

Natality

An Overview: 2019

Total Resident Live Births	11,448
Crude Birth Rate per 1,000 Population	12.9
Median Live Birth Weight (Grams)	3,369
Low Weight Births (Less than 2,500 grams)	806
Percent Low Birth Weight	7.0%
Mean Age of Mother	28
No Prenatal Care	0.9%

Resident births decreased nearly four percent from 2018 when there were 11,890 births. In 2019, 51.3 percent of the babies born were male and 48.7 percent were female. Racially, white, non-Hispanic births were 51.8 percent male and 48.2 percent female; American Indian, non-Hispanic births were 50.8 percent male, 49.2 percent female.

The low birth weight rate per 1,000 live births increased from 66.6 in 2018 to 70.4 in 2019. This was a 5.7 percent increase from the 2018 low birth weight rate.

There were 11,448 births to South Dakota residents in 2019, for a crude birth rate of 12.9 per 1,000 South Dakota resident population.

Table 7, 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 as shown in this table.

Table 7
Resident Live Births and Crude Birth Rates,
South Dakota and United States, 2005-2019

Year	United States		South Dakota	
	Number	Crude Rate	Number	Crude Rate
2019	3,745,540*	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
2006	4,265,555	14.2	11,914	15.1
2005	4,138,349	14.0	11,466	14.7

Note: * 2019 U.S. data are provisional at time of publication.

Crude birth rates are per 1,000 population.

Sources: National Center for Health Statistics

South Dakota Department of Health, Office of 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 8, below, shows the number and percent of resident births by mother's race since 2010. In 2019, the number of births to white, non-Hispanics, American Indian, non-Hispanics, Hispanics, and multi-racial, non-Hispanics decreased by 4.0 percent, 2.2 percent, 2.7 percent, and 8.2 percent respectively. The number of births to black, non-Hispanics, increased by 1.0 percent.

Table 8
South Dakota Resident Live Births by Mother's Race, 2010-2019

Births	White, non-Hispanic		American Indian, non-Hispanic		Hispanic		Black, non-Hispanic		Multi-racial, non-Hispanic		Other		Not Stated		
	Year	Num	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	
2019	11,448	8,149	71.3	1,610	14.1	641	5.6	414	3.6	393	3.4	215	1.9	26	-
2018	11,890	8,487	71.5	1,647	13.9	659	5.6	410	3.5	428	3.6	233	2.0	26	-
2017	12,128	8,612	71.1	1,808	14.9	624	5.1	398	3.3	417	3.4	258	2.1	11	-
2016	12,270	8,830	72.1	1,783	14.6	634	5.2	360	2.9	369	3.0	273	2.2	21	-
2015	12,323	8,824	71.9	1,928	15.7	559	4.6	266	2.2	423	3.4	277	2.3	46	-
2014	12,281	8,901	72.8	1,826	14.9	602	4.9	295	2.4	383	3.1	226	1.8	48	-
2013	12,243	8,909	73.0	1,907	15.6	530	4.3	277	2.3	336	2.8	248	2.0	36	-
2012	12,092	8,822	73.1	1,863	15.4	552	4.6	270	2.2	382	3.2	183	1.5	20	-
2011	11,834	8,669	73.4	1,880	15.9	509	4.3	235	2.0	320	2.7	198	1.7	23	-
2010	11,795	8,827	74.9	1,791	15.2	507	4.3	227	1.9	296	2.5	142	1.2	5	-

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

Multiple Births

Table 9, 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 9
South Dakota Resident Multiple Live Births, 2010-2019

Year of Birth	Twins	Triplets or More
2019	209	1
2018	210	1
2017	208	4
2016	212	7
2015	187	4
2014	192	4
2013	178	5
2012	175	2
2011	166	2
2010	176	6

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

Marital Status

In 2019, the majority of women who gave birth, 63.8 percent, were married as displayed in Table 10 below. When looking at the data by race, American

Indian, non-Hispanic women have consistently had the highest percent of births out of wedlock with 85.2 percent in 2019.

Table 10
South Dakota Resident Births Out of Wedlock by Year of Birth and Race, 2010-2019

Year	All Races		White, non-Hispanic		American Indian, non-Hispanic		Hispanic		Black, non-Hispanic		Multi-racial, non-Hispanic		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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
2011	4,597	38.8	2,340	27.0	1,600	85.2	287	56.4	105	44.7	209	65.3	47	23.7
2010	4,427	37.5	2,377	26.9	1,484	83.1	256	50.5	91	40.1	184	62.4	33	23.2

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 11, below, indicates that in 2019 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 2019, 7.0 percent (806) were low weight births. When looking at race, 6.6 percent of white, non-

Hispanic babies, 7.7 percent of American Indian, non-Hispanic babies, 6.6 percent of Hispanic babies, 11.4 percent of black, non-Hispanic babies, and 6.6 multi-racial, non-Hispanic babies were low birth weight in 2019. Table 12, on the next page, compares the birth weights of infants for the past 10 years.

