# Natality

An Overview: 2021	
Total Resident Live Births	11,304
Crude Birth Rate per 1,000 Population	12.6
Median Live Birth Weight (Grams)	3,335
Low Weight Births (Less than 2,500 grams)	802
Percent Low Birth Weight	7.1%
Median Age of Mother	29
No Prenatal Care	1.5%

There were 11,304 births to South Dakota residents in 2021, for a crude birth rate of 12.3 per 1,000 South Dakota resident population. This is the second lowest crude birth rate ever. The last three years have now been the three lowest years ever.

Resident births increased 3.1 percent from 2020 when there were 10,951 births. In 2021, 51.8 percent of the babies born were male and 48.2 percent were female. Racially, white, non-Hispanic births were 51.8 percent male and 48.2 percent female; American Indian, non-Hispanic births were 53.4 percent male, 46.6 percent female.

The low birth weight rate per 1,000 live births increased from 68.9 in 2020 to 70.9 in 2021. This was a 2.9 percent increase from the 2020 low birth weight rate.

Table 6, below, displays the live births and crude birth rates for the United States and South Dakota for the past 15 years. South Dakota's birth rate remains above the national average even though the last three years have been the lowest ever.

Year	United S	tates	South	Dakota
rear	Number	Crude Rate	Number	Crude Rate
2021	3,664,292*	10.9*	11,304	12.6
2020	3,613,647	11.0	10,951	12.3
2019	3,747,540	11.4	11,448	12.9
2018	3,791,712	11.6	11,890	13.5
2017	3,855,500	11.8	12,128	13.9
2016	3,945,875	12.2	12,270	14.2
2015	3,978,497	12.4	12,323	14.4
2014	3,988,076	12.5	12,281	14.4
2013	3,932,181	12.4	12,243	14.5
2012	3,952,841	12.6	12,092	14.5
2011	3,953,590	12.7	11,834	14.4
2010	3,999,386	13.0	11,795	14.5
2009	4,130,665	13.5	11,930	14.7
2008	4,247,694	14.0	12,074	15.0
2007	4,316,223	14.3	12,253	15.4

# Table 6Resident Live Births and Crude Birth Rates,South Dakota and United States, 2007-2021

Note: \* 2021 U.S. data are provisional at time of publication.

Crude birth rates are per 1,000 population.

Sources: National Center for Health Statistics

### Births by Race

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 black, non-Hispanic multi-racial, non-Hispanic Hispanic The remaining categories (Asian, non-Hispanic, and Pacific Islander, non-Hispanic) are included in the totals but are not necessarily shown specifically in any tables.

Table 7, below, shows the number and percent of resident births by mother's race since 2012. In 2021, the number of births to white, non-Hispanics, American Indian, non-Hispanics, Hispanics, and multi-racial, non-Hispanics increased by 4.4 percent, 1.0 percent, 4.4 percent, and 1.4 percent respectively. The number of births to black, non-Hispanics, remained the same.

Table 7
South Dakota Resident Live Births by Mother's Race/Ethnicity, 2012-2021

Bi	rths	White, Hispa		American Indian, non- Hispanic		<sup>n-</sup> Indian, non- Hispanic		Black, non- Hispanic		Multi-racial, non-Hispanic		Other		Unknown	
Year	Num	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2021	11,304	8,049	71.4	1,514	13.4	691	6.1	383	3.4	425	3.8	214	1.9	28	-
2020	10,951	7,712	70.7	1,499	13.7	662	6.1	383	3.5	419	3.8	234	2.1	42	-
2019	11,448	8,141	71.3	1,607	14.1	641	5.6	414	3.6	391	3.4	216	1.9	38	-
2018	11,890	8,474	71.5	1,644	13.9	659	5.6	410	3.5	428	3.6	233	2.0	42	-
2017	12,128	8,610	71.1	1,806	14.9	624	5.2	398	3.3	416	3.4	258	2.1	16	-
2016	12,270	8,827	72.1	1,782	14.6	634	5.2	360	2.9	368	3.0	273	2.2	26	-
2015	12,323	8,821	71.9	1,921	15.7	559	4.6	266	2.2	422	3.4	277	2.3	57	-
2014	12,281	8,898	72.8	1,812	14.8	602	4.9	295	2.4	383	3.1	225	1.8	66	-
2013	12,243	8,905	73.0	1,902	15.6	530	4.3	277	2.3	336	2.8	248	2.0	45	-
2012	12,092	8,817	73.1	1,853	15.4	552	4.6	270	2.2	382	3.2	183	1.5	35	-

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

### Multiple Births

Table 8, below, displays resident multiple births for the last 10 years. The highest number of twins and triplets (or more) were born in 2016 with 212 sets of twins and seven sets of triplets.

Table	€ 8
South Dakota Resident Multi	ple Live Births, 2012-2021

Year of Birth	Twins	Triplets or More
2021	196	4
2020	168	1
2019	209	1
2018	210	1
2017	208	4
2016	212	7
2015	187	4
2014	192	4
2013	178	5
2012	175	2

# Marital Status

In 2021, the 36.0 percent of infants were born to single mothers. This is the lowest percentage since 2004. When looking at the data by race, American Indian, non-Hispanic women have consistently had the highest percent of births out of wedlock with 87.6 percent in 2021.

