Mortality

An Overview: 2021

Total South Dakota Resident Deaths 9,183

Crude Death Rates per 100,000 Population

South Dakota 1,025.6 United States (2019) 869.7

Age-Adjusted Death Rates per 100,000 Population

South Dakota 858.2 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.

Table 44
Resident Deaths, Crude Death Rates, and Age-Adjusted Death Rates,
South Dakota and United States, 2005-2021

	South Da	ikota and	i United State	es, 2005- <u>/</u>	2021	
	Un	ited States	3	S	outh Dako	ta
Year	Number	Crude Rate	Age-Adjusted Rate	Number	Crude Rate	Age-Adjusted Rate
2021	NA*	NA*	NA*	9,183	1,025.6	858.2
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

Note: *U.S. 2020 and 2021 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 2021 for South Dakota residents were cancer, heart disease, COVID-19, chronic lower respiratory diseases, and Alzheimer's disease.

Cancer was the leading cause of death in South Dakota for the first time since 2017 and accounted for 18.9 percent of all resident deaths. Lung cancer accounted for the most cancer deaths.

Heart disease was the second leading cause of death in 2021 and accounted for 18.4 percent of South Dakota resident deaths.

COVID-19 was the third leading cause of death in 2021 and accounted for 8.5 percent of South Dakota resident deaths.

Chronic lower respiratory diseases were the fourth leading cause of death and accounted for 5.1 percent of 2021 South Dakota resident deaths. Chronic obstructive pulmonary disease (COPD) accounted for the most chronic lower respiratory disease deaths.

Alzheimer's disease was the fifth leading cause of death accounting for 4.3 percent of all South Dakota resident deaths in 2021.

Table 45
South Dakota Resident Leading Causes of Death Due to Unintentional Injuries, 2017-2021

			Yea	r of Dea	th	
	Total	2017	2018	2019	2020	2021
Total Deaths	2,666	537	452	512	569	596
Motor Vehicle Accidents	777	166	156	130	153	172
Car (V40-V49)	323	64	74	51	56	78
Pick-Up or Van (V50-V59)	119	25	19	28	26	21
Pedestrian (V01-V09)	86	16	21	11	17	21
Motorcycle (V20-V29)	71	13	14	13	18	13
All-Terrain Vehicle (V86)	41	5	8	6	13	9
Heavy Transport Vehicle (V60-V69)	15	6	3	1	2	3
Pedal Cyclist (V10-V19)	5	0	1	0	1	3
All Other Motor Vehicle Accidents	5	1	2	1	0	1
Motor Vehicle Accident with Unspecified Details	112	36	14	19	20	23
Other Causes of Death Due to Unintentional Injury	1,889	371	296	382	416	424
Falls (W00-W19)	994	196	149	203	217	229
Accidental Drug Overdose (X40-X44)	324	54	43	71	70	86
Accidental Alcohol Poisoning (X45)	71	10	11	12	23	15
Exposure to Smoke, Fire, and Flames (X00-X09)	68	19	8	11	11	19
Accidental Drowning (W65-W74)	58	8	11	13	13	13
Exposure to Excessive Natural Cold (X31)	53	13	13	10	8	9
Accidental Suffocation and Strangulation in Bed (W75)	38	8	6	8	9	7
Choking on Food (W79)	27	7	4	8	3	5
Unspecified Threat to Breathing (W84)	24	7	6	2	7	2
All Other Causes of Uninentional Injury	232	49	45	44	55	39

Unintentional Injuries

Table 45, on the previous page, displays the breakdown of deaths due to unintentional injury.

The highest type of motor vehicle death in 2021 was a car with 78 deaths. The highest death in the other causes of death due to unintentional injury in 2021 was falls with 229 deaths.

Table 46, on the next page, lists South Dakota resident leading causes of death for the last five years. While heart disease has been the overall leading cause of death for the past five years, cancer was the leading cause in 2021 with heart disease second. The last time cancer had been the leading cause for a given year was in 2017.

COVID-19 was again the third leading cause in 2021 even though the total number of deaths due to COVID-19 dropped from 1,497 to 776.

Chronic lower respiratory diseases were the 4th leading cause in 2021 and the 3rd leading cause in the last five years.

Alzheimer's disease was the 5th leading cause in 2021 as well as the past five years.

Table 46 South Dakota Resident Leading Causes of Death, 2017-2021

Course of Dooth		2017-2021			2017			2018			2019			2020			2021	
Cause of Death	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%	Rank	Deaths	%
South Dakota (All Deaths)		43,275	100		7,991	100		7,971	100		8,273	100		9,857	100		9,183	100
Heart Disease (100-109, 111, 113, 120-151)	1	8,855	20.5	2	1,708	21.4	1	1,797	22.5	1	1,840	22.2	1	1,819	18.5	2	1,691	18.4
Cancer (C00-C97)	2	8,553	19.8	1	1,717	21.5	2	1,632	20.5	2	1,736	21.0	2	1,728	17.5	1	1,740	18.9
Chronic Lower Respiratory Diseases (J40-J47)	3	2,417	5.6	3	505	6.3	3	498	6.2	3	521	6.3	5	429	4.4	4	464	5.1
COVID-19 (U07)	4	2,273	5.3	*	*	*	*	*	*	*	*	*	3	1,497	15.2	3	776	8.5
Alzheimer's Disease (G30)	5	2,261	5.2	4	444	5.6	4	437	5.5	4	496	6.0	4	488	5.0	5	396	4.3
Stroke (I60-I69)	6	1,987	4.6	5	410	5.1	5	387	4.9	5	373	4.5	6	426	4.3	6	391	4.3
Diabetes (E10-E14)	7	1,436	3.3	6	262	3.3	6	252	3.2	6	287	3.5	7	329	3.3	8	306	3.3
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	8	1,055	2.4	*	*	*	9	185	2.3	10	154	1.9	8	235	2.4	7	329	3.6
Accidental Falls (W00-W19)	9	994	2.3	8	196	2.5	*	*	*	7	203	2.5	9	217	2.2	9	229	2.5
Suicide (U03, X60-X84, Y87.0)	10	932	2.2	9	192	2.4	10	168	2.1	9	185	2.2	*	*	*	10	202	2.2
Dementia (F00-F03)	*	*	*	10	183	2.3	8	212	2.7	*	*	*	10	194	2.0	*	*	*
Influenza and Pneumonia (J09-J18)	*	*	*	7	217	2.7	7	246	3.1	8	189	2.3	*	*	*	*	*	*
All Other Causes	-	12,512	28.9	-	2,157	27.0	-	2,157	27.1	-	2,289	27.7	-	2,495	25.3	-	2,659	29.0

