

Natality

An Overview: 2018

Total Resident Live Births	11,890
Crude Birth Rate per 1,000 Population	13.5
Median Live Birth Weight (Grams)	3,370
Low Weight Births (Less than 2,500 grams)	792
Percent Low Birth Weight	6.7%
Mean Age of Mother	27
No Prenatal Care	1.0%

There were 11,890 births to South Dakota residents in 2018, for a crude birth rate of 13.5 per 1,000 South Dakota resident population.

Resident births decreased by two percent from 2017 when there were 12,128 births. In 2018, 50.5 percent of the babies born were male and 49.5 percent were female. Racially, white, non-Hispanic births were 50.4 percent male and 49.6 percent female; American Indian, non-Hispanic births were 50.1 percent male, 49.9 percent female.

The low birth weight rate per 1,000 live births decreased from 69.3 in 2017 to 66.6 in 2018. This was a 3.9 percent decrease from the 2017 low birth weight rate.

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, 2004-2018

Year	United States		South Dakota	
	Number	Crude Rate	Number	Crude Rate
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
2004	4,112,052	14.0	11,339	14.6

Note: 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 2009. In 2018, the number of births to white, non-Hispanics and American Indian, non-Hispanics decreased by 1.5 percent and 8.9 percent, respectively. The number of births to black, non-Hispanics, Hispanics, and multi-racial, non-Hispanics increased by 3.0 percent, 5.6 percent, and 2.6 percent, respectively.

Table 8
South Dakota Resident Live Births by Mother's Race, 2009-2018

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	%	
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	-
2009	11,930	8,961	75.2	1,826	15.3	474	4.0	215	1.8	308	2.6	137	1.1	9	-

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, 2009-2018

Year of Birth	Twins	Triplets or More
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
2009	144	4

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

Marital Status

In 2018, the majority of women who gave birth, 63.9 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 85.0 percent in 2018.

Table 10
South Dakota Resident Births Out of Wedlock by Year of Birth and Race, 2009-2018

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	%
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
2009	4,573	38.3	2,449	27.3	1,491	81.7	277	58.4	112	52.1	215	69.8	27	19.7

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 2018 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 2018, 6.7 percent (792) were low weight births. When looking at race, 6.1 percent of white, non-

Hispanic babies, 7.5 percent of American Indian, non-Hispanic babies, 8.3 percent of black, non-Hispanic babies, 7.6 percent Hispanic babies, and 8.4 multi-racial, non-Hispanic babies were low birth weight in 2018. 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, 2018

Birth Weight (in Grams)	Race 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	%
<2,000	267	2.2	169	2.0	42	2.6	16	2.4	13	3.2	20	4.7	6	2.6
2,000-2,499	525	4.4	347	4.1	82	5.0	34	5.2	21	5.1	16	3.7	24	10.3
2,500-2,999	1,958	16.5	1,348	15.9	251	15.3	125	19.0	90	22	79	18.5	59	25.3
3,000-3,499	4,413	37.1	3,156	37.2	580	35.3	256	38.8	160	39	163	38.1	87	37.3
3,500-3,999	3,597	30.3	2,640	31.1	507	30.8	180	27.3	99	24.1	117	27.3	47	20.2
4,000-4,499	1,004	8.4	742	8.7	155	9.4	43	6.5	23	5.6	32	7.5	9	3.9
4,500+	123	1.0	84	1.0	28	1.7	5	0.8	4	1	1	0.2	1	0.4
Not Stated	3	-	1	-	2	-	0	-	0	-	0	-	0	-
Total	11,890	100	8,487	100	1,647	100	659	100	410	100	428	100	233	100
Median birth weight in grams	3,370		3,380		3,402		3,290		3,235		3,330		3,145	
Mean birth weight in grams	3,332		3,347		3,358		3,261		3,225		3,263		3,118	
Modal birth weight in grams	3,430		3,670		3,430		3,100		3,380		3,330		2,750	

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, 2009-2018

Year	Total Births		< 2500 Grams		2500 + Grams		Not Stated	
	Num	%	Num	%	Num	%	Num	%
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	-
2009	11,930	100	700	5.9	11,228	94.1	2	-

