# **Mortality**

An Overview: 2020

Total South Dakota Resident Deaths 9,857

Crude Death Rates per 100,000 Population

South Dakota 1,104.2 United States (2019) 869.7

Age-Adjusted Death Rates per 100,000 Population

South Dakota 867.4 United States (2019) 715.2

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:

white, non-Hispanic American Indian, non-Hispanic The remaining categories (Black, non-Hispanic; Asian, non-Hispanic; Pacific Islander, non-Hispanic; Multi-Racial, non-Hispanic; and Hispanic) are included in the totals but are not shown specifically in any tables.

Table 44, 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.

October, November, and December of 2020 had the 4<sup>th</sup>, 1<sup>st</sup>, and 2<sup>nd</sup> highest respective death rates for any month in South Dakota since 1960. The 3<sup>rd</sup> highest monthly death rate was in June of 1972 when the Rapid City flood occurred. <u>The death rate in 2020 was the second highest annual death rate since death data was first gathered in 1906.</u> The highest annual death rate ever in South Dakota was in 1918.

Table 44
Resident Deaths, Crude Death Rates, and Age-Adjusted Death Rates,
South Dakota and United States, 2004-2020

		ited States	s office of the		outh Dako	ta
Year	Number	Crude Rate	Age-Adjusted Rate	Number	Crude Rate	Age-Adjusted Rate
2020	NA*	NA*	NA*	9,857	1,104.2	867.4
2019	2,854,838	869.7	715.2	8,273	935.2	739.6
2018	2,839,205	867.8	723.6	7,971	903.5	715.7
2017	2,813,503	863.8	731.9	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	8.008	6,811	879.7	742.3

Note: \*U.S. 2020 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

# **Leading Causes of Death**

The five leading causes of death in 2020 for South Dakota residents were heart disease, cancer, COVID-19, unintentional injuries, and Alzheimer's disease.

Heart disease remained the leading cause of death in South Dakota accounting for 18.5 percent of South Dakota's 2020 resident deaths. Acute myocardial infarction was the leading cause of heart disease deaths during the year, accounting for 33.4 percent of heart disease deaths.

Cancer was the second leading cause of death in 2020 and accounted for 17.5 percent of South Dakota resident deaths.

COVID-19 was the third leading cause of death in 2020 and accounted for 15.2 percent of South Dakota resident deaths.

Unintentional injuries were the fourth leading cause of death and accounted for 5.8 percent of 2020 South Dakota resident deaths. Motor vehicle accidents accounted for 26.9 percent of deaths due to unintentional injury.

Alzheimer's disease was the fifth leading cause of death accounting for 5.0 percent of all South Dakota resident deaths in 2020.

Table 45
South Dakota Resident Leading Causes of Death Due to Unintentional Injuries, 2016-2020

			Yea	r of Dea	th	
	Total	2016	2017	2018	2019	2020
Total Deaths	2,573	503	537	452	512	569
Motor Vehicle Accidents	740	135	166	156	130	153
Car (V40-V49)	293	48	64	74	51	56
Pick-Up or Van (V50-V59)	126	28	25	19	28	26
Pedestrian (V01-V09)	80	15	16	21	11	17
Motorcycle (V20-V29)	72	14	13	14	13	18
All-Terrain Vehicle (V86)	41	9	5	8	6	13
Heavy Transport Vehicle (V60-V69)	15	3	6	3	1	2
All Other Motor Vehicle Accidents	6	0	1	3	1	1
Motor Vehicle Accident with Unspecified Details	107	18	36	14	19	20
Other Causes of Death Due to Unintentional Injury	1,833	368	371	296	382	416
Falls (W00-W19)	950	185	196	149	203	217
Accidental Poisoning (X40-X49)	378	67	70	57	86	98
Accidental Threats to Breathing (excl. drowning) (W75-W84)	122	27	28	21	21	25
Exposure to Smoke, Fire, and Flames ( X00-X09)	59	10	19	8	11	11
Exposure to Excessive Natural Cold (X31)	58	14	13	13	10	8
Accidental Drowning and Submersion (W65-W74, V90, V92)	57	10	8	11	14	14
Accidental Discharge of Firearms (W32-W34)	19	5	2	7	0	5
Explosion (W35-W40)	14	7	0	1	3	3
Air Transport Accidents (V95.0-V95.3, V95.8-V95.9, & V96-V97)	11	3	1	3	2	2
Contact with Agricultural Machinery (W30)	11	2	3	5	0	1
Struck by Thrown, Projected, or Falling Object (W20)	9	2	1	2	0	4
Exposure to Excessive Natural Heat (X30)	6	1	2	0	0	3
Exposure to Electric Current (W85-W87)	5	2	1	0	1	1
Pedestrian Injured in Collision with Train (V05)	5	0	2	2	1	0
All Other Causes of Uninentional Injury	129	33	25	17	30	24

# **Unintentional Injuries**

Table 45, on the previous page, displays the breakdown of deaths due to unintentional injury, which were the fourth leading cause of deaths among South Dakotans. In 2020, 569 or 5.8 percent of deaths were due to unintentional injuries.

The highest type of motor vehicle death in 2020 was a car with 56 deaths. The highest death in the other causes of death due to unintentional injury in 2020 was falls with 217 deaths.

Table 46, on the next page, lists South Dakota resident leading causes of death for the last five years. Heart disease has been the overall leading cause of death for the past five years.

Cancer has been the second leading cause for the past five years, but was the leading cause in 2017.

Unintentional injuries have been the third leading cause for the past five years and has consistently been either 3<sup>rd</sup> or 4<sup>th</sup> every year.

Even though chronic lower respiratory diseases dropped to 6<sup>th</sup> in 2020, it remained the 4<sup>th</sup> leading cause over the past five years.

Alzheimer's disease has been the 5<sup>th</sup> leading causes over the past five years and has consistently been 4<sup>th</sup> or 5<sup>th</sup> each year.

Table 46 South Dakota Resident Leading Causes of Death, 2016-2020

Cause of Booth		Total			2016			2017			2018			2019			2020	
Cause of Death	Rank	Deaths	%															
South Dakota (All Deaths)		41,930	100		7,838	100		7,991	100		7,971	100		8,273	100		9,857	100
Heart Disease (100-109, I11, I13, I20-I51)	1	8,896	21.2	1	1,732	22.1	2	1,708	21.4	1	1,797	22.5	1	1,840	22.2	1	1,819	18.5
Cancer (C00-C97)	2	8,504	20.3	2	1,691	21.6	1	1,717	21.5	2	1,632	20.5	2	1,736	21.0	2	1,728	17.5
Unintentional Injuries (V01- X59, Y85-Y86)	3	2,573	6.1	3	503	6.4	3	537	6.7	4	452	5.7	4	512	6.2	4	569	5.8
Chronic Lower Respiratory Diseases (J40-J47)	4	2,380	5.7	5	427	5.4	4	505	6.3	3	498	6.2	3	521	6.3	6	429	4.4
Alzheimer's Disease (G30)	5	2,314	5.5	4	449	5.7	5	444	5.6	5	437	5.5	5	496	6.0	5	488	5.0
Stroke (I60-I69)	6	2,016	4.8	6	420	5.4	6	410	5.1	6	387	4.9	6	373	4.5	7	426	4.3
COVID-19 (U07)	7	1,497	3.6	*	*	*	*	*	*	*	*	*	*	*	*	3	1,497	15.2
Diabetes (E10-E14)	8	1,383	3.3	7	253	3.2	7	262	3.3	7	252	3.2	7	287	3.5	8	329	3.3
Influenza and Pneumonia (J09-J18)	9	989	2.4	8	195	2.5	8	217	2.7	8	246	3.1	8	189	2.3	*	*	*
Suicide (U03, X60-X84, Y87.0)	10	891	2.1	9	161	2.1	9	192	2.4	10	168	2.1	9	185	2.2	10	185	1.9
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	*	*	*	10	158	2.0	10	152	1.9	9	185	2.3	10	154	1.9	9	235	2.4
All Other Causes	-	10,487	25.0	-	1,849	23.6	-	1,847	23.1	-	1,917	24.0	-	1,980	23.9		2,152	21.8