Table 9
South Dakota Resident Births Out of Wedlock by Year of Birth and Race/Ethnicity,
2012-2021

	All Races White, no Hispanio		All Races			Amer Indian Hisp	, non-	Hisp	anic	Black, Hispa		no	racial, on- anic	Oth	ner
Year	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
2021	4,065	36.0	1,867	23.2	1,327	87.6	395	57.2	154	40.2	270	63.4	44	20.6	
2020	3,947	36.1	1,772	23.0	1,318	87.5	375	56.6	146	38.0	273	65.2	55	23.6	
2019	4,145	36.2	1,954	24.0	1,371	85.2	355	55.4	148	35.7	260	66.2	48	22.3	
2018	4,287	36.1	2,008	23.7	1,400	85.0	357	54.3	158	38.5	304	71.0	50	21.5	
2017	4,506	37.2	2,155	25.0	1,523	84.2	327	52.5	172	43.2	273	65.5	50	19.4	
2016	4,519	36.8	2,505	25.0	1,513	84.9	349	55.1	156	43.3	230	62.3	54	19.8	
2015	4,571	37.1	2,213	25.1	1,606	83.5	322	57.6	105	39.5	270	63.8	40	14.4	
2014	4,623	37.7	2,303	25.9	1,533	84.2	331	55.0	135	45.8	258	67.4	47	20.8	
2013	4,669	38.1	2,370	26.6	1,611	84.7	297	56.3	119	43.0	223	66.4	38	15.3	
2012	4,671	38.6	2,393	27.1	1,571	84.5	305	55.4	127	47.0	240	62.8	33	18.0	

Note: Failure of races to add to the total is due to races not stated included in the total. Source: South Dakota Department of Health, Office of Health Statistics

# **Birth Weight**

Table 10, below, indicates that in 2021 the majority of births fell into the 3,000 to 3,499 gram range. This is consistent with data from past years. Of all South Dakota resident live births in 2021, 7.1 percent (802) were low weight births. This is the highest percentage since 2002. When looking at race, 6.6 percent of white, non-

Hispanic babies, 8.5 percent of American Indian, non-Hispanic babies, 5.9 percent of Hispanic babies, 10.7 percent of black, non-Hispanic babies, and 10.6 multi-racial, non-Hispanic babies were low birth weight in 2021. Table 11, on the next page, compares the birth weights of infants for the past 10 years.

	Table 10
South Dakota Resident Live Births by	y Birth Weight and Mother's Race/Ethnicity, 2021

	Race/Ethnicity of Mother													
Birth Weight (in Grams)	Total		White, non- Hispanic		American Indian, non- Hispanic		Hispanic		Black, non- Hispanic		Multi-racial, non-Hispanic		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
<2,000	278	2.5	163	2.0	54	3.6	16	2.3	18	4.7	19	4.5	8	3.7
2,000-2,499	524	4.6	366	4.5	74	4.9	25	3.6	23	6.0	26	6.1	10	4.7
2,500-2,999	2,026	17.9	1,381	17.2	262	17.3	148	21.4	94	24.5	81	19.1	55	25.7
3,000-3,499	4,295	38.0	3,056	38.0	538	35.6	282	40.8	142	37.1	167	39.3	100	46.7
3,500-3,999	3,230	28.6	2,399	29.8	420	27.8	180	26.0	91	23.8	97	22.8	36	16.8
4,000-4,499	828	7.3	606	7.5	136	9.0	36	5.2	13	3.4	30	7.1	5	2.3
4,500+	113	1.0	74	0.9	28	1.9	4	0.6	2	0.5	5	1.2	0	0.0
Not Stated	10	-	7	-	2	-	0	-	0	-	1	-	0	-
Total	11,304	100	8,049	100	1,514	100	691	100	383	100	425	100	214	100
Median birth weight in grams	3,335		3,350		3,341		3,285		3,190		3,250		3,160	
Mean birth weight in grams	3,299		3,318		3,301		3,259		3,133		3,213		3,114	
Modal birth weight in grams	3,260		3,350		3,260		3,060		3,190		3,220		3,232	

Note: Failure of the races to add to the total is due to unknown races included the total birth column.

	Table 11	
South Dakota Resident Births by	by Birth Weight and Year of Birth, 2012-20	21

								/
Veer	Total Births		< 2500	Grams	2500 + 0	Grams	Not St	tated
Year	Num	%	Num	%	Num	%	Num	%
2021	11,304	100	802	7.1	10,492	92.9	10	-
2020	10,951	100	755	6.9	10,193	93.1	3	-
2019	11,448	100	806	7.0	10,641	93.0	1	-
2018	11,890	100	792	6.7	11,095	93.3	3	-
2017	12,128	100	841	6.9	11,286	93.1	1	-
2016	12,270	100	830	6.8	11,440	93.2	0	-
2015	12,323	100	759	6.2	11,563	93.8	1	-
2014	12,281	100	805	6.6	11,474	93.4	2	-
2013	12,243	100	770	6.3	11,468	93.7	5	-
2012	12,092	100	751	6.2	11,338	93.8	3	-
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Source: South Dakota Department of Health, Office of Health Statistics

Table 12, below, compares the low birth weight babies by race of mother. In 2021, there were 529 (6.6%) low birth weight babies born to white, non-Hispanic women. For American Indian, non-Hispanic women there were 128 (8.5%) low birth weight babies and for black, non-Hispanic women there were 41 (10.7%) low birth weight babies. From 2020 to 2021, there was an increase in low birth weight babies for all races except for Hispanic.

Table 12
South Dakota Resident Low Birth Weight Births by Race of Mother, 2012-2021

			Mothe	r's Race			
Year	Total	White, non-Hispanic	American Indian, non-Hispanic	Hispanic	Black, non- Hispanic	Multi-racial, non-Hispanic	Other
2021	7.1%	6.6%	8.5%	5.9%	10.7%	10.6%	8.4%
2020	6.9%	6.5%	8.0%	6.2%	7.6%	10.3%	8.1%
2019	7.0%	6.6%	7.7%	6.6%	11.4%	6.6%	10.2%
2018	6.7%	6.1%	7.5%	7.6%	8.3%	8.4%	12.9%
2017	6.9%	6.7%	7.9%	5.6%	10.5%	6.0%	10.9%
2016	6.8%	6.2%	8.0%	6.0%	10.3%	7.6%	7.7%
2015	6.2%	5.7%	7.3%	5.5%	6.0%	8.7%	9.0%
2014	6.6%	6.3%	7.1%	7.3%	10.2%	6.0%	6.2%
2013	6.3%	5.9%	6.7%	8.5%	8.3%	6.0%	8.9%
2012	6.2%	5.6%	7.8%	8.0%	10.7%	6.3%	7.7%

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

Figure 2, below, shows live births by weeks of gestation and median birth weight in grams for the past five years. Overall, the longer the weeks of gestation the higher the median birth weight.