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

Table 13, below, compares the low birth weight babies by race of mother. In 2018, there were 516 (6.1%) low birth weight babies born to white, non-Hispanic women. For American Indian, non-Hispanic women there were 124 (7.5%) low birth weight

babies and for black, non-Hispanic women there were 34 (8.3%) low birth weight babies. From 2017 to 2018, there was a decrease 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, 2009-2018

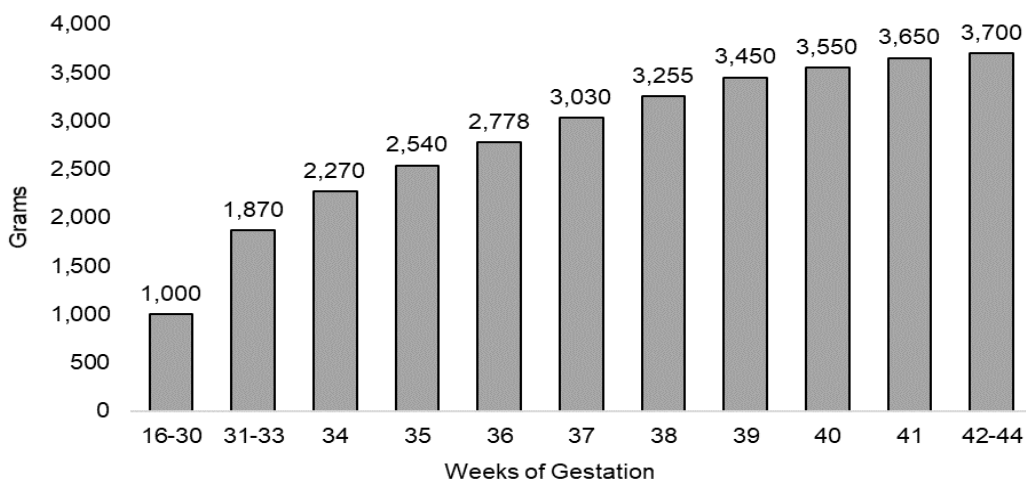
Year	Mother's Race						
	Total	White, non-Hispanic	American Indian, non-Hispanic	Hispanic	Black, non-Hispanic	Multi-racial, non-Hispanic	Other
2018	6.7%	6.1%	7.5%	7.6%	8.3%	8.4%	12.9%
2017	6.9%	6.7%	7.9%	5.6%	10.5%	6.0%	10.9%
2016	6.8%	6.2%	8.0%	6.0%	10.3%	7.6%	7.7%
2015	6.2%	5.7%	7.3%	5.5%	6.0%	8.7%	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%
2009	5.9%	5.6%	5.8%	5.9%	14.0%	6.2%	9.5%

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

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

Overall, the longer the weeks of gestation the higher the median birth weight.

Figure 2
South Dakota Resident Live Births by Gestation and Median Birth Weight, 2014-2018



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 2018, the majority of births, 62.7 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, 2009-2018

Year	Total		<35		35-36		37-39		40+		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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	-
2009	11,930	100	335	2.8	608	5.1	6,787	57.0	4,177	35.1	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 2018, 17.2 percent stated

they smoked cigarettes three months prior to pregnancy, and 11.8 percent smoked cigarettes anytime during their pregnancy.

Table 15
South Dakota Resident Live Births by Cigarette Smoking Status, 2009-2018

Year	Mother's Cigarette Smoking Status				
	Three Months Prior to Pregnancy	First Trimester	Second Trimester	Third Trimester	Anytime During Pregnancy
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%
2009	26.2%	17.7%	13.7%	13.0%	18.5%

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 2009.

The largest percentage of women stated they never quit smoking cigarettes during their pregnancy with 44.8 percent in 2018.

Table 16

South Dakota Resident Births to Mothers Who Smoked Cigarettes Prior to Pregnancy by Cigarette Smoking Status During Pregnancy, 2009-2018

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
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%
2009	31.0%	15.0%	5.0%	46.0%	3.0%

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 2018 at 33.8 percent.

The median ages for white, non-Hispanic and black, non-Hispanic were 29 while the three other racial groups were 26.

