

# Mortality

<b>An Overview: 2016</b>	
Total South Dakota Resident Deaths	7,838
Crude Death Rates per 100,000 Population	
South Dakota	905.7
United States (2014)	823.7
Age-Adjusted Death Rates per 100,000 Population	
South Dakota	718.6
United States (2014)	724.6

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 2016, (7,838 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, 2000-2016**

Year	United States			South Dakota		
	Number	Crude Rate	Age-Adjusted Rate	Number	Crude Rate	Age-Adjusted Rate
2016	NA*	NA*	NA*	7,838	905.7	718.6
2015	NA*	NA*	NA*	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
2000	2,403,351	854.0	869.0	7,014	929.2	804.8

Note: \*U.S. 2015 and 2016 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

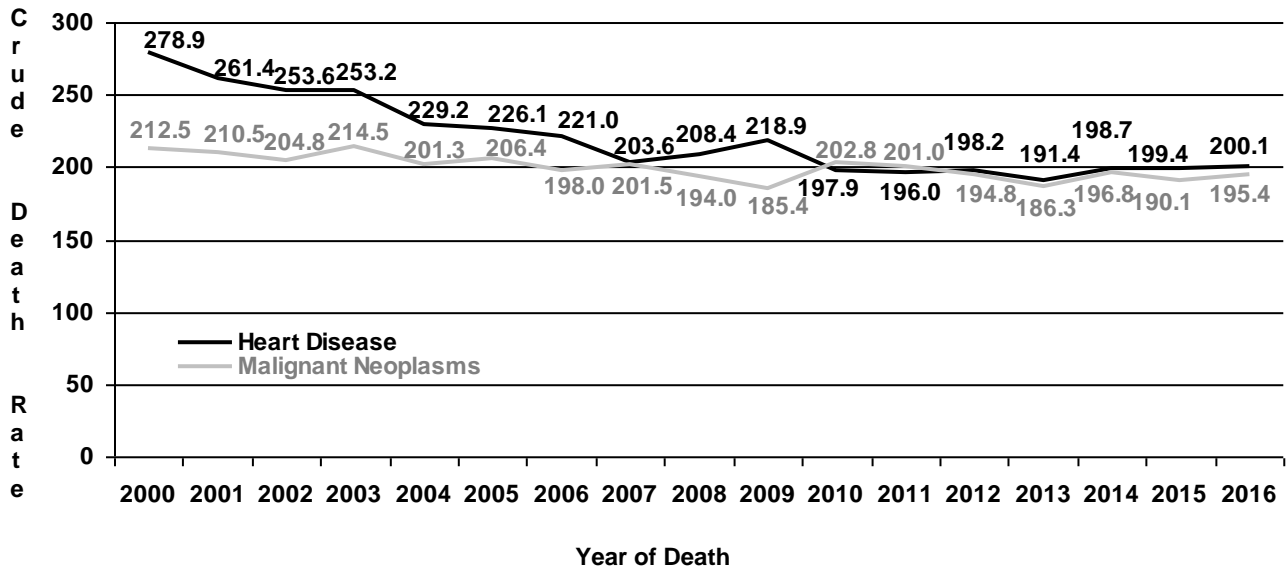
The five leading causes of death in 2016 for South Dakota residents were heart disease, cancer, accidents, Alzheimer’s disease, and chronic lower respiratory diseases.

Heart disease remained the leading cause of death in South Dakota accounting for 22.1 percent of South Dakota’s 2016 resident deaths. Heart disease was the leading cause of death for whites, males, and females in 2016. Accidents were the leading cause of death for American Indians in 2016.

Acute myocardial infarction was the leading cause of heart disease deaths during the year, accounting for 34.4 percent of heart disease deaths.

Figure 8, below, compares the crude death rates of South Dakota resident heart disease and cancer since 2000. From 2015 to 2016 there was an increase in the heart disease rate and an increase in the cancer rate.

**Figure 8**  
**South Dakota Resident Crude Death Rate Due to Malignant Neoplasms and Heart Disease by Year of Death, 2000-2016**



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

Cancer was the second leading cause of death in 2016 and accounted for 21.6 percent of South Dakota resident deaths, a 2.4 percent increase from 2015.

Accidents were the third leading cause of death and accounted for 6.4 percent of 2016 South Dakota resident deaths, a 6.7 percent increase from 2015. Motor vehicle accidents accounted for 26.8 percent of accidental deaths.

Alzheimer’s disease was the fourth leading cause of death accounting for 5.7 percent of all South Dakota resident deaths in 2016, an increase of 3.6 percent from 2015.

Chronic lower respiratory disease accounted for 5.7 percent of South Dakota resident deaths and fell from third leading cause of death in 2015 to fifth leading cause of death in 2016.

Table 46, below, displays the breakdown of accidental deaths, which were the third leading cause of deaths among South Dakotans. In 2016, 503 or 6.4 percent of deaths were due to accidents.

The highest type of motor vehicle death in 2016 was car occupant with 48 deaths. The highest death in the other causes of accidental death in 2016 was falls with 185 deaths.

**Table 46**  
**South Dakota Resident Leading Causes of Death Due to Accidents, 2012-2016**

	Total	Year of Death				
		2012	2013	2014	2015	2016
<b>Total Deaths</b>	<b>2,272</b>	<b>417</b>	<b>424</b>	<b>461</b>	<b>467</b>	<b>503</b>
<b>Motor Vehicle Accidents</b>	<b>720</b>	<b>142</b>	<b>149</b>	<b>151</b>	<b>143</b>	<b>135</b>
Car Occupant (V40-V49)	341	73	76	74	70	48
Occupant of Pick-Up Truck or Van (V50-V59)	133	24	25	31	25	28
Motorcycle Rider (V20-V29)	62	14	14	9	11	14
Pedestrian (V01-V09)	61	8	16	12	10	15
Occupant of Special All-Terrain Vehicle (V86)	39	11	5	5	9	9
Occupant of Heavy Transport Vehicle (V60-V69)	7	1	1	2	0	3
All Other Motor Vehicle Accidents	77	11	12	18	18	18
<b>Other Causes of Accidental Death</b>	<b>1,552</b>	<b>275</b>	<b>275</b>	<b>310</b>	<b>324</b>	<b>368</b>
Falls (W00-W19)	825	143	146	170	181	185
Accidental Poisoning (X40-X49)	268	42	44	58	57	67
Accidental Threats to Breathing (excl. drowning) (W75-W84)	118	18	29	24	20	27
Exposure to Smoke, Fire, and Flames ( X00-X09)	56	22	10	5	9	10
Accidental Drowning and Submersion (W65-W74, V90, V92)	55	13	11	8	13	10
Exposure to Excessive Natural Cold (X31)	42	6	9	8	5	14
Accidental Discharge of Firearms (W32-W34)	15	2	1	2	5	5
Air Transport Accidents (V95.0-V95.3, V95.8-V95.9, & V96-V97)	12	2	1	5	1	3
Contact with Agricultural Machinery (W30)	11	3	2	1	3	2
All Other Causes of Accidents	150	24	22	29	30	45

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. Heart disease and cancer were the leading causes of death in 2016 and for each of the five prior years.

In 2016, 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 Alzheimer's disease and chronic lower respiratory disease round out the top 5 causes in 2016.

**Table 47**  
**South Dakota Resident Leading Causes of Death, 2012-2016**

Cause of Death	Total			2012			2013			2014			2015			2016		
	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%
South Dakota (All Deaths)		37,424	100		7,283	100		7,079	100		7,500	100		7,724	100		7,838	100
Heart Disease (I00-I09, I11, I13, I20-I51)	1	8,408	22.5	1	1,652	22.7	1	1,617	22.8	1	1,695	22.6	1	1,712	22.1	1	1,732	22.1
Malignant Neoplasms (Cancer) (C00-C97)	2	8,199	21.9	2	1,623	22.3	2	1,574	22.2	2	1,679	22.4	2	1,632	21.1	2	1,691	21.6
Accidents (V01-X59, Y85-Y86)	3	2,272	6.1	5	417	5.7	3	424	6.0	3	461	6.1	4	467	6.0	3	503	6.4
Chronic Lower Respiratory Diseases (J40-J47)	4	2,259	6.0	3	479	6.6	6	413	5.8	4	440	5.9	3	500	6.5	5	427	5.4
Alzheimer's Disease (G30)	5	2,185	5.8	4	462	6.3	4	420	5.9	6	433	5.8	5	421	5.5	4	449	5.7
Cerebrovascular Diseases (I60-I69)	6	2,064	5.5	6	410	5.6	5	414	5.8	5	439	5.9	6	381	4.9	6	420	5.4
Diabetes Mellitus (E10-E14)	7	1,216	3.2	7	219	3.0	7	239	3.4	7	223	3.0	7	282	3.7	7	253	3.2
Influenza and Pneumonia (J09-J18)	8	962	2.6	8	188	2.6	8	186	2.6	8	180	2.4	8	213	2.8	8	195	2.5
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	757	2.0	9	135	1.9	9	147	2.1	9	141	1.9	9	173	2.2	9	161	2.1
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	657	1.8	10	113	1.6	10	121	1.7	10	128	1.7	10	137	1.8	10	158	2.0
All Other Causes	-	8,445	22.6	-	1,585	21.8	-	1,524	21.5	-	1,681	22.4	-	1,806	23.4	-	1,849	23.6

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, 2016**

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>7,838</b>	<b>100</b>	<b>905.7</b>	<b>718.6</b>		<b>7,041</b>	<b>100</b>	<b>955.3</b>	<b>676.8</b>		<b>656</b>	<b>100</b>	<b>844.2</b>	<b>1,361.3</b>
Heart Disease (I00-I09, I11, I13, I20-I51)	1	1,732	22.1	200.1	153.7	1	1,616	23.0	219.2	150.4	2	91	13.9	117.1	210.6
Malignant Neoplasms (Cancer) (C00-C97)	2	1,691	21.6	195.4	156.6	2	1,584	22.5	214.9	155.6	3	86	13.1	110.7	184.5
Accidents (V01-X59, Y85-Y86)	3	503	6.4	58.1	53.1	6	388	5.5	52.6	44.3	1	98	14.9	126.1	146.0
Alzheimer's Disease (G30)	4	449	5.7	51.9	37.1	3	439	6.2	59.6	37.7	*	-	-	-	-
Chronic Lower Respiratory Diseases (J40-J47)	5	427	5.4	49.3	38.5	5	400	5.7	54.3	37.9	8	21	3.2	27.0	59.1
Cerebrovascular Diseases (I60-I69)	6	420	5.4	48.5	35.8	4	403	5.7	54.7	35.8	*	-	-	-	-
Diabetes Mellitus (E10-E14)	7	253	3.2	29.2	23.6	7	196	2.8	26.6	19.2	5	51	7.8	65.6	120.8
Influenza and Pneumonia (J09-J18)	8	195	2.5	22.5	16.7	8	169	2.4	22.9	14.7	7	23	3.5	29.6	63.5
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	161	2.1	18.6	19.9	10	115	1.6	15.6	16.0	6	34	5.2	43.8	45.8
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	158	2.0	18.3	16.4	*	-	-	-	-	4	58	8.8	74.6	107.6
Unspecified Dementia (F03)	*	-	-	-	-	9	116	1.6	15.7	9.5	*	-	-	-	-
Assault (homicide) (X85-Y09, Y87.1)	*	-	-	-	-	*	-	-	-	-	T9	18	2.7	23.2	22.6
Nephritis, nephrotic syndrome, and nephrosis (N00-N07, N17-N19, N25-N27)	*	-	-	-	-	*	-	-	-	-	T9	18	2.7	23.2	42.5
All Other Causes	-	1,849	23.6	213.6	-	-	1,615	22.9	219.1	-	-	158	24.1	203.3	-

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 2016, patterns for the 10 leading causes of death varied by race. Seven of the 10 leading causes were the same for whites and American Indians, but they differed by rank. For example, accidents were the sixth leading cause of death at 5.5 percent for the white population, but was the first leading cause of death for the American Indian population at 14.9 percent.

## 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 2016, 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

Heart disease deaths ranked second place for American Indians in 2016 while cancer ranked third.

Alzheimer's disease, cerebrovascular 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, assault (homicide), and nephritis, nephrotic syndrome, and nephrosis.