Table 11
South Dakota Resident Live Births by Birth Weight and Mother's Race, 2019

Birth Weight (in Grams)	Total		Race of Mother											
			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	303	2.6	205	2.5	47	2.9	12	1.9	22	5.3	8	2.0	6	2.8
2,000-2,499	503	4.4	336	4.1	77	4.8	30	4.7	25	6.0	18	4.6	16	7.4
2,500-2,999	1,903	16.6	1,305	16.0	247	15.3	140	21.8	97	23.4	62	15.8	50	23.3
3,000-3,499	4,261	37.2	3,039	37.3	557	34.6	256	39.9	160	38.6	147	37.4	91	42.3
3,500-3,999	3,409	29.8	2,540	31.2	458	28.4	156	24.3	89	21.5	113	28.8	47	21.9
4,000-4,499	926	8.1	638	7.8	187	11.6	38	5.9	17	4.0	39	9.9	4	1.9
4,500+	142	1.2	85	1.0	37	2.3	9	1.4	4	1.0	6	1.5	1	0.5
Not Stated	1	-	1	-	0	-	0	-	0	-	0	-	0	-
Total	11,448	100	8,149	100	1,610	100	641	100	414	100	393	100	215	100
Median birth weight in grams	3,369		3,380		3,393		3,255		3,183		3,391		3,230	
Mean birth weight in grams	3,320		3,331		3,361		3,254		3,118		3,347		3,148	
Modal birth weight in grams	3,260		3,510		3,317		2,910		3,280		3,510		3,280	

Note: Failure of the races to add to the total is due to race not stated in the total birth column.

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

Table 12
South Dakota Resident Births by Birth Weight and Year of Birth, 2010-2019

Year	Total Births		< 2500 Grams		2500 + Grams		Not Stated	
	Num	%	Num	%	Num	%	Num	%
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	-
2011	11,834	100	746	6.3	11,084	93.7	4	-
2010	11,795	100	811	6.9	10,981	93.1	3	-

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

Table 13, below, compares the low birth weight babies by race of mother. In 2019, there were 541 (6.6%) low birth weight babies born to white, non-Hispanic women. For American Indian, non-Hispanic women there were 124 (7.7%) low birth weight

babies and for black, non-Hispanic women there were 47 (11.4%) low birth weight babies. From 2018 to 2019, there was an increase in low birth weight babies for white, non-Hispanic, American Indian, non-Hispanic, and black, non-Hispanic.

Table 13
South Dakota Resident Low Birth Weight Births by Race of Mother, 2010-2019

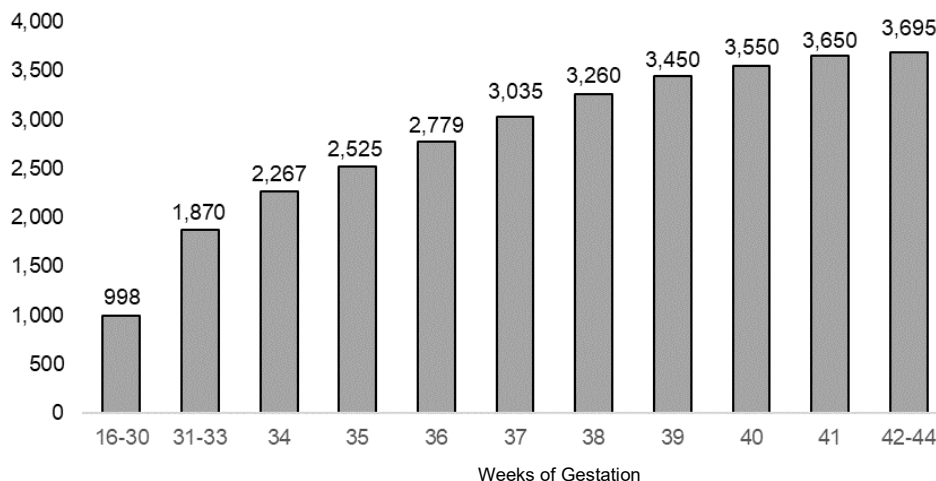
Year	Mother's Race						
	Total	White, non-Hispanic	American Indian, non-Hispanic	Hispanic	Black, non-Hispanic	Multi-racial, non-Hispanic	Other
2019	7.0%	6.6%	7.7%	6.6%	11.4%	6.6%	10.2%
2018	6.7%	6.1%	7.5%	7.6%	8.3%	8.4%	12.9%
2017	6.9%	6.7%	7.9%	5.6%	10.5%	6.0%	10.9%
2016	6.8%	6.2%	8.0%	6.0%	10.3%	7.6%	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%
2011	6.3%	5.8%	6.9%	6.7%	12.3%	7.5%	10.6%
2010	6.9%	7.0%	6.1%	5.9%	10.1%	6.8%	9.9%

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.