Table 17
South Dakota Resident Live Births by Mother's Age and Race, 2018

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	%
Less than 18	166	1.4	38	0.4	88	5.3	18	2.7	7	1.7	12	2.8	3	1.3
18-19 Years	403	3.4	174	2.1	141	8.6	40	6.1	14	3.4	25	5.8	9	3.9
20-24 Years	2,329	19.6	1,421	16.7	465	28.2	186	28.2	75	18.3	138	32.2	39	16.7
25-29 Years	4,016	33.8	2,941	34.7	502	30.5	216	32.8	130	31.7	145	33.9	71	30.5
30-34 Years	3,435	28.9	2,739	32.3	297	18.0	126	19.1	116	28.3	74	17.3	79	33.9
35-39 Years	1,339	11.2	1,030	12.1	127	7.7	60	9.1	51	12.4	32	7.5	30	12.9
40 & over	205	1.7	144	1.7	27	1.6	13	2.0	17	4.1	2	0.5	2	0.9
Total	11,890	100	8,487	100	1,647	100	659	100	410	100	428	100	233	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, 2009-2018

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	%
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
2009	11,930	100	313	2.6	789	6.6	3,151	26.4	3,903	32.7	2,599	21.8	960	8.0	215	1.8

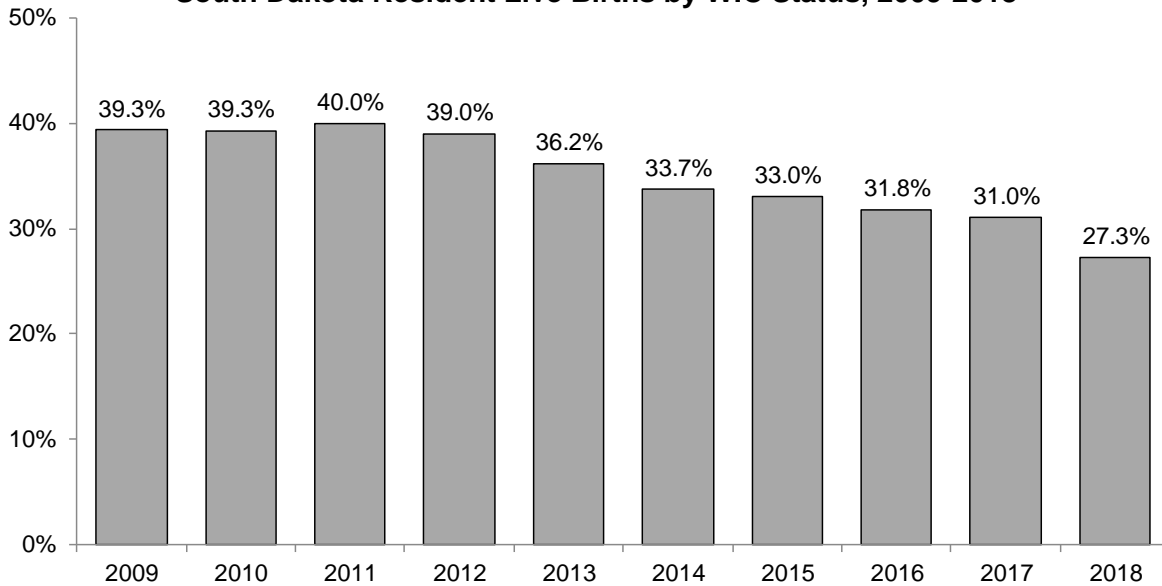
Note: Failure of ages to add to total births is due to mother's age not stated.

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 2018, 27.3 percent of mothers were on WIC during their pregnancy.

