	88	33.6	106	40.5	61	23.3	7	2.7
Influenza and Pneumonia (J09-J18)	217	100	127	58.5	77	35.5	13	6.0	0	0.0
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	192	100	32	16.7	1	0.5	113	58.9	46	24.0
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	152	100	79	52.0	45	29.6	27	17.8	1	0.7
All Other Causes	1,847	100	817	44.2	748	40.5	240	13.0	42	2.3

Note: The asterisks (\*) preceding the cause of death codes indicate they are not part of the International Classification of Diseases, Tenth Revision. The place of death data may not add to the total due to not stated places not being specified, but being included in the total.

Source: South Dakota Department of Health, Office of Health Statistics

### Tobacco Use

On the death certificate, the certifier was instructed to check “yes” or “probably” if in their opinion, the use of tobacco contributed to death or check “no” if in their clinical judgment tobacco use did not contribute to the death. There was also the option of “unknown” if the certifier was unsure if tobacco use contributed to death.

On 1,346 deaths, or 16.8 percent, the certifier indicated “yes” or “probably” that tobacco use contributed to the death. Conversely, on 4,892 deaths, or 61.2 percent, the certifier indicated that tobacco use did not contribute to the death.

In the remaining 1,753 deaths, or 21.9 percent, the certifier was unsure if tobacco use contributed to the death.

Table 54, on the next page, displays the 10 leading causes of death where the certifier said “yes” or “probably” that tobacco use contributed to the death.

Tobacco use contributed to death in 71.0 percent, or 299 out of the 421 trachea, bronchus, and lung cancer deaths in 2017. In 63.4 percent, or 320 chronic lower respiratory disease deaths the certifier said “yes” or “probably” that tobacco use contributed to the death.

**Table 54**  
**South Dakota Resident Leading Causes of Death as They Relate to Tobacco Use, 2017**  
**(Did Tobacco Use Contribute to Death)**

Cause of Death	Yes/Probably		Total Deaths	
	Number	Percent	Number	Percent
<b>Total</b>	<b>1,346</b>	<b>16.8</b>	<b>7,991</b>	<b>100</b>
<b>Malignant neoplasms (C00-C97)</b>	<b>452</b>	<b>26.3</b>	<b>1,717</b>	<b>100</b>
Malignant neoplasm of trachea, bronchus, and lung (C33-C34)	299	71.0	421	100
Malignant neoplasm of esophagus (C15)	24	40.0	60	100
Malignant neoplasm, without specification of site (C80)	19	22.6	84	100
Malignant neoplasm of bladder (C67)	14	29.2	48	100
Malignant neoplasm of lip, oral cavity, and pharynx (C00-C14)	12	42.9	28	100
Malignant neoplasms of colon, rectum, and anus (C18-C21)	12	7.6	158	100
Malignant neoplasm of pancreas (C25)	11	8.9	124	100
<b>Chronic lower respiratory diseases (J40-J47)</b>	<b>320</b>	<b>63.4</b>	<b>505</b>	<b>100</b>
Chronic obstructive pulmonary disease, unspecified (J44.9)	231	64.3	359	100
Chronic obstructive pulmonary disease with acute lower respiratory infection (J44.0)	52	64.2	81	100
Chronic obstructive pulmonary disease with acute exacerbation (J44.1)	16	69.6	23	100
Emphysema (J43)	16	84.2	19	100
<b>Heart disease (I00-I09, I11, I13, I20-I51)</b>	<b>250</b>	<b>14.6</b>	<b>1,708</b>	<b>100</b>
Acute myocardial infarction (I21-I22)	92	16.1	570	100
Atherosclerotic heart disease (I25.1)	69	16.9	409	100
Hypertensive Heart Disease (I11)	17	12.1	140	100
<b>Cerebrovascular diseases (I60-I69)</b>	<b>49</b>	<b>12.0</b>	<b>410</b>	<b>100</b>
<b>Diabetes mellitus (E10-E14)</b>	<b>41</b>	<b>15.6</b>	<b>262</b>	<b>100</b>
<b>Accidents (V01-X59, Y85-Y86)</b>	<b>28</b>	<b>5.2</b>	<b>537</b>	<b>100</b>
<b>Chronic liver disease and cirrhosis (K70 &amp; K73-K74)</b>	<b>21</b>	<b>13.8</b>	<b>152</b>	<b>100</b>
Alcoholic liver disease (K70)	20	15.6	128	100
<b>Influenza and pneumonia (J09-J18)</b>	<b>20</b>	<b>9.2</b>	<b>217</b>	<b>100</b>
Pneumonia (J12-J18)	16	8.8	181	100
<b>Septicemia (A40-A41)</b>	<b>14</b>	<b>14.0</b>	<b>100</b>	<b>100</b>
<b>Pneumonitis due to solids and liquids (J69)</b>	<b>9</b>	<b>16.4</b>	<b>55</b>	<b>100</b>

Source: South Dakota Department of Health, Office of Health Statistics

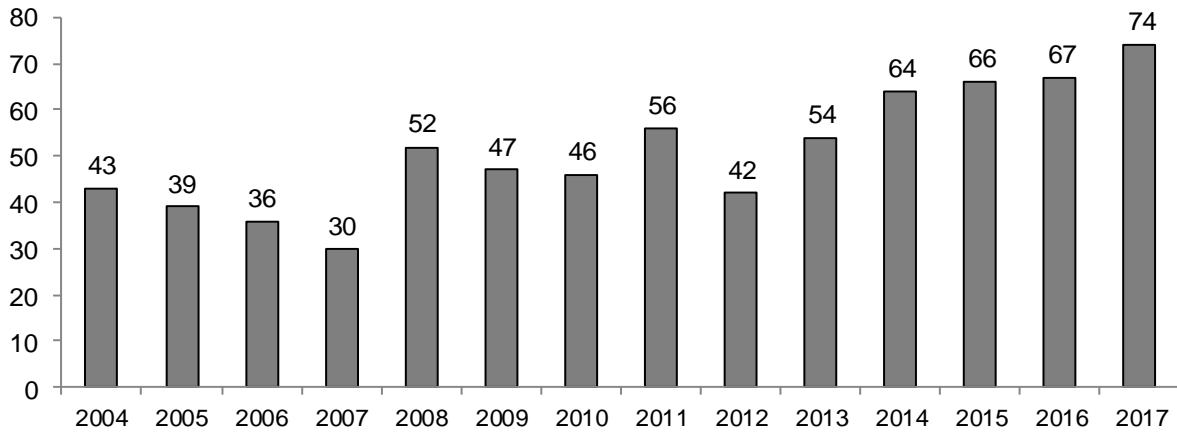
### Drug Overdose Deaths

Figures 12-17 And Tables 55-62 on the following pages break down the drug overdose deaths for South Dakota residents for the past 14 years by the manner of death, year of death, and type of drug.

As shown in Figure 12 , there were 74 drug overdose deaths in 2017, up from 67 drug overdose deaths in 2016. Table 55, below that, shows that of the 74 drug

overdose deaths in 2017, 54 deaths were unintentional, 18 deaths were suicides, and two deaths were undetermined intent. The definition of drug overdose deaths is located in the back of this report within the Technical Notes section.

**Figure 12**  
**South Dakota Resident Deaths Due to Drug Overdoses, 2004-2017**



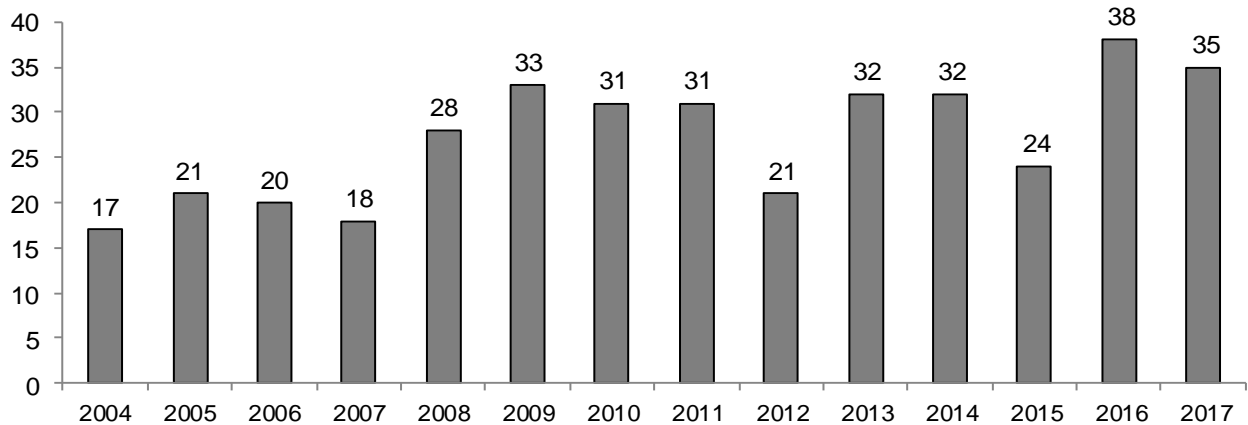
Source: South Dakota Department of Health, Office of Health Statistics

**Table 55**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Drugs, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	43	39	36	30	52	47	46	56	42	54	64	66	67	74
<b>Unintentional</b>	26	18	21	15	30	26	19	41	24	34	46	44	52	54
<b>Suicide</b>	12	14	12	8	13	12	16	11	11	15	12	19	12	18
<b>Homicide</b>	0	0	0	0	0	1	0	0	0	1	0	0	1	0
<b>Undetermined Intent</b>	5	7	3	7	9	8	11	4	7	4	6	3	2	2