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

Table 47 South Dakota Resident Leading Causes of Death by Race, 2021

			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)		9,183	100	1,025.6	858.2		7,827	100	1,081.6	776.4		1,102	100	1,504.3	2,139.9
Cancer (C00-C97)	1	1,740	18.9	194.3	154.9	1	1,618	20.7	223.6	154.5	5	86	7.8	117.4	198.0
Heart Disease (100-109, 111, I13, I20-I51)	2	1,691	18.4	188.9	152.6	2	1,527	19.5	211.0	147.2	2	127	11.5	173.4	270.1
COVID-19 (U07)	3	776	8.5	86.7	71.2	3	636	8.1	87.9	62.7	3	111	10.1	151.5	240.7
Chronic Lower Respiratory Diseases (J40-J47)	4	464	5.1	51.8	41.3	4	422	5.4	58.3	39.9	8	34	3.1	46.4	87.4
Alzheimer's Disease (G30)	5	396	4.3	44.2	35.6	5	384	4.9	53.1	36.2	*	*	*	*	*
Stroke (I60-I69)	6	391	4.3	43.7	35.4	6	360	4.6	49.7	34.5	*	*	*	*	*
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	7	329	3.6	36.7	37.2	10	142	1.8	19.6	16.3	1	175	15.9	238.9	310.9
Diabetes (E10-E14)	8	306	3.3	34.2	28.9	8	216	2.8	29.8	21.6	4	87	7.9	118.8	171.6
Accidental Falls (W00-W19)	9	229	2.5	25.6	21.0	7	217	2.8	30.0	21.1	*	*	*	*	*
Suicide (U03, X60-X84, Y87.0)	10	202	2.2	22.6	23.1	*	*	*	*	*	7	50	4.5	68.3	62.1
Dementia (F00-F03)	*	*	*	*	*	9	187	2.4	25.8	17.6	*	*	*	*	*
Motor Vehicle Accidents	*	*	*	*	*	*	*	*	*	*	6	61	5.5	83.3	89.2
Accidental Drug Overdose (X40-X44)	*	*	*	*	*	*	*	*	*	*	9	25	2.3	34.1	40.0
Chronic Alcohol Abuse (F10)	*	*	*	*	*	*	*	*	*	*	10	24	2.2	32.8	43.8
All Other Causes	-	2,659	29.0	_	_	-	2,118	27.1	-	-	-	322	29.2	-	-

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 2021, patterns for the 10 leading causes of death varied by race. Only six of the 10 leading causes were the same for whites and American Indians. For example, Alzheimer's disease, stroke, accidental falls, and dementia were in the top 10 for whites, but not American Indians.

At the same time, motor vehicle accidents, suicides, accidental drug overdose, and chronic alcohol abuse were in the top 10 for American Indians, but not whites.

Cancer was the leading cause of death for whites, while chronic liver disease and cirrhosis was the leading cause for American Indians.

Gender

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 2021, patterns for the 10 leading causes of death in South Dakota also varied by gender. Eight of the 10 leading causes were the same for South Dakota's men and women, but they differed in rank. For example, liver disease was the fifth leading cause for men, but only tied for the eighth leading cause for women. Likewise, Alzheimer's disease was the fourth leading cause for women, but only the ninth leading cause for men.

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

Suicide and motor vehicle accidents were among the 10 leading causes of death for South Dakota's men, but not for women. At the same time, dementia and accidental falls were both in the top ten for women, but not for men.

Table 48 South Dakota Resident Leading Causes of Death by Gender, 2021

			Tot		Juding G			Ma		,, 2021			Fem	ale	
Cause of Death	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate	Rank	Deaths	%	Rate	Age- Adjusted Rate	Rank	Deaths	%	Crude Rate	Age- Adjusted Rate
South Dakota (All Deaths)		9,183	100	1,104.2	867.4		4,919	100	1,081.5	1,021.9		4,264	100	967.9	715.7
Cancer (C00-C97)	1	1,740	18.9	194.3	154.9	2	946	19.2	208.0	184.0	1	794	18.6	180.2	132.9
Heart Disease (I00-I09, I11, I13, I20-I51)	2	1,691	18.4	188.9	152.6	1	1,020	20.7	224.3	210.1	2	671	15.7	152.3	104.4
COVID-19 (U07)	3	776	8.5	86.7	71.2	3	452	9.2	99.4	92.3	3	324	7.6	73.5	54.4
Chronic Lower Respiratory Diseases (J40-J47)	4	464	5.1	51.8	41.3	4	226	4.6	49.7	45.9	5	238	5.6	54.0	38.4
Alzheimer's Disease (G30)	5	396	4.3	44.2	35.6	9	124	2.5	27.3	29.0	4	272	6.4	61.7	39.2
Stroke (I60-I69)	6	391	4.3	43.7	35.4	6	185	3.8	40.7	38.1	6	206	4.8	46.8	32.0
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	7	329	3.6	36.7	37.2	5	194	3.9	42.7	42.2	8-Tie	135	3.2	30.6	31.8
Diabetes (E10-E14)	8	306	3.3	34.2	28.9	7	170	3.5	37.4	35.2	7	136	3.2	30.9	24.1
Accidental Falls (W00-W19)	9	229	2.5	25.6	21.0	*	*	*	*	*	10	126	3.0	28.6	19.4
Suicide (U03, X60-X84, Y87.0)	10	202	2.2	22.6	23.1	8	153	3.1	33.6	33.7	*	*	*	*	*
Dementia (F00-F03)	*	*	*	*	*	*	*	*	*	*	8-Tie	135	3.2	30.6	19.6
Motor Vehicle Accidents	*	*	*	*	*	10	120	2.4	26.4	25.9	*	*	*	*	*
All Other Causes	-	2,659	29.0	-	-	-	1,329	27.0	-	-	-	1,227	28.8	-	-

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

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

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

Table 49 South Dakota Resident Five Leading Causes of Death by Age Group, 2017-2021 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 1,771	Motor Vehicle Accidents 5	Suicide 25	Suicide 43	Suicide 30	Heart Disease 48	Cancer 168	Cancer 405	Cancer 483	Heart Disease 497	Heart Disease 455
2	Cancer 1,711	Drowning 2	Motor Vehicle Accidents 16	Motor Vehicle Accidents 28	Chronic Liver Disease and Cirrhosis 27	Cancer 45	Heart Disease 122	Heart Disease 279	Heart Disease 346	Cancer 424	COVID-19 (2020-2021) 232
3	COVID-19 (2020-2021) 1,137	Congenital Malformations, Deformations, and Chromosomal Abnormalities 2	Homicide 3	Accidental Drug Overdose 13	Motor Vehicle Accidents 24	Chronic Liver Disease and Cirrhosis 43	COVID-19 (2020-2021) 83	COVID-19 (2020-2021) 182	COVID-19 (2020-2021) 266	COVID-19 (2020-2021) 323	Alzheimer's Disease 207
4	Chronic Lower Respiratory Diseases 483	Cancer 2	Congenital Malformations, Deformations, and Chromosomal Abnormalities 2	Chronic Liver Disease and Cirrhosis 9	Accidental Drug Overdose 19	COVID-19 (2020-2021) 28	Chronic Liver Disease and Cirrhosis 60	Chronic Lower Respiratory Disease 74	Chronic Lower Respiratory Disease 147	Alzheimer's Disease 189	Cancer 163
5	Alzheimer's Disease 452	Smoke and Fire 2 Homicide 2	Accidental Drug Overdose 1	9	COVID-19 (2020-2021) 19	Suicide 25	Diabetes 36	Diabetes 51	Stroke 73	Chronic Lower Respiratory Disease 160	Stroke 117