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

Table 47 South Dakota Resident Leading Causes of Death by Race, 2020

			All Rac	es			White	e, Non-l	Hispanic		Α	merican	Indian,	Non-His	panic
Cause of Death	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate
South Dakota (All Deaths)		9,857	100	1,104.2	867.4		8,513	100	1,175.6	786.7		1,086	100	1,487.8	2,174.2
Heart Disease (I00-I09, I11, I13, I20-I51)	1	1,819	18.5	203.8	155.1	1	1,671	19.6	230.8	150.4	3	117	10.8	160.3	258.3
Cancer (C00-C97)	2	1,728	17.5	193.6	147.9	2	1,589	18.7	219.4	146.1	5	101	9.3	138.4	218.5
COVID-19 (U07)	3	1,497	15.2	167.7	127.1	3	1,251	14.7	172.8	110.1	1	206	19.0	282.2	450.0
Unintentional Injuries (V01-X59, Y85-Y86)	4	569	5.8	63.7	58.4	5	411	4.8	56.8	45.7	2	122	11.2	167.1	204.3
Alzheimer's Disease (G30)	5	488	5.0	54.7	39.7	4	478	5.6	66.0	40.6	*	*	*	*	*
Chronic Lower Respiratory Diseases (J40-J47)	6	429	4.4	48.1	36.6	6	406	4.8	56.1	36.8	*	*	*	*	*
Stroke (I60-I69)	7	426	4.3	47.7	35.4	7	388	4.6	53.6	33.7	8	31	2.9	42.5	78.1
Diabetes (E10-E14)	8	329	3.3	36.9	29.2	8	237	2.8	32.7	21.7	6	82	7.6	112.3	166.2
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	9	235	2.4	26.3	25.4	10(tie)	119	1.4	16.4	13.0	4	109	10.0	149.3	190.2
Suicide (U03, X60-X84, Y87.0)	10	185	1.9	20.7	20.9	9	127	1.5	17.5	16.8	7	42	3.9	57.5	55.2
Dementia (Unspecified Type) (F03)	*	*	*	*	*	10(tie)	119	1.4	16.4	10.1	*	*	*	*	*
Homicide (X85-Y09, Y87.1)	*	*	*	*	*	*	*	*	*	*	9	29	2.7	39.7	41.9
Septicemia (A40-A41)	*	*	*	*	*	*	*	*	*	*	10	21	1.9	28.8	37.9
All Other Causes	-	2,152	21.8	_	_	-	1,717	20.2	_	_	-	226	20.8	_	_

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 the given race. Source: South Dakota Department of Health, Office of Health Statistics

#### Race

Table 47, 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 2020, 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 greatly by rank. For example, Alzheimer's Disease was the fourth leading cause of death for whites, but wasn't even in the top ten for American Indians. At the same time, chronic liver disease and cirrhosis was the fourth leading cause for American Indians, but was only tied for 10<sup>th</sup> for whites.

Heart disease was the leading cause of death for whites, while COVID-19 was the leading cause for American Indians.

Alzheimer's disease, chronic lower respiratory diseases, and dementia were all in the top ten for whites, but not for American Indians. Homicide and septicemia were both in the top ten for American Indians, but not for whites.

# <u>Gender</u>

Table 48, 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 2020, 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. For example, unintentional injuries was the fourth leading cause for men, but only the sixth leading cause for women. Likewise, Alzheimer's disease was the fourth leading cause for women, but only the eighth leading cause for men.

Heart disease was the leading cause of death for men, but cancer was the leading cause for women.

Suicide was among the 10 leading causes of death for South Dakota's men, but not for women. At the same time, influenza and pneumonia, and dementia were both in the top ten for women, but not for men.

Table 48 South Dakota Resident Leading Causes of Death by Gender, 2020

			Tot	al			•	Ма	le				Fem	ale	
Cause of Death	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate
South Dakota (All Deaths)		9,857	100	1,104.2	867.4		5,252	100	1,165.4	1,059.7		4,605	100	1,041.7	706.6
Heart Disease (I00-I09, I11, I13, I20-I51)	1	1,819	18.5	203.8	155.1	1	1,045	19.9	231.9	206.5	2	774	16.8	175.1	109.6
Cancer (C00-C97)	2	1,728	17.5	193.6	147.9	2	907	17.3	201.3	173.2	1	821	17.8	185.7	130.5
COVID-19 (U07)	3	1,497	15.2	167.7	127.1	3	796	15.2	176.6	160.9	3	701	15.2	158.6	102.2
Unintentional Injuries (V01-X59, Y85- Y86)	4	569	5.8	63.7	58.4	4	362	6.9	80.3	77.9	6	207	4.5	46.8	38.7
Alzheimer's Disease (G30)	5	488	5.0	54.7	39.7	8	165	3.1	36.6	35.8	4	323	7.0	73.1	42.1
Chronic Lower Respiratory Diseases (J40-J47)	6	429	4.4	48.1	36.6	5	225	4.3	49.9	44.7	7	204	4.4	46.1	31.3
Stroke (I60-I69)	7	426	4.3	47.7	35.4	6	190	3.6	42.2	37.7	5	236	5.1	53.4	32.7
Diabetes (E10-E14)	8	329	3.3	36.9	29.2	7	175	3.3	38.8	34.7	8	154	3.3	34.8	24.2
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	9	235	2.4	26.3	25.4	10	143	2.7	31.7	30.4	9	92	2.0	20.8	20.2
Suicide (U03, X60-X84, Y87.0)	10	185	1.9	20.7	20.9	9	148	2.8	32.8	32.5	*	*	*	*	*
Influenza and Pneumonia (J09-J18)	*	*	*	*	*	*	*	*	*	*	10-Tie	79	1.7	17.9	12.1
Dementia (Unspecified Type) (F03)	*	*	*	*	*	*	*	*	*	*	10-Tie	79	1.7	17.9	10.3
All Other Causes	_	2,152	21.8	-	-	-	1,096	20.9	-	_	-	935	20.3	-	-

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

<sup>\*</sup>This cause was not one of the 10 leading causes of death for this gender. Source: South Dakota Department of Health, Office of Health Statistics

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Table 49
South Dakota Resident Five Leading Causes of Death by Age Group, 2016-2020
Deaths per Year

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 1,779	Unintentional Injuries 13	Unintentional Injuries 24	Unintentional Injuries 58	Unintentional Injuries 54	Heart Disease 47	Cancer 169	Cancer 394	Cancer 477	Heart Disease 506	Heart Disease 468
2	Cancer 1,701	Homicide 2	Suicide 23	Suicide 39	Suicide 31	Cancer 46	Heart Disease 125	Heart Disease 273	Heart Disease 339	COVID-19 (2020) 478	COVID-19 (2020) 365
3	Unintentional Injuries 515	Cancer 2	Homicide 3	Homicide 9	Chronic Liver Disease and Cirrhosis 21	Unintentional Injuries 45	COVID-19 (2020) 79	COVID-19 (2020) 200	COVID-19 (2020) 333	Cancer 432	Alzheimer's Disease 213
4	Chronic Lower Respiratory Diseases 476	Congenital Malformations, Deformations, and Chromosomal Abnormalities 2	Congenital Malformations, Deformations, and Chromosomal Abnormalities 2	Chronic Liver Disease and Cirrhosis 6	Heart Disease 16	Chronic Liver Disease and Cirrhosis 32	Unintentional Injuries 57	Chronic Lower Respiratory Disease 70	Chronic Lower Respiratory Disease 140	Alzheimer's Disease 195	Cancer 159
5	Alzheimer's Disease 463	Viral Infection of Unspecified Site 1	Cancer 1	Heart Disease 5	Cancer 15	Suicide 25	Chronic Liver Disease and Cirrhosis 52	Unintentional Injuries 55	Stroke 70	Chronic Lower Respiratory Disease 162	Stroke 120

#### Age

Table 49, on the previous page, lists the five leading causes of death by age group for the last five years combined. Excluding infants, unintentional injuries were the leading cause of death for South Dakotans through age 39.