Figure 3
South Dakota Resident Live Births by WIC Status, 2009-2018

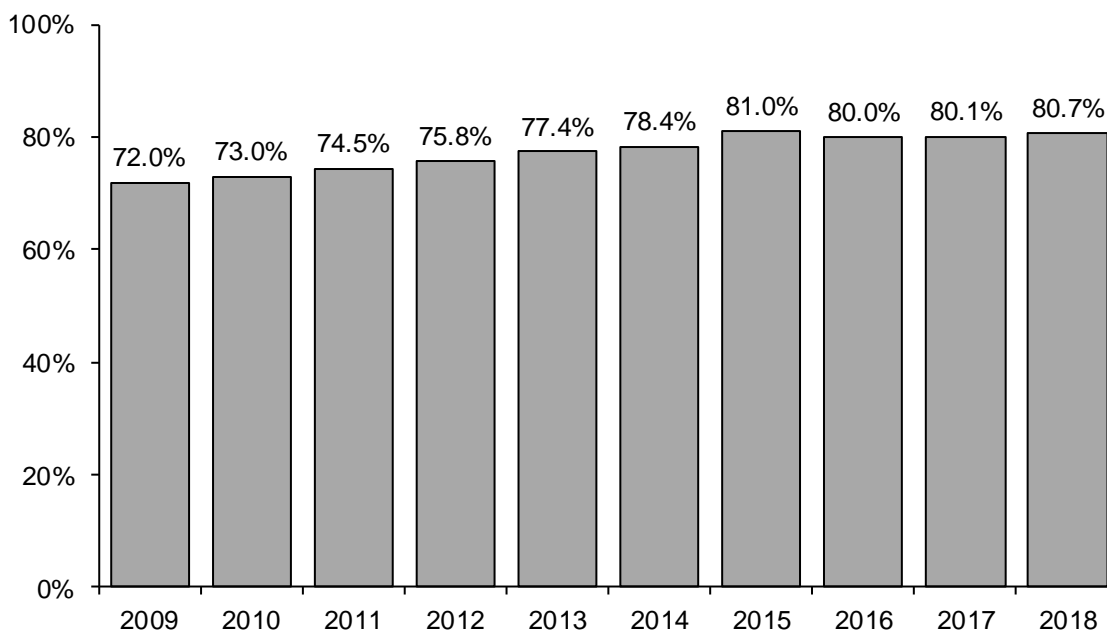


Source: South Dakota Department of Health, Office of Health Statistics

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 increased slightly from 80.1 percent in 2017 to 80.7 percent in 2018.

Figure 4
South Dakota Resident Live Births by Breastfeeding Status at Time of Discharge, 2009-2018



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 2009 to 2018. In 2018, the teen birth rate was 9.9, up from the 2017 rate of 9.1

When looking at race, the white, non-Hispanic teen birth rate was 3.1 compared to a teen birth rate of 40.2 for American Indian, non-Hispanics and 21.3 for Hispanics in 2018.

Table 19
South Dakota Resident Teen Births and Rates by Year and Mother's Race, 2009-2018

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
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
2009	303	18.5	132	10.3	110	48.4	24	43.6	14	56.9	22	56.7	1	8.1

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

We have changed how initiation of prenatal care is calculated. We have done this in order to match the manner used by the National Center for Health Statistics and, consequently, make our data comparable to national data. This change is reflected in all prenatal care data in this report. Therefore, even though prenatal care data in this report is not comparable to past reports, all prenatal care data for years prior to 2018 in this report are comparable due to our recalculating of those older years.

Just over three-fourths (75.4%) of mothers started care in the first trimester – 82.5 percent of white, non-Hispanic mothers, 49.0 percent of American Indian, non-Hispanic mothers, 61.7 percent of black, non-Hispanic mothers, and 63.1 percent of Hispanic mothers. Overall, 1.0 percent failed to obtain prenatal care at all, however this includes 4.9 percent of American Indian, non-Hispanic mothers and 1.7 percent of multi-racial, non-Hispanic mothers.

Table 20, below, shows the number of South Dakota resident live births by when the mothers started prenatal care in 2018.