Age

Table 49, on the previous page, lists the five leading causes of death by age group for the last five years combined. Motor vehicle accidents were the leading cause of death for 1-9 year olds. Suicides were the leading cause for 10-39 year olds.

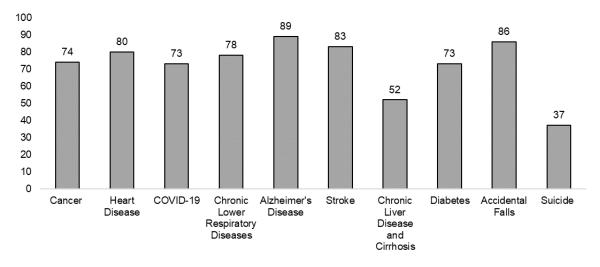
Oddly, heart disease was the leading cause of death for persons 40-49 over the past five years. The leading cause of death for persons 50-79 was cancer. Heart disease was the leading cause of death for persons aged 80 and older.

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 2021. The median age for the 10

leading causes of death in 2021 ranged from 37 for suicide to 89 for Alzheimer's Disease.

Figure 8
Median Age at Death for South Dakota Residents for the Leading Causes of Death, 2021



Source: South Dakota Department of Health

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 55, while whites' median age at death was

78. The median age at death for males was 73, while females was 80. The overall median age at death of 76 in 2021 was the lowest since 1987.

Table 50
Median Age at Death for South Dakota Residents by Race, Gender and Year of Death, 2005-2021

Year of Death	Total Median Age	White, non- Hispanic	American Indian, non-Hispanic	Male	Female
2021	76	78	55	73	80
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 2021, the median age at death for whites ranged from 60 for liver disease to 90 for dementia. The range for American Indians was 24 for suicides to 72 for chronic lower respiratory diseases. For males the range in 2021 was 40 for

suicide to 86 for Alzheimer's disease. The range for females was 51 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, 2021

by Ruse un		•	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)	76	78	55	73	80
Cancer (C00-C97)	74	74	68	73	74
Heart Disease (I00-I09, I11, I13, I20-I51)	80	82	63	75	85
COVID-19 (U07)	73	75	65	73	73
Chronic Lower Respiratory Diseases (J40-J47)	78	78	72	78	78
Alzheimer's Disease (G30)	89	89	*	86	90
Stroke (I60-I69)	83	84	*	78	88
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	52	60	48	52	51
Diabetes (E10-E14)	73	77	59	72	74
Accidental Falls (W00-W19)	86	86	*	*	88
Suicide (U03, X60-X84, Y87.0)	37	*	24	40	*
Dementia (F00-F03)	*	90	*	*	90
Motor Vehicle Accidents	*	*	35	43	*
Accidental Drug Overdose (X40-X44)	*	*	36	*	*
Chronic Alcohol Abuse (F10)	*	*	51	*	*

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

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

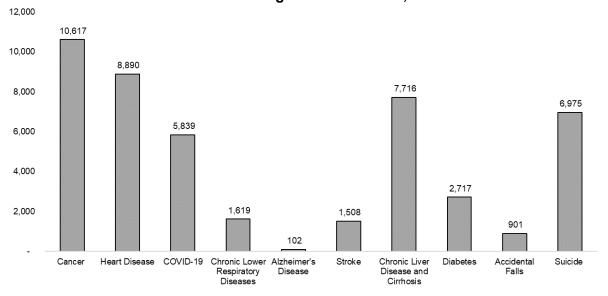
Years of Potential Life Lost

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

In 2021, cancer led in YPLL with 10,617 followed by heart disease with 8,890 years of potential life lost.

^{*}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, 2021



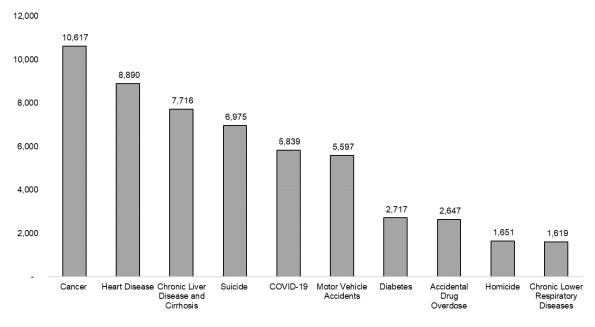
Note: Chart excludes infant deaths.

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.

Motor vehicle accidents, accidental drug overdose, and homicide 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), 2021



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 Leading Causes of Death by Place of Death, 2021

	Hosį	oital	Nurs Home Tel Care/H	/Long rm ospice	Resid	ence	All O Repo Entr	rted	Unkn	own
Cause of Death	Num			%	Num	%	Num	%	Num	%
South Dakota (All Deaths)	3,354 36.7 3		3,050	33.4	2,293	25.1	445	4.9	41	-
Cancer (C00-C97)	408	23.5	710	40.9	574	33.1	42	2.4	6	-
Heart Disease (I00-I09, I11, I13, I20-I51)	531	31.6	460	27.3	625	37.1	67	4.0	8	-
COVID-19 (U07)	596	76.8	112	14.4	63	8.1	5	0.6	0	-
Chronic Lower Resiratory Diseases (J40-J47)	160	34.6	153	33.0	141	30.5	9	1.9	1	-
Alzheimer's Disease (G30)	21	5.3	317	80.1	53	13.4	5	1.3	0	-
Stroke (I60-I69)	171	43.8	172	44.1	46	11.8	1	0.3	1	-
Chronic Liver Disease and Cirrhosis (K70 & K73-K74)	172	52.3	71	21.6	71	21.6	15	4.6	0	-
Diabetes (E10-E14)	95	31.1	83	27.2	111	36.4	16	5.2	1	-
Accidental Falls (W00-W19)	113	49.8	79	34.8	29	12.8	6	2.6	2	
Suicide (U03, X60-X84, Y87.0)	32	16.0	0	0.0	121	60.5	47	23.5	2	-

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 1,474 deaths, or 17.8 percent, the certifier indicated "yes" or "probably" that tobacco use contributed to the death. Conversely, on 4,631 deaths, or 56.1 percent, the certifier indicated that tobacco use did not contribute to the death.