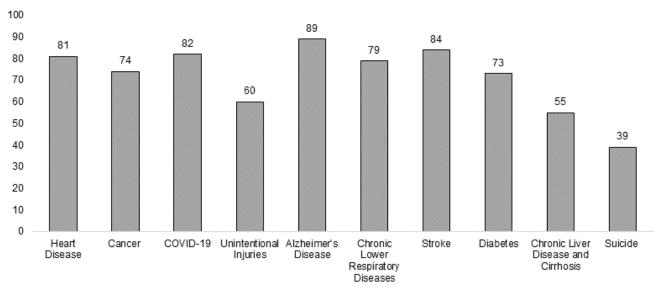
Oddly, heart disease was the leading cause of death for persons 40-49 over the past five years. The leading cause of death for persons 50-79 was cancer. Heart disease was the leading cause of death for persons aged 80 and older.

## Median Age

Figure 8, below, presents data on the median age at death for the 10 leading causes of death for South Dakota residents in 2020. The median age for the 10

leading causes of death in 2020 ranged from 39 for suicide to 89 for Alzheimer's Disease.

Figure 8
Median Age at Death for South Dakota Residents for the Leading Causes of Death, 2020



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

Table 50, below, shows the median age at death for the given years by race and gender. When looking at race, American Indians have a much lower median age at

death at 60, while whites' median age at death was 81. The median age at death for males was 75, while females was 82.

Table 50
Median Age at Death for South Dakota Residents by Race, Gender and Year of Death, 2005-2020

Year of Death	Total Median Age	White, non- Hispanic	American Indian, non-Hispanic	Male	Female
2020	79	81	60	75	82
2015	80	81	56	76	83
2010	80	81	58	77	84
2005	80	81	58	76	83

Table 51, below, shows the median age at death for South Dakota residents for the leading causes of death by race and gender. In 2020, the median age at death for whites ranged from 49 for suicide to 90 for dementia. The range for American Indians was 24 for suicides to 74 for stroke. For males the range in 2020 was 41 for suicide to 87 for

Alzheimer's disease. The range for females was 55 for chronic liver disease and cirrhosis to 90 for Alzheimer's disease and dementia.

Table 51

Median Age at Death for South Dakota Residents for the Leading Causes of Death by Race and Gender, 2020

,		Median Age	e at Death in Ye	ears	
	All	Ra	ice	Gei	nder
Cause of Death	Total Deaths	White, non- Hispanic	American Indian, non- Hispanic	Male	Female
South Dakota (All Deaths)	79	81	60	75	82
Heart Disease (I00-I09, I11, I13, I20-I51)	81	82	64	76	87
Cancer (C00-C97)	74	75	69	74	74
COVID-19 (U07)	82	84	67	80	84
Unintentional Injuries (V01-X59, Y85-Y86)	60	70	40	57	74
Alzheimer's Disease (G30)	89	89	*	87	90
Chronic Lower Respiratory Diseases (J40-J47)	79	79	*	79	79
Stroke (I60-I69)	84	85	74	81	87
Diabetes (E10-E14)	73	79	62	70	78
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	55	59	48	55	55
Suicide (U03, X60-X84, Y87.0)	39	49	24	41	*
Influenza and Pneumonia (J09-J18)	*	*	*	*	84
Dementia (Unspecified Type) (F03)	*	90	*	*	90
Homicide (X85-Y09, Y87.1)	*	*	31	*	*
Septicemia (A40-A41)	*	*	54	*	*

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

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

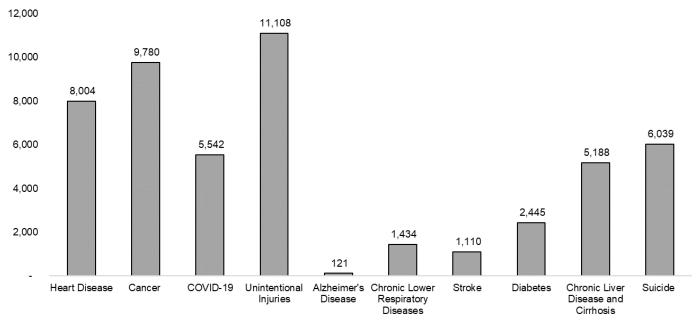
#### Years of Potential Life Lost

Figure 9, on the next page, depicts the years of potential life lost (YPLL) before age 75 for each of these causes.

In 2020, unintentional injuries led in YPLL with 11,108 followed by cancer with 9,780 years of potential life lost.

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

Figure 9
South Dakota Resident Years of Potential Life Lost (YPLL) Before Age 75
for the Leading Causes of Death, 2020



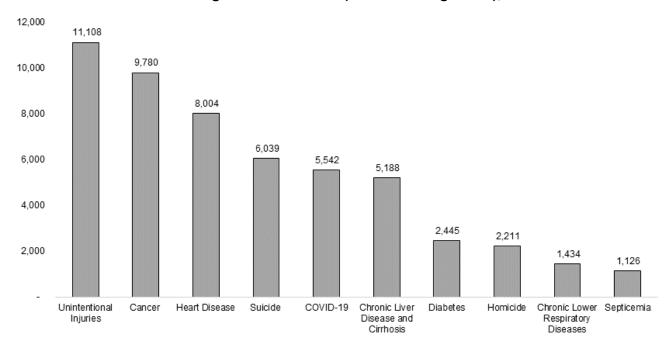
Note: Chart excludes infant deaths.

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

Figure 10, below, shows the causes of death with the highest number of years of potential life lost (YPLL) before age 75.

Homicide and septicemia are in the top ten with regard to YPLL even though they are not in the top ten with regard to the number of deaths only.

Figure 10
South Dakota Resident Years of Potential Life Lost (YPLL) Before Age 75 for the Leading Causes of Death (in Descending Order), 2020



Note: Chart excludes infant deaths

# Place of Death

Table 52, below, displays the 10 leading causes of death by the place where death occurred in 2020.

Overall, nursing home, long term care, and hospice facility had the highest occurrence of deaths with 39.6 percent. Hospital followed closely with 33.2 percent.

Table 52 South Dakota Resident Deaths by Cause of Death and Place of Death, 2020

	Nurs Home Tei Care/H Fac	/Long rm ospice	Hos	oital	Resid	ence	All O Repo	rted	Unkn	own
Cause of Death	Num	%	Num	%	Num	%	Num	%	Num	%
South Dakota (All Deaths)	3,894	39.6	3,265	33.2	2,230	22.7	436	4.4	32	-
Heart Disease (I00-I09, I11, I13, I20-I51)	588	32.4	533	29.4	636	35.0	58	3.2	4	-
Cancer (C00-C97)	674	39.2	349	20.3	638	37.1	60	3.5	7	-
COVID-19 (U07)	659	44.1	779	52.1	50	3.3	8	0.5	1	-
Unintentional Injuries (V01-X59, Y85-Y86)	98	17.5	204	36.4	93	16.6	165	29.5	9	-
Alzheimer's Disease (G30)	426	87.5	20	4.1	37	7.6	4	0.8	1	-
Chronic Lower Resiratory Diseases (J40-J47)	172	40.2	120	28.0	119	27.8	17	4.0	1	-
Stroke (I60-I69)	229	53.8	147	34.5	44	10.3	6	1.4	0	-
Diabetes (E10-E14)	122	37.1	90	27.4	99	30.1	18	5.5	0	-
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	46	19.6	119	50.6	61	26.0	9	3.8	0	-
Suicide (U03, X60-X84, Y87.0)	3	1.6	36	19.6	112	60.9	33	17.9	1	-
All Other Causes	877	40.9	868	40.5	341	15.9	58	2.7	8	-

#### 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 1,608 deaths, or 17.9 percent, the certifier indicated "yes" or "probably" that tobacco use contributed to the death. Conversely, on 5,133 deaths, or 57.2 percent, the certifier indicated that tobacco use did not contribute to the death.