Source: South Dakota Department of Health, Office of Health Statistics

**Figure 13**  
**South Dakota Resident Deaths Due to All Opioid Poisoning, 2004-2017**



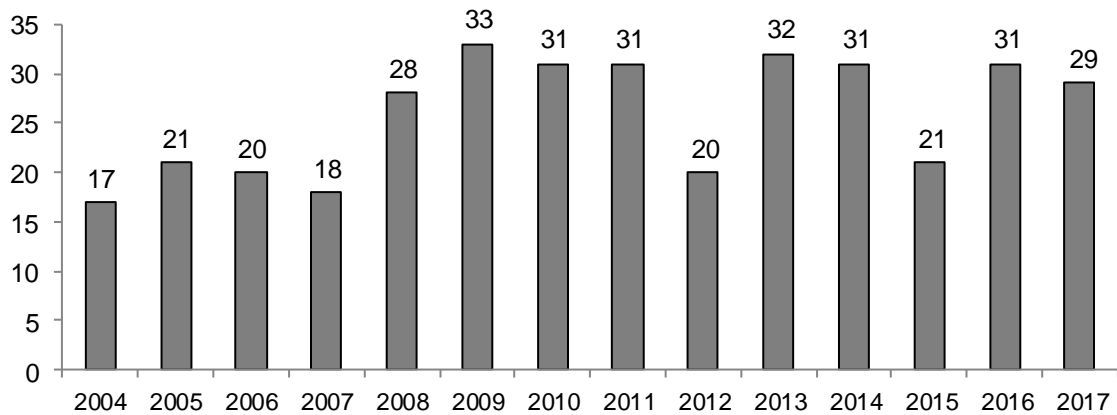
Source: South Dakota Department of Health, Office of Health Statistics

**Table 56**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Opioid Poisoning, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	17	21	20	18	28	33	31	31	21	32	32	24	38	35
<b>Unintentional</b>	12	10	15	9	18	22	15	26	15	21	27	19	31	28
<b>Suicide</b>	3	6	3	3	4	6	8	3	2	9	2	4	6	7
<b>Homicide</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<b>Undetermined Intent</b>	2	5	2	6	6	4	8	2	4	2	3	1	1	0

Source: South Dakota Department of Health, Office of Health Statistics

**Figure 14**  
**South Dakota Resident Deaths Due to Prescription Opioid Poisoning, 2004-2017**



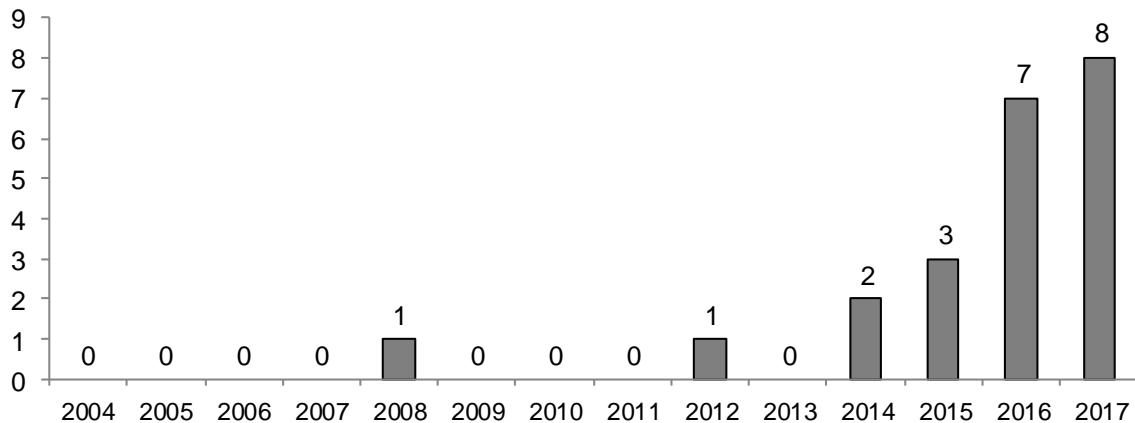
Source: South Dakota Department of Health, Office of Health Statistics

**Table 57**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Prescription Opioid Poisoning, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	17	21	20	18	28	33	31	31	20	32	31	21	31	29
<b>Unintentional</b>	12	10	15	9	18	22	15	26	14	21	26	16	24	22
<b>Suicide</b>	3	6	3	3	4	6	8	3	2	9	2	4	6	7
<b>Homicide</b>	0	0	0	0	0	1	0	0	0	0	0	0	0	0
<b>Undetermined Intent</b>	2	5	2	6	6	4	8	2	4	2	3	1	1	0

Source: South Dakota Department of Health, Office of Health Statistics

**Figure 15**  
**South Dakota Resident Deaths Due to Illicit Opioid Poisoning, 2004-2017**



Source: South Dakota Department of Health, Office of Health Statistics

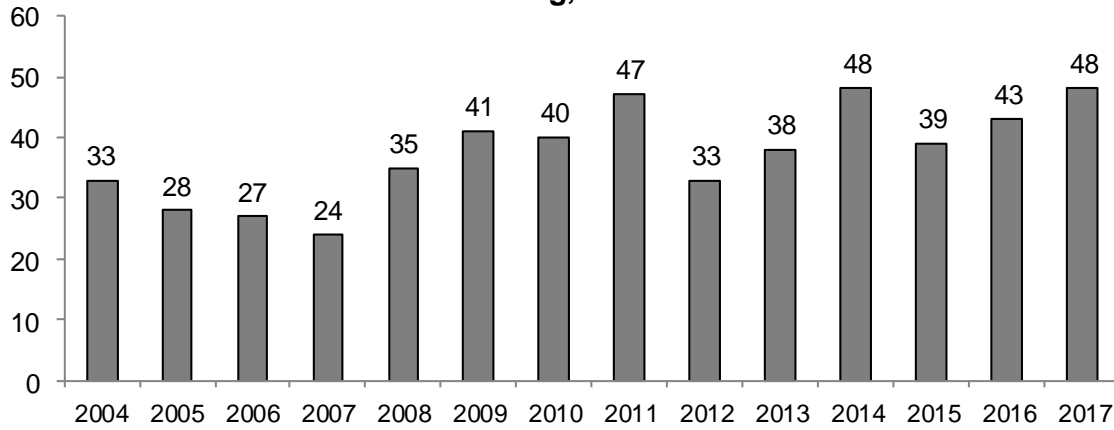
**Table 58**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Opioid Poisoning, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	0	0	0	0	1	0	0	0	1	0	2	3	7	8
<b>Unintentional</b>	0	0	0	0	1	0	0	0	1	0	2	3	7	8
<b>Suicide</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Homicide</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Undetermined Intent</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Source: South Dakota Department of Health, Office of Health Statistics



**Figure 16**  
**South Dakota Resident Deaths Due to All Pharmaceutical Drug Poisoning, 2004-2017**



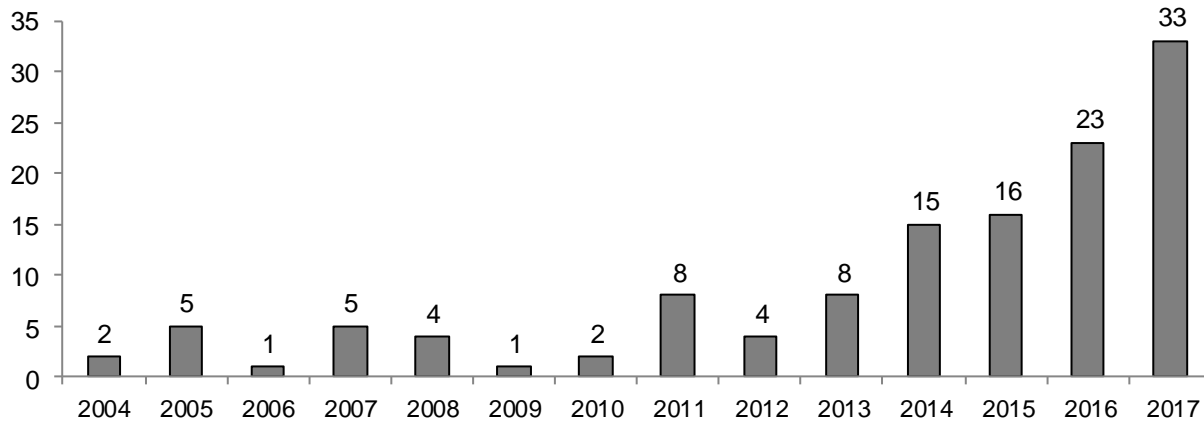
Source: South Dakota Department of Health, Office of Health Statistics

**Table 59**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Pharmaceutical Drug Poisoning, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	33	28	27	24	35	41	40	47	33	38	48	39	43	48
<b>Unintentional</b>	18	11	16	10	19	22	16	34	18	24	33	24	31	30
<b>Suicide</b>	10	11	9	7	8	11	14	10	10	12	9	12	10	17
<b>Homicide</b>	0	0	0	0	0	1	0	0	0	0	0	0	1	0
<b>Undetermined Intent</b>	5	6	2	7	8	7	10	3	5	2	6	3	1	1

Source: South Dakota Department of Health, Office of Health Statistics

**Figure 17**  
**South Dakota Resident Deaths Due to Illicit Drug Poisoning, 2004-2017**



Source: South Dakota Department of Health, Office of Health Statistics

**Table 60**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Drug Poisoning, 2004-2017**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total</b>	2	5	1	5	4	1	2	8	4	8	15	16	23	33
<b>Unintentional</b>	2	4	0	5	3	1	2	7	3	6	14	16	23	31
<b>Suicide</b>	0	0	1	0	0	0	0	1	1	1	1	0	0	1
<b>Homicide</b>	0	0	0	0	0	0	0	0	0	1	0	0	0	0
<b>Undetermined Intent</b>	0	1	0	0	1	0	0	0	0	0	0	0	0	1

Source: South Dakota Department of Health, Office of Health Statistics

The following tables (61 and 62) show the specific drugs involved in drug overdose deaths for 2017 and for the past 10 years. Out of the 74 total drug deaths in 2017, 22 of those involved methamphetamine. Of those 22 deaths, 12 deaths listed methamphetamine as the only drug while 10 other deaths involved two or more drugs.

The following is an explanation of what is represented with regard to “Drugs Involved” in deaths due to a drug overdose:

- Please note that just because a drug is involved in a drug overdose death doesn’t necessarily mean the overdose was due to that specific drug. It just means that drug was mentioned on the death certificate of a drug overdose

death. Sometimes we have no way of knowing which drug actually caused the overdose in cases where multiple drugs are listed.

- Please be aware that when more than one drug is “involved” in a drug overdose, each drug is counted separately. For example, if methamphetamine and heroin are both listed on the death certificate, each drug will be counted once even though it’s just one death.
- Also, if something like Vicodin, which is a combination of drugs, is listed on the death certificate, each drug will be counted and “involved” in the overdose.
- Analogs of fentanyl are included in the total for fentanyl.