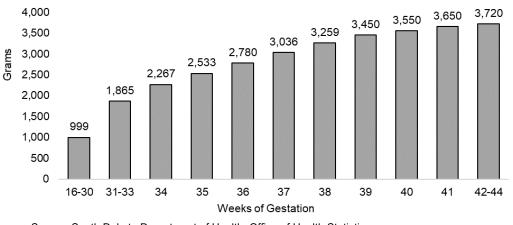


Table 13, below, displays resident births by year of birth and weeks of gestation. In 2021 we saw the lowest percentage of births ever at 40 or more weeks of gestation

at only 21.9 percent. The 10.5 percent that were less than 37 weeks was the highest in at least the last 30 years.

 Table 13

 South Dakota Resident Births by Year of Birth and Weeks of Gestation, 2012-2021

Veen	Tota	al	<3	5	35-3	36	37-	39	40+		40+		Not Stated	
Year	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%		
2021	11,304	100	421	3.7	762	6.7	7,636	67.6	2,478	21.9	7	-		
2020	10,951	100	389	3.6	641	5.9	7,259	66.4	2,646	24.2	16	-		
2019	11,448	100	409	3.6	686	6.0	7,403	64.7	2,946	25.7	4	-		
2018	11,890	100	410	3.5	709	6.0	7,442	62.7	3,313	27.9	16	-		
2017	12,128	100	432	3.6	693	5.7	7,333	60.5	3,657	30.2	13	-		
2016	12,270	100	399	3.3	699	5.7	7,366	60.1	3,796	31.0	10	-		
2015	12,323	100	385	3.1	665	5.4	7,268	59.1	3,990	32.4	15	-		
2014	12,281	100	416	3.4	622	5.1	7,310	59.7	3,894	31.8	39	-		
2013	12,243	100	373	3.1	618	5.1	7,069	57.9	4,157	34.0	26	-		
2012	12,092	100	373	3.1	572	4.7	6,734	55.8	4,393	36.4	20	-		

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

### Tobacco Use

Table 14, below, displays the percent of mothers who smoked cigarettes for each of the past 10 years. In 2021, 13.4 percent stated they smoked cigarettes three months

prior to pregnancy, and 9.2 percent smoked cigarettes anytime during their pregnancy, which is the lowest this has ever been.

Table 14
South Dakota Resident Live Births by Cigarette Smoking Status, 2012-2021

		Mother'	s Cigarette Smoki	ng Status	
Year	Three Months Prior to Pregnancy	First Trimester	Second Trimester	Third Trimester	Anytime During Pregnancy
2021	13.4%	8.9%	7.0%	6.3%	9.2%
2020	14.9%	9.8%	7.8%	7.3%	10.1%
2019	15.9%	10.5%	8.2%	7.5%	10.7%
2018	17.2%	11.4%	8.9%	8.1%	11.8%
2017	18.1%	12.2%	9.7%	8.8%	12.6%
2016	19.5%	13.2%	10.1%	9.2%	13.6%
2015	20.9%	13.6%	10.4%	9.5%	14.0%
2014	21.7%	14.4%	11.1%	10.2%	14.8%
2013	22.5%	14.6%	11.4%	10.5%	15.1%
2012	24.0%	16.0%	12.5%	11.4%	16.5%

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

Table 15, on the next page, displays the percent of mothers who smoked cigarettes prior to pregnancy by their cigarette smoking status during pregnancy since 2012.

The largest percentage of women stated they never quit smoking cigarettes during their pregnancy with 43.8 percent in 2021.

# Table 15 South Dakota Resident Births to Mothers Who Smoked Cigarettes Prior to Pregnancy by Cigarette Smoking Status During Pregnancy. 2012-2021

Year	Quit before becoming pregnant	Quit before second trimester	Quit before third trimester	Never quit	Stopped at some point during pregnancy, but started again before giving birth
2021	32.3%	13.9%	7.1%	43.8%	2.9%
2020	32.9%	13.6%	4.9%	45.9%	2.7%
2019	33.4%	13.8%	6.1%	44.8%	1.9%
2018	32.3%	15.0%	6.0%	44.8%	2.1%
2017	32.0%	13.5%	6.4%	45.8%	2.2%
2016	31.5%	15.8%	6.4%	44.3%	2.1%
2015	33.9%	15.0%	6.1%	42.9%	2.2%
2014	32.3%	15.5%	5.5%	44.4%	2.3%
2013	33.8%	14.0%	5.9%	43.5%	2.8%
2012	32.3%	14.4%	6.1%	44.6%	2.6%

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

### Mother's Age and Race

Table 16, below, displays that women aged 25 to 29 accounted for the largest percentage of South Dakota resident births in 2021 at 32.8 percent.

The median ages for white, non-Hispanic and Hispanic were 29 while American Indian, non-Hispanic was 26 and black, non-Hispanic was 30.