In the remaining 2,225 deaths, or 24.8 percent, the certifier was unsure if tobacco use contributed to the death.

Table 53, below, displays the 10 leading causes of natural death where the certifier said "yes" or "probably" that tobacco use contributed to the death.

Tobacco use contributed to death in 71.2 percent, or 265 out of the 372 trachea, bronchus, and lung cancer deaths in 2020. In 62.5 percent, or 268 chronic lower respiratory disease deaths the certifier said "yes" or "probably" that tobacco use contributed to the death.

Table 53
South Dakota Resident Leading Causes of Natural Death as They Relate to Tobacco Use, 2020

(Did Tobacco Use Contribute to Death)

Cause of Death	Yes/Pro	obably	Total Nat	ural Deaths
	Number	Percent	Number	Percent
Total	1,608	17.9	8,966	100
Cancer (C00-C97)	491	28.4	1,727	100
Trachea, bronchus, and lung cancer (C33-C34)	265	71.2	372	100
Colorectal cancer (C18-C21)	25	15.9	157	100
Esophagus cancer (C15)	20	41.7	48	100
Lip, oral cavity, and pharynx cancer (C00-C14)	20	69.0	29	100
Pancreas cancer (C25)	19	14.8	128	100
Liver cancer (C22)	14	16.3	86	100
Heart disease (100-109, 111, 113, 120-151)	312	17.2	1,818	100
Acute myocardial infarction (I21-I22)	107	17.6	608	100
Atherosclerotic heart disease (I25.1)	80	20.3	394	100
Hypertensive heart disease (I11)	23	13.5	171	100
Atherosclerotic cardiovascular disease, so described (I25.0)	17	23.0	74	100
Heart failure (I50)	15	15.2	99	100
Chronic lower respiratory diseases (J40-J47)	268	62.5	429	100
Chronic obstructive pulmonary disease, unspecified (J44.9)	190	64.2	296	100
Chronic obstructive pulmonary disease with acute lower respiratory	36	58.1	62	100
infection (J44.0)	30	30.1	02	100
Emphysema (J43)	18	72.0	25	100
COVID-19 (U07)	151	10.1	1,497	100
Stroke (I60-I69)	54	12.7	425	100
Diabetes (E10-E14)	51	15.5	329	100
Chronic liver disease and cirrhosis (K70 & K73-K74)	35	14.9	235	100
Alcoholic liver disease (K70)	32	16.2	198	100
Hypertension (I10, I12, I15)	18	14.2	127	100
Alzheimer's disease (G30)	16	3.3	488	100
Septicemia (A40-A41)	14	13.5	104	100

Note: Table does not include infant deaths.

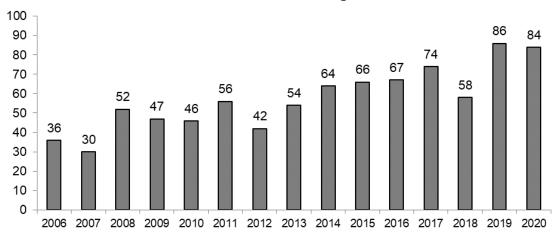
# **Drug Overdose Deaths**

Figures 11-16 And Tables 54-59 on the following pages break down the drug overdose deaths for South Dakota residents for the past 15 years by the manner of death, year of death, and type of drug.

As shown in Figure 11, there were 84 drug overdose deaths in 2020, down from 86 drug overdose deaths in 2019. Table 54, below that, shows that of the 84 drug

overdose deaths in 2020, 70 deaths were unintentional, 10 deaths were suicides, one death was a homicide, and three deaths where the intent was undetermined. The definition of drug overdose deaths is located in the back of this report within the Technical Notes section.

Figure 11
South Dakota Resident Deaths Due to Drug Overdoses, 2006-2020



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

Table 54
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Drugs, 2006-2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	36	30	52	47	46	56	42	54	64	66	67	74	58	86	84
Unintentional	21	15	30	26	19	41	24	34	46	44	52	54	43	71	70
Suicide	12	8	13	12	16	11	11	15	12	19	12	18	11	10	10
Homicide	0	0	0	1	0	0	0	1	0	0	1	0	0	0	1
Undetermined Intent	3	7	9	8	11	4	7	4	6	3	2	2	4	5	3

Figure 12
South Dakota Resident Deaths Due to All Opioid Poisoning, 2006-2020

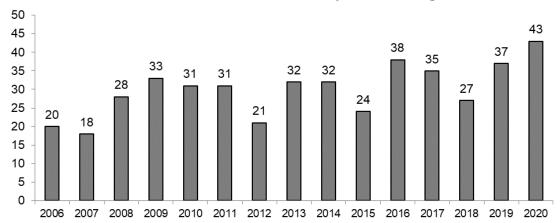
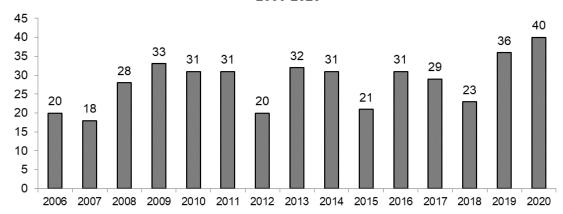


Table 55
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Opioid Poisoning, 2006-2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	20	18	28	33	31	31	21	32	32	24	38	35	27	37	43
Unintentional	15	9	18	22	15	26	15	21	27	19	31	28	22	32	41
Suicide	3	3	4	6	8	3	2	9	2	4	6	7	3	3	1
Homicide	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intent	2	6	6	4	8	2	4	2	3	1	1	0	2	2	1

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

Figure 13
South Dakota Resident Deaths Due to Prescription Opioid Poisoning, 2006-2020



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 Prescription Opioid Poisoning, 2006-2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	20	18	28	33	31	31	20	32	31	21	31	29	23	36	40
Unintentional	15	9	18	22	15	26	14	21	26	16	24	22	19	31	38
Suicide	3	3	4	6	8	3	2	9	2	4	6	7	3	3	1
Homicide	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intent	2	6	6	4	8	2	4	2	3	1	1	0	1	2	1

Figure 14
South Dakota Resident Deaths Due to Illicit Opioid Poisoning, 2006-2020

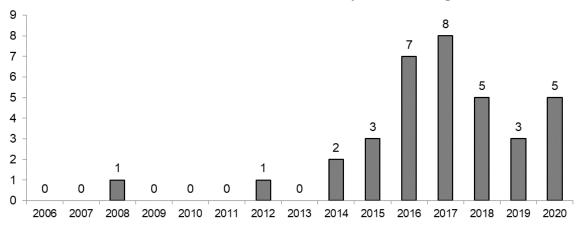
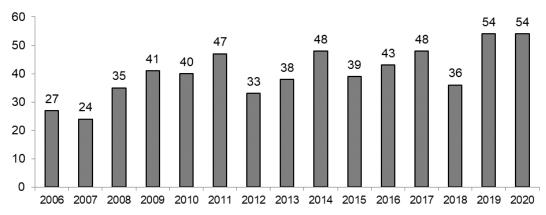


Table 57
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Opioid Poisoning, 2006-2020

							<u> </u>								
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	0	0	1	0	0	0	1	0	2	3	7	8	5	3	5
Unintentional	0	0	1	0	0	0	1	0	2	3	7	8	4	3	5
Suicide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Homicide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intent	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

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

Figure 15
South Dakota Resident Deaths Due to All Pharmaceutical Poisoning, 2006-2020



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 All Pharmaceutical Drug Poisoning, 2006-2020