In the remaining 2,156 deaths, or 26.1 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 69.0 percent, or 29 out of the 42 emphysema deaths in 2021. In 62.1 percent, or 288 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, 2021

(Did Tobacco Use Contribute to Death)

Cause of Death	Yes/Pro	obably	Total Nat	ural Deaths
	Number	Percent	Number	Percent
Total	1,474	17.8	8,261	100
Cancer (C00-C97)	428	24.6	1,740	100
Trachea, bronchus, and lung cancer (C33-C34)	239	61.8	387	100
Esophagus cancer (C15)	16	32.7	49	100
Colorectal cancer (C18-C21)	15	9.4	160	100
Chronic lower respiratory diseases (J40-J47)	288	62.1	464	100
Chronic obstructive pulmonary disease, unspecified (J44.9)	198	64.3	308	100
Chronic obstructive pulmonary disease with acute lower respiratory infection (J44.0)	38	53.5	71	100
Emphysema (J43)	29	69.0	42	100
Heart disease (I00-I09, I11, I13, I20-I51)	256	15.1	1,691	100
Acute myocardial infarction (I21-I22)	108	16.8	643	100
Atherosclerotic heart disease (I25.1)	56	16.1	348	100
Hypertensive heart disease (I11)	29	21.5	135	100
COVID-19 (U07)	113	14.6	776	100
Stroke (I60-I69)	53	13.6	391	100
Diabetes (E10-E14)	44	14.4	306	100
Chronic liver disease and cirrhosis (K70 & K73-K74)	33	10.0	329	100
Alcoholic liver disease (K70)	30	10.5	285	100
Alzheimer's disease (G30)	18	4.5	396	100
Influenza and Pneumonia (J09-J18)	16	13.2	121	100
Pneumonia (J12-J18)	15	12.7	118	100
Hypertension (I10, I12, I15)	15	12.1	124	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 104 drug overdose deaths in 2021, up from 84 drug overdose deaths in 2020. Table 54, below

that, shows that of the 104 drug overdose 2021, 86 deaths deaths in unintentional, 17 deaths were suicides, and death where the intent undetermined. definition The 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, 2007-2021

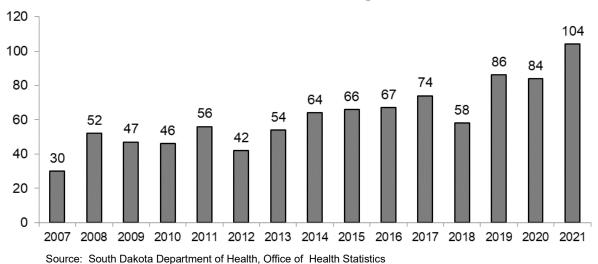


Table 54
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Drugs, 2007-2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	30	52	47	46	56	42	54	64	66	67	74	58	86	84	104
Unintentional	15	30	26	19	41	24	34	46	44	52	54	43	71	70	86
Suicide	8	13	12	16	11	11	15	12	19	12	18	11	10	10	17
Homicide	0	0	1	0	0	0	1	0	0	1	0	0	0	1	0
Undetermined Intent	7	9	8	11	4	7	4	6	3	2	2	4	5	3	1

Figure 12
South Dakota Resident Deaths Due to All Opioid Poisoning, 2007-2021

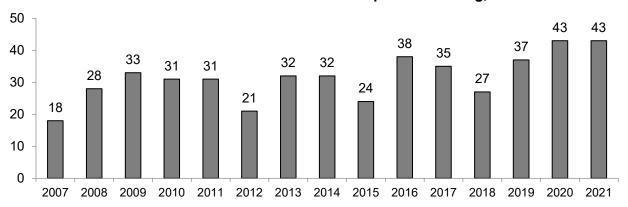
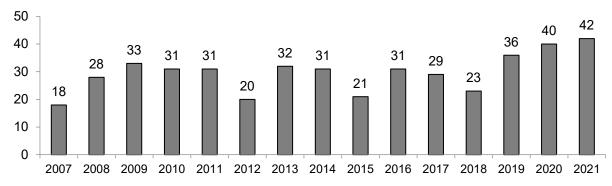


Table 55
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for All Opioid Poisoning, 2007-2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	18	28	33	31	31	21	32	32	24	38	35	27	37	43	43
Unintentional	9	18	22	15	26	15	21	27	19	31	28	22	32	41	35
Suicide	3	4	6	8	3	2	9	2	4	6	7	3	3	1	8
Homicide	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intent	6	6	4	8	2	4	2	3	1	1	0	2	2	1	0

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

Figure 13
South Dakota Resident Deaths Due to Prescription Opioid Poisoning, 2007-2021



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, 2007-2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	18	28	33	31	31	20	32	31	21	31	29	23	36	40	42
Unintentional	9	18	22	15	26	14	21	26	16	24	22	19	31	38	34
Suicide	3	4	6	8	3	2	9	2	4	6	7	3	3	1	8
Homicide	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Undetermined Intent	6	6	4	8	2	4	2	3	1	1	0	1	2	1	0

Figure 14
South Dakota Resident Deaths Due to Illicit Opioid Poisoning, 2007-2021

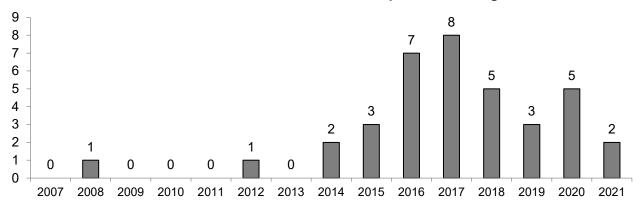
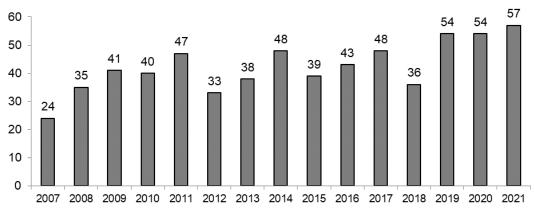


Table 57
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Opioid Poisoning, 2007-2021

				1111010	Opioio	0.00	g, <u>-</u>								
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	0	1	0	0	0	1	0	2	3	7	8	5	3	5	2
Unintentional	0	1	0	0	0	1	0	2	3	7	8	4	3	5	2
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	1	0	0	0

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

Figure 15
South Dakota Resident Deaths Due to All Pharmaceutical Poisoning, 2007-2021