Figure 2
South Dakota Live Births by Gestation and Median Birth Weight, 2015-2019



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

Table 14, below, displays resident births by year of birth and weeks of gestation. In 2019, the majority of births, 64.7 percent,

occurred between 37 to 39 weeks of gestation. This is consistent with the past several years.

Table 14
South Dakota Resident Births by Year of Birth and Weeks of Gestation, 2010-2019

Year	Total		<35		35-36		37-39		40+		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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	3,312	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	-
2011	11,834	100	379	3.2	561	4.7	6,730	56.9	4,151	35.1	13	-
2010	11,795	100	412	3.5	600	5.1	6,764	57.5	3,996	33.9	23	-

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

Tobacco Use

Table 15, below, displays the percent of mothers who smoked cigarettes during the past 10 years. In 2019, 15.9 percent stated

they smoked cigarettes three months prior to pregnancy, and 10.7 percent smoked cigarettes anytime during their pregnancy.

Table 15
South Dakota Resident Live Births by Cigarette Smoking Status, 2010-2019

Year	Mother's Cigarette Smoking Status				
	Three Months Prior to Pregnancy	First Trimester	Second Trimester	Third Trimester	Anytime During Pregnancy
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%
2011	24.4%	16.1%	12.5%	11.5%	16.9%
2010	24.5%	16.4%	12.8%	11.9%	17.1%

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

Table 16, on the next page, displays the percent of mothers who smoked cigarettes prior to pregnancy by their cigarette smoking status during pregnancy since 2010.

The largest percentage of women stated they never quit smoking cigarettes during their pregnancy with 44.8 percent in 2019.

Table 16
South Dakota Resident Births to Mothers Who Smoked Cigarettes Prior to Pregnancy by Cigarette Smoking Status During Pregnancy, 2010-2019

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
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%
2011	32.5%	15.0%	6.0%	43.6%	3.0%
2010	31.2%	14.7%	5.6%	45.1%	3.4%

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

Mother's Age and Race

Table 17, below, displays that women aged 25 to 29 accounted for the largest percentage of South Dakota resident births in 2019 at 33.2 percent.

The median ages for white, non-Hispanic and black, non-Hispanic were 29 while American Indian, non-Hispanic was 26 and Hispanic was 27.

Table 17
South Dakota Resident Live Births by Mother's Age and Race, 2019

Age of Mother	Total		Race of Mother											
			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	147	1.3	39	0.5	71	4.4	23	3.6	4	1.0	9	2.3	1	0.5
18-19 Years	393	3.4	146	1.8	155	9.6	40	6.2	9	2.2	35	8.9	8	3.7
20-24 Years	2,197	19.2	1,353	16.6	462	28.7	158	24.6	70	16.9	102	26.0	47	21.9
25-29 Years	3,801	33.2	2,817	34.6	433	26.9	219	34.2	145	35.0	121	30.8	59	27.4
30-34 Years	3,356	29.3	2,631	32.3	316	19.6	123	19.2	127	30.7	85	21.6	64	29.8
35-39 Years	1,349	11.8	1,017	12.5	149	9.3	66	10.3	49	11.8	37	9.4	28	13.0
40 & over	205	1.8	146	1.8	24	1.5	12	1.9	10	2.4	4	1.0	8	3.7
Total	11,448	100	8,149	100	1,610	100	641	100	414	100	393	100	215	100

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

Table 18, below, displays the mother's age for births in the past 10 years. The largest

percentage of births in this time period were to mothers aged 25-29 years old.

Table 18
South Dakota Resident Live Births by Mother's Age and Year of Birth, 2010-2019