			,		4004610	w w.	<del>g .                                   </del>	••••• <del>•</del>		<del></del>					
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	27	24	35	41	40	47	33	38	48	39	43	48	36	54	54
Unintentional	16	10	19	22	16	34	18	24	33	24	31	30	23	40	42
Suicide	9	7	8	11	14	10	10	12	9	12	10	17	11	10	9
Homicide	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0
Undetermined Intent	2	7	8	7	10	3	5	2	6	3	1	1	2	4	3

Figure 16
South Dakota Resident Deaths Due to Illicit Drug Poisoning, 2006-2020

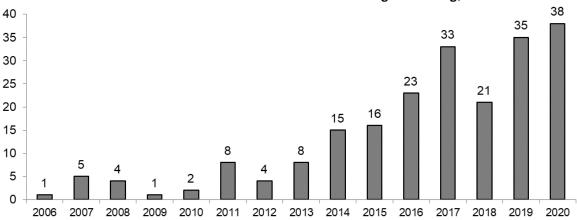


Table 59
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Drug Poisoning, 2006-2020

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	1	5	4	1	2	8	4	8	15	16	23	33	21	35	38
Unintentional	0	5	3	1	2	7	3	6	14	16	23	31	19	34	35
Suicide	1	0	0	0	0	1	1	1	1	0	0	1	0	0	0
Homicide	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Undetermined Intent	0	0	1	0	0	0	0	0	0	0	0	1	2	1	2

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

The following tables (60 and 61) show the specific drugs involved in drug overdose deaths for 2020 and for the past 10 years. Out of the 84 total drug deaths in 2020, 30 of those involved methamphetamine and 30 involved 30 fentanvl. Of those involvina methamphetamine, 19 listed methamphetamine as the only drug, while the other 11 deaths involved at least one other drug. For fentanyl, 11 of the 30 deaths only involved fentanyl, while the other 19 involved at least one other drug.

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 60 South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved, 2020

	Number	Drugs List	of Specific ed on Death ificate
Drugs Involved	of Deaths	Only Drug Involved	Other Drugs Involved
Methamphetamine	30	19	11
Fentanyl (Includes analogs)	30	11	19
Oxycodone (Oxycontin, Percocet, Percodan)	6	2	4
Heroin	6	2	4
Cocaine (Benzoylecgonine)	5	2	3
Buprenorphine	5	2	3
Kratom (Mitragynine)	5	1	4
Morphine	4	0	4
Hydrocodone (Vicodin)	4	1	3
Bupropion (Wellbutrin)	3	2	1
Citalopram (Celexa)	3	1	2
Insulin	3	3	0

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

Table 61 South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved and Year of Death, 2011-2020

Drugs Involved and Number of						Year o	f Death				
Specific Drugs on Death Certificate	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Methamphetamine	157	4	3	9	14	13	18	22	13	31	30
Only Drug Involved	107	2	3	6	10	10	10	12	10	25	19
Other Drugs Involved	50	2	0	3	4	3	8	10	3	6	11
Fentanyl (Includes Analogs)	106	4	2	2	7	7	7	12	12	23	30
Only Drug Involved	61	3	2	1	4	6	2	6	8	18	11
Other Drugs Involved	45	1	0	1	3	1	5	6	4	5	19
Oxycodone (Oxycontin, Percocet, Percodan)	63	9	3	10	8	2	9	5	7	4	6
Only Drug Involved	28	2	2	6	5	2	2	2	4	1	2
Other Drugs Involved	35	7	1	4	3	0	7	3	3	3	4
Morphine	58	7	6	10	11	1	7	3	1	8	4
Only Drug Involved	24	4	5	5	6	0	2	1	0	1	0
Other Drugs Involved	34	3	1	5	5	1	5	2	1	7	4
Hydrocodone (Vicodin)	52	4	5	9	5	7	10	4	2	2	4
Only Drug Involved	23	2	3	4	2	3	5	2	1	0	1
Other Drugs Involved	29	2	2	5	3	4	5	2	1	2	3
Heroin	37	1	1	0	2	3	8	8	5	3	6
Only Drug Involved	14	0	1	0	0	1	4	3	2	1	2
Other Drugs Involved	23	1	0	0	2	2	4	5	3	2	4
Methadone (Methadose)	34	9	1	2	6	4	4	4	3	1	0
Only Drug Involved	16	4	1	1	3	3	1	1	2	0	0
Other Drugs Involved	18	5	0	1	3	1	3	3	1	1	0
Cocaine (Benzoylecgonine)	30	3	0	0	0	3	3	3	8	5	5
Only Drug Involved	10	1	0	0	0	0	0	1	4	2	2
Other Drugs Involved	20	2	0	0	0	3	3	2	4	3	3
Amitriptyline	24	2	4	3	1	1	4	3	2	2	2
Only Drug Involved	6	2	2	1	0	0	0	1	0	0	0
Other Drugs Involved	18	0	2	2	1	1	4	2	2	2	2

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# Table 61 (continued) South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved and Year of Death, 2011-2020

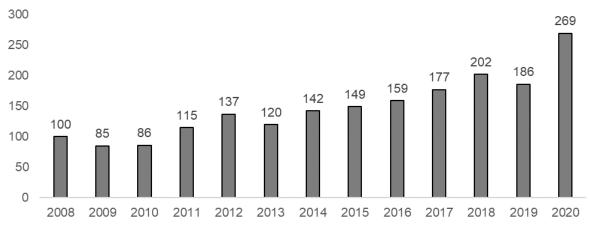
						Year o	f Death				
Specific Drugs on Death Certificate	Total	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bupropion (Wellbutrin)	18	1	0	0	2	0	1	3	3	5	3
Only Drug Involved	12	1	0	0	2	0	0	1	2	4	2
Other Drugs Involved	6	0	0	0	0	0	1	2	1	1	1
Diphenhydramine	18	1	1	1	2	4	2	1	2	3	1
Only Drug Involved	10	1	0	1	2	2	1	1	1	1	0
Other Drugs Involved	8	0	1	0	0	2	1	0	1	2	1
Tramadol	16	2	3	2	0	2	3	1	0	2	1
Only Drug Involved	6	1	2	1	0	1	0	0	0	1	0
Other Drugs Involved	10	1	1	1	0	1	3	1	0	1	1
Citalopram (Celexa)	15	1	1	2	3	0	0	2	1	2	3
Only Drug Involved	2	0	1	0	0	0	0	0	0	0	1
Other Drugs Involved	13	1	0	2	3	0	0	2	1	2	2
Acetaminophen (Darvocet, Excedrin, Percocet, Tylenol, Vicodin)	15	4	0	1	2	3	2	1	0	0	2
Only Drug Involved	5	1	0	0	2	2	0	0	0	0	0
Other Drugs Involved	10	3	0	1	0	1	2	1	0	0	2
Alprazolam (Xanax)	14	3	2	2	1	0	1	0	3	1	1
Only Drug Involved	3	0	1	1	1	0	0	0	0	0	0
Other Drugs Involved	11	3	1	1	0	0	1	0	3	1	1
Quetiapine (Seroquel)	13	0	1	0	0	0	3	4	1	3	1
Only Drug Involved	5	0	1	0	0	0	1	1	1	0	1
Other Drugs Involved	8	0	0	0	0	0	2	3	0	3	0
Codeine	11	1	1	2	0	0	3	2	0	1	1
Only Drug Involved	1	0	1	0	0	0	0	0	0	0	0
Other Drugs Involved	10	1	0	2	0	0	3	2	0	1	1
Insulin	10	2	0	1	0	1	1	0	1	1	3
Only Drug Involved	10	2	0	1	0	1	1	0	1	1	3
Other Drugs Involved	0	0	0	0	0	0	0	0	0	0	0
Amphetamine (Adderall)	10	1	1	0	1	0	1	3	0	1	2
Only Drug Involved	4	0	1	0	0	0	0	1	0	1	1
Other Drugs Involved	6	1	0	0	1	0	1	2	0	0	1
Duloxetine (Cymbalta)	10	0	0	2	0	1	1	2	2	1	1
Only Drug Involved	0	0	0	0	0	0	0	0	0	0	0
Other Drugs Involved	10	0	0	2	0	1	1	2	2	1	1

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 17, below, shows the alcoholinduced deaths for South Dakota residents for the past 13 years. The definition of alcohol-induced deaths is located in the back of this report within the Technical Notes section.