**Table 61**  
**South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved, 2017**

Drugs Involved	Number of Deaths	Number of Specific Drugs Listed on Death Certificate	
		Only Drug	Two or More Drugs
Methamphetamine	22	12	10
Fentanyl (Acrylfentanyl, Furanylfentanyl, Methoxyacetylfentanyl)	12	5	7
Heroin	8	3	5
Oxycodone (Oxycontin, Percocet, Percodan)	5	2	3
Hydrocodone (Vicodin)	4	2	2
Methadone (Methadose)	4	1	3
Quetiapine (Seroquel)	4	1	3
Amitriptyline	3	1	2
Amphetamine (Adderall)	3	1	2
Bupropion (Wellbutrin)	3	1	2
Cocaine (Benzoyllecgonine)	3	1	2
Morphine	3	1	2
Nortriptyline (Pamelor)	3	0	3

Note: ICD -10 Codes: X40-X44, X60-X64, X85, Y10-Y14  
Source: South Dakota Department of Health, Office of Health Statistics

**Table 62**  
**South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved and Year of Death, 2008-2017**

Drugs Involved and Number of Specific Drugs on Death Certificate	Total	Year of Death									
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Methamphetamine</b>	<b>86</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>9</b>	<b>14</b>	<b>13</b>	<b>18</b>	<b>22</b>
1 Drug	55	1	0	1	2	3	6	10	10	10	12
2+ Drugs	31	0	0	1	2	0	3	4	3	8	10
<b>Oxycodone (Oxycontin, Percocet, Percodan)</b>	<b>75</b>	<b>7</b>	<b>13</b>	<b>9</b>	<b>9</b>	<b>3</b>	<b>10</b>	<b>8</b>	<b>2</b>	<b>9</b>	<b>5</b>
1 Drug	38	4	9	4	2	2	6	5	2	2	2
2+ Drugs	37	3	4	5	7	1	4	3	0	7	3
<b>Morphine</b>	<b>63</b>	<b>6</b>	<b>3</b>	<b>9</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>7</b>	<b>3</b>
1 Drug	37	5	2	7	4	5	5	6	0	2	1
2+ Drugs	26	1	1	2	3	1	5	5	1	5	2
<b>Fentanyl (Acrylfentanyl, Furanylfentanyl, Methoxyacetylfentanyl)</b>	<b>55</b>	<b>3</b>	<b>7</b>	<b>4</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>12</b>
1 Drug	33	1	5	4	3	2	1	4	6	2	5
2+ Drugs	22	2	2	0	1	0	1	3	1	5	7
<b>Hydrocodone (Vicodin)</b>	<b>55</b>	<b>3</b>	<b>3</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>9</b>	<b>5</b>	<b>7</b>	<b>10</b>	<b>4</b>
1 Drug	25	1	1	2	2	3	4	2	3	5	2
2+ Drugs	30	2	2	3	2	2	5	3	4	5	2
<b>Methadone (Methadose)</b>	<b>52</b>	<b>10</b>	<b>4</b>	<b>8</b>	<b>9</b>	<b>1</b>	<b>2</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>4</b>
1 Drug	30	6	3	7	4	1	1	3	3	1	1
2+ Drugs	22	4	1	1	5	0	1	3	1	3	3
<b>Heroin</b>	<b>24</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>8</b>	<b>8</b>
1 Drug	10	0	1	0	0	1	0	0	1	4	3
2+ Drugs	14	0	0	0	1	0	0	2	2	4	5
<b>Amitriptyline</b>	<b>22</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>3</b>
1 Drug	8	1	1	0	2	2	1	0	0	0	1
2+ Drugs	14	0	0	2	0	2	2	1	1	4	2
<b>Tramadol</b>	<b>21</b>	<b>5</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>1</b>
1 Drug	8	1	1	1	1	2	1	0	1	0	0
2+ Drugs	13	4	0	1	1	1	1	0	1	3	1
<b>Acetaminophen (Darvocet, Excedrin, Percocet, Tylenol, Vicodin)</b>	<b>20</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>1</b>
1 Drug	6	0	1	0	1	0	0	2	2	0	0
2+ Drugs	14	3	2	1	3	0	1	0	1	2	1
<b>Diphenhydramine</b>	<b>16</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>1</b>
1 Drug	10	0	2	0	1	0	1	2	2	1	1
2+ Drugs	6	1	0	1	0	1	0	0	2	1	0
<b>Quetiapine (Seroquel)</b>	<b>15</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>
1 Drug	5	0	1	1	0	1	0	0	0	1	1
2+ Drugs	10	1	0	4	0	0	0	0	0	2	3
<b>Cocaine (Benzoyllecgonine)</b>	<b>14</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>3</b>
1 Drug	4	2	0	0	1	0	0	0	0	0	1
2+ Drugs	10	0	0	0	2	0	0	0	3	3	2
<b>Alprazolam (Xanax)</b>	<b>12</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>
1 Drug	3	0	0	0	0	1	1	1	0	0	0
2+ Drugs	9	0	2	1	3	1	1	0	0	1	0
<b>Citalopram (Celexa)</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>
1 Drug	2	1	0	0	0	1	0	0	0	0	0
2+ Drugs	9	0	0	1	1	0	2	3	0	0	2
<b>Codeine</b>	<b>10</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>
1 Drug	2	1	0	0	0	1	0	0	0	0	0
2+ Drugs	8	0	0	0	1	0	2	0	0	3	2
<b>Propoxyphene (Darvocet)</b>	<b>10</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
1 Drug	6	3	3	0	0	0	0	0	0	0	0
2+ Drugs	4	1	1	0	1	0	1	0	0	0	0

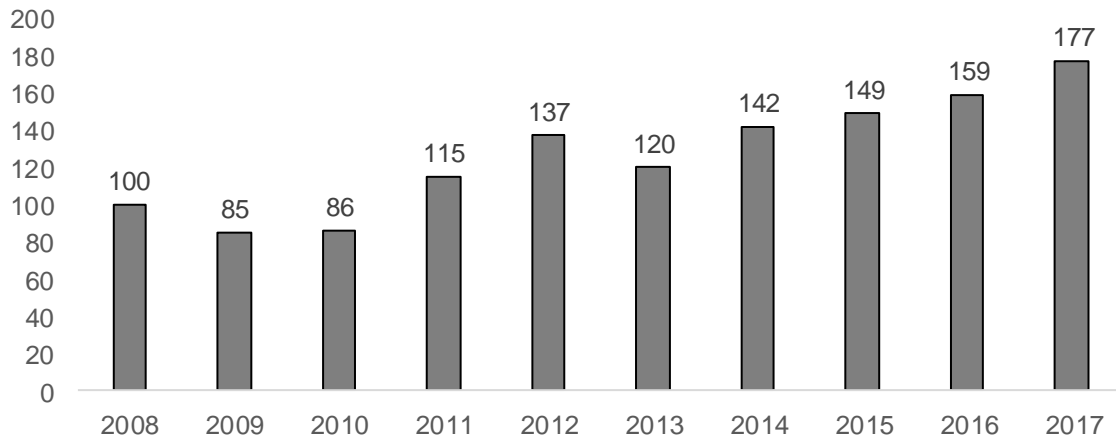
Note: ICD-10 CODES X40-X44, X60-X64, X85, Y10-Y14  
Source: South Dakota Department of Health, Office of Health Statistics

### Alcohol-Induced Deaths

Figure 18, below, shows the alcohol-induced deaths for South Dakota residents for the past 10 years. The definition of

alcohol-induced deaths is located in the back of this report within the Technical Notes section.

**Figure 18**  
**South Dakota Resident Alcohol-Induced Deaths, 2008-2017**



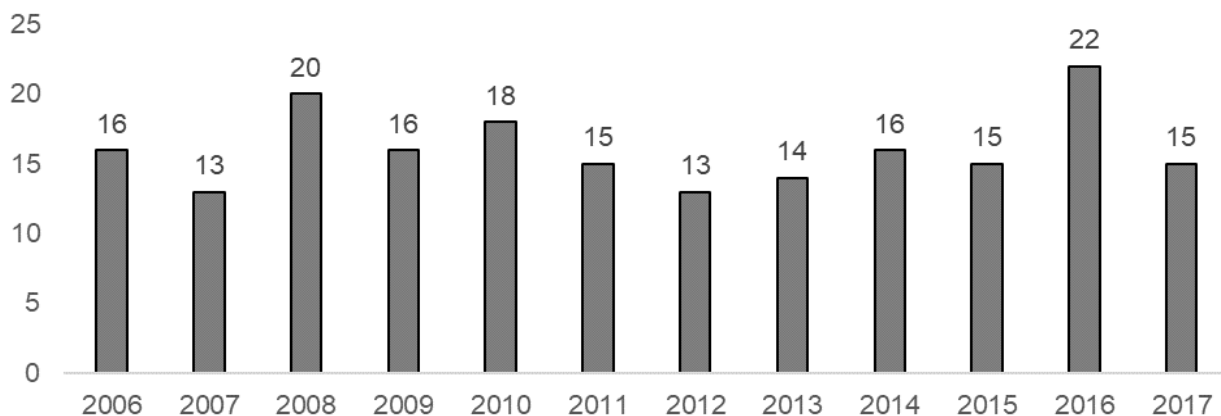
Source: South Dakota Department of Health, Office of Health Statistics

### Farm Accident Deaths

Figure 19, below, shows the number of South Dakota resident deaths due to farm accidents for the past 12 years. The

definition of farm accident deaths is located in the back of this report within the Technical Notes section.

**Figure 19**  
**South Dakota Resident Deaths Due to Farm Accidents, 2006-2017**



Source: South Dakota Department of Health, Office of Health Statistics

### Maternal Mortality

Table 63, on the following page, shows maternal mortality deaths for the past eight

years. Specific definitions are located in the notes below the table.

**Table 63**  
**Deaths Occurring in South Dakota to Women Who Were Pregnant at the Time of**  
**Death or Within One Year After Delivery, 2011-2017**

Year	Any Death While Pregnant, or Within One Year After Delivery	Pregnancy-Related	Pregnancy Associated, But Not Pregnancy-Related
2017	5	*	*
2016	7	*	*
2015	6	*	*
2014	5	1	4
2013	6	1	5
2012	7	1	6
2011	8	3	5

Source: South Dakota Department of Health, Office of Health Statistics

Note: Pregnancy-related: Death resulting from: 1) complications of the pregnancy itself, or 2) the chain of events initiated by the pregnancy that led to death, or 3) aggravation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy that subsequently caused death during pregnancy or within one calendar year of termination of pregnancy, regardless of the duration or anatomical site of pregnancy. This designation comes from the CDC as part of the Pregnancy Mortality Surveillance System (PMSS). \*--The latest year they have reviewed for South Dakota is 2014.