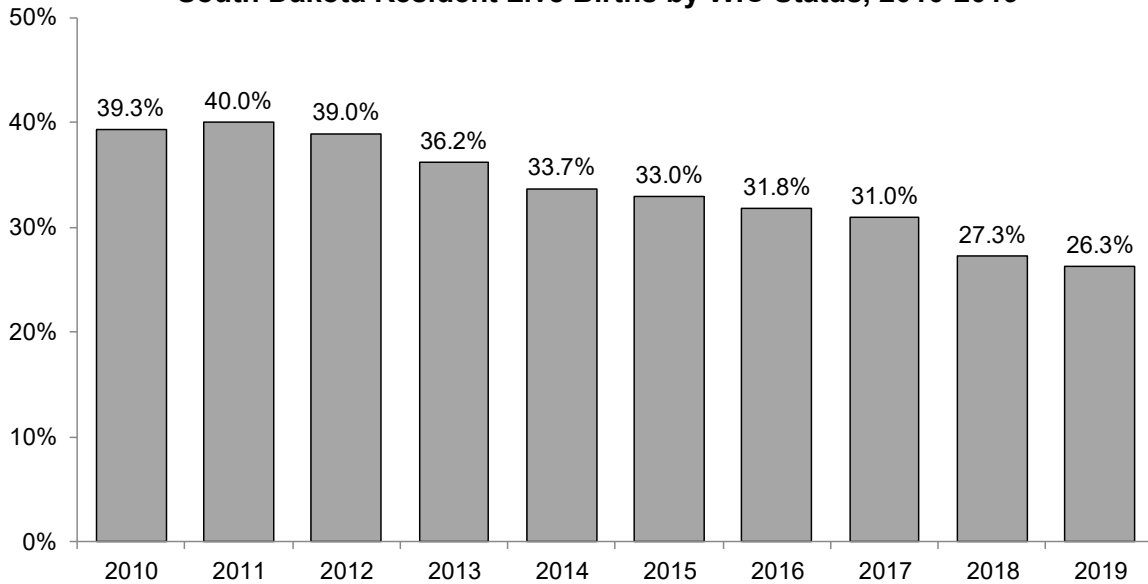
Year	Total Births		Age of Mother													
			< 18		18-19		20-24		25-29		30-34		35-39		40+	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2019	11,448	100	147	1.3	393	3.4	2,197	19.2	3,801	33.2	3,356	29.3	1,349	11.8	205	1.8
2018	11,890	100	166	1.4	403	3.4	2,329	19.6	4,016	33.8	3,435	28.9	1,336	11.2	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
2011	11,834	100	256	2.2	718	6.1	2,877	24.3	4,023	34.0	2,740	23.2	988	8.3	232	2.0
2010	11,795	100	269	2.3	714	6.1	2,989	25.3	4,033	34.2	2,638	22.4	959	8.1	193	1.6

Note: Failure of ages to add to total births is due to mother's age not stated.
 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 2019, 26.3 percent of mothers were on WIC during their pregnancy.

Figure 3
South Dakota Resident Live Births by WIC Status, 2010-2019

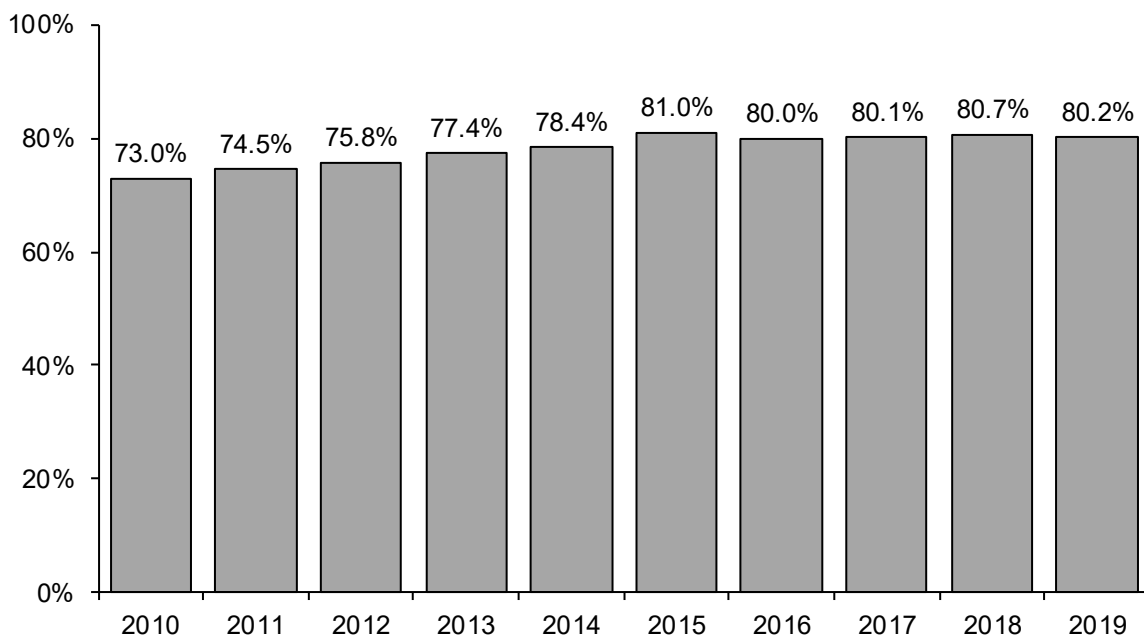


Source: South Dakota Department of Health, Office of Health Statistics

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 slightly from 80.7 percent in 2018 to 80.2 percent in 2019.

Figure 4
South Dakota Resident Live Births by Breastfeeding Status at Time of Discharge, 2010-2019



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

Table 19, below, displays South Dakota resident teen births (15 to 17 years old) by race from 2010 to 2019. In 2019, the teen birth rate was 8.6, down from the 2018 rate of 9.9.

When looking at race, the white, non-Hispanic teen birth rate was 3.2 compared to a teen birth rate of 30.5 for American Indian, non-Hispanics and 24.7 for Hispanics in 2019.