Figure 17
South Dakota Resident Alcohol-Induced Deaths, 2008-2020



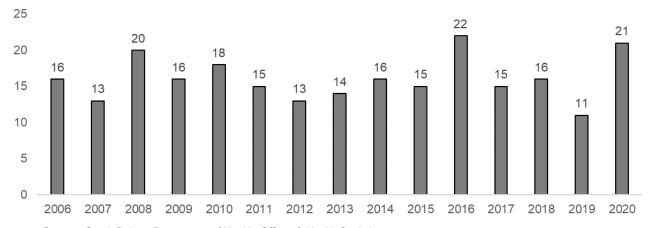
Source: South Dakota Department of Health, Office of Health Statistics

# Farm Accident Deaths

Figure 18, below, shows the number of South Dakota resident deaths due to farm accidents for the past 15 years. The

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

Figure 18
South Dakota Resident Deaths Due to Farm Accidents, 2006-2020



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

# **Maternal Mortality**

Table 62, on the following page, shows maternal mortality deaths for the past 10

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

Table 62
South Dakota Resident Deaths Occurring in South Dakota to Women Who Were Pregnant at the Time of Death or Within One Year After Delivery, 2011-2020

Year	Any Death While Pregnant, or Within One Year After Delivery	Pregnancy-Related	Pregnancy Associated, But Not Pregnancy-Related
2020	8	*	*
2019	6	*	*
2018	8	*	*
2017	5	1	4
2016	6	2	4
2015	5	2	3
2014	5	1	4
2013	6	1	5
2012	6	1	5
2011	8	3	5

Note: <u>Pregnancy-related</u>: 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 2017.

<u>Pregnancy-associated, but not pregnancy-related</u>: 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 2017.

# Firearm Deaths

Table 63, 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 63
South Dakota Resident Deaths Due to Firearms, 2011-2020

	Total		N	Manner of Death		
Year	Firearm Deaths	Accident	Suicide	Homicide	Legal Intervention	Undetermined Intent
2020	120	5	87	27	1	0
2019	113	0	101	10	2	0
2018	117	7	91	16	3	0
2017	102	2	83	12	4	1
2016	107	5	83	14	5	0
2015	95	5	73	14	2	1
2014	90	2	76	9	3	0
2013	79	1	71	5	2	0
2012	84	2	76	6	0	0
2011	71	2	59	6	4	0

# Method of Disposition

Table 64, below, displays the different methods of disposition for the last 14 years. For the first time ever, the top disposition in 2020 was cremation with 4,733 deaths. The

second highest method of disposition in 2020 was burial with 4,552 deaths. Since 2007, cremation has increased from 21.7 percent of all dispositions to 48.0 percent in 2020.

Table 64
South Dakota Resident Deaths by Disposition, 2007-2020

					Type	of Dispo	sition				
Year	Total	Ві	urial	Crer	nation		val from tate	Don	nation	Entor	nbment
	Deaths	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2020	9,857	4,552	46.2	4,733	48.0	512	5.2	43	0.4	17	0.2
2019	8,273	3,920	47.4	3,853	46.6	450	5.4	39	0.5	11	0.1
2018	7,971	3,949	49.5	3,554	44.6	425	5.3	34	0.4	7	0.1
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

Note: Failure of deaths to add to the total is due to unknown dispositions. Source: South Dakota Department of Health, Office of Health Statistics

# **Leading Causes and Selected Components**

Tables 65a-65c, on pages 74 through 76, display South Dakota resident deaths, the crude death rate, and the age-adjusted death rate for 15 leading causes and selected components from 2011 to 2020.

The crude and age-adjusted rates for all causes in 2020 were 1,104.2 and 867.4 respectively, which are up from the crude and age-adjusted rates in 2019 of 935.2 and 739.6, respectively.

Table 65a South Dakota Resident Deaths for 15 Leading Causes and Selected Components, 2011-2020

South Dakota Resident Dea		10 _0	· · · · · · · ·		Number			101110, 1		
Cause of Death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Causes	7,271	7,283	7,079	7,500	7,724	7,838	7,991	7,971	8,273	9,857
Heart Disease	1,615	1,652	1,617	1,695	1,712	1,732	1,708	1,797	1,840	1,819
Cancer	1,656	1,623	1,574	1,679	1,632	1,691	1,717	1,632	1,736	1,728
Trachea, Bronchus, and Lung	457	434	416	439	424	420	421	396	430	372
Colon, Rectum, and Anus	137	166	169	186	168	163	158	169	153	157
Pancreas	95	105	109	118	109	128	124	116	142	128
Female Breast	122	107	108	100	104	109	102	112	106	115
Prostate	88	75	76	75	90	107	71	92	86	95
Leukemia	77	68	89	90	66	61	62	58	73	88
COVID-19	0	0	0	0	0	0	0	0	0	1,497
Unintentional Injuries	407	417	424	461	467	503	537	452	512	569
Motor Vehicle Accidents	99	142	149	151	143	135	166	156	130	153
Alzheimer's Disease	423	462	420	433	421	449	444	437	496	488
Chronic Lower Respiratory Diseases	485	479	413	440	500	427	505	498	521	429
Stroke	442	410	414	439	381	420	410	387	373	426
Diabetes	267	219	239	223	282	253	262	252	287	329
Chronic Liver Disease and Cirrhosis	98	113	121	128	137	158	152	185	154	235
Suicide	125	135	147	141	173	161	192	168	185	185
Influenza and Pneumonia	178	188	186	180	213	195	217	246	189	142
Hypertension	94	78	72	95	103	92	102	113	126	127
Dementia (Unspecified Type)	117	111	99	120	126	121	105	133	82	123
Septicemia	69	64	74	81	119	81	100	117	121	105
Parkinson's Disease	73	53	78	63	80	86	89	104	91	102

Table 65b South Dakota Resident Crude Death Rates for 15 Leading Causes and Selected Components, 2011-2020

			30110111		Crude Do	eath Rate	es			
Cause of Death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Causes	882.3	873.9	837.9	879.1	899.7	905.7	918.9	903.5	935.2	1,104.2
Heart Disease	196.0	198.2	191.4	198.7	199.4	200.1	196.4	203.7	208.0	203.8
Cancer	201.0	194.8	186.3	196.8	190.1	195.4	197.4	185.0	196.2	193.6
Trachea, Bronchus, and Lung	55.5	52.1	49.2	51.5	49.4	48.5	48.4	44.9	48.2	41.7
Colon, Rectum, and Anus	16.6	19.9	20.0	21.8	19.6	18.8	18.2	19.2	17.3	17.6
Pancreas	11.5	12.6	12.9	13.8	12.7	14.8	14.3	13.1	16.1	14.3
Female Breast	29.7	25.8	25.7	23.6	24.4	25.4	23.7	25.6	24.2	26.0
Prostate	21.3	17.9	17.9	17.5	20.8	24.5	16.2	20.6	19.2	21.1
Leukemia	9.3	8.2	10.5	10.5	7.7	7.0	7.1	6.6	8.3	9.9
COVID-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.7
Unintentional Injuries	49.4	50.0	50.2	54.0	54.4	58.1	61.7	51.2	57.9	63.7
Motor Vehicle Accidents	12.0	17.0	17.6	17.7	16.7	15.6	19.1	17.7	14.7	17.1
Alzheimer's Disease	51.3	55.4	49.7	50.8	49.0	51.9	51.1	49.5	56.1	54.7
Chronic Lower Respiratory Diseases	58.9	57.5	48.9	51.6	58.2	49.3	58.1	56.4	58.9	48.1
Stroke	53.6	49.2	49.0	51.5	44.4	48.5	47.1	43.9	42.2	47.7
Diabetes	32.4	26.3	28.3	26.1	32.8	29.2	30.1	28.6	32.4	36.9
Chronic Liver Disease and Cirrhosis	11.9	13.6	14.3	15.0	16.0	18.3	17.5	21.0	17.4	26.3
Suicide	15.2	16.2	17.4	16.5	20.2	18.6	22.1	19.0	20.9	20.7
Influenza and Pneumonia	21.6	22.6	22.0	21.1	24.8	22.5	25.0	27.9	21.4	15.9
Hypertension	11.4	9.4	8.5	11.1	12.0	10.6	11.7	12.8	14.2	14.2
Dementia (Unspecified Type)	14.2	13.3	11.7	14.1	14.7	14.0	12.1	15.1	9.3	13.8
Septicemia	8.4	7.7	8.8	9.5	13.9	9.4	11.5	13.3	13.7	11.8
Parkinson's Disease	8.9	6.4	9.2	7.4	9.3	9.9	10.2	11.8	10.3	11.4