Pregnancy-associated, but not pregnancy-related: Death of a woman from any cause, while she is pregnant or within one calendar year of termination of pregnancy, regardless of the duration or anatomical site of pregnancy, but not pregnancy related (see above). This designation comes from the CDC as part of the Pregnancy Mortality Surveillance System (PMSS). \*--The latest year they have reviewed for South Dakota is 2014.

Firearm Deaths

Table 64, below, shows firearm deaths for South Dakota residents for the past 10 years. The definition of firearm deaths is

located in the back of this report within the Technical Notes section.

**Table 64**  
**South Dakota Resident Deaths Due to Firearms, 2008-2017**

Year	Total Firearm Deaths	Manner of Death		
		Accident	Suicide	Homicide
2017	102	1	83	16
2016	107	5	84	18
2015	95	5	73	16
2014	90	2	76	12
2013	79	1	71	7
2012	84	2	76	6
2011	71	1	60	10
2010	75	3	65	5
2009	75	4	61	10
2008	83	4	68	10

Source: South Dakota Department of Health, Office of Health Statistics

## Method of Disposition

Table 65, below, displays the different methods of disposition for the last 12 years. The top disposition in 2017 was burial with 4,106 deaths. The second highest method of

disposition in 2017 was cremation with 3,315 deaths. Since 2006, cremation has increased from 20.5 percent of all dispositions to 41.5 percent in 2017.

**Table 65**  
**South Dakota Resident Deaths by Disposition, 2006-2017**

Year	Total Deaths	Type of Disposition									
		Burial		Cremation		Removal from State		Donation		Entombment	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2017	7,991	4,106	51.4	3,315	41.5	512	6.4	46	0.6	9	0.1
2016	7,838	4,145	52.9	3,190	40.7	447	5.7	38	0.5	17	0.2
2015	7,724	4,335	56.1	2,939	38.1	413	5.3	23	0.3	14	0.2
2014	7,500	4,302	57.4	2,738	36.5	398	5.3	40	0.5	15	0.2
2013	7,079	4,146	58.6	2,468	34.9	417	5.9	32	0.5	15	0.2
2012	7,283	4,465	61.3	2,345	32.2	428	5.9	33	0.5	10	0.1
2011	7,271	4,539	62.4	2,211	30.4	472	6.5	33	0.5	10	0.1
2010	7,087	4,548	64.2	2,044	28.8	433	6.1	47	0.7	10	0.1
2009	6,913	4,545	65.7	1,855	26.8	464	6.7	34	0.5	8	0.1
2008	7,056	4,857	68.8	1,662	23.6	485	6.9	35	0.5	9	0.1
2007	6,800	4,775	70.2	1,474	21.7	481	7.1	46	0.7	18	0.3
2006	7,038	5,127	72.8	1,440	20.5	431	6.1	30	0.4	6	0.1

Note: Failure of deaths to add to total is due to the disposition not stated.

Source: South Dakota Department of Health, Office of Health Statistics

## Leading Causes and Selected Components

Tables 66a-66c, on pages 75 through 77, display South Dakota resident deaths, the crude death rate, and the age-adjusted death rate for 15 leading causes and selected components from 2008 to 2017.

The crude and age-adjusted rates for all causes in 2017 were 918.9 and 736.1 respectively, which are up from the crude and age-adjusted rates in 2016 of 905.7 and 718.6, respectively.

**Table 66a**  
**South Dakota Resident Deaths for 15 Leading Causes and Selected Components, 2008-**  
**2017**

Cause of Death	Number of Deaths									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>All Causes</b>	<b>7,056</b>	<b>6,913</b>	<b>7,087</b>	<b>7,271</b>	<b>7,283</b>	<b>7,079</b>	<b>7,500</b>	<b>7,724</b>	<b>7,838</b>	<b>7,991</b>
<b>Malignant Neoplasms (Cancer)</b>	1,561	1,506	1,651	1,656	1,623	1,574	1,679	1,632	1,691	1,717
Trachea, Bronchus, and Lung	445	387	434	457	434	416	439	424	420	421
Colon, Rectum, and Anus	152	157	168	137	166	169	186	168	163	158
Pancreas	87	110	98	95	105	109	118	109	128	124
Female Breast	118	95	103	122	107	108	100	104	109	102
Prostate	78	84	96	88	75	76	75	90	107	71
Non-Hodgkin's Lymphoma	68	47	63	62	63	59	52	55	55	71
<b>Heart Disease</b>	1,677	1,778	1,611	1,615	1,652	1,617	1,695	1,712	1,732	1,708
<b>Accidents</b>	372	348	391	407	417	424	461	467	503	537
Motor Vehicle Accidents	125	133	141	99	142	149	151	143	135	166
<b>Chronic Lower Respiratory Diseases</b>	486	440	451	485	479	413	440	500	427	505
<b>Alzheimer's Disease</b>	401	402	401	423	462	420	433	421	449	444
<b>Cerebrovascular Diseases</b>	391	417	411	442	410	414	439	381	420	410
<b>Diabetes Mellitus</b>	216	200	241	267	219	239	223	282	253	262
<b>Influenza and Pneumonia</b>	186	135	166	178	188	186	180	213	195	217
<b>Intentional Self-Harm (Suicide)</b>	123	128	139	125	135	147	141	173	161	192
<b>Chronic Liver Disease and Cirrhosis</b>	100	79	83	98	113	121	128	137	158	152
<b>Unspecified Dementia</b>	80	90	91	117	111	99	120	126	121	105
<b>Essential (Primary) Hypertension and Hypertensive Renal Disease</b>	65	52	93	94	78	72	95	103	92	102
<b>Septicemia</b>	54	63	66	69	64	74	81	119	81	100
<b>Parkinson's Disease</b>	69	65	85	73	53	78	63	80	86	89
<b>Vascular Dementia</b>	50	42	60	67	72	46	68	72	71	78

Source: South Dakota Department of Health, Office of Health Statistics

**Table 66b**  
**South Dakota Resident Crude Death Rates for 15 Leading Causes and Selected Components, 2008-2017**

Cause of Death	Crude Death Rates									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>All Causes</b>	<b>877.0</b>	<b>851.0</b>	<b>870.4</b>	<b>882.3</b>	<b>873.9</b>	<b>837.9</b>	<b>879.1</b>	<b>899.7</b>	<b>905.7</b>	<b>918.9</b>
<b>Malignant Neoplasms (Cancer)</b>	194.0	185.4	202.8	201.0	194.8	186.3	196.8	190.1	195.4	197.4
Trachea, Bronchus, and Lung	55.3	47.6	53.3	55.5	52.1	49.2	51.5	49.4	48.5	48.4
Colon, Rectum, and Anus	18.9	19.3	20.6	16.6	19.9	20.0	21.8	19.6	18.8	18.2
Pancreas	10.8	13.5	12.0	11.5	12.6	12.9	13.8	12.7	14.8	14.3
Female Breast	29.3	23.4	25.3	29.7	25.8	25.7	23.6	24.4	25.4	23.7
Prostate	19.4	20.7	23.6	21.3	17.9	17.9	17.5	20.8	24.5	16.2
Non-Hodgkin's Lymphoma	8.5	5.8	7.7	7.5	7.6	7.0	6.1	6.4	6.4	8.2
<b>Heart Disease</b>	208.4	218.9	197.9	196.0	198.2	191.4	198.7	199.4	200.1	196.4
<b>Accidents</b>	46.2	42.8	48.0	49.4	50.0	50.2	54.0	54.4	58.1	61.7
Motor Vehicle Accidents	15.5	16.4	17.3	12.0	17.0	17.6	17.7	16.7	15.6	19.1
<b>Chronic Lower Respiratory Diseases</b>	60.4	54.2	55.4	58.9	57.5	48.9	51.6	58.2	49.3	58.1
<b>Alzheimer's Disease</b>	49.8	49.5	49.3	51.3	55.4	49.7	50.8	49.0	51.9	51.1
<b>Cerebrovascular Diseases</b>	48.6	51.3	50.5	53.6	49.2	49.0	51.5	44.4	48.5	47.1
<b>Diabetes Mellitus</b>	26.8	24.6	29.6	32.4	26.3	28.3	26.1	32.8	29.2	30.1
<b>Influenza and Pneumonia</b>	23.1	16.6	20.4	21.6	22.6	22.0	21.1	24.8	22.5	25.0
<b>Intentional Self-Harm (Suicide)</b>	15.3	15.8	17.1	15.2	16.2	17.4	16.5	20.2	18.6	22.1
<b>Chronic Liver Disease and Cirrhosis</b>	12.4	9.7	10.2	11.9	13.6	14.3	15.0	16.0	18.3	17.5
<b>Unspecified Dementia</b>	9.9	11.1	11.2	14.2	13.3	11.7	14.1	14.7	14.0	12.1
<b>Essential (Primary) Hypertension and Hypertensive Renal Disease</b>	8.1	6.4	11.4	11.4	9.4	8.5	11.1	12.0	10.6	11.7
<b>Septicemia</b>	6.7	7.8	8.1	8.4	7.7	8.8	9.5	13.9	9.4	11.5
<b>Parkinson's Disease</b>	8.6	8.0	10.4	8.9	6.4	9.2	7.4	9.3	9.9	10.2
<b>Vascular Dementia</b>	6.2	5.2	7.4	8.1	8.6	5.4	8.0	8.4	8.2	9.0

Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
Source: South Dakota Department of Health, Office of Health Statistics



**Table 66c**  
**South Dakota Resident Age-Adjusted Death Rates for 15 Leading Causes and Selected Components, 2008-2017**