Table 20
South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Race, 2018

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	8,864	75.4	6,972	82.5	772	49.0	408	63.1	251	61.7	292	69.2	152	66.4
Second	2,212	18.8	1,233	14.6	504	32.0	178	27.5	119	29.2	101	23.9	69	30.1
Third	561	4.8	213	2.5	224	14.2	57	8.8	36	8.8	22	5.2	8	3.5
None	119	1.0	30	0.4	77	4.9	4	0.6	1	0.2	7	1.7	0	0.0
Not Stated	134	-	39	-	70	-	12	-	3	-	6	-	4	-
Total	11,890	100	8,487	100	1,647	100	659	100	410	100	428	100	233	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, 2009-2018**

Year	Total		First		Second		Third		No Prenatal Care		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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	-
2009	11,930	100	8,093	69.0	2,832	24.1	714	6.1	88	0.8	203	-

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 2018, the majority of births, 60.6

percent, were paid by private insurance. The second highest payment type was Medicaid with 29.6 percent.

**Table 22
South Dakota Resident Live Births by Payment Type, 2014-2018**

Payment Type	Year									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Private Insurance	6,975	57.1	7,259	59.0	7,431	60.7	7,160	59.3	7,183	60.6
Medicaid	3,906	32.0	3,831	31.2	3,806	31.1	3,867	32.1	3,513	29.6
Champus/Tricare	396	3.2	348	2.8	377	3.1	369	3.1	384	3.2
Self-Pay	359	2.9	379	3.1	348	2.8	360	3.0	395	3.3
Indian Health Service	408	3.3	386	3.1	204	1.7	246	2.0	311	2.6
Other Government	82	0.7	42	0.3	36	0.3	33	0.3	39	0.3
Other	82	0.7	48	0.4	34	0.3	30	0.2	30	0.3
Not Stated	73	-	30	-	34	-	63	-	35	-

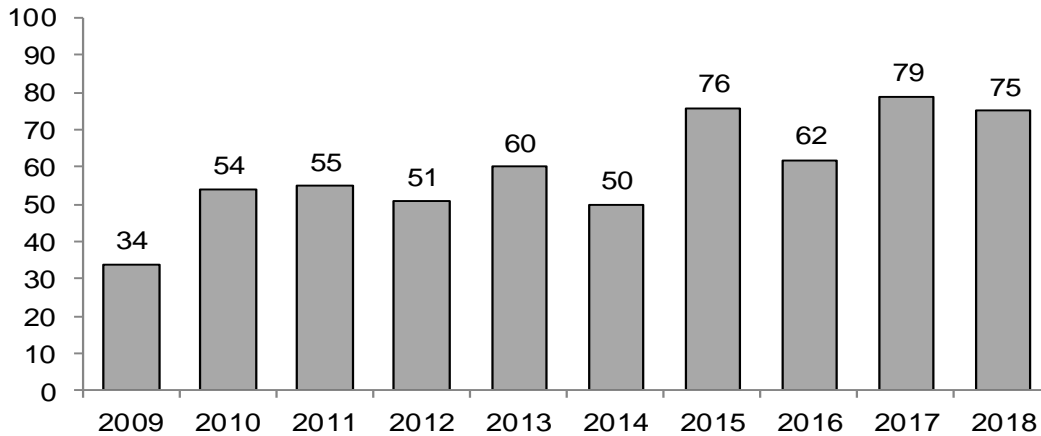
Source: South Dakota Department of Health, Office of Health Statistics

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 2018, intended home births constituted less than one percent (0.6 percent) of South Dakota resident births.

Figure 5
South Dakota Resident Intended Home Births, 2009-2018



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, 2009-2018

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	%
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	-
2009	11,930	100	10,603	89.1	418	3.5	759	6.4	50	0.4	12	0.1	62	0.5	26	-

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, 95.6 percent in 2018, had no infections present or treated.

For all five years, chlamydia was the main infection present and/or treated during pregnancy. In 2018, chlamydia infections were present or treated in 2.2 percent of births.