Table 16South Dakota Resident Live Births by Mother's Age and Race, 2021

			Race of Mother											
Age of Mother	Total		White, non- Hispanic		American Indian, non- Hispanic		Hispanic		Black, non- Hispanic		Multi- racial, non- Hispanic		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Less than 18	159	1.4	43	0.5	68	4.5	24	3.5	7	1.8	12	2.8	4	1.9
18-19 Years	347	3.1	149	1.9	118	7.8	50	7.2	8	2.1	19	4.5	0	-
20-24 Years	2,100	18.6	1,236	15.4	476	31.4	178	25.8	58	15.1	129	30.4	20	9.3
25-29 Years	3,704	32.8	2,782	34.6	409	27.0	201	29.1	103	26.9	135	31.8	68	31.8
30-34 Years	3,336	29.5	2,622	32.6	274	18.1	146	21.1	118	30.8	91	21.4	74	34.6
35-39 Years	1,413	12.5	1,033	12.8	154	10.2	75	10.9	73	19.1	32	7.5	44	20.6
40 & over	245	2.2	184	2.3	15	1.0	17	2.5	16	4.2	7	1.6	4	1.9
Total	11,304	100	8,049	100	1,514	100	691	100	383	100	425	100	214	100

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

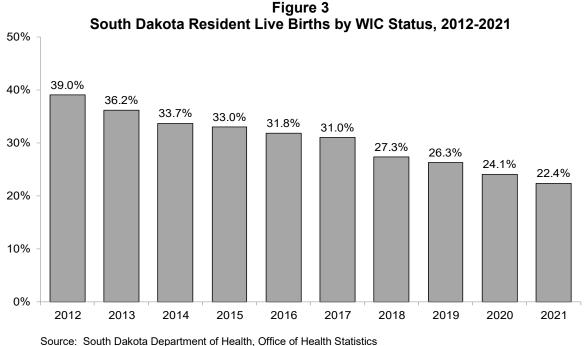
Table 17, below, displays the mother's age for births in the past 10 years. Overall, the

percentage of births continue to shift to women 30 or more years old.

Table 17
South Dakota Resident Live Births by Mother's Age and Year of Birth, 2012-2021

	Total B	irthe		Age of Mother														
	Total Births		Total Births		< 1	8	18-19		20-24		25-29		30-34		35-39		40+	
Year	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%		
2021	11,304	100	159	1.4	347	3.1	2,100	18.6	3,704	32.8	3,336	29.5	1,413	12.5	245	2.2		
2020	10,951	100	154	1.4	386	3.5	2,063	18.8	3,677	33.6	3,153	28.8	1,282	11.7	235	2.1		
2019	11,448	100	147	1.3	393	3.4	2,197	19.2	3,801	33.2	3,356	29.3	1,349	11.8	205	1.8		
2018	11,890	100	166	1.4	403	3.4	2,329	19.6	4,016	33.8	3,435	28.9	1,336	11.2	205	1.7		
2017	12,128	100	155	1.3	467	3.9	2,493	20.6	4,023	33.2	3,401	28.0	1,342	11.1	247	2.0		
2016	12,270	100	208	1.7	481	3.9	2,615	21.3	4,166	34.0	3,312	27.0	1,255	10.2	233	1.9		
2015	12,323	100	161	1.3	565	4.6	2,746	22.3	4,172	33.9	3,331	27.0	1,130	9.2	218	1.8		
2014	12,281	100	223	1.8	519	4.2	2,778	22.6	4,161	33.9	3,251	26.5	1,148	9.3	201	1.6		
2013	12,243	100	224	1.8	598	4.9	2,885	23.6	4,184	34.2	3,027	24.7	1,123	9.2	202	1.6		
2012	12,092	100	272	2.2	665	5.5	2,950	24.4	4,105	33.9	2,905	24.0	1,001	8.3	194	1.6		

Note: Failure of ages to add to total births is due to unknown mother's ages included in the total. Source: South Dakota Department of Health, Office of Health Statistics Figure 3, below, displays the percent of South Dakota resident live births on the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) for the past 10 years. In 2021, 22.4 percent of mothers were on WIC during their pregnancy.



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

Figure 4, below, displays the percent of mothers breastfeeding at time of hospital discharge. The percent of women who

were breastfeeding at time of discharge decreased from 81.5 percent in 2020 to 80.5 percent in 2021.

Figure 4 South Dakota Resident Live Births by Breastfeeding Status at Time of Discharge, 2012-2021

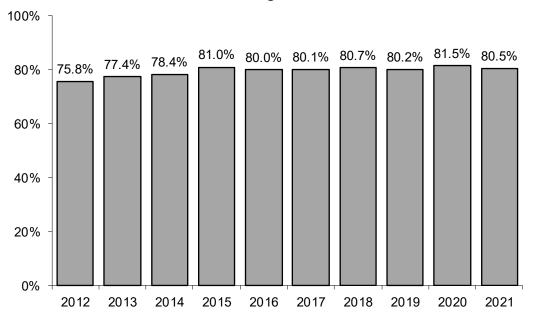


Table 18, below, displays South Dakota resident teen births (15 to 17 years old) by race from 2012 to 2021. In 2021, the teen birth rate was 8.6, unchanged from the 2020 rate.

When looking at race, the white, non-Hispanic teen birth rate was 3.2 compared to a teen birth rate of 27.2 for American Indian, non-Hispanics and 21.8 for Hispanics in 2021.

South Dakota Resident Teen Births and Rates by Year and Mother's Race/Ethnicity, 2012-202			Т	able 18				
	South Dakota Re	<u>sident Teen E</u>	Births and Rate	es by Ye	ar an	d Mother's	Race/Ethnicity	, <b>2012-2021</b>

Year	Total		White, non- Hispanic		Indiar	rican 1, non- )anic	Hispanic		Hispanic		Hispanic		,						Multi-r non-His	,	Otl	her
	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate								
2021	154	8.6	41	3.2	66	27.2	23	21.8	7	14.2	12	16.0	4	13.4								
2020	147	8.6	37	3.0	61	26.6	27	26.7	3	7.0	13	18.8	3	11.0								
2019	143	8.6	39	3.2	67	30.5	23	24.7	4	10.3	9	13.5	1	3.4								
2018	162	9.9	37	3.1	86	40.2	18	21.3	7	19.3	11	18.0	3	7.9								
2017	147	9.1	41	3.4	80	37.3	13	16.6	1	3.1	10	16.8	1	3.4								
2016	200	12.5	60	5.0	93	44.6	23	29.7	4	13.5	15	24.8	5	16.6								
2015	153	9.5	44	3.7	76	36.0	18	23.4	2	7.3	10	16.4	3	10.2								
2014	216	13.2	87	7.1	86	41.4	19	23.3	8	19.8	14	23.9	1	3.9								
2013	214	13.2	76	6.2	91	43.0	23	31.6	5	14.4	16	28.6	2	9.6								
2012	264	16.4	108	8.8	100	48.2	20	32.3	6	18.3	26	47.8	2	9.6								

Note: Rates are per 1,000 female population ages 15-17. Failure of races to add to the total is due to unknown races included in the total. Source: South Dakota Department of Health, Office of Health Statistics

### Prenatal Care

Table 19, below, shows the number of South Dakota resident live births by when the mothers started prenatal care in 2021.