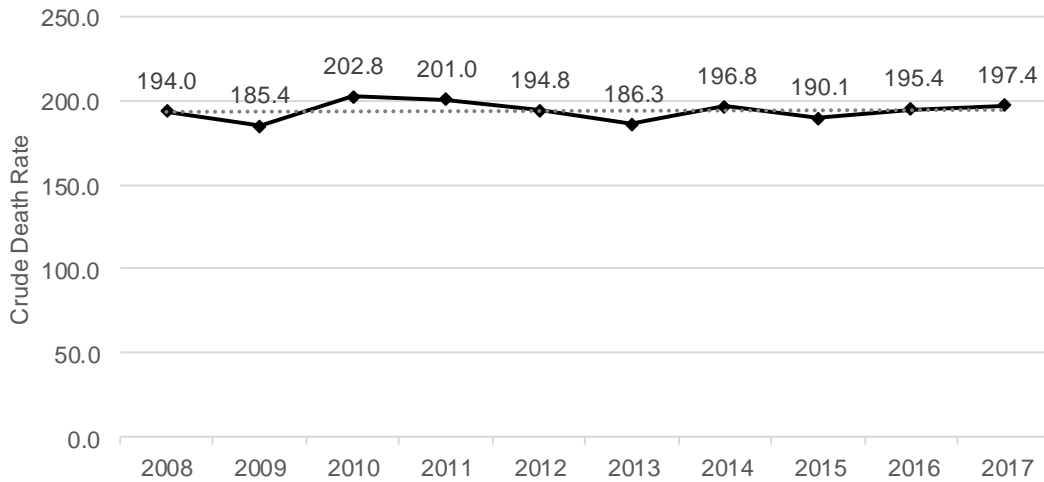
Cause of Death	Age-Adjusted Death Rates									
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>All Causes</b>	<b>712.1</b>	<b>688.6</b>	<b>713.4</b>	<b>716.1</b>	<b>706.8</b>	<b>677.4</b>	<b>709.9</b>	<b>714.9</b>	<b>718.6</b>	<b>736.1</b>
<b>Malignant Neoplasms (Cancer)</b>	164.8	156.5	170.6	168.6	162.2	154.3	161.4	153.3	156.6	157.0
Trachea, Bronchus, and Lung	47.3	40.7	45.4	47.2	43.5	41.0	41.8	39.7	38.2	38.2
Colon, Rectum, and Anus	15.9	15.8	17.0	13.9	16.4	16.7	17.6	15.7	15.2	14.2
Pancreas	8.9	11.3	10.2	9.5	10.6	10.7	11.1	10.3	11.6	11.5
Female Breast	23.3	17.6	19.7	23.7	19.5	19.3	17.9	18.7	19.3	17.3
Prostate	19.2	20.3	23.7	20.9	17.7	17.0	16.7	19.6	23.1	15.7
Non-Hodgkin's Lymphoma	7.0	4.7	6.3	6.2	6.3	5.5	4.8	5.2	5.4	6.4
<b>Heart Disease</b>	162.2	168.3	154.9	153.0	153.8	148.8	153.6	151.0	153.7	150.0
<b>Accidents</b>	41.8	40.0	44.3	44.8	46.6	46.4	49.2	49.3	53.1	56.2
Motor Vehicle Accidents	15.1	16.6	17.0	11.8	17.1	17.4	17.5	16.3	15.8	19.0
<b>Chronic Lower Respiratory Diseases</b>	49.0	43.9	46.0	47.4	45.4	39.1	40.7	45.1	38.5	45.4
<b>Alzheimer's Disease</b>	35.9	35.2	36.2	36.6	39.6	35.1	36.1	34.8	37.1	36.9
<b>Cerebrovascular Diseases</b>	37.6	38.8	39.2	42.0	37.6	37.5	38.8	33.0	35.8	36.3
<b>Diabetes Mellitus</b>	21.8	20.4	24.6	26.8	21.6	22.9	21.2	26.3	23.6	24.8
<b>Influenza and Pneumonia</b>	17.3	12.6	15.5	16.3	16.9	16.4	16.1	18.3	16.7	19.0
<b>Intentional Self-Harm (Suicide)</b>	15.4	16.0	17.3	15.3	16.1	18.0	17.1	20.4	19.9	22.7
<b>Chronic Liver Disease and Cirrhosis</b>	11.6	8.7	9.7	11.1	13.3	13.3	16.0	15.9	16.4	17.0
<b>Unspecified Dementia</b>	6.9	7.9	8.3	10.2	9.4	8.4	10.1	10.5	9.6	8.6
<b>Essential (Primary) Hypertension and Hypertensive Renal Disease</b>	6.2	4.8	8.8	8.5	6.8	6.3	8.1	8.7	7.9	8.7
<b>Septicemia</b>	5.5	6.4	6.7	7.0	6.2	7.2	8.1	11.0	7.5	9.4
<b>Parkinson's Disease</b>	6.7	6.2	8.2	7.0	5.1	7.3	6.3	7.2	7.6	8.1
<b>Vascular Dementia</b>	4.2	3.7	5.3	5.9	6.3	3.9	5.7	5.7	5.4	6.4

Note: The age-adjusted death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
Source: South Dakota Department of Health, Office of Health Statistics

The following figures on the next several pages display 10 year trends for crude death rates for the 15 leading causes of death in 2017. Note: The crude death rate is

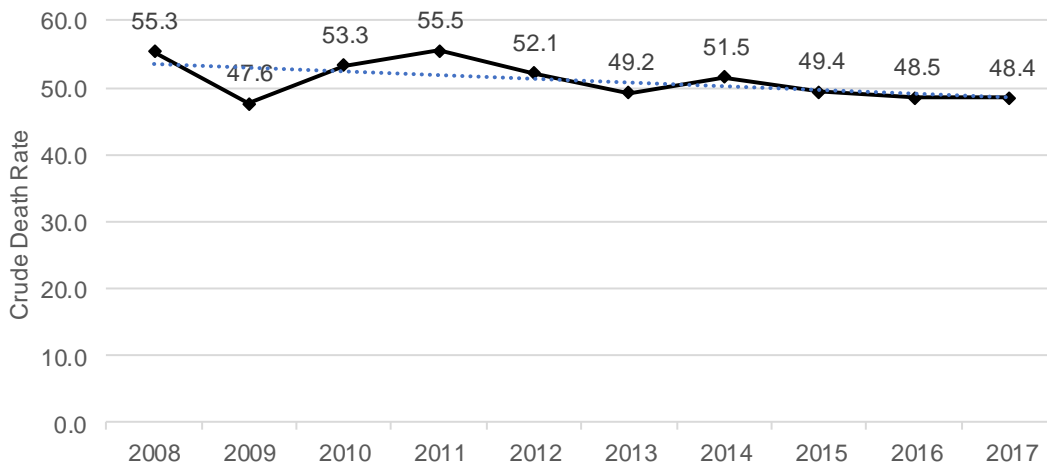
calculated using yearly U.S. Census Bureau population estimates for that year.

**Figure 20**  
**South Dakota Resident Crude Death Rate Due to Malignant Neoplasms by Year of Death, 2008-2017**



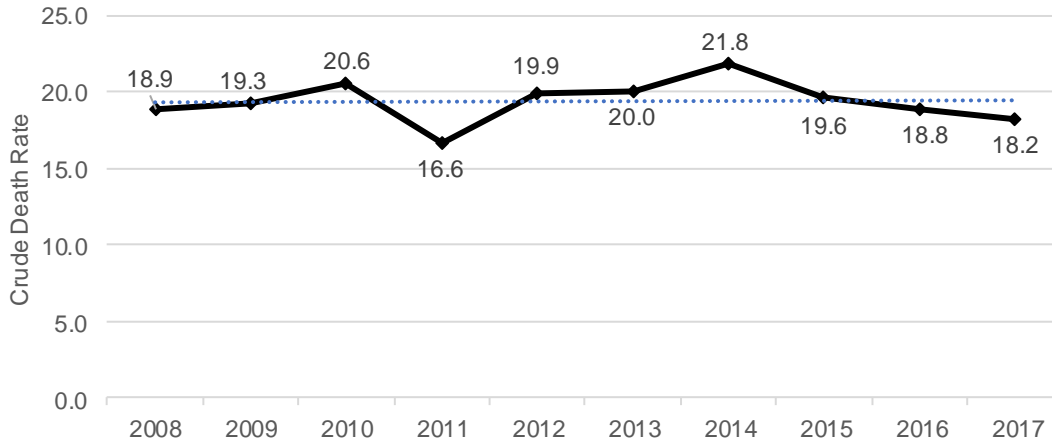
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20a**  
**South Dakota Resident Crude Death Rate Due to Trachea, Bronchus, and Lung Cancer by Year of Death, 2008-2017**



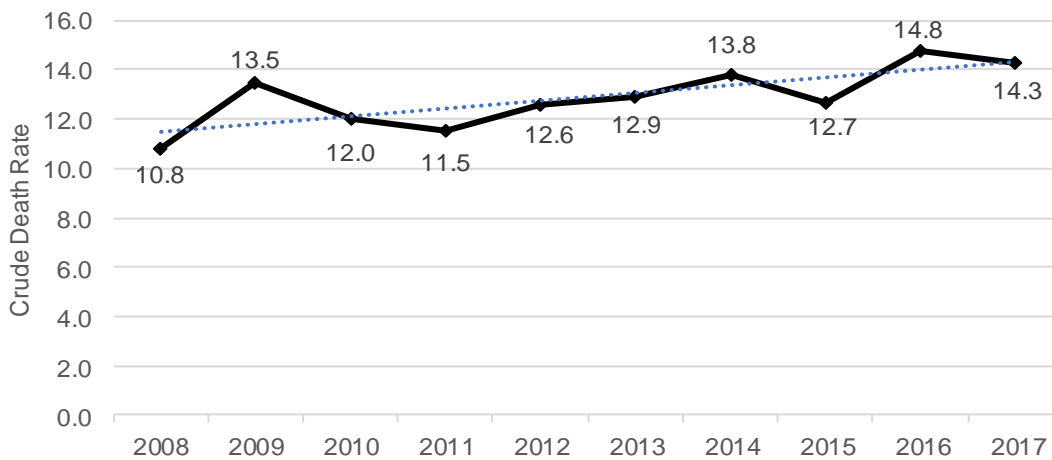
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20b**  
**South Dakota Resident Crude Death Rate Due to Colon, Rectum, and Anus Cancer by Year of Death, 2008-2017**