Table 24
South Dakota Resident Live Births by Infections Present and/or Treated
During This Pregnancy and Year of Birth, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	299	2.4	324	2.6	312	2.5	306	2.5	267	2.2
Genital herpes*	165	1.3	178	1.4	190	1.5	166	1.4	151	1.3
Hepatitis C	22	0.2	43	0.3	32	0.3	37	0.3	68	0.6
Gonorrhea	38	0.3	54	0.4	52	0.4	64	0.5	66	0.6
Hepatitis B	16	0.1	19	0.2	22	0.2	23	0.2	23	0.2
Syphilis	12	0.1	5	0.0	6	0.0	15	0.1	9	0.1
Cytomegalovirus (CMV)	5	0.0	4	0.0	4	0.0	5	0.0	2	0.0
Toxoplasmosis	3	0.0	5	0.0	1	0.0	1	0.0	1	0.0
Rubella	4	0.0	0	0.0	2	0.0	2	0.0	0	0.0
No infections	11,710	95.6	11,712	95.3	11,688	95.3	11,565	95.4	11,344	95.6

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, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Mother had a previous cesarean delivery	1,655	13.5	1,864	15.2	1,739	14.2	1,680	13.9	1,677	14.1
Diabetes, gestational	904	7.4	962	7.8	954	7.8	951	7.8	991	8.3
Hypertension, gestational	578	4.7	619	5.1	724	5.9	749	6.2	803	6.7
Other previous poor pregnancy outcomes	519	4.2	481	3.9	573	4.7	552	4.6	537	4.6
Previous preterm births	322	2.6	370	3.0	403	3.3	381	3.2	460	3.9
Hypertension, pre-pregnancy	158	1.3	169	1.3	154	1.3	155	1.3	167	1.4
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	181	1.5	132	1.1	177	1.5	178	1.5	152	1.3
Diabetes, pre-existing	113	0.9	104	0.8	119	1.0	141	1.2	118	1.0
Hypertension, eclampsia	36	0.3	36	0.3	72	0.6	75	0.6	74	0.6
Assisted reproductive technology	45	0.4	40	0.3	70	0.6	72	0.6	67	0.6
No medical risk factors for this pregnancy	8,521	69.6	8,299	68.0	8,204	67.3	8,125	67.5	7,755	65.8

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 2018, 2.0 percent of South Dakota resident infants received five-minute Apgar scores less than seven.

Considering race, 1.9 percent of white, non-Hispanic infants, 1.8 percent of American Indian, non-Hispanic infants, 1.7 percent of

Hispanic infants, 2.4 percent of black, non-Hispanic infants, and 2.6 percent multi-racial, non-Hispanic infants received a five-minute Apgar score less than seven in 2018.

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 2018 were epidural or spinal anesthesia with 55.4 percent,

augmentation of labor with 33.0 percent, induction of labor with 32.3 percent, and antibiotics during labor with 27.8 percent. Overall characteristics of labor and delivery were present in 81.9 percent of resident births in 2018.

Table 26
South Dakota Resident Live Births by Characteristics of Labor and Delivery and Year of Birth, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Epidural or spinal anesthesia	6,577	53.6	6,594	53.5	6,861	55.9	6,730	55.4	6,589	55.4
Augmentation of labor	3,693	30.1	3,712	30.2	3,754	30.7	3,755	31.0	3,904	33.0
Induction of labor*	3,158	25.7	3,219	26.1	3,553	28.9	3,680	30.3	3,851	32.3
Antibiotics during labor	3,420	27.9	3,394	27.6	3,334	27.2	3,383	27.9	3,298	27.8
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	206	1.7	369	3.0	643	5.3	769	6.3	873	7.4
Meconium staining of the amniotic fluid	1,009	8.2	1,125	9.2	835	6.8	1,023	8.5	829	7.0
Fetal intolerance	449	3.7	583	4.8	686	5.6	660	5.5	667	5.7
Non-vertex presentation	490	4.0	500	4.1	568	4.7	545	4.5	551	4.7
Chorioamnionitis diagnosed during labor	132	1.1	158	1.3	144	1.2	149	1.2	136	1.1
None of the above	2,569	20.9	2,487	20.4	2,410	19.8	2,316	19.2	2,134	18.1

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, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Tocolysis*	143	1.2	160	1.3	118	1.0	141	1.2	99	0.8
Cervical cerclage	34	0.3	26	0.2	40	0.3	42	0.3	40	0.3
External cephalic version-failed	29	0.2	36	0.3	38	0.3	33	0.3	36	0.3
External cephalic version-successful	17	0.1	26	0.2	40	0.3	28	0.2	24	0.2
No obstetric procedures	12,035	97.3	12,052	98.0	12,040	98.1	11,894	98.1	11,697	98.4