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, 2016**

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>7,838</b>	<b>100</b>	<b>905.7</b>	<b>718.6</b>		<b>4,049</b>	<b>100</b>	<b>928.1</b>	<b>862.3</b>		<b>3,789</b>	<b>100</b>	<b>882.8</b>	<b>594.1</b>
Heart Disease (I00-I09, I11, I13, I20-I51)	1	1,732	22.1	200.1	153.7	1	943	23.3	216.1	198.7	1	789	20.8	183.8	114.8
Malignant Neoplasms (Cancer) (C00-C97)	2	1,691	21.6	195.4	156.6	2	934	23.1	214.1	193.3	2	757	20.0	176.4	129.5
Accidents (V01-X59, Y85-Y86)	3	503	6.4	58.1	53.1	3	313	7.7	71.7	70.8	5	190	5.0	44.3	35.4
Alzheimer's Disease (G30)	4	449	5.7	51.9	37.1	7	134	3.3	30.7	30.0	3	315	8.3	73.4	41.4
Chronic Lower Respiratory Diseases (J40-J47)	5	427	5.4	49.3	38.5	4	243	6.0	55.7	50.6	6	184	4.9	42.9	30.3
Cerebrovascular Diseases (I60-I69)	6	420	5.4	48.5	35.8	5	155	3.8	35.5	31.9	4	265	7.0	61.7	38.0
Diabetes Mellitus (E10-E14)	7	253	3.2	29.2	23.6	6	137	3.4	31.4	29.3	7	116	3.1	27.0	19.1
Influenza and Pneumonia (J09-J18)	8	195	2.5	22.5	16.7	10	87	2.1	19.9	18.5	8	108	2.9	25.2	14.9
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	9	161	2.1	18.6	19.9	8	125	3.1	28.7	30.4	*	-	-	-	-
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	10	158	2.0	18.3	16.4	9	90	2.2	20.6	18.7	10	68	1.8	15.8	13.9
Unspecified Dementia (F03)	*	-	-	-	-	*	-	-	-	-	9	86	2.3	20.0	10.6
All Other Causes	-	1,849	23.6	213.6	-	-	888	21.9	203.5	-	-	911	24.0	212.3	-

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, 2012-2016**

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 8,408	Accidents 58	Accidents 115	Accidents 278	Accidents 226	Malignant Neoplasms (Cancer) 244	Malignant Neoplasms (Cancer) 999	Malignant Neoplasms (Cancer) 1,756	Malignant Neoplasms (Cancer) 2,212	Heart Disease 2,537	Heart Disease 2,327
2	Malignant Neoplasms (Cancer) 8,199	Assault (Homicide) 19	Intentional Self-harm (Suicide) 91	Intentional Self-harm (Suicide) 153	Intentional Self-Harm (Suicide) 127	Heart Disease 208	Heart Disease 658	Heart Disease 1,146	Heart Disease 1,431	Malignant Neoplasms (Cancer) 2,155	Alzheimer's Disease 993
3	Accidents 2,272	Malignant Neoplasms (Cancer) 14	Malignant Neoplasms (Cancer) 18	Assault (Homicide) 30	Chronic Liver Disease and Cirrhosis 81	Accidents 201	Accidents 263	Chronic Lower Respiratory Disease 330	Chronic Lower Respiratory Disease 611	Alzheimer's Disease 954	Malignant Neoplasms (Cancer) 715
4	Chronic Lower Respiratory Diseases 2,259	Congenital Malformations, Deformations, and Chromosomal Anomalies 11	Assault (Homicide) 14	Malignant Neoplasms (Cancer) 25	Heart Disease 69	Chronic Liver Disease and Cirrhosis 146	Chronic Liver Disease and Cirrhosis 193	Diabetes Mellitus 231	Cerebrovascular Disease 325	Chronic Lower Respiratory Disease 796	Cerebrovascular Disease 655
5	Alzheimer's Disease 2,185	Ill-Defined and Unknown Causes of Mortality 6	Heart Disease 7	Heart Disease 21	Malignant Neoplasms (Cancer) 60	Intentional Self-Harm (Suicide) 141	Intentional Self-Harm (Suicide) 131	Accidents 200	Diabetes Mellitus 265	Cerebrovascular Disease 795	Chronic Lower Respiratory Disease 403

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.

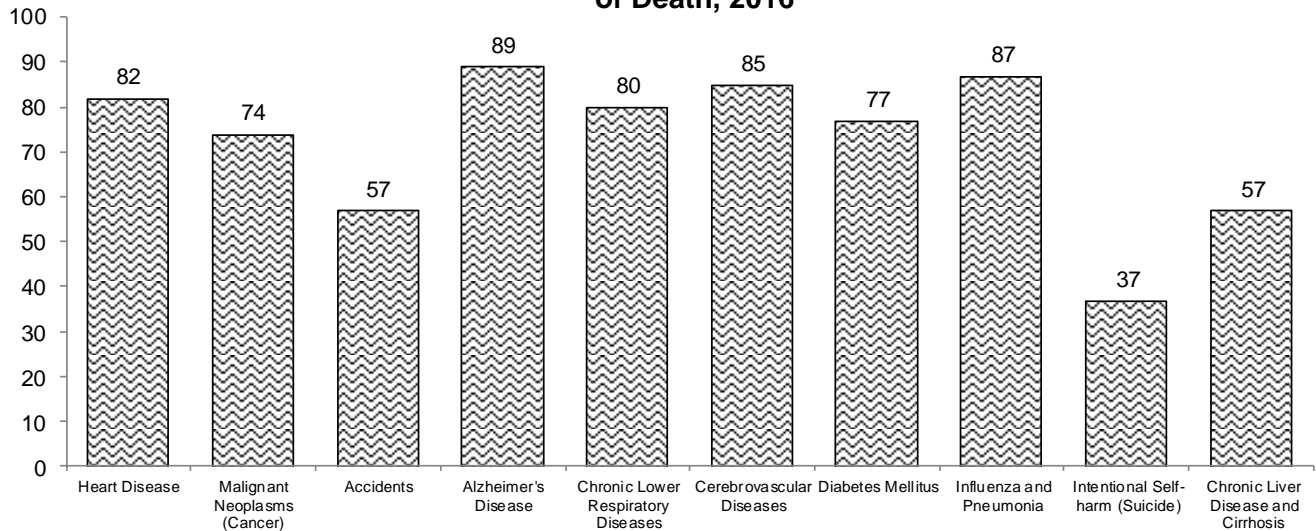
The leading cause of death for persons 40-79 was cancer. Heart disease was the leading cause of death for persons aged 80 and older.

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 2016. The median age for

the 10 leading causes of death in 2016 remained quite similar to the median ages of death in 2015.

**Figure 9**  
**Median Age at Death for South Dakota Residents for the Leading Causes of Death, 2016**



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 58, 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, 2012-2016**

Year of Death	Total Median Age	White	American Indian	Male	Female
2016	79	81	58	75	83
2015	80	81	56	76	83
2014	80	81	58	76	83
2013	80	81	59	75	83
2012	80	82	58	76	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 2016, the median age at death was 79 for all South Dakotans; for white residents the median age was 81, compared to 58 for American Indians. The overall median age at death remained the same for whites and increased for American Indians when

compared to their overall median age at death in 2015. The median age at death in 2016 for South Dakota resident males and females was 75 and 83, respectively. The median age at death for males decreased from 2015 to 2016 while females' median age at death remained the same.

**Table 52**  
**Median Age at Death for South Dakota Residents for the Leading Causes of Death**  
**by Race and Gender, 2016**

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>58</b>	<b>75</b>	<b>83</b>
Heart Disease (I00-I09, I11, I13, I20-I51)	82	83	64	77	87
Malignant Neoplasms (Cancer) (C00-C97)	74	75	65	74	74
Accidents (V01-X59, Y85-Y86)	57	68	34	51	79
Alzheimer's Disease (G30)	89	89	*	87	90
Chronic Lower Respiratory Diseases (J40-J47)	80	80	75	79	80
Cerebrovascular Diseases (I60-I69)	85	85	*	80	87
Diabetes Mellitus (E10-E14)	77	79	65	76	79
Influenza and Pneumonia (J09-J18)	87	87	72	82	88
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	37	44	28	38	*
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	57	*	53	57	60
Assault (homicide) (X85-Y019, Y87.1)	*	*	27	*	*
Nephritis, Nephrotic Syndrome, and Nephrosis (N00-N07, N17-N19, N25-N27)	*	*	67	*	*
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.

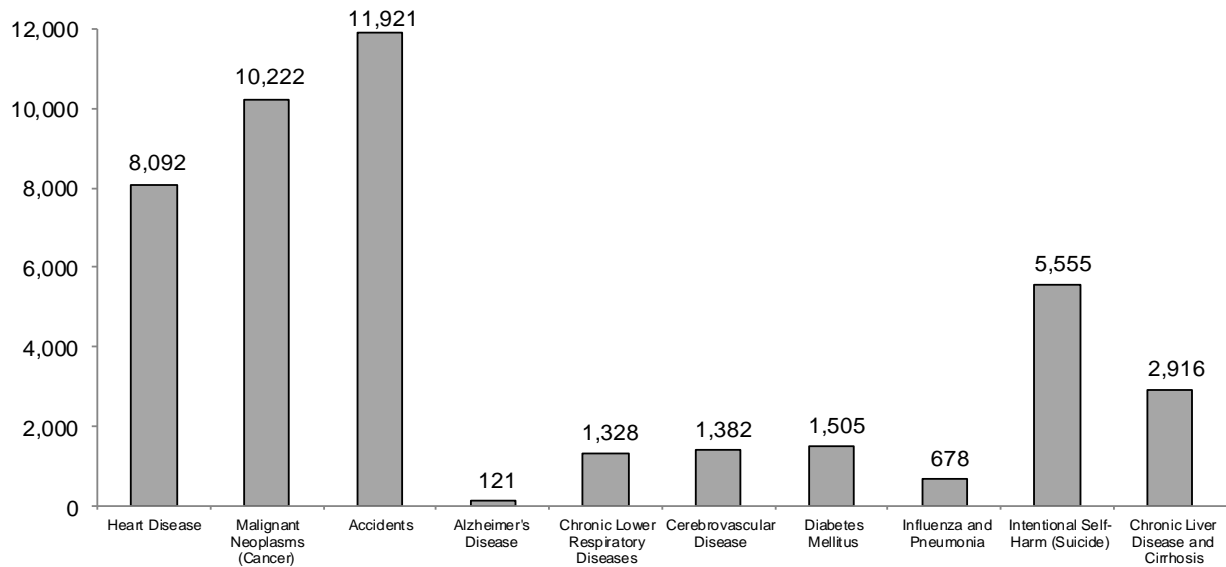
Source: South Dakota Department of Health, Office of Health Statistics

### 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 2016, accidents led in YPLL with 11,921 followed by cancer with 10,222 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, 2016**

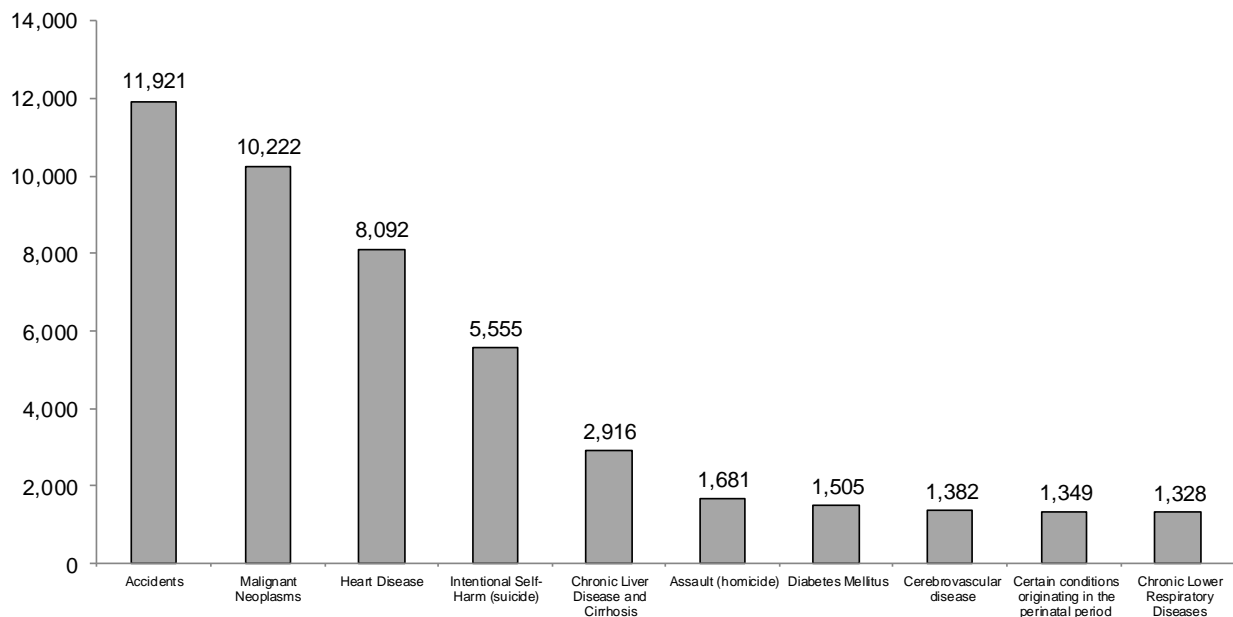


Note: This data is not comparable to the age-adjusted data in Figure 11 on the next page.  
 Source: South Dakota Department of Health, Office of Health Statistics