Just over three-fourths (76.2%) of mothers started care in the first trimester – 83.7 percent of white, non-Hispanic mothers, 48.4 percent of American Indian, non-Hispanic mothers, 63.9 percent of black, non-Hispanic mothers, and 65.9 percent of Hispanic mothers. Overall, 1.5 percent failed to obtain prenatal care at all. Overall the 76.2 percent with care in the first trimester is the highest it has been since the methodology changed in 2006.

Table 19
South Dakota Resident Live Births by Trimester Prenatal Care Began
and Mother's Race/Ethnicity, 2021

				Race/Ethnicity of Mother											
Trimester Prenatal Care	Tot	al	White Hisp		non-Hispanic		Hispanic		Black, non- Hispanic		Multi-racial, non-Hispanic		Ot	her	
Began	Num	%	Num	%			Num	%	Num	%	Num	%	Num	%	
First	8,530	76.2	6,709	83.7	705	48.4	450	65.9	242	63.9	268	64.1	143	67.5	
Second	1,913	17.1	1,055	13.2	435	29.9	160	23.4	104	27.4	92	22.0	58	27.4	
Third	587	5.2	221	2.8	220	15.1	66	9.7	29	7.7	39	9.3	8	3.8	
None	165	1.5	34	0.4	97	6.7	7	1.0	4	1.1	19	4.5	3	1.4	
Not Stated	109	-	30	-	57	-	8	-	4	-	7	-	2	-	
Total	11,304	100	8,049	100	1,514	100	691	100	383	100	425	100	214	100	

Note: Failure of the races to add to the total is due to unknown races contained in the total birth column.

Table 20, below, shows the number of mothers who began prenatal care by trimester for the past 10 years.

Prenatal care in the first trimester has slowly increased over the past 10 years and is the highest since it started to be collected in this manner in 2006.

Year	Tota	al	Fi	rst	Sec	Second		ird	No Pre Ca		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2021	11,304	100	8,530	76.2	1,913	17.1	587	5.2	168	1.5	109	-
2020	10,951	100	8,256	76.0	1,956	18.0	533	4.9	118	1.1	88	-
2019	11,448	100	8,605	75.9	2,094	18.5	533	4.7	105	0.9	111	-
2018	11,890	100	8,864	75.4	2,212	18.8	561	4.8	119	1.0	134	-
2017	12,128	100	8,853	74.0	2,360	19.7	622	5.2	129	1.1	164	-
2016	12,270	100	9,160	75.5	2,248	18.5	629	5.2	98	0.8	135	-
2015	12,323	100	9,128	75.3	2,292	18.9	588	4.9	107	0.9	208	-
2014	12,281	100	9,089	75.4	2,236	18.5	637	5.3	98	0.8	221	-
2013	12,243	100	8,974	74.9	2,353	19.6	588	4.9	73	0.6	255	-
2012	12,092	100	8,596	72.8	2,519	21.3	610	5.2	78	0.7	289	-

Table 20South Dakota Resident Live Births by Trimester Prenatal Care Began, 2012-2021

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

#### Payment Type

Table 21, below, displays the number of births by payment type for the past five years. In 2021, the majority of births, 62.8

percent, were paid by private insurance. The second highest payment type was Medicaid with 28.3 percent.

Table 21
South Dakota Resident Live Births by Payment Type, 2017-2021

					Ye	ar				
Payment Type	2017		20	2018		19	20	20	2021	
	Num	%								
Private Insurance	7,160	59.3	7,183	60.6	7,067	61.8	6,729	62.2	7,052	62.8
Medicaid	3,867	32.1	3,513	29.6	3,273	28.6	3,183	29.4	3,175	28.3
Self-Pay	360	3.0	395	3.3	360	3.1	284	2.6	387	3.4
Champus/Tricare	369	3.1	384	3.2	337	2.9	365	3.4	344	3.1
Indian Health Service	246	2.0	311	2.6	309	2.7	169	1.6	171	1.5
Other Government	33	0.3	39	0.3	65	0.6	55	0.5	71	0.6
Other	30	0.2	30	0.3	24	0.2	26	0.2	28	0.2
Not Stated	63	-	35	-	13	-	140	-	76	-

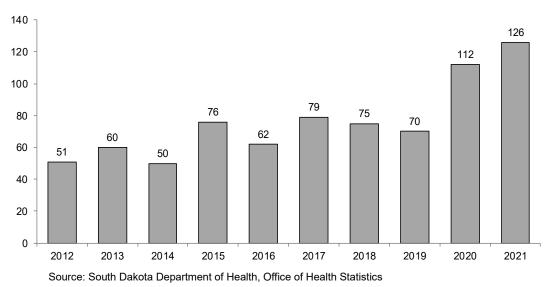
Source: South Dakota Department of Health, Office of Health Statistics

### Home Births

Figure 5, on the following page, displays the number of intended home births for South Dakota residents in the past 10 years.

It was the largest number of intended home births in 2021 since this started being tracked in 2006.

Figure 5 South Dakota Resident Intended Home Births, 2012-2021



# Attendant at Birth

Table 22, below, displays South Dakota resident live births by the attendant at birth for the past 10 years. Births attended by a

physician are steadily declining while births attended by a certified nurse midwife are steadily increasing.