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, 2007-2021

				Hallin	aceunc	ai Diu	g i dist	Jilling,	<u> 2007-2</u>	UZ 1					
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	24	35	41	40	47	33	38	48	39	43	48	36	54	54	57
Unintentional	10	19	22	16	34	18	24	33	24	31	30	23	40	42	41
Suicide	7	8	11	14	10	10	12	9	12	10	17	11	10	9	15
Homicide	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0
Undetermined Intent	7	8	7	10	3	5	2	6	3	1	1	2	4	3	1

Figure 16
South Dakota Resident Deaths Due to Illicit Drug Poisoning, 2007-2021

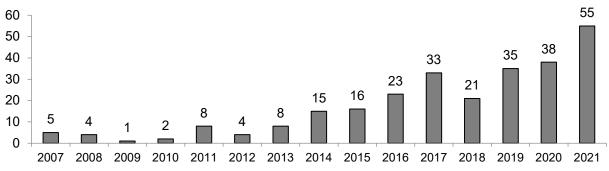


Table 59
South Dakota Resident Deaths Due to Drug Overdose by Manner of Death and Year of Death for Illicit Drug Poisoning, 2007-2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Total	5	4	1	2	8	4	8	15	16	23	33	21	35	38	55
Unintentional	5	3	1	2	7	3	6	14	16	23	31	19	34	35	53
Suicide	0	0	0	0	1	1	1	1	0	0	1	0	0	0	2
Homicide	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Undetermined Intent	0	1	0	0	0	0	0	0	0	0	1	2	1	2	0

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 2021 and for the past 10 years. Out of the 104 total drug deaths in 2021, 52 of those involved methamphetamine and 29 involved fentanyl. Of those 52 involving methamphetamine, 39 listed methamphetamine as the only drug. while the other 13 deaths involved at least one other drug. For fentanyl, 15 of the 29 deaths only involved fentanyl, while the other 14 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, 2021

	Number	Drugs List Cert	of Specific ed on Death ificate
Drugs Involved	of Deaths	Only Drug Involved	Other Drugs Involved
Methamphetamine	52	39	13
Fentanyl (Includes analogs)	29	15	14
Oxycodone (Oxycontin, Percocet, Percodan)	7	2	5
Cocaine (Benzoylecgonine)	6	2	4
Hydrocodone (Vicodin)	4	0	4
Citalopram (Celexa)	4	0	4
Tramadol	4	1	3
Gabapentin	4	0	4
Bupropion (Wellbutrin)	3	2	1
Amitriptyline	3	1	2
Diphenhydramine	3	1	2
Acetaminophen (Darvocet, Excedrin, Percocet, Tylenol, Vicodin)	3	1	2
Alprazolam (Xanax)	3	0	3

Note: ICD -10 Codes: X40-X44, X60-X64, X85, Y10-Y14

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

Table 61
South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved and Year of Death, 2012-2021

Drugs Involved and Number of						Year o	f Death				
Specific Drugs on Death Certificate	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Methamphetamine	205	3	9	14	13	18	22	13	31	30	52
Only Drug Involved	144	3	6	10	10	10	12	10	25	19	39
Other Drugs Involved	61	0	3	4	3	8	10	3	6	11	13
Fentanyl (Includes Analogs)	131	2	2	7	7	7	12	12	23	30	29
Only Drug Involved	73	2	1	4	6	2	6	8	18	11	15
Other Drugs Involved	58	0	1	3	1	5	6	4	5	19	14
Oxycodone (Oxycontin, Percocet, Percodan)	61	3	10	8	2	9	5	7	4	6	7
Only Drug Involved	28	2	6	5	2	2	2	4	1	2	2
Other Drugs Involved	33	1	4	3	0	7	3	3	3	4	5
Hydrocodone (Vicodin)	52	5	9	5	7	10	4	2	2	4	4
Only Drug Involved	21	3	4	2	3	5	2	1	0	1	0
Other Drugs Involved	31	2	5	3	4	5	2	1	2	3	4
Morphine	52	6	10	11	1	7	3	1	8	4	1
Only Drug Involved	21	5	5	6	0	2	1	0	1	0	1
Other Drugs Involved	31	1	5	5	1	5	2	1	7	4	0
Heroin	38	1	0	2	3	8	8	5	3	6	2
Only Drug Involved	15	1	0	0	1	4	3	2	1	2	1
Other Drugs Involved	23	0	0	2	2	4	5	3	2	4	1
Cocaine (Benzoylecgonine)	33	0	0	0	3	3	3	8	5	5	6
Only Drug Involved	11	0	0	0	0	0	1	4	2	2	2
Other Drugs Involved	22	0	0	0	3	3	2	4	3	3	4

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Table 61 (continued) South Dakota Resident Deaths Due to Drug Overdose by Drugs Involved and Year of Death, 2012-2021

Drugs Involved and Number of						Year o	f Death				
Specific Drugs on Death Certificate	Total	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Amitriptyline	25	4	3	1	1	4	3	2	2	2	3
Only Drug Involved	5	2	1	0	0	0	1	0	0	0	1
Other Drugs Involved	20	2	2	1	1	4	2	2	2	2	2
Methadone (Methadose)	25	1	2	6	4	4	4	3	1	0	0
Only Drug Involved	12	1	1	3	3	1	1	2	0	0	0
Other Drugs Involved	13	0	1	3	1	3	3	1	1	0	0
Bupropion (Wellbutrin)	20	0	0	2	0	1	3	3	5	3	3
Only Drug Involved	13	0	0	2	0	0	1	2	4	2	2
Other Drugs Involved	7	0	0	0	0	1	2	1	1	1	1
Diphenhydramine	20	1	1	2	4	2	1	2	3	1	3
Only Drug Involved	10	0	1	2	2	1	1	1	1	0	1
Other Drugs Involved	10	1	0	0	2	1	0	1	2	1	2
Citalopram (Celexa)	18	1	2	3	0	0	2	1	2	3	4
Only Drug Involved	2	1	0	0	0	0	0	0	0	1	0
Other Drugs Involved	16	0	2	3	0	0	2	1	2	2	4
Tramadol	18	3	2	0	2	3	1	0	2	1	4
Only Drug Involved	6	2	1	0	1	0	0	0	1	0	1
Other Drugs Involved	12	1	1	0	1	3	1	0	1	1	3
Acetaminophen (Darvocet, Excedrin, Percocet, Tylenol, Vicodin)	14	0	1	2	3	2	1	0	0	2	3
Only Drug Involved	5	0	0	2	2	0	0	0	0	0	1
Other Drugs Involved	9	0	1	0	1	2	1	0	0	2	2
Alprazolam (Xanax)	14	2	2	1	0	1	0	3	1	1	3
Only Drug Involved	3	1	1	1	0	0	0	0	0	0	0
Other Drugs Involved	11	1	1	0	0	1	0	3	1	1	3
Quetiapine (Seroquel)	14	1	0	0	0	3	4	1	3	1	1
Only Drug Involved	5	1	0	0	0	1	1	1	0	1	0
Other Drugs Involved	9	0	0	0	0	2	3	0	3	0	1
Amphetamine (Adderall)	11	1	0	1	0	1	3	0	1	2	2
Only Drug Involved	4	1	0	0	0	0	1	0	1		0
Other Drugs Involved	7	0	0	1	0	1	2	0	0	1	2
Codeine	11	1	2	0	0	3	2	0	1	1	1
Only Drug Involved	1	1	0	0	0	0	0	0	0	0	0
Other Drugs Involved	10	0	2	0	0	3	2	0	1	1	1
Gabapentin	10	0	0	0	0	1	1	1	2	1	4
Only Drug Involved	10	0	0	0	0	0	0	1	0	0	0
Other Drugs Involved	9	0	0	0	0	1	1	0	2	1	4
Duloxetine (Cymbalta)	10	0	2	0	1	1	2	2	1	1	0
Only Drug Involved	0	0	0	0	0	0	0	0	0	0	0
Other Drugs Involved	10	0	2	0	1	1	2	2	1	1	1
Note: ICD-10 CODES X40-X44 X60-X64				U		L '			ı		_ '