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 2016. This is the first 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), 2016**



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

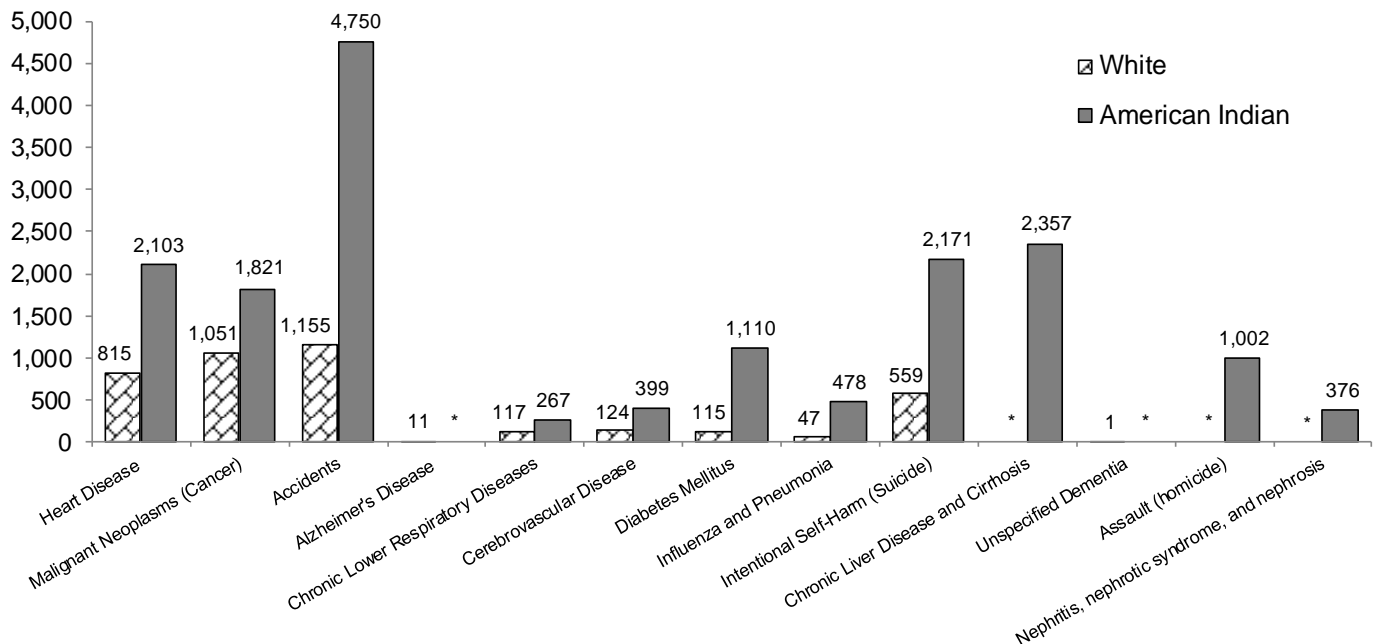
Figure 11, below, illustrates the years of potential life lost (YPLL) before age 75 per 100,000 population for the top 10 causes of death by race. When comparing YPLL by race, American Indians exceeded whites substantially in YPLL for the leading causes of death.

American Indians' and whites' largest YPLL was accidents with 4,750 years and 1,155 years respectively.

Whites' second largest YPLL was cancer with 1,051 years while American Indians' second largest YPLL was chronic liver disease and cirrhosis with 2,357 years.

Whites' third largest YPLL was heart disease with 815 years. Suicide was the third largest YPLL for American Indians with 2,171 years, which still exceeded whites' largest YPLL (accidents with 1,155 years).

**Figure 11**  
**Age-Adjusted Years of Potential Life Lost (YPLL) Before Age 75 for the Leading Causes of Death by Race, 2016**



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 2016.

Overall, nursing home, long term care, and hospice facility had the highest occurrence of deaths with 39.4 percent. Hospital followed closely with 35.6 percent.

**Table 53**  
**South Dakota Resident Deaths by Cause of Death and Place of Death, 2016**

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>7,838</b>	<b>100</b>	<b>2,789</b>	<b>35.6</b>	<b>3,090</b>	<b>39.4</b>	<b>1,608</b>	<b>20.5</b>	<b>351</b>	<b>4.5</b>
Heart Disease (I00-I09, I11, I13, I20-I51)	1,732	100	598	34.5	570	32.9	498	28.8	66	3.8
Malignant Neoplasms (Cancer) (C00-C97)	1,691	100	516	30.5	669	39.6	472	27.9	34	2.0
Accidents (V01-X59, Y85-Y86)	503	100	205	40.8	83	16.5	77	15.3	138	27.4
Alzheimer's Disease (G30)	449	100	28	6.2	390	86.9	29	6.5	2	0.4
Chronic Lower Respiratory Diseases (J40-J47)	427	100	156	36.5	166	38.9	98	23.0	7	1.6
Cerebrovascular Diseases (I60-I69)	420	100	181	43.1	212	50.5	24	5.7	3	0.7
Diabetes Mellitus (E10-E14)	253	100	95	37.5	101	39.9	52	20.6	5	2.0
Influenza and Pneumonia (J09-J18)	195	100	105	53.8	81	41.5	8	4.1	1	0.5
Intentional Self-Harm (Suicide) (*U03, X60-X84, Y87.0)	161	100	32	19.9	0	0.0	82	50.9	47	29.2
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	158	100	85	53.8	36	22.8	33	20.9	4	2.5
All Other Causes	1,849	100	788	42.6	782	42.3	235	12.7	44	2.4

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 1,323 deaths, or 16.9 percent, the certifier indicated “yes” or “probably” that tobacco use contributed to the death. Conversely, on 4,583 deaths, or 58.5 percent, the certifier indicated that tobacco use did not contribute to the death.

In the remaining 1,932 deaths, or 24.6 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 69.3 percent, or 291 out of the 420 trachea, bronchus, and lung cancer deaths in 2016. In 64.4 percent, or 275 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, 2016**  
**(Did Tobacco Use Contribute to Death)**

Cause of Death	Yes/Probably		Total Deaths	
	Number	Percent	Number	Percent
<b>Total</b>	<b>1,323</b>	<b>16.9</b>	<b>7,838</b>	<b>100</b>
<b>Malignant neoplasms (C00-C97)</b>	<b>438</b>	<b>25.9</b>	<b>1,691</b>	<b>100</b>
Malignant neoplasm of trachea, bronchus, and lung (C33-C34)	291	69.3	420	100
Malignant neoplasm, without specification of site (C80)	15	20.8	72	100
Malignant neoplasm of pancreas (C25)	15	11.7	128	100
Malignant neoplasm of bladder (C67)	15	31.9	47	100
Malignant neoplasm of esophagus (C15)	11	30.6	36	100
Malignant neoplasm of lip, oral cavity, and pharynx (C00-C14)	10	40.0	25	100
Malignant neoplasms of colon, rectum, and anus (C18-C21)	9	5.5	163	100
<b>Chronic lower respiratory diseases (J40-J47)</b>	<b>275</b>	<b>64.4</b>	<b>427</b>	<b>100</b>
Chronic obstructive pulmonary disease, unspecified (J44.9)	186	66.0	282	100
Chronic obstructive pulmonary disease with acute lower respiratory infection (J44.0)	43	61.4	70	100
Emphysema (J43)	17	65.4	26	100
<b>Heart disease (I00-I09, I11, I13, I20-I51)</b>	<b>269</b>	<b>15.5</b>	<b>1,732</b>	<b>100</b>
Acute myocardial infarction (I21-I22)	111	18.6	596	100
Atherosclerotic heart disease (I25.1)	67	17.2	389	100
Ischemic cardiomyopathy (I25.5)	13	11.1	42	100
<b>Cerebrovascular diseases (I60-I69)</b>	<b>50</b>	<b>11.7</b>	<b>420</b>	<b>100</b>
<b>Diabetes mellitus (E10-E14)</b>	<b>43</b>	<b>12.0</b>	<b>253</b>	<b>100</b>
<b>Chronic liver disease and cirrhosis (K70 &amp; K73-K74)</b>	<b>21</b>	<b>13.3</b>	<b>158</b>	<b>100</b>
Alcoholic liver disease (K70)	17	15.0	113	100
<b>Accidents (V01-X59, Y85-Y86)</b>	<b>20</b>	<b>4.0</b>	<b>503</b>	<b>100</b>
<b>Influenza and pneumonia (J09-J18)</b>	<b>16</b>	<b>8.3</b>	<b>195</b>	<b>100</b>
Pneumonia (J12-J18)	14	7.5	186	100
<b>Essential (primary) hypertension &amp; hypertensive renal disease (I10 &amp; I12)</b>	<b>12</b>	<b>13.0</b>	<b>92</b>	<b>100</b>
<b>Nephritis, nephrotic syndrome, and nephrosis (N00-N07, N17-N19, N25-N27)</b>	<b>11</b>	<b>12.0</b>	<b>92</b>	<b>100</b>

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

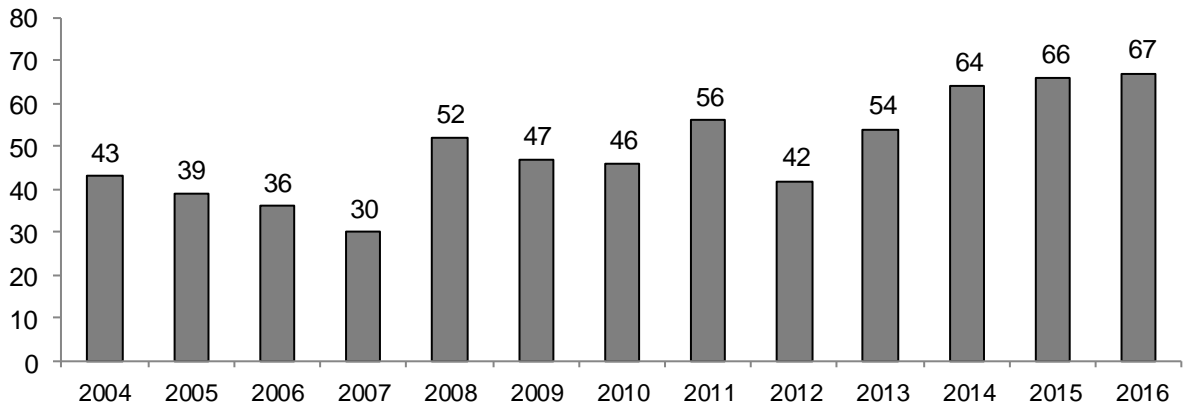
### Drug-Induced Deaths

Figures 12-17 And Tables 55-60 on the following pages break down the drug-induced deaths for South Dakota residents for the past 13 years by the manner of death, year of death, and type of drug.

As shown in Figure 12 , there were 67 drug overdose deaths in 2016, up slightly from 66 drug overdose deaths in 2015. Table 54, below that, shows that of the 67 drug

overdose deaths in 2016, 52 deaths were unintentional, 12 deaths were suicides, one death was homicide, and two deaths were undetermined intent. The definition of drug overdose induced deaths is located in the back of this report (page 232) within the Technical Notes section.