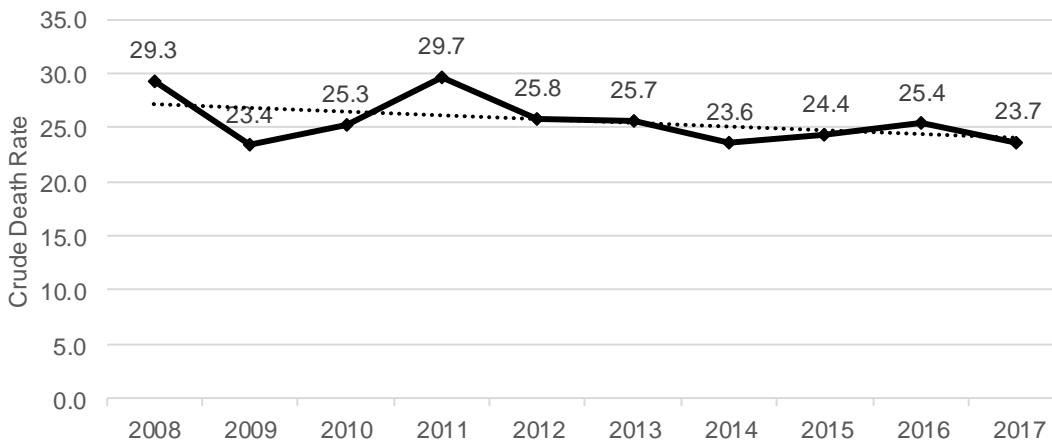
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20c**  
**South Dakota Resident Crude Death Rate Due to Pancreas Cancer by Year of Death, 2008-2017**



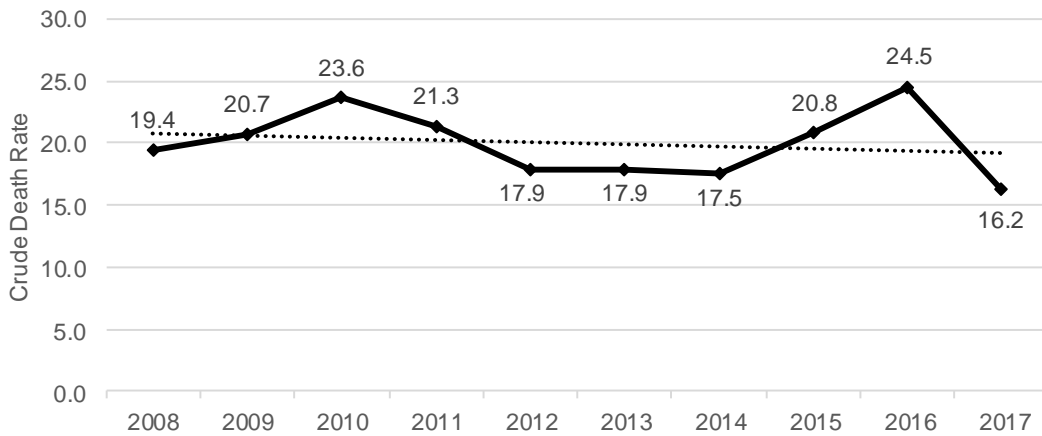
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20d**  
**South Dakota Resident Crude Death Rate Due to Female Breast Cancer by Year of Death, 2008-2017**



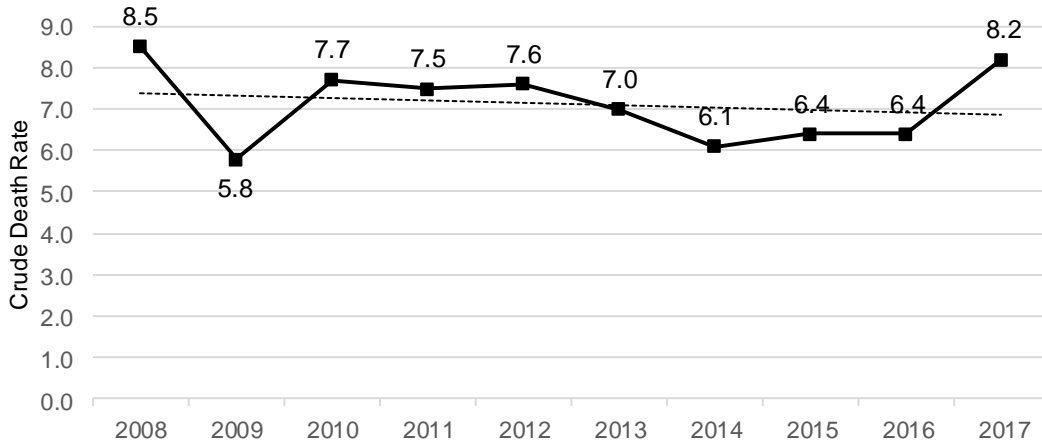
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20e**  
**South Dakota Resident Crude Death Rate Due to Prostate Cancer by Year of Death, 2008-2017**



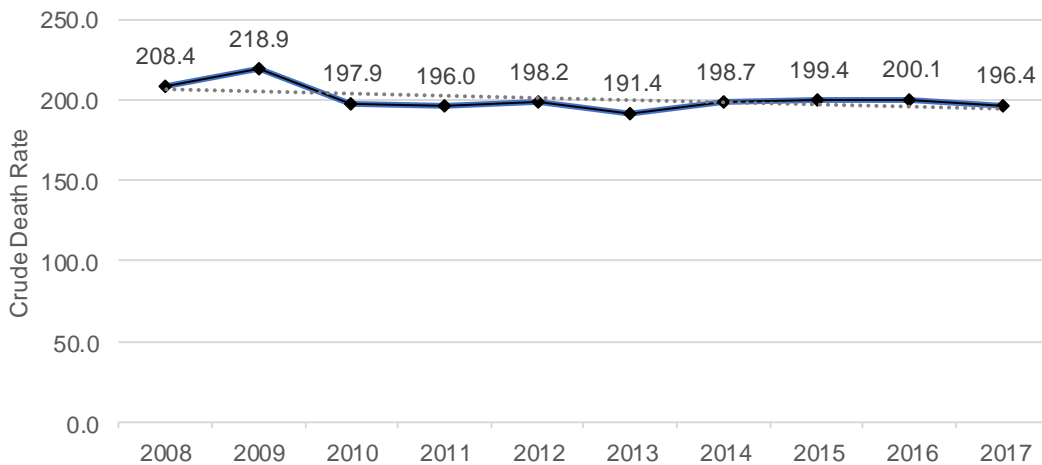
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 20f**  
**South Dakota Resident Crude Death Rate Due to Non-Hodgkin's Lymphoma by Year of Death, 2008-2017**



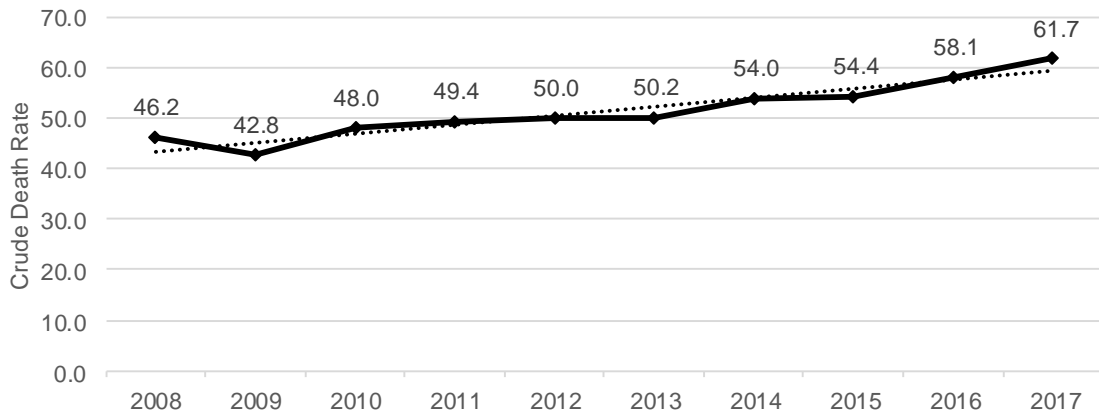
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 21**  
**South Dakota Resident Crude Death Rate Due to Heart Disease by Year of Death, 2008-2017**



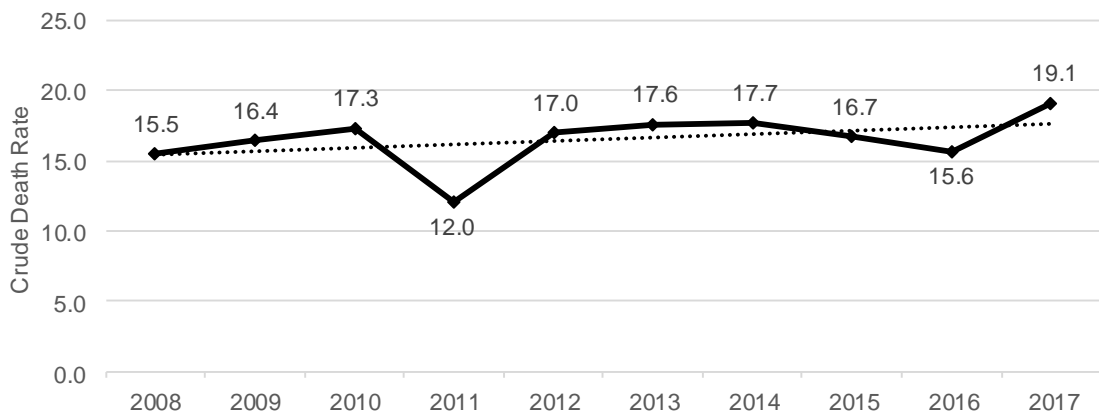
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 22**  
**South Dakota Resident Crude Death Rate Due to Accidents by Year of Death, 2008-2017**