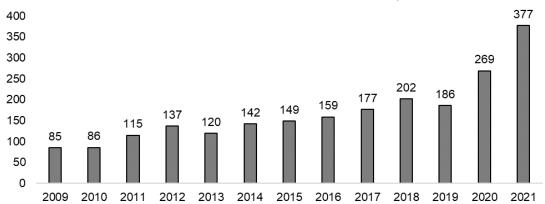
Note: ICD-10 CODES X40-X44, X60-X64, X85, Y10-Y14 Source: South Dakota Department of Health, Office of Health Statistics

Alcohol-Induced Deaths

Figure 17, below, shows the alcohol-induced 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, 2009-2021



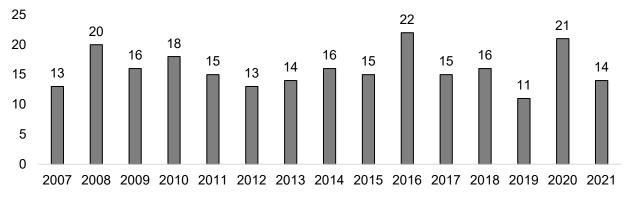
Source: South Dakota Department of Health, Office of Health Statistics

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, 2007-2021



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, 2012-2021

Year	Any Death While Pregnant, or Within One Year After Delivery	Pregnancy-Related	Pregnancy Associated, But Not Pregnancy-Related
2021	11	*	*
2020	8	*	*
2019	6	*	*
2018	8	1	7
2017	5	1	4
2016	6	2	4
2015	5	2	3
2014	5	1	4
2013	6	1	5
2012	6	1	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 2018.

<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 2018.

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, 2012-2021

	Total		N	lanner of Death		
Year	Firearm Deaths	Accident	Suicide	Homicide	Legal Intervention	Undetermined Intent
2021	128	0	98	25	4	1
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

Method of Disposition

Table 64, below, displays the different methods of disposition for the last 14 years. For the first time ever, over 50 percent of dispositions in 2021 were cremations. The second highest

method of disposition in 2021 was burial with 43.7 percent. Since 2008, cremation has increased from 23.6 percent of all dispositions to 50.5 percent in 2021.

Table 64
South Dakota Resident Deaths by Disposition, 2008-2021

					Туре	of Dispo	sition				
Year	Total	Вι	urial	Crer	Cremation Removal from State Donation		Donation		Entor	nbment	
	Deaths	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2021	9,183	4,012	43.7	4,641	50.5	478	5.2	43	0.5	8	0.1
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

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 73 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 2012 to 2021.

The crude and age-adjusted rates for all causes in 2021 were 1,025.6 and 858.2 respectively, which are down from the crude and age-adjusted rates in 2020 of 1,104.2 and 867.4, respectively.

Table 65a
South Dakota Resident Deaths for 15 Leading Causes and Selected Components, 2012-2021

	Number of Deaths 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 7,283 7,079 7,500 7,724 7,838 7,991 7,971 8,273 9,857 9,183										
Cause of Death										_	
All Causes	7,283	7,079	7,500	7,724	7,838	7,991	7,971	8,273	9,857	9,183	
Cancer	1,623	1,574	1,679	1,632	1,691	1,717	1,632	1,736	1,728	1,740	
Trachea, Bronchus, and Lung	434	416	439	424	420	421	396	430	372	387	
Colon, Rectum, and Anus	166	169	186	168	163	158	169	153	157	160	
Pancreas	105	109	118	109	128	124	116	142	128	136	
Heart Disease	1,652	1,617	1,695	1,712	1,732	1,708	1,797	1,840	1,819	1,691	
COVID-19	0	0	0	0	0	0	0	0	1,497	776	
Chronic Lower Respiratory Diseases	479	413	440	500	427	505	498	521	429	464	
Alzheimer's Disease	462	420	433	421	449	444	437	496	488	396	
Stroke	410	414	439	381	420	410	387	373	426	391	
Chronic Liver Disease and Cirrhosis	113	121	128	137	158	152	185	154	235	329	
Diabetes	219	239	223	282	253	262	252	287	329	306	
Accidental Falls	143	146	170	181	185	196	149	203	217	229	
Suicide	135	147	141	173	161	192	168	185	185	202	
Dementia	183	145	188	198	192	183	212	146	194	196	
Motor Vehicle Accidents	142	149	151	143	135	166	156	130	153	172	
Influenza and Pneumonia	188	186	180	213	195	217	246	189	142	124	
Hypertension	78	72	95	103	92	102	113	126	127	124	
Septicemia	64	74	81	119	81	100	117	121	105	107	

Table 65b South Dakota Resident Crude Death Rates for 15 Leading Causes and Selected Components, 2012-2021