**Figure 12**  
**South Dakota Resident Deaths Due to Drug Overdoses, 2004-2016**



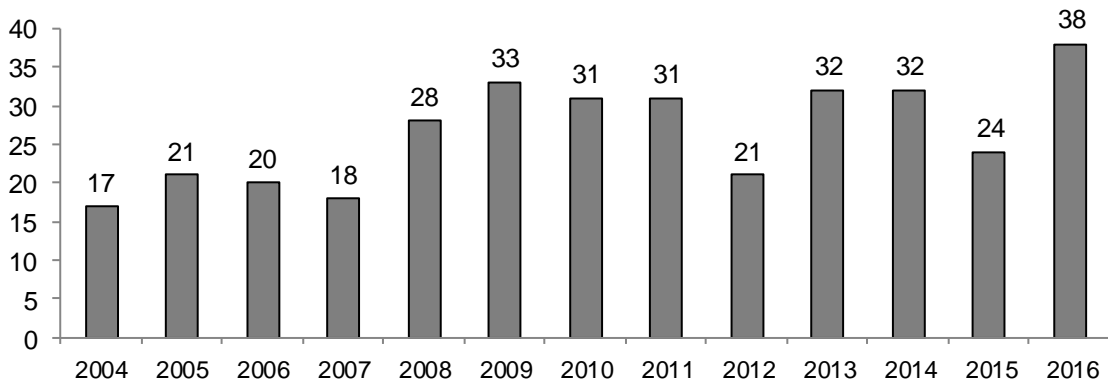
Source: South Dakota Department of Health, Office of Health Statistics

**Table 55**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Drugs, 2004-2016**

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

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

**Figure 13**  
**South Dakota Resident Deaths Due to All Opioid Poisoning, 2004-2016**



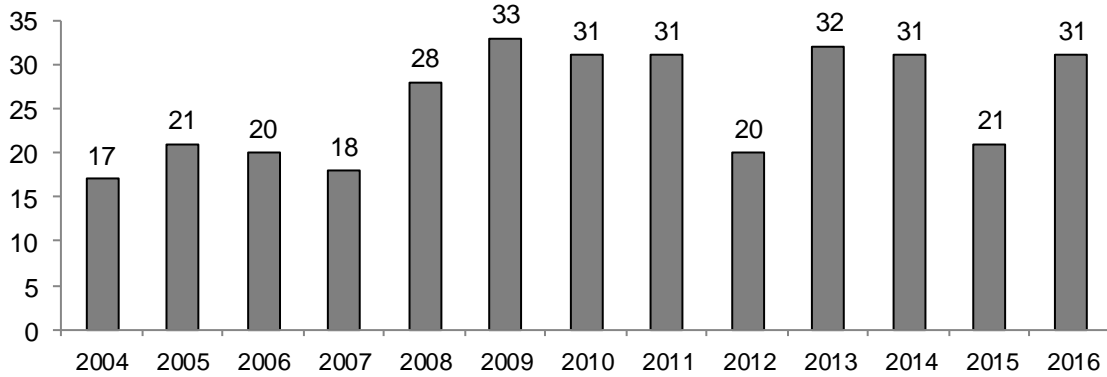
Source: South Dakota Department of Health, Office of Health Statistics

**Table 56**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Opioid Poisoning, 2004-2016**

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

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

**Figure 14**  
**South Dakota Resident Deaths Due to Prescription Opioid Poisoning, 2004-2016**



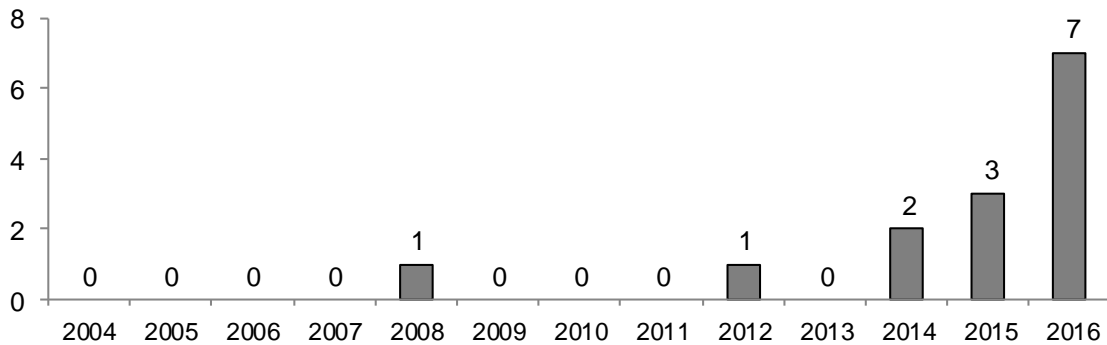
Source: South Dakota Department of Health, Office of Health Statistics

**Table 57**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Prescription Opioid Poisoning, 2004-2016**

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

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

**Figure 15**  
**South Dakota Resident Deaths Due to Illicit Opioid Poisoning, 2004-2016**



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

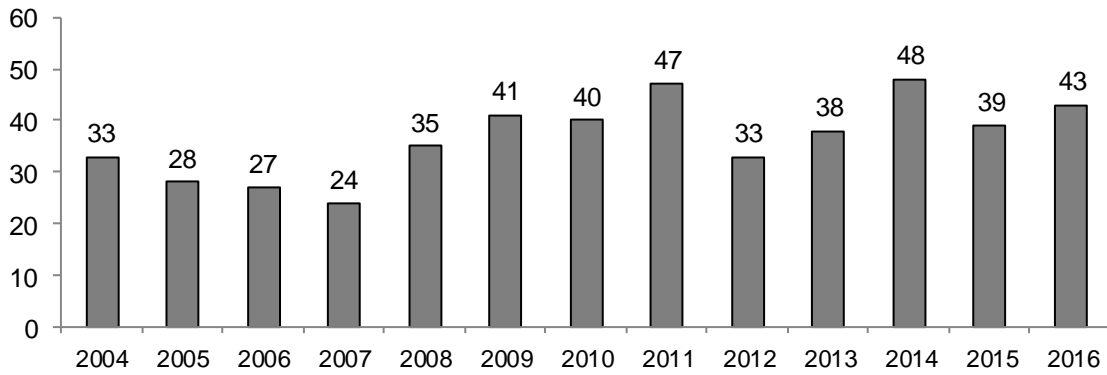
**Table 58**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Opioid Poisoning, 2004-2016**

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



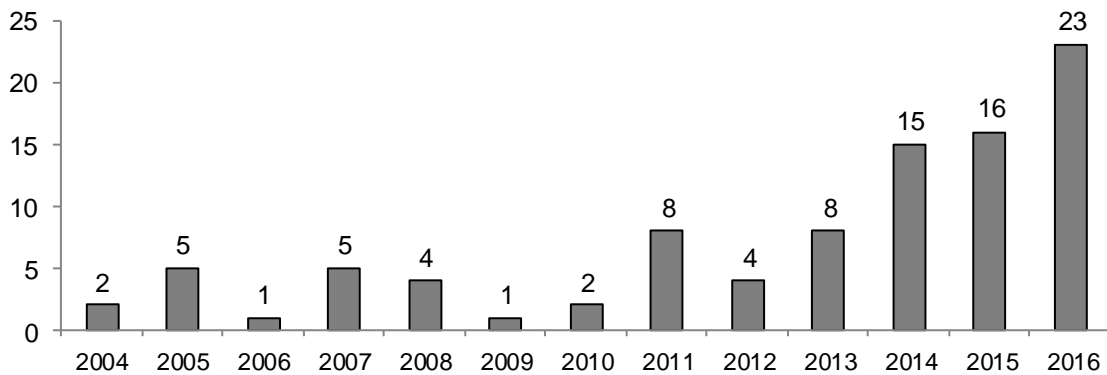
Source: South Dakota Department of Health, Office of Health Statistics

**Table 59**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Pharmaceutical Drug Poisoning, 2004-2016**

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

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

**Figure 17**  
**South Dakota Resident Deaths Due to Illicit Drug Poisoning, 2004-2016**



**Table 60**  
**South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Drug Poisoning, 2004-2016**

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

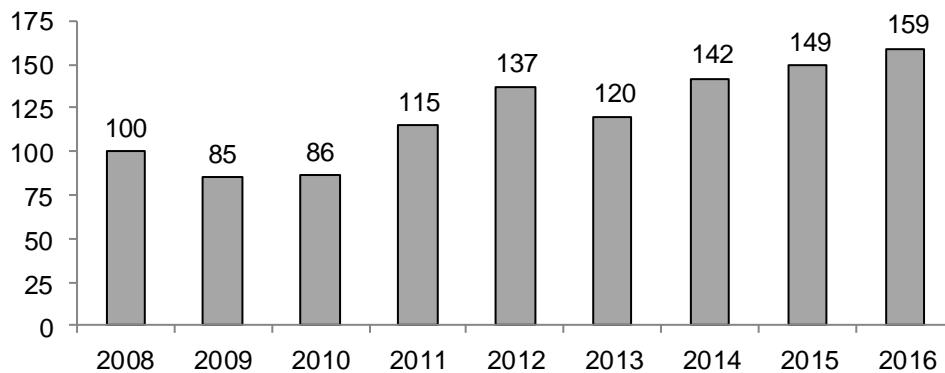
Source: South Dakota Department of Health, Office of Health Statistics

### Alcohol-Induced Deaths

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

alcohol-induced deaths is located in the back of this report (page 231) within the Technical Notes section.

**Figure 18**  
**South Dakota Resident Alcohol-Induced Deaths, 2008-2016**



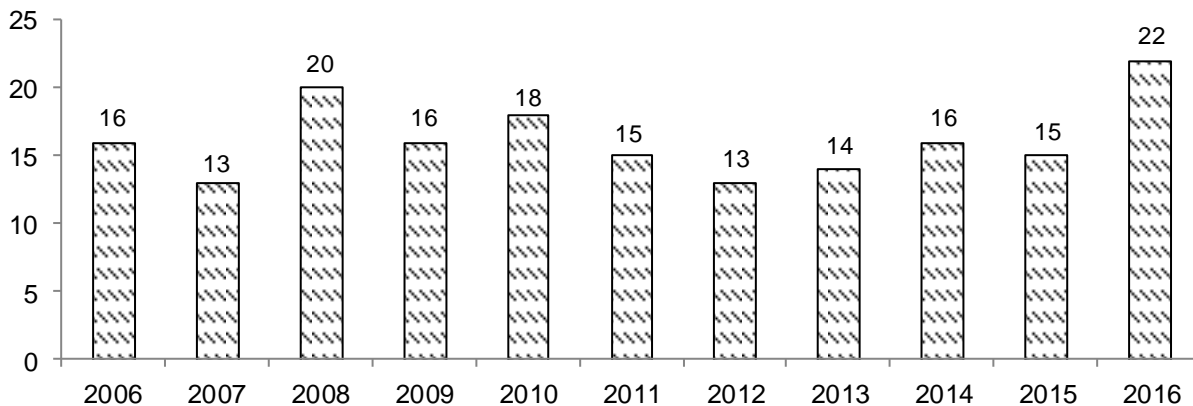
Source: South Dakota Department of Health, Office of Health Statistics

### Farm Accident Deaths

Figure 19, below, shows the number of South Dakota resident deaths due to farm accidents for the past 11 years. The

definition of farm accident deaths is located in the back of this report (page 231) within the Technical Notes section.

**Figure 19**  
**South Dakota Resident Deaths Due to Farm Accidents, 2006-2016**



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

### Maternal Mortality

Table 61, on the following page, shows maternal mortality deaths for the past 12 years. The definition of maternal mortality is

located in the back of this report (page 231) within the Technical Notes section.

**Table 61**  
**South Dakota Resident Maternal Deaths by Year of Death, 2005-2016**

Year	# of Deaths
2016	1
2015	2
2014	1
2013	3
2012	2
2011	3
2010	1
2009	1
2008	0
2007	3
2006	1
2005	1

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

Firearm Deaths

Table 62, below, shows firearm deaths for South Dakota residents for the past nine years. The definition of firearm deaths is

located in the back of this report (page 231) within the Technical Notes section.

**Table 62**  
**South Dakota Resident Deaths Due to Firearms, 2008-2016**

Year	Total Firearm Deaths	Manner of Death		
		Accident	Suicide	Homicide
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 63, on the next page, displays the different methods of disposition for the last 11 years. The top disposition in 2016 was burial with 4,145 deaths. The second highest

method of disposition in 2016 was cremation with 3,190 deaths. Since 2006, cremation has increased from 20.5 percent of all dispositions to 40.7 percent in 2016.

**Table 63**  
**South Dakota Resident Deaths by Disposition, 2006-2016**

Year	Total Deaths	Type of Disposition									
		Burial		Cremation		Removal from State		Donation		Entombment	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
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 64a-64c, on pages 72 through 75, display South Dakota resident deaths, the crude death rate, and the age-adjusted death rate for 15 leading causes and selected components from 2007 to 2016.

The crude and age-adjusted rates for all causes in 2016 were 905.7 and 718.6 respectively, which are up from the crude and age-adjusted rates in 2015 of 899.7 and 714.9, respectively.