Table 19
South Dakota Resident Teen Births and Rates by Year and Mother's Race, 2010-2019

Year	Total		White, non-Hispanic		American Indian, non-Hispanic		Hispanic		Black, non-Hispanic		Multi-racial, non-Hispanic		Other	
	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate
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
2011	245	15.2	93	7.5	107	52.2	23	37.2	4	16.0	15	28.0	1	4.7
2010	259	15.8	116	9.2	103	48.2	25	42.1	2	7.9	12	24.0	1	5.2

Note: Rates are per 1,000 female population ages 15-17. Failure of races to add to the total is due to races not stated.
Source: South Dakota Department of Health, Office of Health Statistics

Prenatal Care

Table 20, below, shows the number of South Dakota resident live births by when the mothers started prenatal care in 2019.

non-Hispanic mothers, and 65.6 percent of Hispanic mothers. Overall, 0.9 percent failed to obtain prenatal care at all, however this includes 4.0 percent of American Indian, non-Hispanic mothers and 1.5 percent of multi-racial, non-Hispanic mothers.

Just over three-fourths (75.9%) of mothers started care in the first trimester – 82.8 percent of white, non-Hispanic mothers, 52.1 percent of American Indian, non-Hispanic mothers, 62.2 percent of black,

Table 20
South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Race, 2019

Trimester Prenatal Care Began	Total		Race of Mother											
			White, non-Hispanic		American Indian, non-Hispanic		Hispanic		Black, non-Hispanic		Multi-racial, non-Hispanic		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
First	8,605	75.9	6,723	82.8	808	52.1	417	65.6	253	62.2	240	61.9	145	69.0
Second	2,094	18.5	1,153	14.2	502	32.3	149	23.4	119	29.2	111	28.6	56	26.7
Third	533	4.7	212	2.6	180	11.6	67	10.5	33	8.1	31	8.0	7	3.3
None	105	0.9	30	0.4	62	4.0	3	0.5	2	0.5	6	1.5	2	1.0
Not Stated	111	-	31	-	58	-	5	-	7	-	5	-	5	-
Total	11,448	100	8,149	100	1,610	100	641	100	414	100	393	100	215	100

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

Table 21, below, shows the number of mothers who began prenatal care by trimester for the past 10 years.

Most mothers in all years began prenatal care in their first trimester.

Table 21
South Dakota Resident Live Births by Trimester Prenatal Care Began, 2010-2019

Year	Total		First		Second		Third		No Prenatal Care		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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	-
2011	11,834	100	8,346	72.0	2,563	22.1	606	5.2	75	0.6	244	-
2010	11,795	100	8,479	73.4	2,418	20.9	581	5.0	79	0.7	238	-

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

Payment Type

Table 22, below, displays the number of births by payment type for the past five years. In 2019, the majority of births, 61.8

percent, were paid by private insurance. The second highest payment type was Medicaid with 28.6 percent.

Table 22
South Dakota Resident Live Births by Payment Type, 2015-2019

Payment Type	Year									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Private Insurance	7,259	59.0	7,431	60.7	7,160	59.3	7,183	60.6	7,067	61.8
Medicaid	3,831	31.2	3,806	31.1	3,867	32.1	3,513	29.6	3,273	28.6
Self-Pay	379	3.1	348	2.8	360	3.0	395	3.3	360	3.1
Champus/Tricare	348	2.8	377	3.1	369	3.1	384	3.2	337	2.9
Indian Health Service	386	3.1	204	1.7	246	2.0	311	2.6	309	2.7
Other Government	42	0.3	36	0.3	33	0.3	39	0.3	65	0.6
Other	48	0.4	34	0.3	30	0.2	30	0.3	24	0.2
Not Stated	30	-	34	-	63	-	35	-	13	-

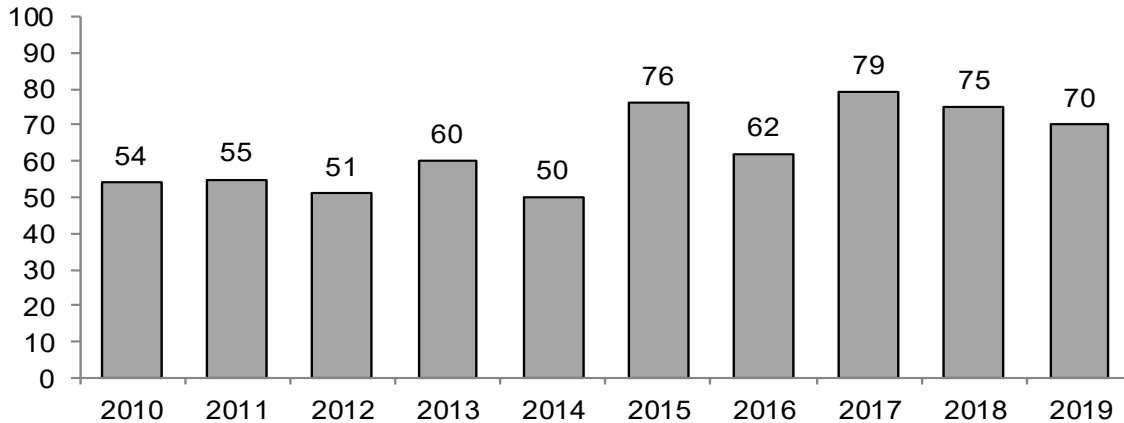
Source: South Dakota Department of Health, Office of Health Statistics

Home Births

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

In 2019, intended home births constituted less than one percent (0.6 percent) of South Dakota resident births.