			•	•	Crude l	Death Ra	tes			
Cause of Death	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All Causes	873.9	837.9	879.1	899.7	905.7	918.9	903.5	935.2	1,104.2	1,025.6
Cancer	194.8	186.3	196.8	190.1	195.4	197.4	185.0	196.2	193.6	194.3
Trachea, Bronchus, and Lung	52.1	49.2	51.5	49.4	48.5	48.4	44.9	48.2	41.7	43.2
Colon, Rectum, and Anus	19.9	20.0	21.8	19.6	18.8	18.2	19.2	17.3	17.6	17.9
Pancreas	12.6	12.9	13.8	12.7	14.8	14.3	13.1	16.1	14.3	15.2
Heart Disease	198.2	191.4	198.7	199.4	200.1	196.4	203.7	208.0	203.8	188.9
COVID-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	167.7	86.7
Chronic Lower Respiratory Diseases	57.5	48.9	51.6	58.2	49.3	58.1	56.4	58.9	48.1	51.8
Alzheimer's Disease	55.4	49.7	50.8	49.0	51.9	51.1	49.5	56.1	54.7	44.2
Stroke	49.2	49.0	51.5	44.4	48.5	47.1	43.9	42.2	47.7	43.7
Chronic Liver Disease and Cirrhosis	13.6	14.3	15.0	16.0	18.3	17.5	21.0	17.4	26.3	36.7
Diabetes	26.3	28.3	26.1	32.8	29.2	30.1	28.6	32.4	36.9	34.2
Accidental Falls	17.2	17.3	19.9	21.1	21.4	22.5	16.9	22.9	24.3	25.6
Suicide	16.2	17.4	16.5	20.2	18.6	22.1	19.0	20.9	20.7	22.6
Dementia	22.0	17.2	22.0	23.1	22.2	21.0	24.0	16.5	21.7	21.9
Motor Vehicle Accidents	17.0	17.6	17.7	16.7	15.6	19.1	17.7	14.7	17.1	19.2
Influenza and Pneumonia	22.6	22.0	21.1	24.8	22.5	25.0	27.9	21.4	15.9	13.8
Hypertension	9.4	8.5	11.1	12.0	10.6	11.7	12.8	14.2	14.2	13.8
Septicemia	7.7	8.8	9.5	13.9	9.4	11.5	13.3	13.7	11.8	12.0

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, 2012-2021

	Age-Adjusted Death Rates									
Cause of Death	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
All Causes	706.8	677.4	709.9	714.9	718.6	736.1	715.7	739.6	867.4	858.2
Cancer	162.2	154.3	161.4	153.3	156.6	157.0	145.2	153.3	147.9	154.9
Trachea, Bronchus, and Lung	43.5	41.0	41.8	39.7	38.2	38.2	35.3	37.2	31.1	33.8
Colon, Rectum, and Anus	16.4	16.7	17.6	15.7	15.2	14.2	15.2	13.7	13.3	14.2
Pancreas	10.6	10.7	11.1	10.3	11.6	11.5	10.0	12.3	10.8	12.1
Heart Disease	153.8	148.8	153.6	151.0	153.7	150.0	156.2	158.1	155.1	152.6
COVID-19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.1	71.2
Chronic Lower Respiratory Diseases	45.4	39.1	40.7	45.1	38.5	45.4	43.7	45.1	36.6	41.3
Alzheimer's Disease	39.6	35.1	36.1	34.8	37.1	36.9	36.3	40.6	39.7	35.6
Stroke	37.6	37.5	38.8	33.0	35.8	36.3	33.3	32.3	35.4	35.4
Chronic Liver Disease and Cirrhosis	13.3	13.3	16.0	15.9	16.4	17.0	19.7	17.1	25.4	37.2
Diabetes	21.6	22.9	21.2	26.3	23.6	24.8	23.3	26.8	29.2	28.9
Accidental Falls	13.4	13.7	15.3	16.2	16.5	17.4	12.8	17.5	18.4	21.0
Suicide	16.1	18.0	17.1	20.4	19.9	22.7	19.4	21.2	20.9	23.1
Dementia	15.7	12.3	15.8	16.1	15.0	15.0	16.9	11.8	15.8	17.6
Motor Vehicle Accidents	17.1	17.4	17.5	16.3	15.8	19.0	17.3	14.6	16.8	19.3
Influenza and Pneumonia	16.9	16.4	16.1	18.3	16.7	19.0	20.8	16.0	12.2	11.4
Hypertension	6.8	6.3	8.1	8.7	7.9	8.7	9.4	10.6	10.5	11.6
Septicemia	6.2	7.2	8.1	11.0	7.5	9.4	10.5	10.9	9.8	9.9

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 2021. 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 Cancer by Year of Death, 2012-2021

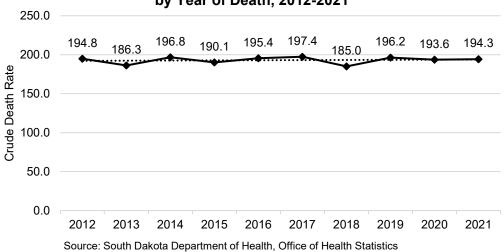


Figure 19a South Dakota Resident Crude Death Rate Due to Trachea, Bronchus, and Lung Cancer by Year of Death, 2012-2021

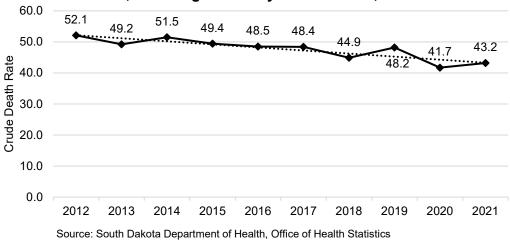


Figure 19b South Dakota Resident Crude Death Rate Due to Colon, Rectum, and Anus Cancer by Year of Death, 2012-2021

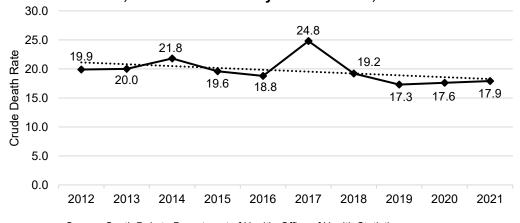
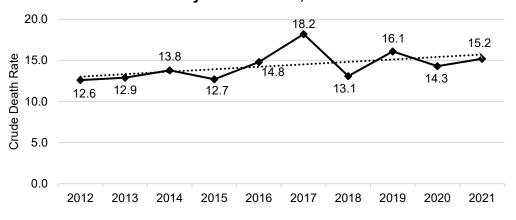


Figure 19c
South Dakota Resident Crude Death Rate Due to Pancreas
Cancer by Year of Death, 2012-2021



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

Figure 20
South Dakota Resident Crude Death Rate Due to Heart
Disease by Year of Death, 2012-2021

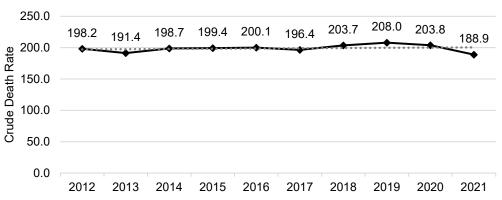


Figure 21
South Dakota Resident Crude Death Rate Due to Chronic Lower Respiratory Disease by Year of Death, 2012-2021