**Table 64a**  
**South Dakota Resident Deaths for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Number of Deaths										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
<b>All Causes</b>	<b>6,800</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>Heart Disease</b>	1,623	1,677	1,778	1,611	1,615	1,652	1,617	1,695	1,712	1,732	
<b>Malignant Neoplasms (Cancer)</b>	1,606	1,561	1,506	1,651	1,656	1,623	1,574	1,679	1,632	1,691	
Trachea, Bronchus, and Lung	425	445	387	434	457	434	416	439	424	420	
Colon, Rectum, and Anus	165	152	157	168	137	166	169	186	168	163	
Pancreas	93	87	110	98	95	105	109	118	109	128	
Female Breast	113	118	95	103	122	107	108	100	104	109	
Prostate	94	78	84	96	88	75	76	75	90	107	
Leukemia	76	60	57	82	77	68	89	90	66	61	
<b>Accidents</b>	357	372	348	391	407	417	424	461	467	503	
Motor Vehicle Accidents	145	125	133	141	99	142	149	151	143	135	

**Table 64a (continued)**  
**South Dakota Resident Deaths for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Number of Deaths									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Alzheimer's Disease</b>	345	401	402	401	423	462	420	433	421	449
<b>Chronic Lower Respiratory Diseases</b>	458	486	440	451	485	479	413	440	500	427
<b>Cerebrovascular Diseases</b>	408	391	417	411	442	410	414	439	381	420
<b>Diabetes Mellitus</b>	246	216	200	241	267	219	239	223	282	253
<b>Influenza and Pneumonia</b>	189	186	135	166	178	188	186	180	213	195
<b>Intentional Self-Harm (Suicide)</b>	101	123	128	139	125	135	147	141	173	161
<b>Chronic Liver Disease and Cirrhosis</b>	94	100	79	83	98	113	121	128	137	158
<b>Unspecified Dementia</b>	70	80	90	91	117	111	99	120	126	121
<b>Essential (Primary) Hypertension and Hypertensive Renal Disease</b>	70	65	52	93	94	78	72	95	103	92
<b>Nephritis, Nephrotic Syndrome, and Nephrosis</b>	74	90	99	72	49	57	62	72	79	92
<b>Parkinson's Disease</b>	62	69	65	85	73	53	78	63	80	86
<b>Septicemia</b>	64	54	63	66	69	64	74	81	119	81

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

**Table 64b**  
**South Dakota Resident Crude Death Rates for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Crude Death Rates									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>All Causes</b>	<b>853.2</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>Heart Disease</b>	203.6	208.4	218.9	197.9	196.0	198.2	191.4	198.7	199.4	200.1
<b>Malignant Neoplasms (Cancer)</b>	201.5	194.0	185.4	202.8	201.0	194.8	186.3	196.8	190.1	195.4
Trachea, Bronchus, and Lung	53.3	55.3	47.6	53.3	55.5	52.1	49.2	51.5	49.4	48.5
Colon, Rectum, and Anus	20.7	18.9	19.3	20.6	16.6	19.9	20.0	21.8	19.6	18.8
Pancreas	11.7	10.8	13.5	12.0	11.5	12.6	12.9	13.8	12.7	14.8
Female Breast	28.3	29.3	23.4	25.3	29.7	25.8	25.7	23.6	24.4	25.4
Prostate	23.7	19.4	20.7	23.6	21.3	17.9	17.9	17.5	20.8	24.5
Leukemia	9.5	7.5	7.0	10.1	9.3	8.2	10.5	10.5	7.7	7.0
<b>Accidents</b>	44.8	46.2	42.8	48.0	49.4	50.0	50.2	54.0	54.4	58.1
Motor Vehicle Accidents	18.2	15.5	16.4	17.3	12.0	17.0	17.6	17.7	16.7	15.6

**Table 64b (continued)**  
**South Dakota Resident Crude Death Rates for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Crude Death Rates									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alzheimer's Disease	43.3	49.8	49.5	49.3	51.3	55.4	49.7	50.8	49.0	51.9
Chronic Lower Respiratory Diseases	57.5	60.4	54.2	55.4	58.9	57.5	48.9	51.6	58.2	49.3
Cerebrovascular Diseases	51.2	48.6	51.3	50.5	53.6	49.2	49.0	51.5	44.4	48.5
Diabetes Mellitus	30.9	26.8	24.6	29.6	32.4	26.3	28.3	26.1	32.8	29.2
Influenza and Pneumonia	23.7	23.1	16.6	20.4	21.6	22.6	22.0	21.1	24.8	22.5
Intentional Self-Harm (Suicide)	12.7	15.3	15.8	17.1	15.2	16.2	17.4	16.5	20.2	18.6
Chronic Liver Disease and Cirrhosis	11.8	12.4	9.7	10.2	11.9	13.6	14.3	15.0	16.0	18.3
Unspecified Dementia	8.8	9.9	11.1	11.2	14.2	13.3	11.7	14.1	14.7	14.0
Essential (Primary) Hypertension and Hypertensive Renal Disease	8.8	8.1	6.4	11.4	11.4	9.4	8.5	11.1	12.0	10.6
Nephritis, Nephrotic Syndrome, and Nephrosis	9.3	11.2	12.2	8.8	5.9	6.8	7.3	8.4	9.2	10.6
Parkinson's Disease	7.8	8.6	8.0	10.4	8.9	6.4	9.2	7.4	9.3	9.9
Septicemia	8.0	6.7	7.8	8.1	8.4	7.7	8.8	9.5	13.9	9.4

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 64c**  
**South Dakota Resident Age-Adjusted Death Rates for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Age-Adjusted Death Rates									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>All Causes</b>	<b>695.1</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>Heart Disease</b>	159.5	162.2	168.3	154.9	153.0	153.8	148.8	153.6	151.0	153.7
<b>Malignant Neoplasms (Cancer)</b>	170.9	164.8	156.5	170.6	168.6	162.2	154.3	161.4	153.3	156.6
Trachea, Bronchus, and Lung	46.3	47.3	40.7	45.4	47.2	43.5	41.0	41.8	39.7	38.2
Colon, Rectum, and Anus	17.2	15.9	15.8	17.0	13.9	16.4	16.7	17.6	15.7	15.2
Pancreas	9.8	8.9	11.3	10.2	9.5	10.6	10.7	11.1	10.3	11.6
Female Breast	20.9	23.3	17.6	19.7	23.7	19.5	19.3	17.9	18.7	19.3
Prostate	23.7	19.2	20.3	23.7	20.9	17.7	17.0	16.7	19.6	23.1
Leukemia	8.1	6.1	6.0	8.6	7.8	7.3	9.0	8.8	6.2	5.6
<b>Accidents</b>	40.9	41.8	40.0	44.3	44.8	46.6	46.4	49.2	49.3	53.1
Motor Vehicle Accidents	17.9	15.1	16.6	17.0	11.8	17.1	17.4	17.5	16.3	15.8

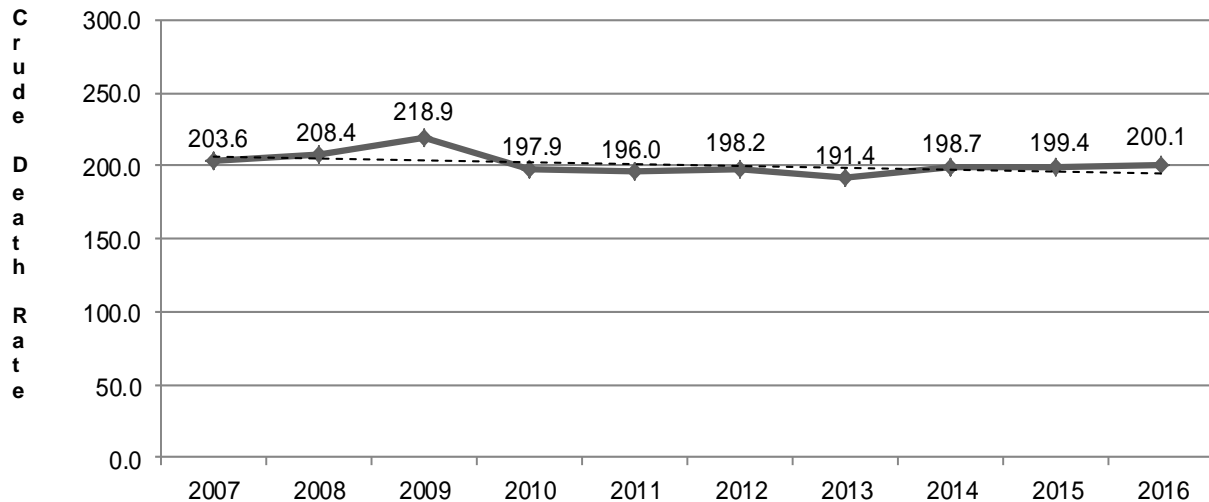
**Table 64c (continued)**  
**South Dakota Resident Age-Adjusted Death Rates for 15 Leading Causes and Selected Components, 2007-2016**

Cause of Death	Age-Adjusted Death Rates									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alzheimer's Disease	30.7	35.9	35.2	36.2	36.6	39.6	35.1	36.1	34.8	37.1
Chronic Lower Respiratory Diseases	47.1	49.0	43.9	46.0	47.4	45.4	39.1	40.7	45.1	38.5
Cerebrovascular Diseases	38.9	37.6	38.8	39.2	42.0	37.6	37.5	38.8	33.0	35.8
Diabetes Mellitus	25.5	21.8	20.4	24.6	26.8	21.6	22.9	21.2	26.3	23.6
Influenza and Pneumonia	18.1	17.3	12.6	15.5	16.3	16.9	16.4	16.1	18.3	16.7
Intentional Self-Harm (Suicide)	12.3	15.4	16.0	17.3	15.3	16.1	18.0	17.1	20.4	19.9
Chronic Liver Disease and Cirrhosis	11.2	11.6	8.7	9.7	11.1	13.3	13.3	16.0	15.9	16.4
Unspecified Dementia	6.2	6.9	7.9	8.3	10.2	9.4	8.4	10.1	10.5	9.6
Essential (Primary) Hypertension and Hypertensive Renal Disease	6.6	6.2	4.8	8.8	8.5	6.8	6.3	8.1	8.7	7.9
Nephritis, Nephrotic Syndrome, and Nephrosis	7.2	8.9	9.4	7.1	4.5	5.5	5.7	6.5	7.4	7.8
Parkinson's Disease	6.1	6.7	6.2	8.2	7.0	5.1	7.3	6.3	7.2	7.6
Septicemia	6.5	5.5	6.4	6.7	7.0	6.2	7.2	8.1	11.0	7.5

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

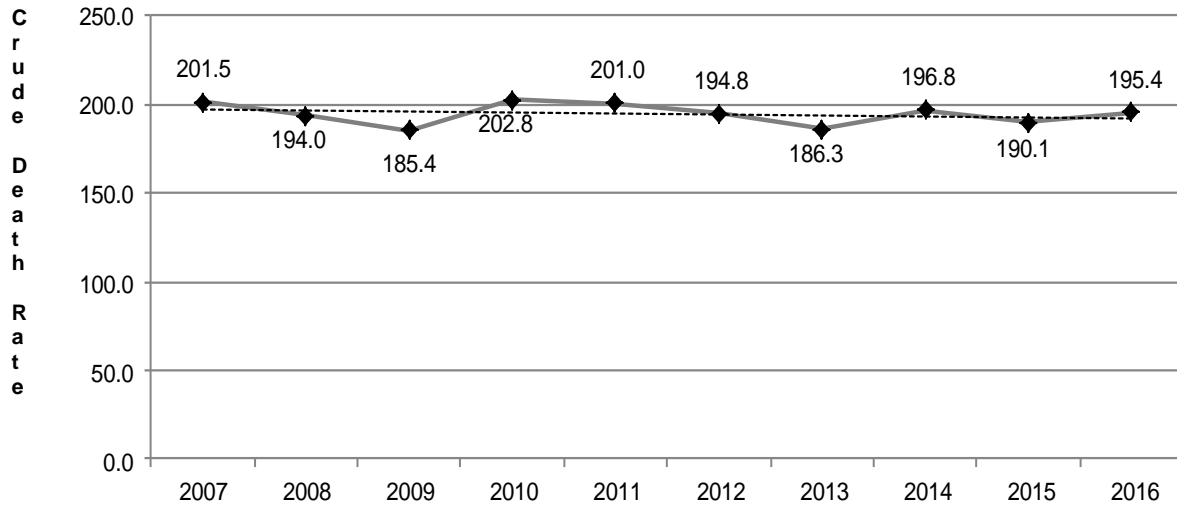
The following figures on the next several pages display 10 year trends for crude death rates for the 15 leading causes of death in 2016.