Figure 5
South Dakota Resident Intended Home Births, 2010-2019



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

Attendant at Birth

Table 23, below, displays South Dakota resident live births by the attendant at birth for the past 10 years. In all years the

majority of attendants at birth have been physicians.

Table 23
South Dakota Resident Live Births by Attendant at Birth, 2010-2019

Year	Total		Physician (MD, Resident, Intern)		Doctor of Osteopathy (DO)		Certified Nurse Midwife (CNM)		Nurse (RN, LPN, NC)		Licensed Certified Nurse Midwife		Other		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2019	11,448	100	9,246	80.8	1,187	10.4	841	7.3	65	0.6	38	0.3	70	0.6	1	-
2018	11,890	100	9,699	81.6	1,140	9.6	889	7.5	38	0.3	39	0.3	82	0.7	3	-
2017	12,128	100	9,928	81.9	1,145	9.4	857	7.1	71	0.6	46	0.4	77	0.6	4	-
2016	12,270	100	10,400	84.8	904	7.4	811	6.6	55	0.4	35	0.3	47	0.4	3	-
2015	12,323	100	10,630	86.3	669	5.4	844	6.8	66	0.5	53	0.4	52	0.4	0	-
2014	12,281	100	10,604	86.4	687	5.6	792	6.5	59	0.5	55	0.4	43	0.4	2	-
2013	12,243	100	10,560	87.3	569	4.7	770	6.4	60	0.5	63	0.5	81	0.7	140	-
2012	12,092	100	10,573	88.5	491	4.1	755	6.3	42	0.4	32	0.3	57	0.5	142	-
2011	11,834	100	10,471	88.5	423	3.6	699	5.9	148	1.3	29	0.2	60	0.5	4	-
2010	11,795	100	10,342	87.7	617	5.2	711	6.0	39	0.3	24	0.2	53	0.4	9	-

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 24, on the next page, displays resident births by infections present and/or treated during mother's pregnancy for the past five years. The majority of births, 95.2 percent in 2019, had no infections present or treated.

For all five years, chlamydia was the main infection present and/or treated during pregnancy. In 2019, chlamydia infections were present or treated in 2.4 percent of births.

Table 24
South Dakota Resident Live Births by Infections Present and/or Treated
During This Pregnancy and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	324	2.6	312	2.5	306	2.5	267	2.2	280	2.4
Genital herpes*	178	1.4	190	1.5	166	1.4	151	1.3	186	1.6
Gonorrhea	54	0.4	52	0.4	64	0.5	66	0.6	77	0.7
Hepatitis C	43	0.3	32	0.3	37	0.3	68	0.6	53	0.5
Hepatitis B	19	0.2	22	0.2	23	0.2	23	0.2	17	0.1
Syphilis	5	0.0	6	0.0	15	0.1	9	0.1	11	0.1
Toxoplasmosis	5	0.0	1	0.0	1	0.0	1	0.0	2	0.0
Cytomegalovirus (CMV)	4	0.0	4	0.0	5	0.0	2	0.0	1	0.0
Rubella	0	0.0	2	0.0	2	0.0	0	0.0	1	0.0
No infections	11,712	95.3	11,688	95.3	11,565	95.4	11,344	95.6	10,893	95.2

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

Medical History Factors

Table 25, 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 25
South Dakota Resident Live Births by Mother's Medical History Factors
and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Mother had a previous cesarean delivery	1,864	15.2	1,739	14.2	1,680	13.9	1,677	14.1	1,577	13.8
Diabetes, gestational	962	7.8	954	7.8	951	7.8	991	8.3	1,006	8.8
Hypertension, gestational	619	5.1	724	5.9	749	6.2	803	6.7	820	7.2
Other previous poor pregnancy outcomes	481	3.9	573	4.7	552	4.6	537	4.6	478	4.2
Previous preterm births	370	3.0	403	3.3	381	3.2	460	3.9	430	3.8
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	132	1.1	177	1.5	178	1.5	152	1.3	179	1.6
Hypertension, pre-pregnancy	169	1.3	154	1.3	155	1.3	167	1.4	163	1.4
Diabetes, pre-existing	104	0.8	119	1.0	141	1.2	118	1.0	106	0.9
Hypertension, eclampsia	36	0.3	72	0.6	75	0.6	74	0.6	96	0.8
Assisted reproductive technology	40	0.3	70	0.6	72	0.6	67	0.6	77	0.7
No medical risk factors for this pregnancy	8,299	68.0	8,204	67.3	8,125	67.5	7,755	65.8	7,533	65.9

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 2019, 2.4 percent of South Dakota resident infants received five-minute Apgar scores less than seven.