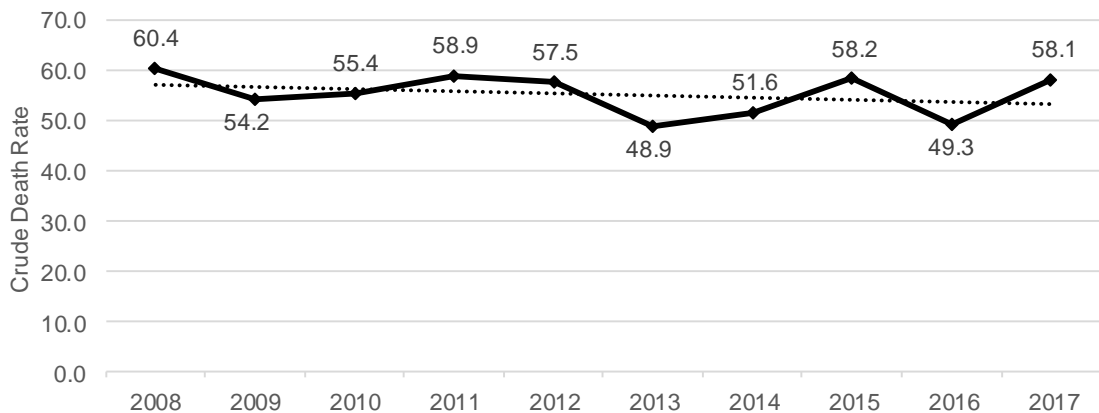
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 22a**  
**South Dakota Resident Crude Death Rate Due to Motor Vehicle Accidents by Year of Death, 2008-2017**



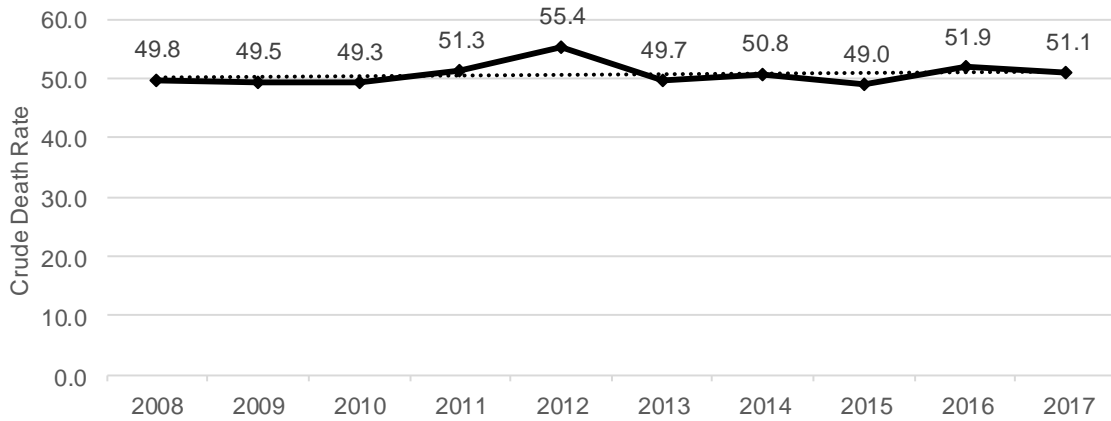
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 23**  
**South Dakota Resident Crude Death Rate Due to Chronic Lower Respiratory Disease by Year of Death, 2008-2017**



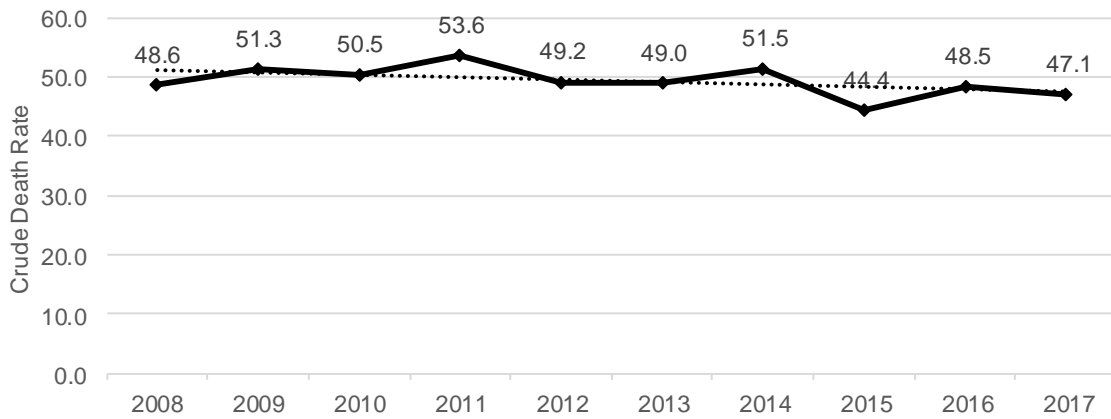
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 24**  
**South Dakota Resident Crude Death Rate Due to Alzheimer's Disease by Year of Death, 2008-2017**



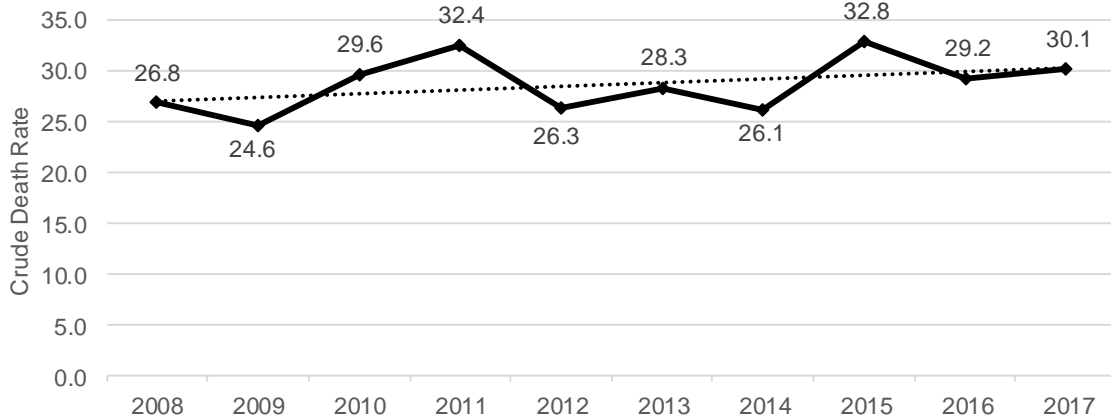
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 25**  
**South Dakota Resident Crude Death Rate Due to Cerebrovascular Disease by Year of Death, 2008-2017**



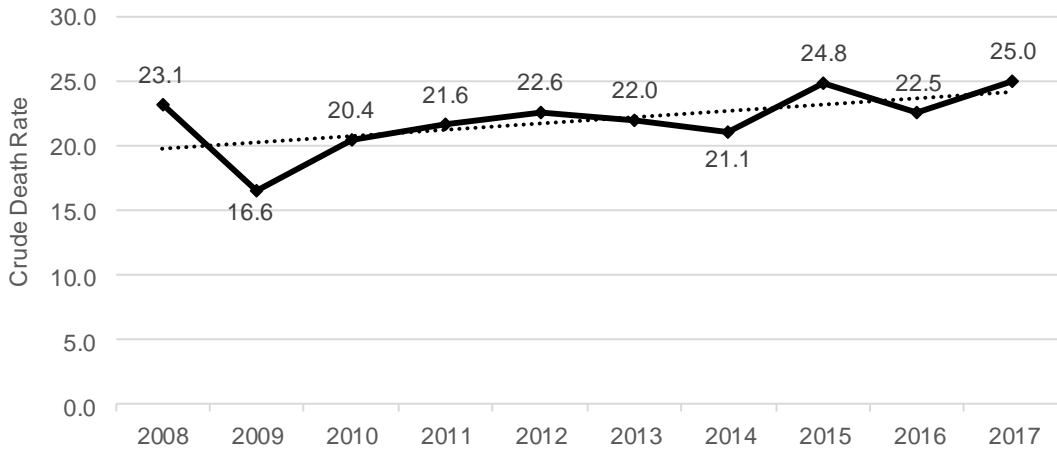
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 26**  
**South Dakota Resident Crude Death Rate Due to Diabetes Mellitus by Year of Death, 2008-2017**



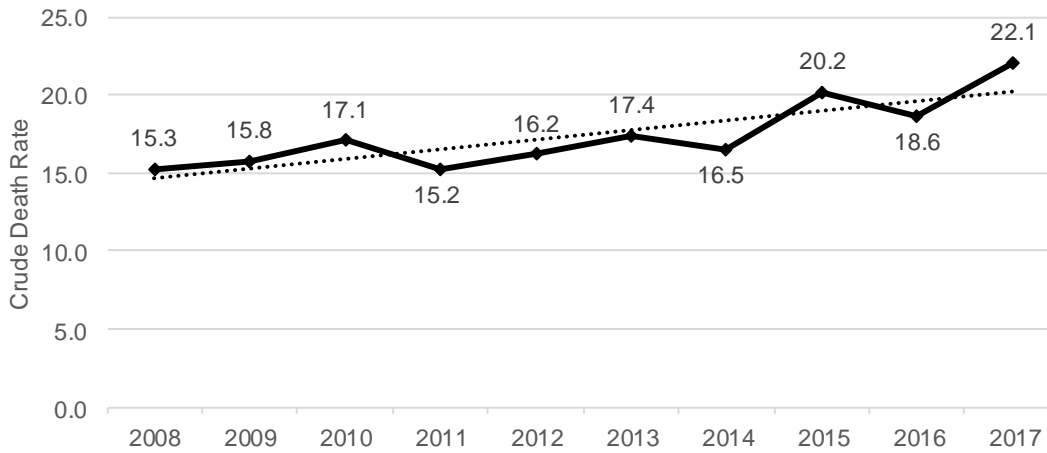
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 27**  
**South Dakota Resident Crude Death Rate Due to Influenza and Pneumonia by Year of Death, 2008-2017**