Table 22
South Dakota Resident Live Births by Attendant at Birth, 2012-2021

Year	Tota	al	Physic (MD Reside Inter	), ent,	Docto Osteo (D0	pathy	Certi Nur Midw (CN	se vife	Licen Certi Nur Midv	fied se	Nurse (RN, LPN, NC)		Other		No State	-
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2021	11,304	100	9,003	79.7	1,081	9.6	1,037	9.2	59	0.5	36	0.3	86	0.8	2	-
2020	10,951	100	8,860	80.9	1,112	10.2	777	7.1	61	0.6	41	0.4	99	0.9	1	-
2019	11,448	100	9,246	80.8	1,187	10.4	841	7.3	38	0.3	65	0.6	70	0.6	1	-
2018	11,890	100	9,699	81.6	1,140	9.6	889	7.5	39	0.3	38	0.3	82	0.7	3	-
2017	12,128	100	9,928	81.9	1,145	9.4	857	7.1	46	0.4	71	0.6	77	0.6	4	-
2016	12,270	100	10,400	84.8	904	7.4	811	6.6	35	0.3	55	0.4	47	0.4	3	-
2015	12,323	100	10,630	86.3	669	5.4	844	6.8	53	0.4	66	0.5	52	0.4	0	-
2014	12,281	100	10,604	86.4	687	5.6	792	6.5	55	0.4	59	0.5	43	0.4	2	-
2013	12,243	100	10,560	87.3	569	4.7	770	6.4	63	0.5	60	0.5	81	0.7	140	-
2012	12,092	100	10,573	88.5	491	4.1	755	6.3	32	0.3	42	0.4	57	0.5	142	-

Note: Licensed Certified Nurse Midwives are licensed by the Board of Nursing to deliver out of an institution. Certified Nurse Midwives are those that deliver in a hospital under a physician's license.

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

# Infections Present and/or Treated

Table 23, on the next page, displays resident births by infections present and/or treated during mother's pregnancy for the past five years. In 2021, 5.9 percent of births had at least one infection present or treated.

For all five years, chlamydia was the main infection present and/or treated during pregnancy. In 2021, chlamydia infections were present or treated in 2.9 percent of births.

# Table 23South Dakota Resident Live Births by Infections Present and/or TreatedDuring This Pregnancy and Year of Birth, 2017-2021

					Year of	Birth				
	201	7	201	8	201	9	202	0	2021	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	306	2.5	267	2.2	280	2.4	276	2.5	332	2.9
Genital herpes*	166	1.4	151	1.3	186	1.6	171	1.6	185	1.6
Gonorrhea	64	0.5	66	0.6	77	0.7	83	0.8	118	1.0
Hepatitis C	37	0.3	68	0.6	53	0.5	63	0.6	92	0.8
Syphilis	15	0.1	9	0.1	11	0.1	19	0.2	48	0.4
Hepatitis B	23	0.2	23	0.2	17	0.1	17	0.2	19	0.2
Toxoplasmosis	1	0.0	1	0.0	2	0.0	4	0.0	3	0.0
Cytomegolovirus (CMV)	5	0.0	2	0.0	1	0.0	2	0.0	2	0.0
Rubella	2	0.0	0	0.0	1	0.0	0	0.0	0	0.0
No infections	11,565	95.4	11,344	95.6	10,893	95.2	10,376	94.8	10,636	94.1

Note: Percentages may sum to more than 100 percent because multiple infections may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

**Medical History Factors** 

Table 24, below, lists the medical history factors for South Dakota resident mothers during the past five years.

The most common medical history factor for all five years was the mother had a previous cesarean delivery.

Table 24
South Dakota Resident Live Births by Mother's Medical History Factors
and Year of Birth, 2017-2021

					Year of	f Birth				
	20 <sup>-</sup>	17	20 <sup>-</sup>	18	20 <sup>-</sup>	19	202	20	202	21
	Num	%	Num	%	Num	%	Num	%	Num	%
Mother had a previous cesarean delivery	1,680	13.9	1,677	14.1	1,577	13.8	1,482	13.5	1,488	13.1
Diabetes, gestational	951	7.8	991	8.3	1,006	8.8	1,023	9.4	1,223	10.8
Hypertension, gestational	749	6.2	803	6.7	820	7.2	800	7.3	927	8.2
Previous preterm births	381	3.2	460	3.9	430	3.8	428	4.0	421	3.7
Other previous poor pregnancy outcomes	552	4.6	537	4.6	478	4.2	486	4.5	420	3.7
Hypertension, pre-pregnancy	155	1.3	167	1.4	163	1.4	208	1.9	217	1.9
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	178	1.5	152	1.3	179	1.6	153	1.4	164	1.5
Hypertension, eclampsia	75	0.6	74	0.6	96	0.8	76	0.7	115	1.0
Diabetes, pre-existing	141	1.2	118	1.0	106	0.9	130	1.2	103	0.9
Assisted reproductive technology	72	0.6	67	0.6	77	0.7	62	0.5	67	0.6
No medical risk factors for this pregnancy	8,125	67.5	7,755	65.8	7,533	65.9	7,083	65.4	7,161	63.9

Note: Percentages may sum to more than 100 percent because multiple factors may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# Apgar Score

The Apgar score was developed by the late Virginia Apgar, M.D., as a standardized mechanism to assess the physical condition of newborns. The score considers five easily identifiable characteristics – heart rate, respiratory effort, muscle tone, reflex, and color. Each characteristic is assessed and assigned a value from zero to two, with two being optimum. If the total score of these five components is seven or greater, a newborn is considered to be in good to excellent physical condition. In 2021, 2.4 percent of South Dakota resident infants received five-minute Apgar scores less than seven.

Considering race, 2.3 percent of white, non-Hispanic infants, 3.1 percent of American Indian, non-Hispanic infants, 1.6 percent of

# Characteristics of Labor and Delivery

Table 25, below, lists the characteristics of labor and delivery for the past five years reported on South Dakota resident birth certificates. The four most prevalent characteristics in 2021 were epidural or spinal anesthesia with 57.5 percent, Hispanic infants, 2.6 percent of black, non-Hispanic infants, and 2.6 percent multiracial, non-Hispanic infants received a fiveminute Apgar score less than seven in 2021.

induction of labor with 38.2 percent, augmentation of labor with 31.9 percent, antibiotics during labor with 26.5 percent. Epidural or spinal anesthesia and induction of labor have been steadily increasing.