Considering race, 2.4 percent of white, non-Hispanic infants, 1.6 percent of American Indian, non-Hispanic infants, 1.6 percent of

Hispanic infants, 3.7 percent of black, non-Hispanic infants, and 3.3 percent multi-racial, non-Hispanic infants received a five-minute Apgar score less than seven in 2019.

Characteristics of Labor and Delivery

Table 26, 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 2019 were epidural or spinal anesthesia with 55.5 percent,

induction of labor with 34.2 percent, augmentation of labor with 31.2 percent, antibiotics during labor with 28.5 percent. Overall characteristics of labor and delivery were present in 82.3 percent of resident births in 2019.

Table 26
South Dakota Resident Live Births by Characteristics of Labor and Delivery and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Epidural or spinal anesthesia	6,594	53.5	6,861	55.9	6,730	55.4	6,589	55.4	6,358	55.5
Induction of labor	3,219	26.1	3,553	28.9	3,680	30.3	3,851	32.3	3,918	34.2
Augmentation of labor	3,712	30.2	3,754	30.7	3,755	31.0	3,904	33.0	3,574	31.2
Antibiotics during labor	3,394	27.6	3,334	27.2	3,383	27.9	3,298	27.8	3,258	28.5
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	369	3.0	643	5.3	769	6.3	873	7.4	975	8.5
Fetal intolerance	583	4.8	686	5.6	660	5.5	667	5.7	764	6.7
Meconium staining of the amniotic fluid	1,125	9.2	835	6.8	1,023	8.5	829	7.0	726	6.4
Non-vertex presentation	500	4.1	568	4.7	545	4.5	551	4.7	531	4.6
Chorioamnionitis diagnosed during labor	158	1.3	144	1.2	149	1.2	136	1.1	149	1.3
None of the above	2,487	20.4	2,410	19.8	2,316	19.2	2,134	18.1	2,022	17.7

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 27, 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 27
South Dakota Resident Live Births by Obstetric Procedures and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Tocolysis	160	1.3	118	1.0	141	1.2	99	0.8	108	0.9
External cephalic version-failed	36	0.3	38	0.3	33	0.3	36	0.3	50	0.4
Cervical cerclage	26	0.2	40	0.3	42	0.3	40	0.3	30	0.3
External cephalic version-successful	26	0.2	40	0.3	28	0.2	24	0.2	28	0.2
No obstetric procedures	12,052	98.0	12,040	98.1	11,894	98.1	11,697	98.4	11,236	98.2

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 28, below, displays the complications associated with the onset of labor for the past five years. The primary complication in 2019 associated with onset of labor for

mothers was precipitous labor (< 3 hours). In 2019, 12.7 percent of births had a complication associated with the onset of labor.

Table 28
South Dakota Resident Live Births by Onset of Labor and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Precipitous labor (< 3 hours)	653	5.3	676	5.5	812	6.7	1,336	11.2	763	6.7
Premature rupture of membranes	365	3.0	422	3.4	458	3.8	400	3.4	372	3.3
Prolonged labor (20 + hours)	459	3.7	469	3.8	359	3.0	410	3.4	350	3.1
None of the above	10,852	88.2	10,751	87.6	10,543	87.0	9,801	82.5	9,993	87.3

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 29, below, illustrates the maternal complications for the past five years. The highest maternal complication in 2019 was third or fourth degree perineal

laceration with 1.0 percent of births. Overall, maternal complications were present in 1.8 percent of resident births in 2019.

Table 29
South Dakota Resident Live Births by Maternal Complications and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Third or fourth degree perineal laceration	115	0.9	119	1.0	111	0.9	102	0.9	111	1.0
Maternal transfusion	42	0.3	43	0.4	48	0.4	60	0.5	51	0.4
Unplanned operating procedure following delivery	45	0.4	38	0.3	38	0.3	49	0.4	41	0.4
Unplanned hysterectomy	7	0.1	3	0.0	4	0.0	12	0.1	9	0.1
Admitted to intensive care	10	0.1	6	0.0	7	0.1	11	0.1	6	0.1
Ruptured uterus	4	0.0	3	0.0	7	0.1	6	0.1	1	0.0
None of the above	12,112	98.3	12,079	98.5	11,930	98.4	11,678	98.2	11,246	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 30, 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. Primary C-section was the second largest method of delivery followed by repeat C-section methods.