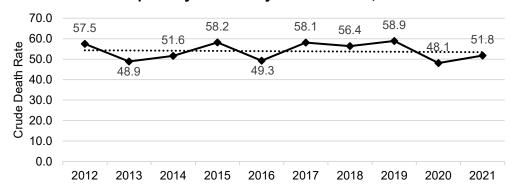
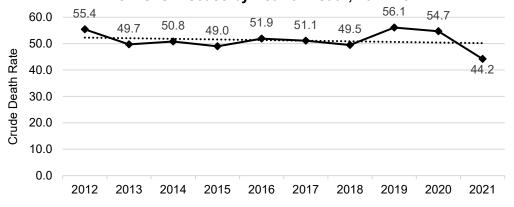


Figure 22 South Dakota Resident Crude Death Rate Due to Alzheimer's Disease by Year of Death, 2012-2021



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

Figure 23
South Dakota Resident Crude Death Rate Due to Stroke by
Year of Death, 2012-2021

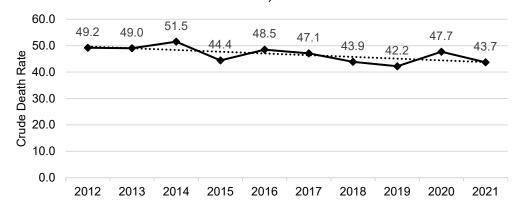


Figure 24
South Dakota Resident Crude Death Rate Due to Chronic
Liver Disease and Cirrhosis by Year of Death, 2012-2021

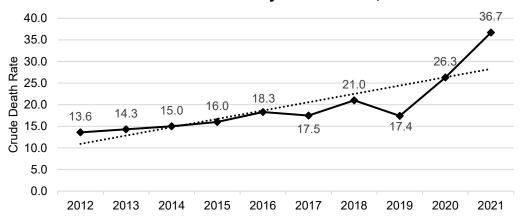
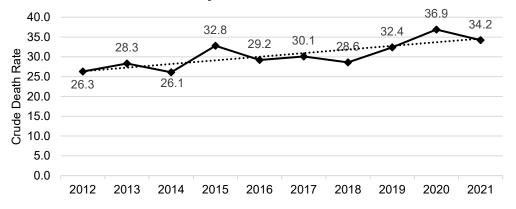


Figure 25
South Dakota Resident Crude Death Rate Due to
Diabetes by Year of Death, 2012-2021



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

Figure 26
South Dakota Resident Crude Death Rate Due Accidental
Falls by Year of Death, 2012-2021

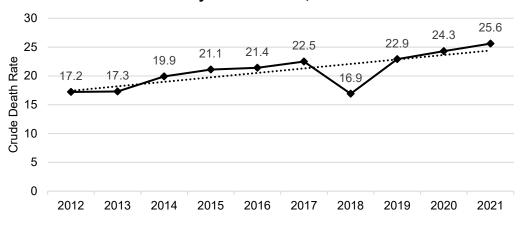


Figure 27
South Dakota Resident Crude Death Rate Due to Suicide by Year of Death, 2012-2021

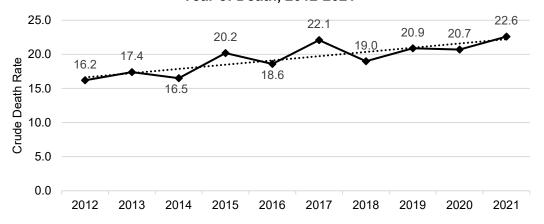


Figure 28
South Dakota Resident Crude Death Rate Due to Dementia by
Year of Death, 2012-2021

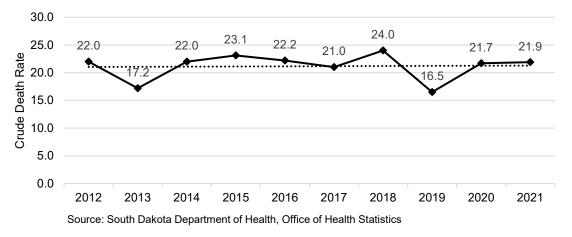


Figure 29
South Dakota Resident Crude Death Rate Due to Motor
Vehicle Accidents by Year of Death, 2012-2021

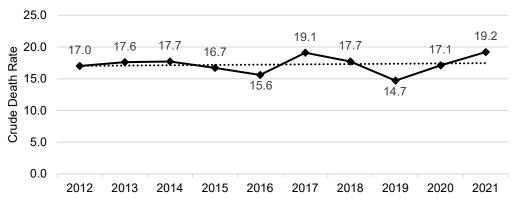


Figure 30
South Dakota Resident Crude Death Rate Due to Influenza and Pneumonia by Year of Death, 2012-2021

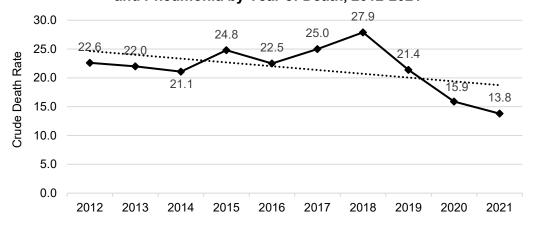


Figure 31
South Dakota Resident Crude Death Rate Due to
Hypertension by Year of Death, 2012-2021

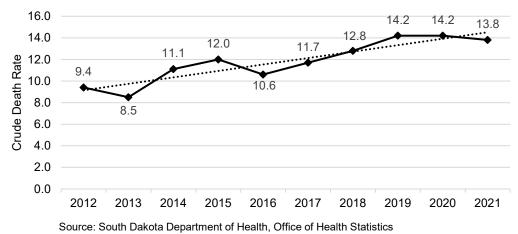
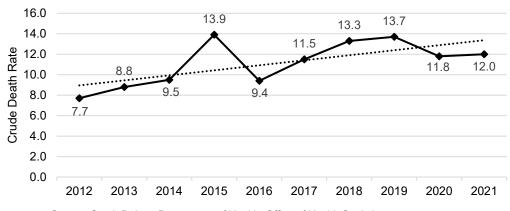


Figure 32 South Dakota Resident Crude Death Rate Due to Septicemia by Year of Death, 2012-2021





REFERENCES

Osterman MJK, Hamilton BE, Martin JA, Driscoll AK, Valenzuela CP. Births: Final data for 2020. National Vital Statistics Reports; vol 70 no 17. Hyattsville, MD: National Center for Health Statistics. 2022.

Xu JQ, Murphy SL, Kochanek KD, and Arias E. Deaths: Final data for 2019. National Vital Statistics Reports; vol 70 no 08. Hyattsville, MD: National Center for Health Statistics. 2021.