Table 25
South Dakota Resident Live Births by Characteristics of Labor and
Delivery and Year of Birth, 2017-2021

					Year of	Birth				
	<b>20</b> <sup>2</sup>	17	20	18	201	19	202	20	202	21
	Num	%	Num	%	Num	%	Num	%	Num	%
Epidural or spinal anesthesia	6,730	55.4	6,589	55.4	6,358	55.5	6,241	57.0	6,500	57.5
Induction of labor	3,680	30.3	3,851	32.3	3,918	34.2	4,025	36.6	4,307	38.2
Augmentation of labor	3,755	31.0	3,904	33.0	3,574	31.2	3,365	31.0	3,591	31.9
Antibiotics during labor	3,383	27.9	3,298	27.8	3,258	28.5	3,114	28.5	2,995	26.5
Fetal intolerance	660	5.5	667	5.7	764	6.7	814	7.5	765	6.8
Meconium staining of the amniotic fluid	1,023	8.5	829	7.0	726	6.4	657	6.1	751	6.7
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	769	6.3	873	7.4	975	8.5	750	6.8	701	6.2
Non-vertex presentation	545	4.5	551	4.7	531	4.6	469	4.3	576	5.1
Chorioamnioitis diagnosed during labor	149	1.2	136	1.1	149	1.3	148	1.4	95	0.8
None of the above	2,316	19.2	2,134	18.1	2,022	17.7	1,874	17.3	1,897	16.9

Note: Percentages may sum to more than 100 percent because multiple characteristics of labor and delivery may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# Obstetric Procedures

Table 26, on the next page, shows obstetric procedures by year of birth for the past five

years. Tocolysis was the top obstetric procedure used for all years.

 Table 26

 South Dakota Resident Live Births by Obstetric Procedures and Year of Birth, 2017-2021

					Year of	Birth				
	201	7	201	2018		2019		20	202	1
	Num	um % N		%	Num	%	Num	%	Num	%
Tocolysis	141	1.2	99	0.8	108	0.9	105	1.0	87	0.8
External cephalic version-failed	33	0.3	36	0.3	50	0.4	42	0.4	52	0.5
External cephalic version- successful	28	0.2	24	0.2	28	0.2	34	0.3	43	0.4
Cervical cerclage	42	0.3	40	0.3	30	0.3	37	0.3	32	0.3
No obstetric procedures	11,894	98.1	11,697	98.4	11,236	98.2	10,732	98.1	11,091	98.1

Note: Percentages may sum to more than 100 percent because multiple obstetric procedures may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# Onset of Labor

Table 27, below, displays the complications associated with the onset of labor for the past five years. The primary complication in 2021 associated with onset of labor for mothers was precipitous labor (< 3 hours). In 2021, 12.5 percent of births had a complication associated with the onset of labor.

 Table 27

 South Dakota Resident Live Births by Complications Associated with Onset of Labor

 and Year of Birth. 2017-2021

	Year of Birth											
	2017		2018		2019		2020		2021			
	Num	%	Num	%	Num	%	Num	%	Num	%		
Precipitous labor (< 3 hours)	812	6.7	1,336	11.2	763	6.7	743	6.8	819	7.2		
Premature rupture of membranes	458	3.8	400	3.4	372	3.3	317	2.9	330	2.9		
Prolonged labor (20+ hours)	359	3.0	410	3.4	350	3.1	334	3.1	300	2.7		
None of the above	10,543	87.0	9,801	82.5	9,993	87.3	9,590	87.6	9,885	87.5		

Note: Percentages may sum to more than 100 percent because multiple complications with the onset of labor may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# Maternal Complications

Table 28, below, illustrates the maternal complications for the past five years. The highest maternal complication in 2021 was third or fourth degree perineal

laceration with 0.9 percent of births. Overall, maternal complications were present in 1.8 percent of resident births in 2021.

	Table 28	
South Dakota Resident Live Births by	y Maternal Complications and Year of Birth, 2017-2021	

		Year of Birth										
	201	7	201	2018		2019		0	202	1		
	Num	%	Num	%	Num	%	Num	%	Num	%		
Third or fourth degree perineal laceration	111	0.9	102	0.9	111	1.0	84	0.8	99	0.9		
Maternal transfusion	48	0.4	60	0.5	51	0.4	45	0.4	61	0.5		
Unplanned operating procedure following delivery	38	0.3	49	0.4	41	0.4	30	0.3	42	0.4		
Admitted to intensive care	7	0.1	11	0.1	6	0.1	9	0.1	23	0.2		
Unplanned hysterectomy	4	0.0	12	0.1	9	0.1	3	0.0	8	0.1		
Ruptured uterus	7	0.1	6	0.1	1	0.0	7	0.1	2	0.0		
None of the above	11,930	98.4	11,678	98.2	11,246	98.2	10,789	98.6	11,098	98.2		

Note: Percentages may sum to more than 100 percent because multiple complications may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# Methods of Delivery

Table 29, below, displays the method of delivery for the past five years. Vaginal birth was the primary method of delivery for South Dakota residents for the past five years. C-section rates have held very steady the past five years.