**Figure 20**  
**South Dakota Resident Crude Death Rate Due to Heart Disease by Year of Death, 2007-2016**



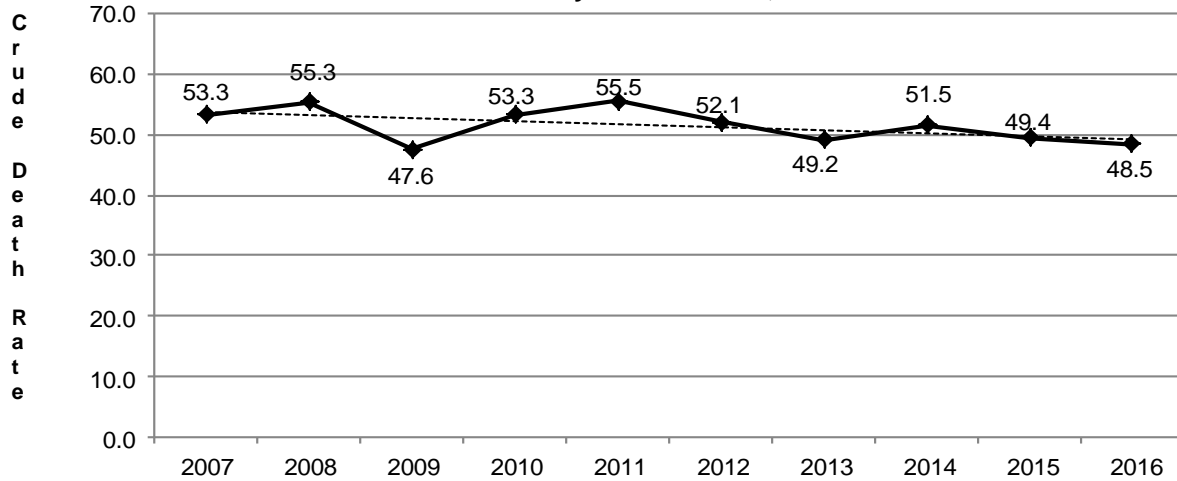
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 21**  
**South Dakota Resident Crude Death Rate Due to Malignant Neoplasms by Year of Death, 2007-2016**



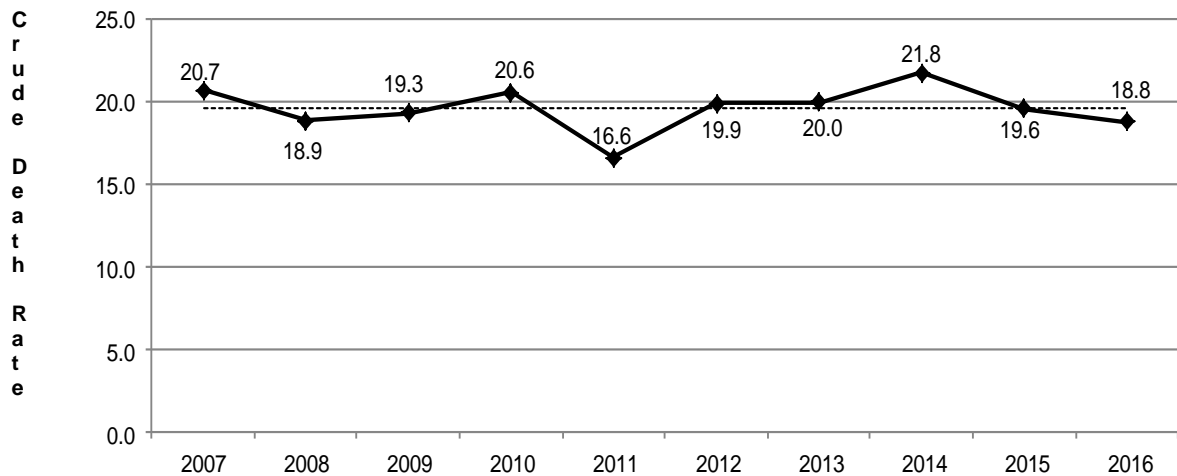
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 21a**  
**South Dakota Resident Crude Death Rate Due to Trachea, Bronchus, and Lung Cancer by Year of Death, 2007-2016**



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

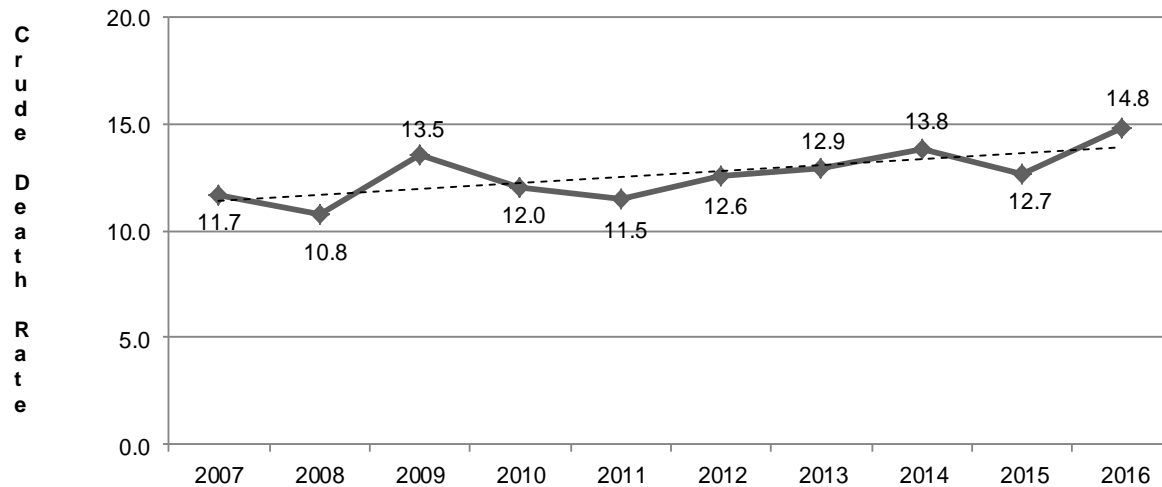
**Figure 21b**  
**South Dakota Resident Crude Death Rate Due to Colon, Rectum, and Anus Cancer by Year of Death, 2007-2016**



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

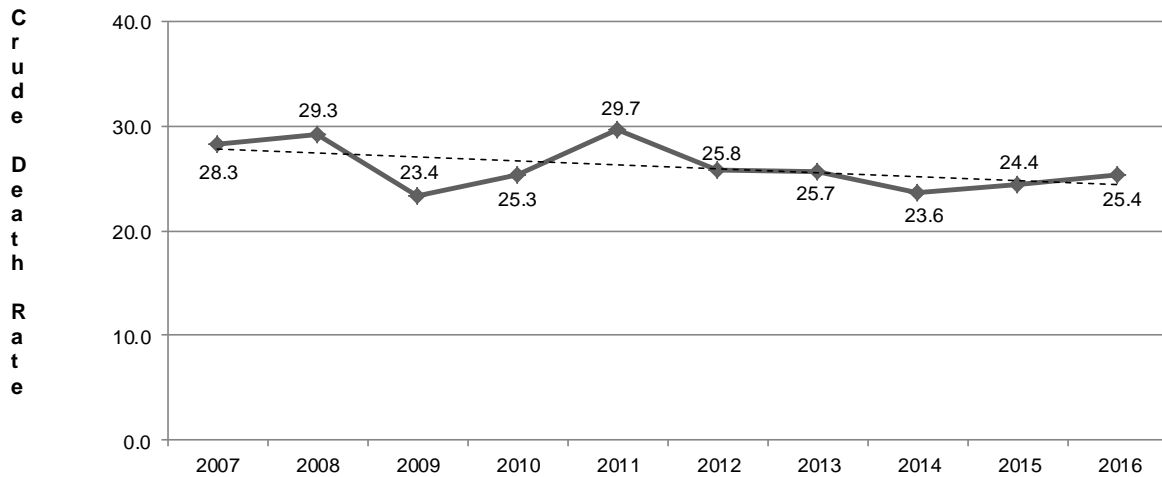


**Figure 21c**  
**South Dakota Resident Crude Death Rate Due to Pancreas Cancer by Year of Death, 2007-2016**



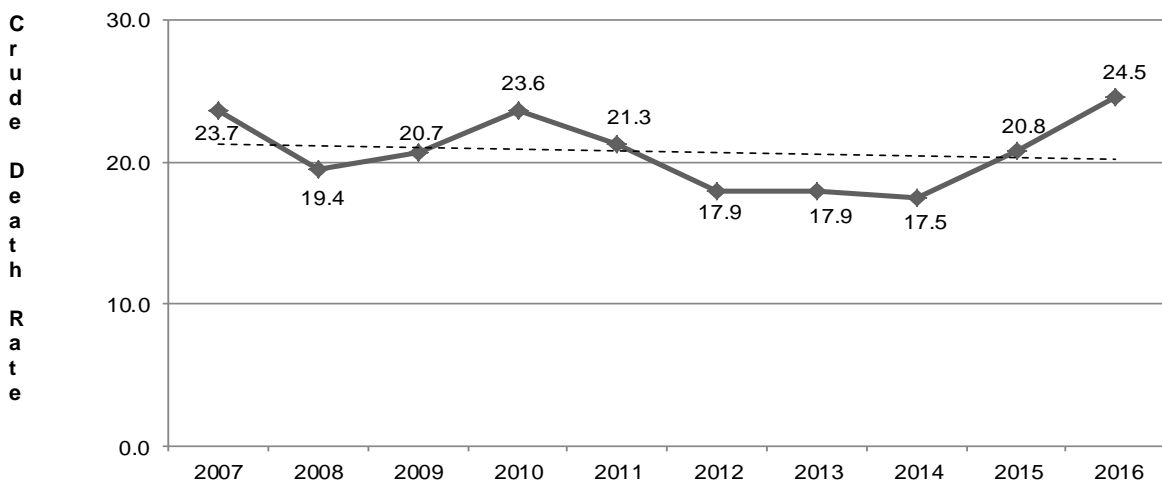
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 21d**  
**South Dakota Resident Crude Death Rate Due to Female Breast Cancer by Year of Death, 2007-2016**



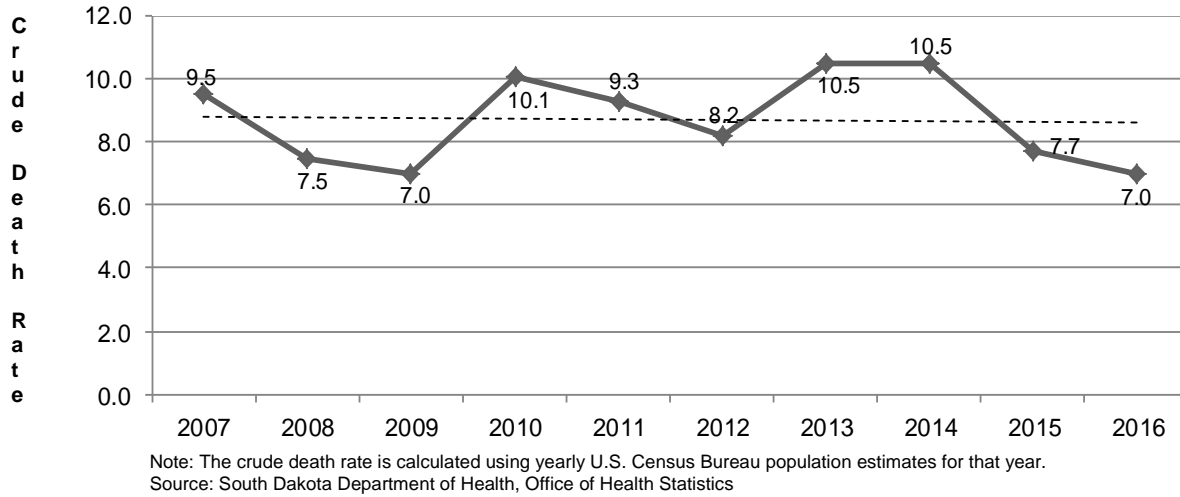
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 21e**  
**South Dakota Resident Crude Death Rate Due to Prostate Cancer by Year of Death, 2007-2016**