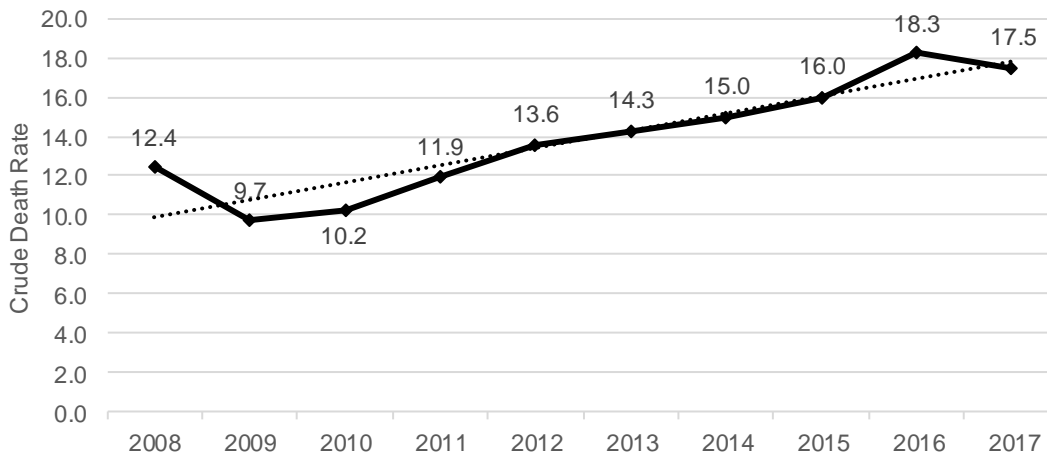
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 28**  
**South Dakota Resident Crude Death Rate Due to Intentional Self Harm (Suicide) by Year of Death, 2008-2017**



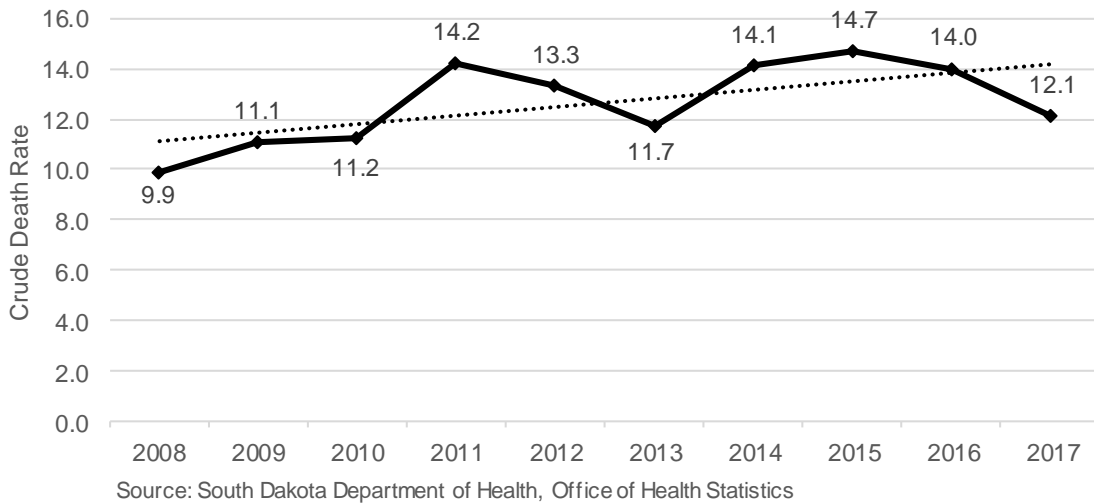
Source: South Dakota Department of Health, Office of Health Statistics

**Figure 29**  
**South Dakota Resident Crude Death Rate Due to Chronic Liver Disease and Cirrhosis by Year of Death, 2008-2017**

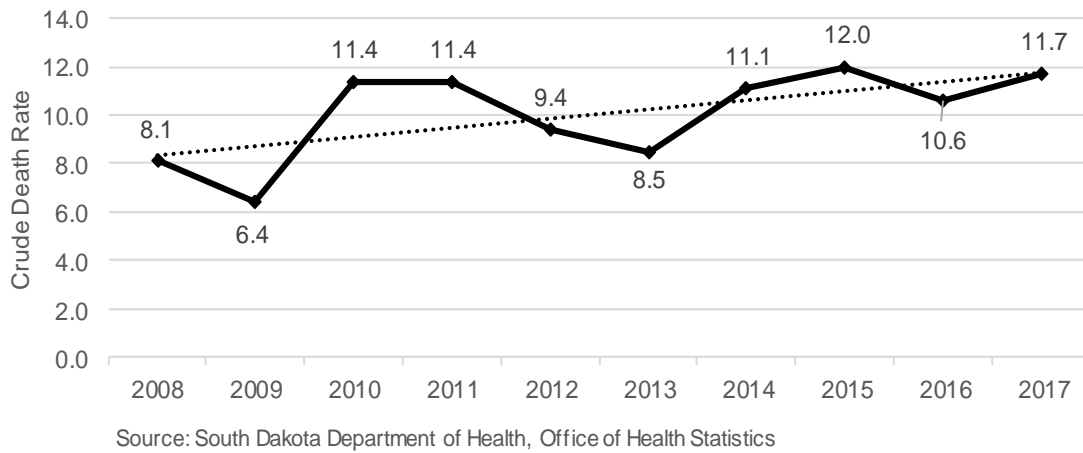


Source: South Dakota Department of Health, Office of Health Statistics

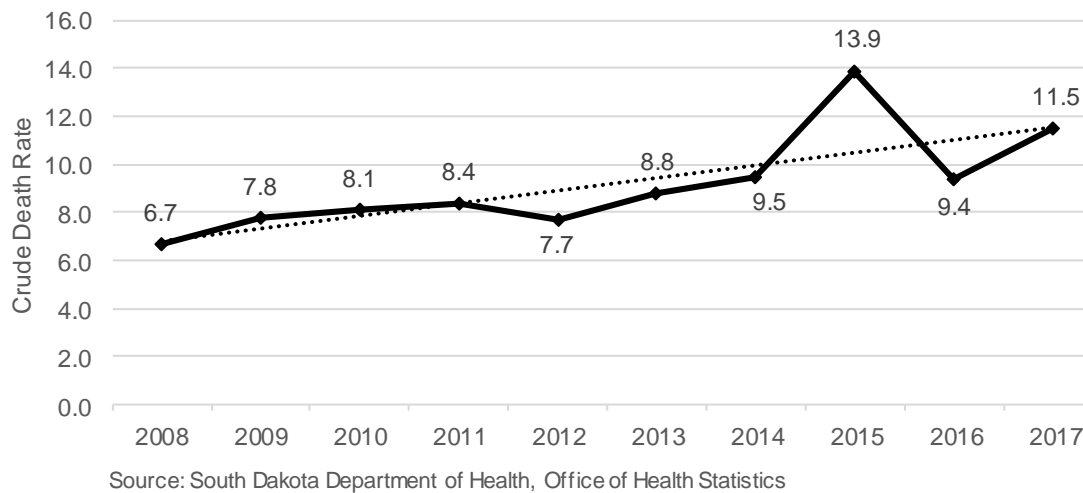
**Figure 30**  
**South Dakota Resident Crude Death Rate Due to Unspecified Dementia by Year of Death, 2008-2017**



**Figure 31**  
**South Dakota Resident Crude Death Rate Due to Essential (Primary) Hypertension and Hypertensive Renal Disease by Year of Death, 2008-2017**

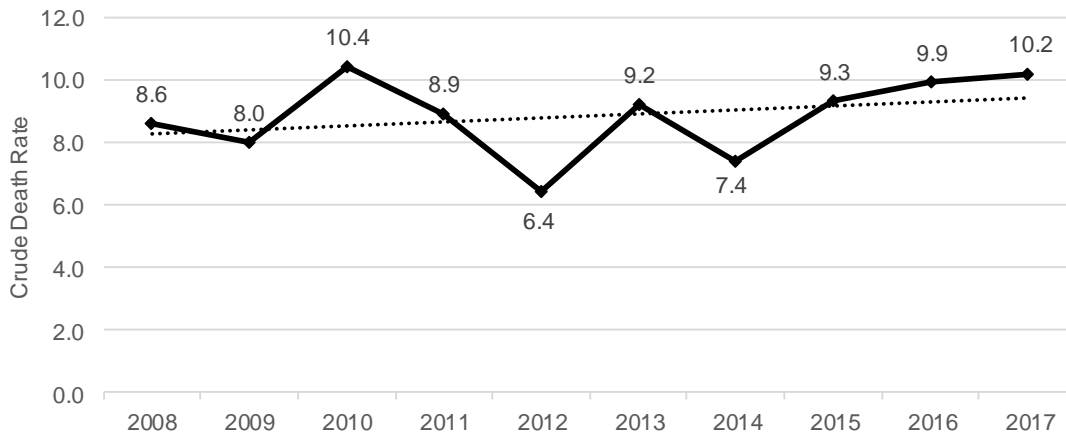


**Figure 32**  
**South Dakota Resident Crude Death Rate Due to Septicemia by Year of Death, 2008-2017**



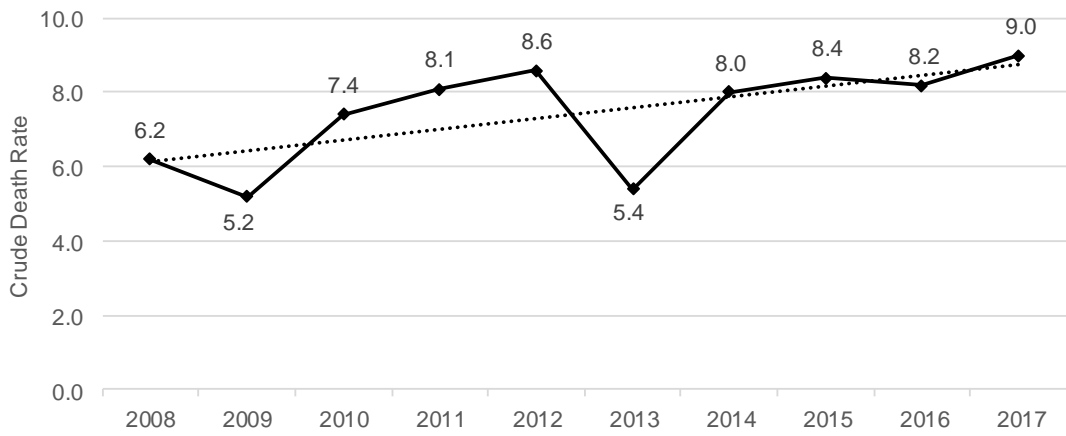


**Figure 33**  
**South Dakota Resident Crude Death Rate Due to Parkinson's Disease by Year of Death, 2008-2017**



Source: South Dakota Department of Health, Office of Health Statistics

**Figure 34**  
**South Dakota Resident Crude Death Rate Due to Vascular Dementia by Year of Death, 2008-2017**



Source: South Dakota Department of Health, Office of Health Statistics