	Table 29	
South Dakota Resident Births by	y Method of Delivery	y and Year of Birth, 2017-2021

	2017		017 2018		2019		2020		2021	
	Num	%	Num	%	Num	%	Num	%	Num	%
Vaginal (Total)	9,155	75.5	8,964	75.4	8,647	75.5	8,252	75.4	8,527	75.4
Vaginal with no previous C-section	8,787	72.5	8,593	72.3	8,321	72.7	7,939	72.5	8,189	72.4
Vaginal after previous C-section	363	3.0	360	3.0	324	2.8	308	2.8	334	3.0
Vaginal (unknown previous types)	5	0.1	11	0.1	2	0.0	5	0.1	4	0.0
C-Section (Total)	2,973	24.5	2,926	24.6	2,801	24.5	2,698	24.6	2,777	24.6
Primary C-section	1,656	13.7	1,608	13.5	1,548	13.5	1,524	13.9	1,622	14.3
Repeat C-section	1,317	10.9	1,317	11.1	1,253	10.9	1,174	10.7	1,154	10.2
C-section (unknown previous types)	0	0.0	1	0.0	0	0.0	0	0.0	1	0.0

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

Table 30, below, displays the method of delivery by fetal presentation. The majority of births, 94.5 percent, were cephalic while 4.6 percent were breech.

When looking at primary C-section births, 24.6 percent were breech while 72.6 percent were cephalic.

	Tota	al	Ceph	alic	Bre	ech	Other	
	Num	%	Num	%	Num	%	Num	%
Total	11,304	100	10,682	94.5	520	4.6	99	0.9
Vaginal (Total)	8,527	100	8,468	99.3	23	0.3	33	0.4
Vaginal with no previous C-section	8,189	100	8,136	99.4	21	0.3	30	0.4
Vaginal after previous C-section	334	100	329	98.5	2	0.6	3	0.9
Vaginal (unknown previous types)	4	100	3	75.0	0	0.0	0	0.0
C-Section (Total)	2,777	100	2,214	79.7	497	17.9	66	2.4
Primary C-section	1,622	100	1,177	72.6	399	24.6	46	2.8
Repeat C-section	1,154	100	1,036	89.8	98	8.5	20	1.7
C-section (unknown previous types)	1	100	1	100	0	0.0	0	0.0

Table 30 South Dakota Resident Births by Method of Delivery and Fetal Presentation. 2021

Note: Failure of methods of delivery and/or fetal presentations to add to the total are due to unknown methods and presentations. Source: South Dakota Department of Health, Office of Health Statistics

# Abnormal Conditions of the Newborn

Table 31, on the next page, shows abnormal conditions in newborns for the past five years. In 2021, 12.9 percent of South Dakota resident live birth certificates reported at least one abnormal condition of the newborn. Overall, NICU admission was the most frequently reported condition in 2021 followed by assisted ventilation required immediately following delivery.

Table 31	
South Dakota Resident Live Births by Abnormal Conditions of Newborn and Year of Birth, 2017	′ <b>-2021</b>

		Year of Birth										
	201	7	2018		201	2019		2020		21		
	Num	%	Num	%	Num	%	Num	%	Num	%		
NICU admission	1,243	10.3	1,169	9.8	1,154	10.1	1,047	9.6	1,190	10.5		
Assisted ventilation required immediately following delivery	804	6.6	684	5.8	682	6.0	624	5.7	779	6.9		
Antibiotics received by the newborn for suspected neonatal sepsis	580	4.8	495	4.2	475	4.1	363	3.3	421	3.7		
Assisted ventilation required for more than 6 hrs	315	2.6	280	2.4	320	2.8	278	2.5	366	3.2		
Newborn given surfactant replacement therapy	95	0.8	62	0.5	98	0.9	66	0.6	75	0.7		
Seizure or serious neurologic dysfunction	9	0.1	3	0.0	19	0.2	9	0.1	9	0.1		
Significant birth injury	13	0.1	18	0.2	11	0.1	8	0.1	15	0.1		
None of the above	10,520	86.8	10,472	88.1	10,024	87.6	9,654	88.2	9,839	87.1		

Note: Percentages may sum to more than 100 percent because multiple abnormal conditions may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# **Congenital Anomalies**

Table 32, below, displays congenital anomalies for the past five years. In 2021 the most prevalent congenital anomaly was

chromosomal disorder followed by Down syndrome. In 2021, 99.1 percent of births had no congenital anomaly.

# Table 32

# South Dakota Resident Births with Reported Congenital Anomalies and Year of Birth, 2017-2021

		Year of Birth										
	201	7	2018		2019		2020		2021			
	Num	%	Num	%	Num	%	Num	%	Num	%		
Chromosomal disorder	21	0.2	21	0.2	17	0.1	18	0.2	32	0.3		
Down syndrome (Trisomy 21)	20	0.2	13	0.1	16	0.1	14	0.1	17	0.2		
Other craniofacial abnormality	10	0.1	8	0.1	12	0.1	13	0.1	15	0.1		
Cleft lip with or without a cleft palate	11	0.1	14	0.1	16	0.1	13	0.1	14	0.1		
Cleft palate alone	13	0.1	14	0.1	17	0.1	11	0.1	12	0.1		
Hypospadias	12	0.1	11	0.1	11	0.1	12	0.1	11	0.1		
Cyanotic congenital heart disease	13	0.1	9	0.1	15	0.1	12	0.1	10	0.1		
Omphalacele	2	0.0	2	0.0	4	0.0	1	0.0	5	0.0		
Gastroschisis	4	0.0	5	0.0	10	0.1	1	0.0	4	0.0		
Meningomyelocele/Spina bifida	5	0.0	6	0.1	4	0.0	3	0.0	3	0.0		
Congenital diaphragmatic hernia	3	0.0	1	0.0	7	0.1	0	0.0	3	0.0		
Limb reduction defect	4	0.0	3	0.0	3	0.0	2	0.0	2	0.0		
Anencephaly	0	0.0	2	0.0	4	0.0	2	0.0	0	0.0		
At least one anomaly	96	0.8	94	0.8	100	0.9	79	0.7	101	0.9		
None of the above	12,029	99.2	11,793	99.2	11,346	99.1	10,863	99.3	11,195	99.1		

Note: Percentages may sum to more than 100 percent because multiple congenital anomalies may be reported for a single birth. Source: South Dakota Department of Health, Office of Health Statistics

# REFERENCES

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