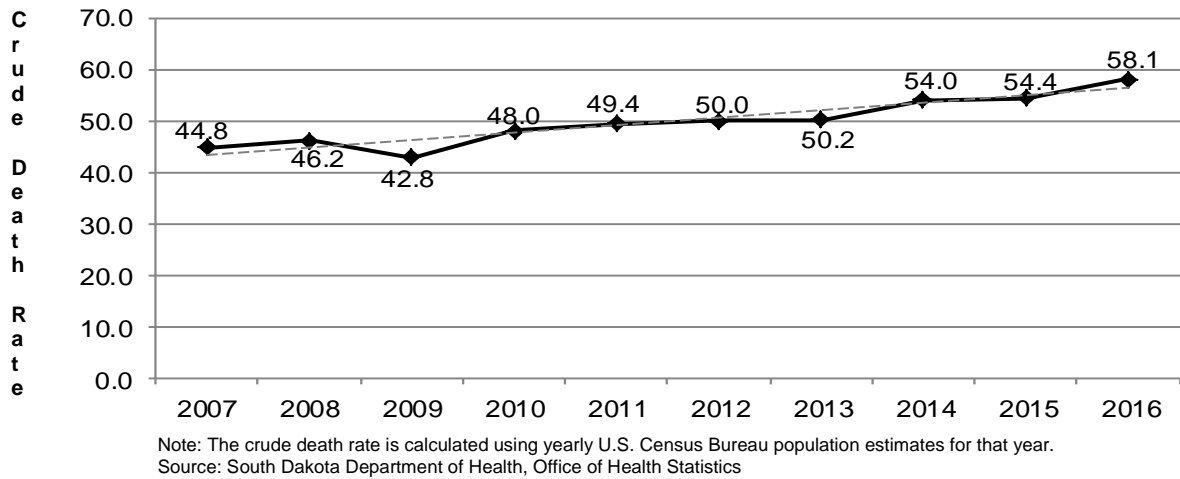


Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

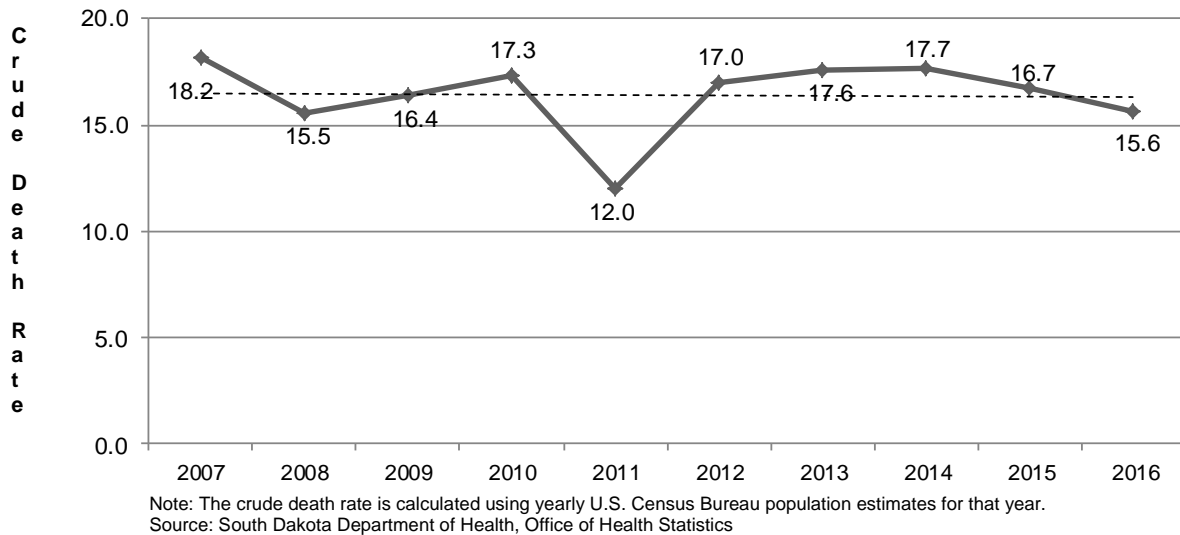
**Figure 21f**  
**South Dakota Resident Crude Death Rate Due to Leukemia by Year of Death, 2007-2016**



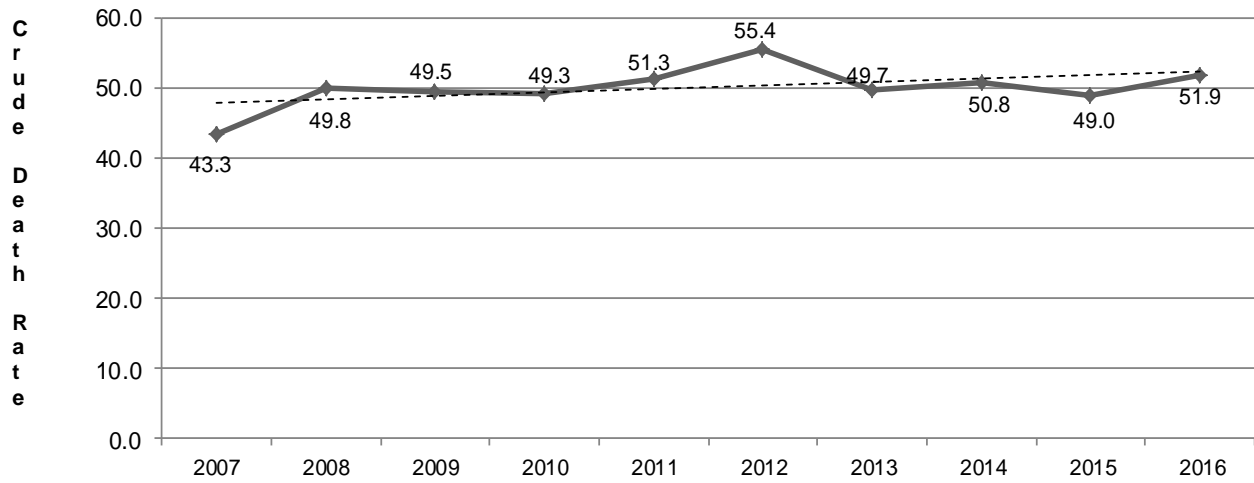
**Figure 22**  
**South Dakota Resident Crude Death Rate Due to Accidents by Year of Death, 2007-2016**



**Figure 22a**  
**South Dakota Resident Crude Death Rate Due to Motor Vehicle Accidents by Year of Death, 2007-2016**

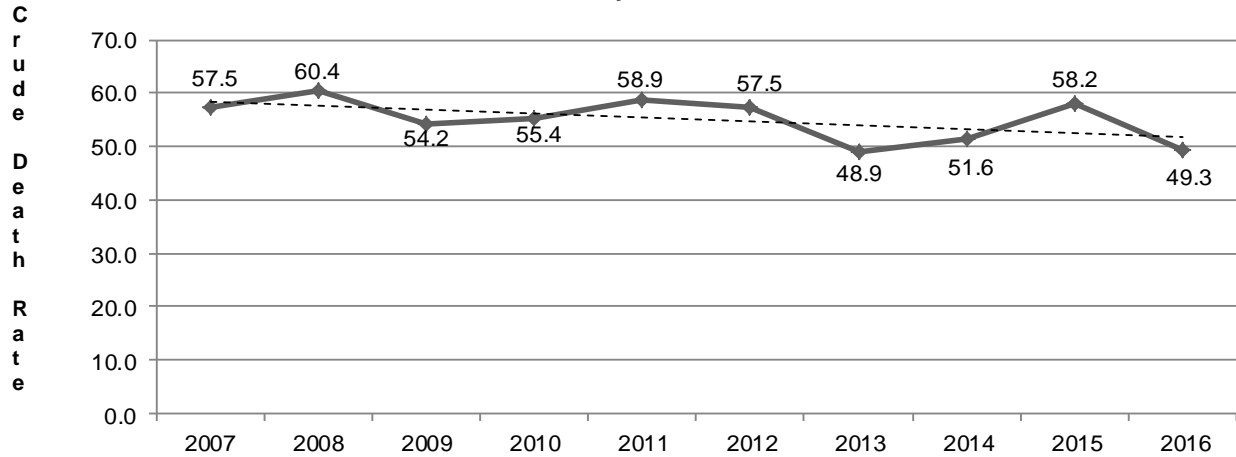


**Figure 23**  
**South Dakota Resident Crude Death Rate Due to Alzheimer's Disease by Year of Death, 2007-2016**



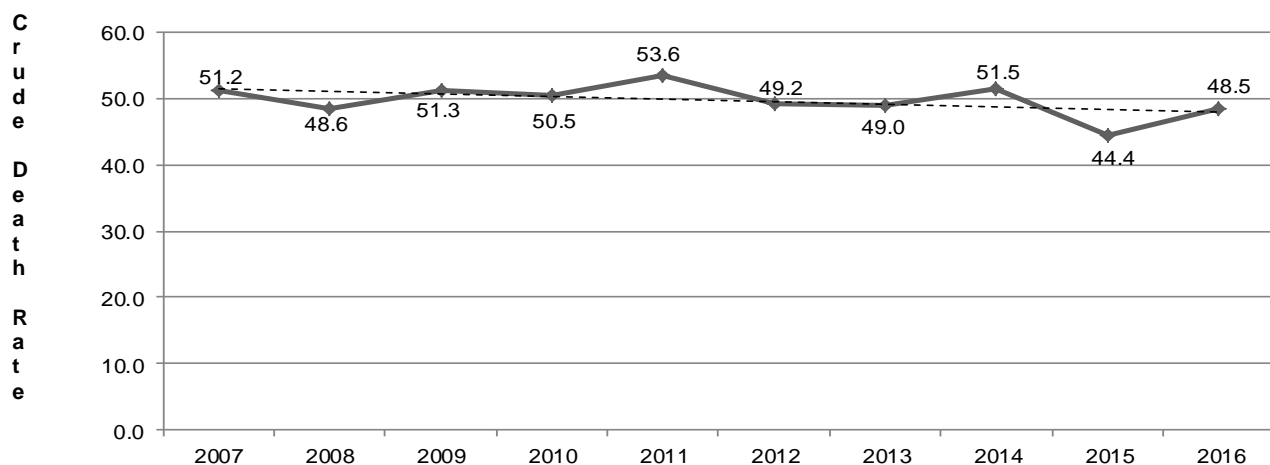
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 24**  
**South Dakota Resident Crude Death Rate Due to Chronic Lower Respiratory Disease by Year of Death, 2007-2016**



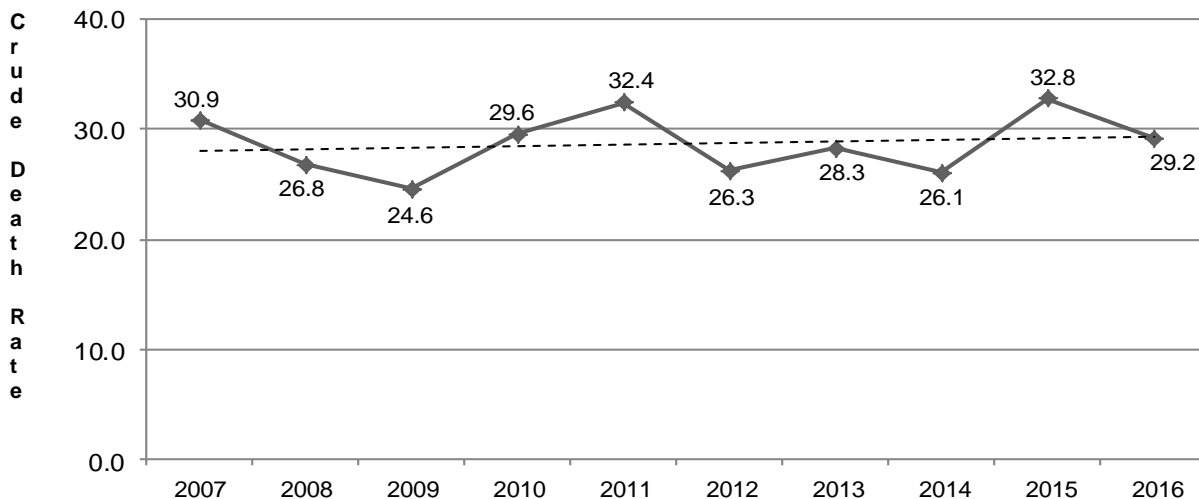
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 25**  
**South Dakota Resident Crude Death Rate Due to Cerebrovascular Disease by Year of Death, 2007-2016**



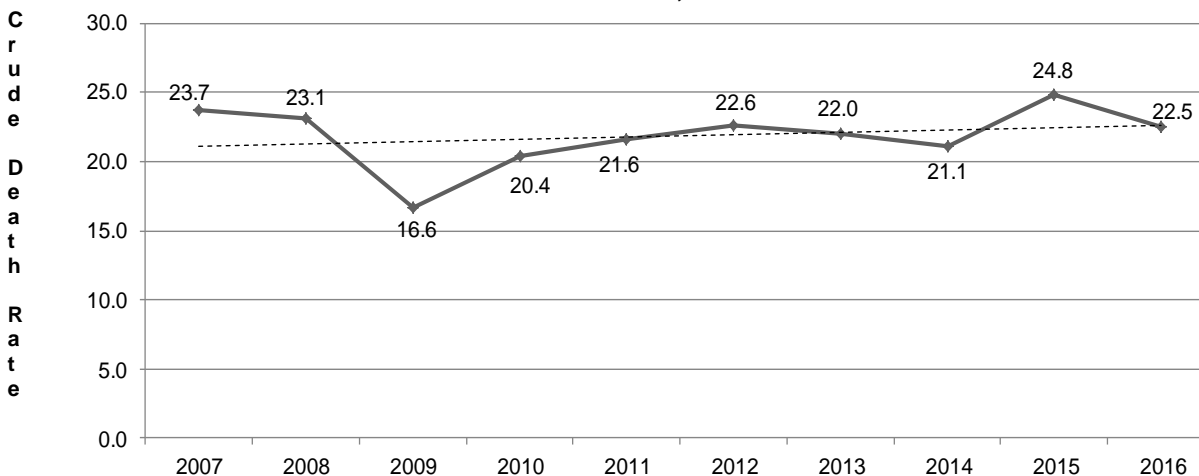
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 26**  
**South Dakota Resident Crude Death Rate Due to Diabetes Mellitus by Year of Death, 2007-2016**