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

Table 65c South Dakota Resident Age-Adjusted Death Rates for 15 Leading Causes and Selected Components, 2011-2020

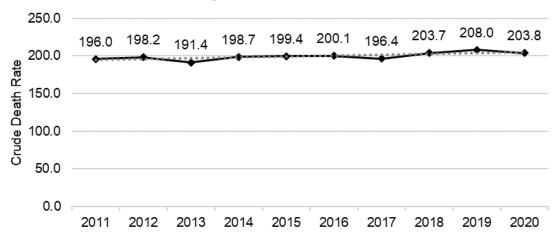
	Age-Adjusted Death Rates									
Cause of Death	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Causes	716.1	706.8	677.4	709.9	714.9	718.6	736.1	715.7	739.6	867.4
Heart Disease	153.0	153.8	148.8	153.6	151.0	153.7	150.0	156.2	158.1	155.1
Cancer	168.6	162.2	154.3	161.4	153.3	156.6	157.0	145.2	153.3	147.9
Trachea, Bronchus, and Lung	47.2	43.5	41.0	41.8	39.7	38.2	38.2	35.3	37.2	31.1
Colon, Rectum, and Anus	13.9	16.4	16.7	17.6	15.7	15.2	14.2	15.2	13.7	13.3
Pancreas	9.5	10.6	10.7	11.1	10.3	11.6	11.5	10.0	12.3	10.8
Female Breast	23.7	19.5	19.3	17.9	18.7	19.3	17.3	20.0	17.9	19.1
Prostate	20.9	17.7	17.0	16.7	19.6	23.1	15.7	19.0	17.5	19.5
Leukemia	7.8	7.3	9.0	8.8	6.2	5.6	5.5	5.1	6.7	7.8
COVID-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.1
Unintentional Injuries	44.8	46.6	46.4	49.2	49.3	53.1	56.2	46.5	52.8	58.4
Motor Vehicle Accidents	11.8	17.1	17.4	17.5	16.3	15.8	19.0	17.3	14.6	16.8
Alzheimer's Disease	36.6	39.6	35.1	36.1	34.8	37.1	36.9	36.3	40.6	39.7
Chronic Lower Respiratory Diseases	47.4	45.4	39.1	40.7	45.1	38.5	45.4	43.7	45.1	36.6
Stroke	42.0	37.6	37.5	38.8	33.0	35.8	36.3	33.3	32.3	35.4
Diabetes	26.8	21.6	22.9	21.2	26.3	23.6	24.8	23.3	26.8	29.2
Chronic Liver Disease and Cirrhosis	11.1	13.3	13.3	16.0	15.9	16.4	17.0	19.7	17.1	25.4
Suicide	15.3	16.1	18.0	17.1	20.4	19.9	22.7	19.4	21.2	20.9
Influenza and Pneumonia	16.3	16.9	16.4	16.1	18.3	16.7	19.0	20.8	16.0	12.2
Hypertension	8.5	6.8	6.3	8.1	8.7	7.9	8.7	9.4	10.6	10.5
Dementia (Unspecified Type)	10.2	9.4	8.4	10.1	10.5	9.6	8.6	10.6	6.6	10.0
Septicemia	7.0	6.2	7.2	8.1	11.0	7.5	9.4	10.5	10.9	9.8
Parkinson's Disease	7.0	5.1	7.3	6.3	7.2	7.6	8.1	9.5	7.9	8.9

Note: The age-adjusted death rate is calculated using yearly U.S. Census Bureau population estimates for the given 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 2020. Note: The crude death rate is

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

Figure 19
South Dakota Resident Crude Death Rate Due to Heart
Disease by Year of Death, 2011-2020



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

Figure 20
South Dakota Resident Crude Death Rate Due to Cancer
by Year of Death, 2011-2020

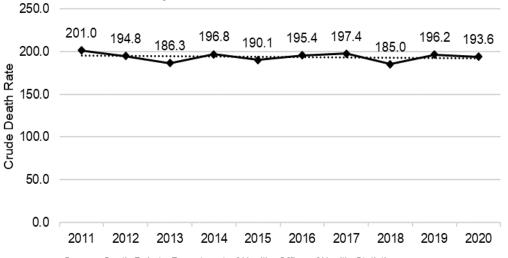


Figure 20a South Dakota Resident Crude Death Rate Due to Trachea, Bronchus, and Lung Cancer by Year of Death, 2011-2020

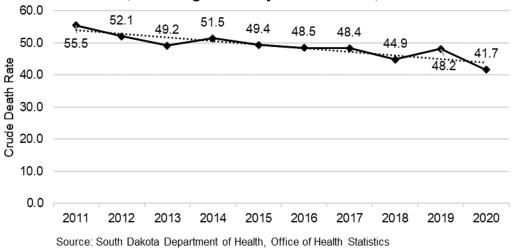


Figure 20b
South Dakota Resident Crude Death Rate Due to Colon,
Rectum, and Anus Cancer by Year of Death, 2011-2020

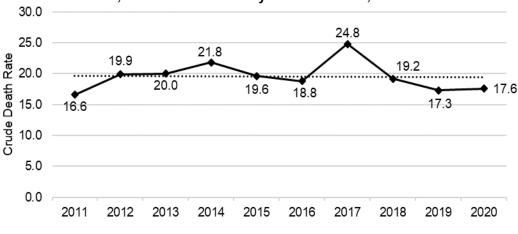


Figure 20c
South Dakota Resident Crude Death Rate Due to Pancreas
Cancer by Year of Death, 2011-2020

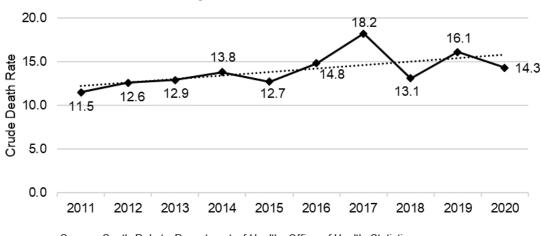


Figure 20d
South Dakota Resident Crude Death Rate Due to Female
Breast Cancer by Year of Death, 2011-2020

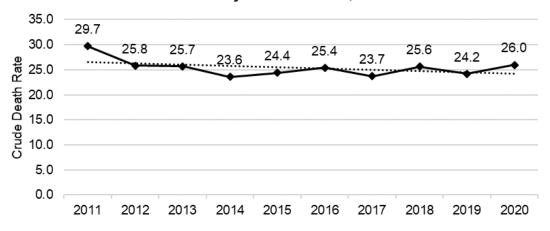
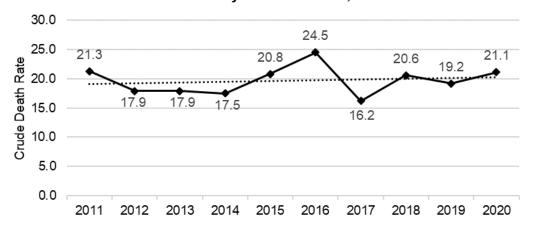