Table 30
South Dakota Resident Births by Method of Delivery and Year of Birth, 2015-2019

	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Vaginal (Total)	9,157	74.3	9,162	74.7	9,155	75.5	8,964	75.4	8,647	75.5
Vaginal with no previous C-section	8,791	71.3	8,820	71.9	8,787	72.5	8,593	72.3	8,321	72.7
Vaginal after previous C-section	338	2.7	334	2.7	363	3.0	360	3.0	324	2.8
Vaginal (unknown previous types)	28	0.2	8	0.1	5	0.0	11	0.1	2	0.0
C-Section (Total)	3,166	25.7	3,108	25.3	2,973	24.5	2,926	24.6	2,801	24.5
Primary C-section	1,637	13.3	1,700	13.9	1,656	13.7	1,608	13.5	1,548	13.5
Repeat C-section	1,526	12.4	1,405	11.5	1,317	10.9	1,317	11.1	1,253	10.9
C-section (unknown previous types)	3	-	3	-	0	-	1	-	0	-

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

Table 31, below, displays the method of delivery by fetal presentation. The majority of births, 95.1 percent, were cephalic while 4.0 percent were breech.

When looking at primary C-section births, 21.2 percent were breech while 76.0 percent were cephalic.

Table 31
South Dakota Resident Births by Method of Delivery and Fetal Presentation, 2019

	Total		Cephalic		Breech		Other	
	Num	%	Num	%	Num	%	Num	%
Total	11,448	100	10,889	95.1	459	4.0	100	0.9
Vaginal (Total)	8,647	100	8,564	99.0	43	0.5	40	0.5
Vaginal with no previous C-section	8,321	100	8,243	99.4	41	0.5	37	0.4
Vaginal after previous C-section	324	100	319	98.5	2	0.6	3	0.9
Vaginal (unknown previous types)	2	100	2	0.0	0	-	0	-
C-Section (Total)	2,801	100	2,325	83.0	416	14.9	60	2.1
Primary C-section	1,548	100	1,176	76.0	328	21.2	44	2.8
Repeat C-section	1,253	100	1,149	91.7	88	7.0	16	1.3

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

Abnormal Conditions of the Newborn

Table 32, on the next page, shows abnormal conditions in newborns for the past five years. In 2019, 12.4 percent of South Dakota resident live birth certificates reported abnormal conditions of the

newborn. Overall, NICU admission was the most frequently reported condition in 2019 followed by assisted ventilation required immediately following delivery.

Table 32

South Dakota Resident Live Births by Abnormal Conditions of Newborn and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
NICU admission	1,224	9.9	1,241	10.1	1,243	10.3	1,169	9.8	1,154	10.1
Assisted ventilation required immediately following delivery	797	6.5	802	6.5	804	6.6	684	5.8	682	6.0
Antibiotics received by the newborn for suspected neonatal sepsis	628	5.1	596	4.9	580	4.8	495	4.2	475	4.1
Assisted ventilation required for more than 6 hrs	281	2.3	296	2.4	315	2.6	280	2.4	320	2.8
Newborn given surfactant replacement therapy	87	0.7	92	0.7	95	0.8	62	0.5	98	0.9
Seizure or serious neurologic dysfunction	9	0.1	11	0.1	9	0.1	3	0.0	19	0.2
Significant birth injury	13	0.1	12	0.1	13	0.1	18	0.2	11	0.1
None of the above	10,724	87.0	10,666	86.9	10,520	86.8	10,472	88.1	10,024	87.6

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 33, below, displays congenital anomalies for the past five years. In 2019 the most prevalent congenital anomaly was

chromosomal disorder and cleft palate alone followed by cleft lip with or without a cleft palate.

Table 33

South Dakota Resident Births with Reported Congenital Anomalies and Year of Birth, 2015-2019

	Year of Birth									
	2015		2016		2017		2018		2019	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chromosomal disorder	20	0.2	21	0.2	21	0.2	21	0.2	17	0.1
Cleft palate alone	2	0.0	12	0.1	13	0.1	14	0.1	17	0.1
Cleft lip with or without a cleft palate	11	0.1	25	0.2	11	0.1	14	0.1	16	0.1
Down syndrome (Trisomy 21)	8	0.1	15	0.1	20	0.2	13	0.1	16	0.1
Cyanotic congenital heart disease	8	0.1	15	0.1	13	0.1	9	0.1	15	0.1
Other craniofacial abnormality	13	0.1	17	0.1	10	0.1	8	0.1	12	0.1
Hypospadias	6	0.0	17	0.1	12	0.1	11	0.1	11	0.1
Gastroschisis	5	0.0	10	0.1	4	0.0	5	0.0	10	0.1
Congenital diaphragmatic hernia	5	0.0	1	0.0	3	0.0	1	0.0	7	0.1
Meningomyelocele/Spina bifida	5	0.0	6	0.0	5	0.0	6	0.1	4	0.0
Omphalacele	2	0.0	1	0.0	2	0.0	2	0.0	4	0.0
Anencephaly	0	0.0	1	0.0	0	0.0	2	0.0	4	0.0
Limb reduction defect	6	0.0	8	0.1	4	0.0	3	0.0	3	0.0
At least one anomaly	79	0.6	121	1.0	96	0.8	94	0.8	100	0.9
None of the above	12,236	99.4	12,149	99.0	12,029	99.2	11,793	99.2	11,346	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