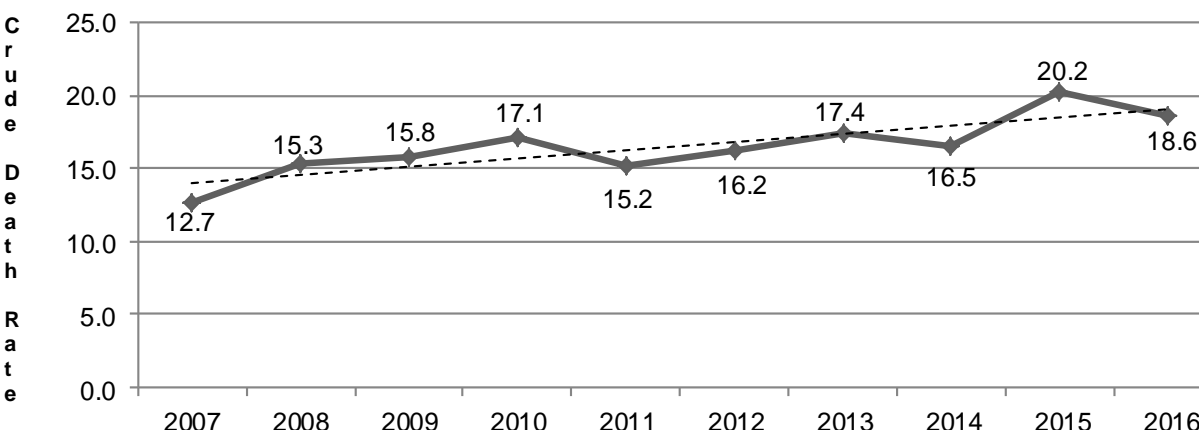
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 27**  
**South Dakota Resident Crude Death Rate Due to Influenza and Pneumonia by Year of Death, 2007-2016**



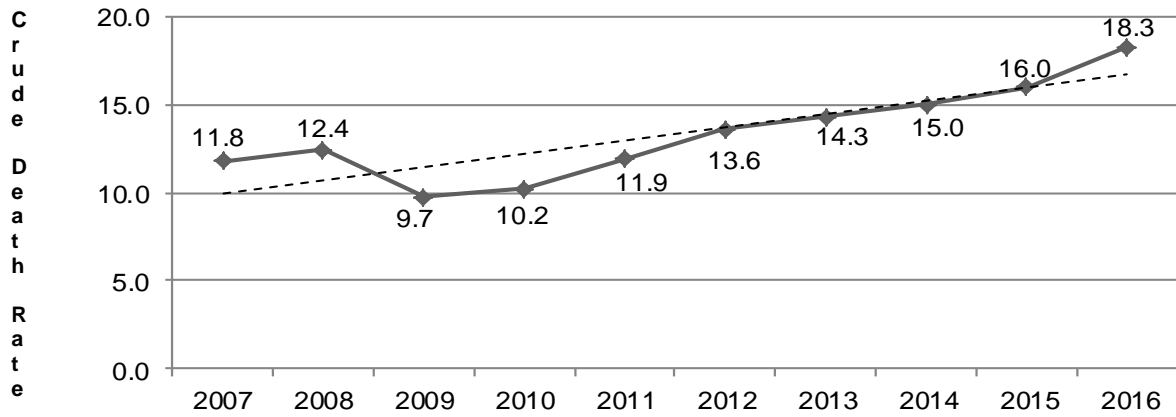
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 28**  
**South Dakota Resident Crude Death Rate Due to Intentional Self-Harm (Suicide) by Year of Death, 2007-2016**



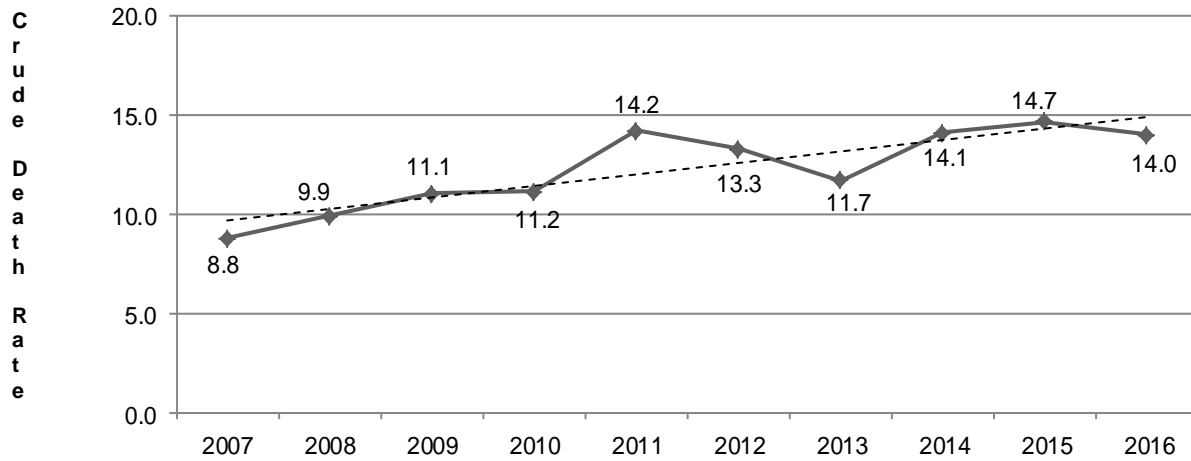
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 29**  
**South Dakota Resident Crude Death Rate Due to Chronic Liver Disease and Cirrhosis by Year of Death, 2007-2016**



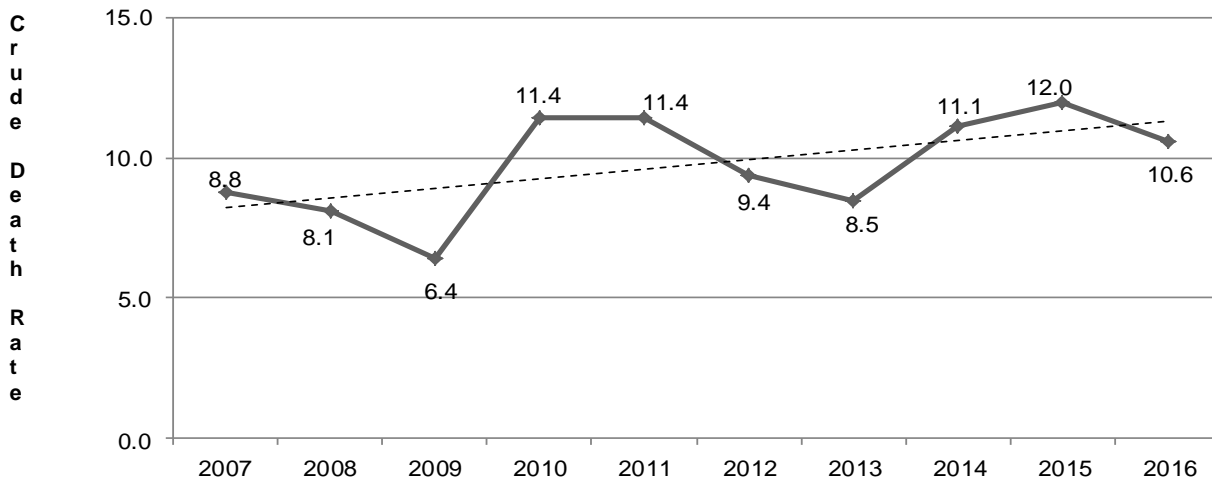
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 30**  
**South Dakota Resident Crude Death Rate Due to Unspecified Dementia by Year of Death, 2007-2016**



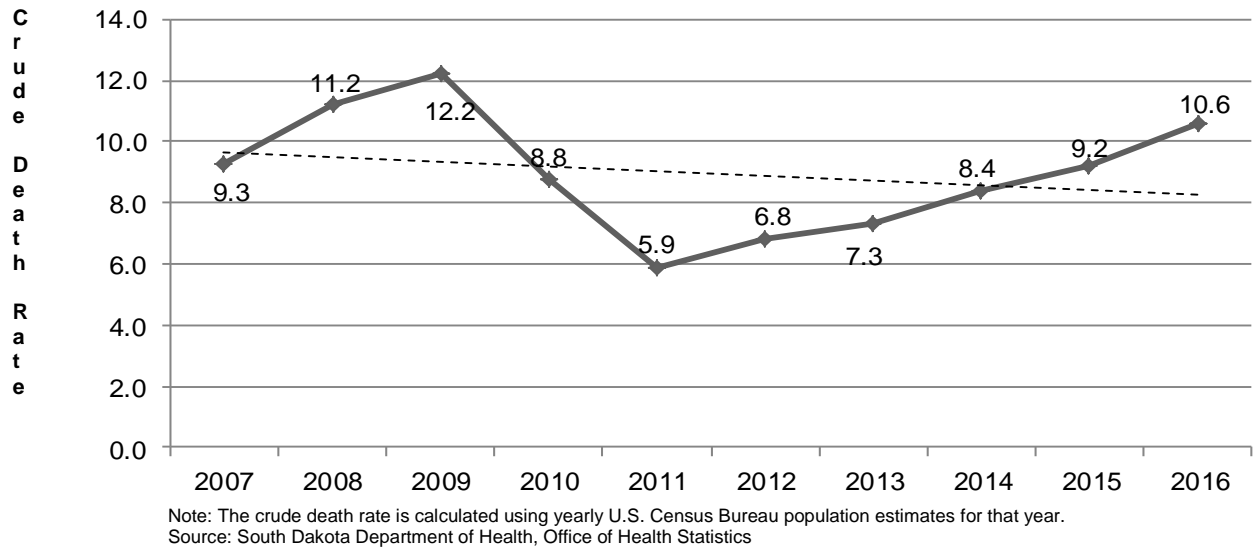
Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 31**  
**South Dakota Resident Crude Death Rate Due to Essential (Primary) Hypertension and Hypertensive Renal Disease by Year of Death, 2007-2016**

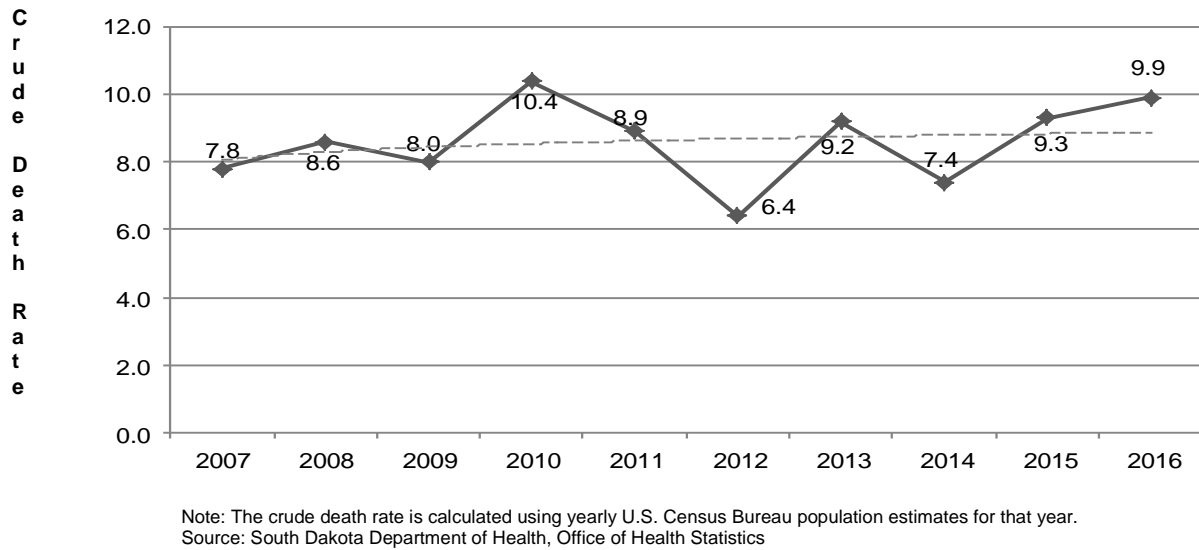


Note: The crude death rate is calculated using yearly U.S. Census Bureau population estimates for that year.  
 Source: South Dakota Department of Health, Office of Health Statistics

**Figure 32**  
**South Dakota Resident Crude Death Rate Due to Nephritis, Nephrotic Syndrome, and Nephrosis by Year of Death, 2007-2016**



**Figure 33**  
**South Dakota Resident Crude Death Rate Due to Parkinson's Disease by Year of Death, 2007-2016**



**Figure 34**  
**South Dakota Resident Crude Death Rate Due to Septicemia by Year of Death, 2007-2016**