Figure 20e
South Dakota Resident Crude Death Rate Due to
Prostate Cancer by Year of Death, 2011-2020



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

Figure 20f
South Dakota Resident Crude Death Rate Due to
Leukemia by Year of Death, 2011-2020

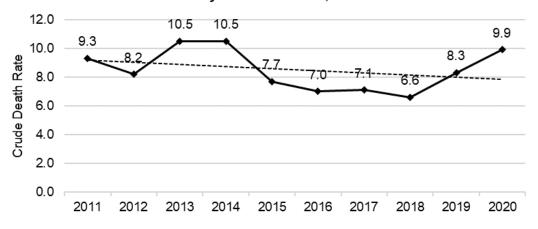


Figure 21
South Dakota Resident Crude Death Rate Due to
Unintentional Injuries by Year of Death, 2011-2020

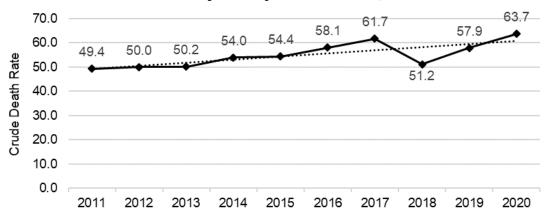
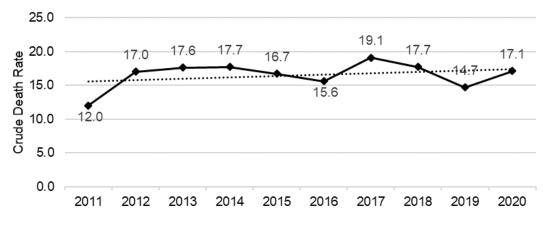


Figure 21a
South Dakota Resident Crude Death Rate Due to Motor
Vehicle Accidents by Year of Death, 2011-2020



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

Figure 22 South Dakota Resident Crude Death Rate Due to Alzheimer's Disease by Year of Death, 2011-2020

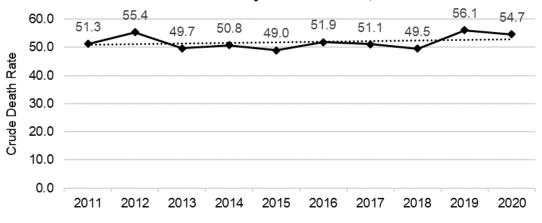


Figure 23
South Dakota Resident Crude Death Rate Due to Chronic
Lower Respiratory Disease by Year of Death, 2011-2020

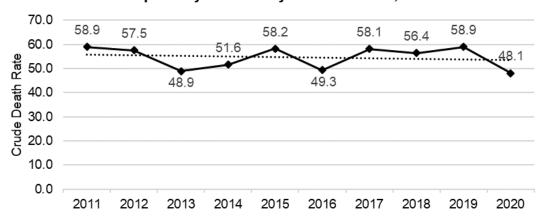
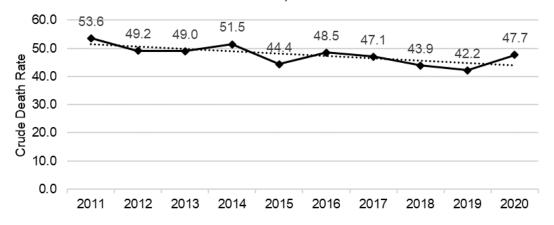


Figure 24
South Dakota Resident Crude Death Rate Due to Stroke by Year of Death, 2011-2020



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

Figure 25
South Dakota Resident Crude Death Rate Due to
Diabetes by Year of Death, 2011-2020

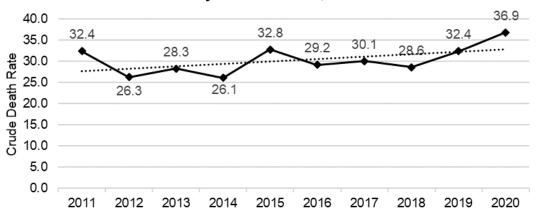


Figure 26 South Dakota Resident Crude Death Rate Due to Chronic Liver Disease and Cirrhosis by Year of Death, 2011-2020

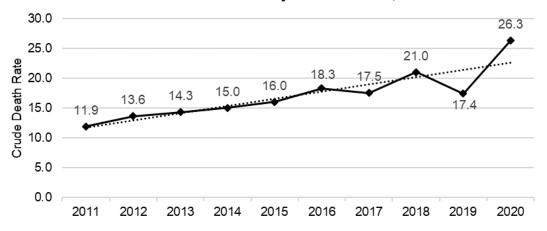
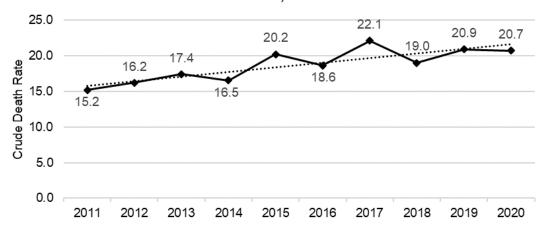


Figure 27
South Dakota Resident Crude Death Rate Due to Suicide by Year of Death, 2011-2020



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

Figure 28
South Dakota Resident Crude Death Rate Due to Influenza and Pneumonia by Year of Death, 2011-2020

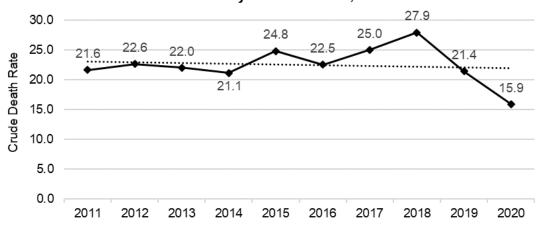


Figure 29
South Dakota Resident Crude Death Rate Due to
Hypertension by Year of Death, 2011-2020

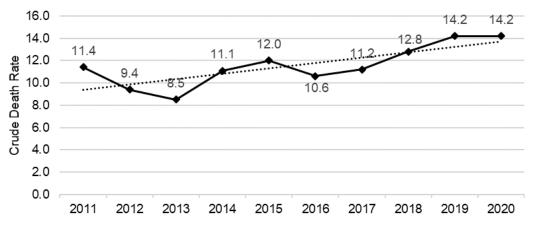


Figure 30
South Dakota Resident Crude Death Rate Due to Dementia
(Unspecified Type) by Year of Death, 2011-2020

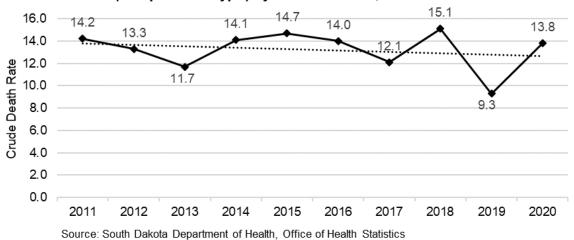


Figure 31
South Dakota Resident Crude Death Rate Due to Septicemia by Year of Death, 2011-2020

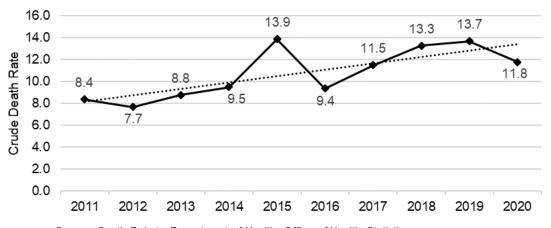


Figure 32 South Dakota Resident Crude Death Rate Due to Parkinson's Disease by Year of Death, 2011-2020