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 2018 associated with onset of labor for

mothers was precipitous labor (< 3 hours). In 2018, 17.5 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, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Precipitous labor (< 3 hours)*	664	5.4	653	5.3	676	5.5	812	6.7	1,336	11.2
Prolonged labor (20 + hours)	508	4.1	459	3.7	469	3.8	359	3.0	410	3.4
Premature rupture of membranes	274	2.2	365	3.0	422	3.4	458	3.8	400	3.4
None of the above	10,857	88.4	10,852	88.2	10,751	87.6	10,543	87.0	9,801	82.5

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 29, below, illustrates the maternal complications for the past five years. The highest maternal complication in 2018 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 2018.

Table 29
South Dakota Resident Live Births by Maternal Complications and Year of Birth, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Third or fourth degree perineal laceration	112	0.9	115	0.9	119	1.0	111	0.9	102	0.9
Maternal transfusion	55	0.4	42	0.3	43	0.4	48	0.4	60	0.5
Unplanned operating procedure following delivery	40	0.3	45	0.4	38	0.3	38	0.3	49	0.4
Unplanned hysterectomy	6	0.0	7	0.1	3	0.0	4	0.0	12	0.1
Admitted to intensive care	10	0.1	10	0.1	6	0.0	7	0.1	11	0.1
Ruptured uterus	4	0.0	4	0.0	3	0.0	7	0.1	6	0.1
None of the above	12,073	98.4	12,112	98.3	12,079	98.5	11,930	98.4	11,678	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, 2014-2018

	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Vaginal (Total)	9,242	75.3	9,157	74.3	9,162	74.7	9,155	75.5	8,964	75.4
Vaginal with no previous C-section	8,912	72.6	8,791	71.3	8,820	71.9	8,787	72.5	8,593	72.3
Vaginal after previous C-section	313	2.5	338	2.7	334	2.7	363	3.0	360	3.0
Vaginal (unknown previous types)	17	0.1	28	0.2	8	0.1	5	0.0	11	0.1
C-Section (Total)	3,039	24.7	3,166	25.7	3,108	25.3	2,973	24.5	2,926	24.6
Primary C-section	1,694	13.8	1,637	13.3	1,700	13.9	1,656	13.7	1,608	13.5
Repeat C-section	1,342	10.9	1,526	12.4	1,405	11.5	1,317	10.9	1,317	11.1
C-section (unknown previous types)	3	-	3	-	3	-	0	-	1	-

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, 22.3 percent were breech while 74.8 percent were cephalic.

Table 31
South Dakota Resident Births by Method of Delivery and Fetal Presentation, 2018

	Total		Cephalic		Breech		Other	
	Num	%	Num	%	Num	%	Num	%
Total	11,890	100	11,306	95.1	480	4.0	104	0.9
Vaginal (Total)	8,964	100	8,891	99.2	35	0.4	38	0.4
Vaginal with no previous C-section	8,593	100	8,526	99.2	33	0.4	34	0.4
Vaginal after previous C-section	360	100	354	98.3	2	0.6	4	1.1
Vaginal (unknown previous types)	11	100	11	100	0	-	0	-
C-Section (Total)	2,926	100	2,415	82.5	445	15.2	66	2.3
Primary C-section	1,608	100	1,203	74.8	359	22.3	46	2.9
Repeat C-section	1,317	100	1,212	92.0	86	6.5	19	1.4
C-section (unknown previous types)	1	100	0	0	0	-	1	100

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 2018, 11.9 percent of South Dakota resident live birth certificates reported abnormal conditions of the

newborn. Overall, NICU admission was the most frequently reported condition in 2018 followed by assisted ventilation required immediately following delivery.

Table 32

South Dakota Resident Live Births by Abnormal Conditions of Newborn and Year of Birth, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
NICU admission	1,245	10.1	1,224	9.9	1,241	10.1	1,243	10.3	1,169	9.8
Assisted ventilation required immediately following delivery	806	6.6	797	6.5	802	6.5	804	6.6	684	5.8
Antibiotics received by the newborn for suspected neonatal sepsis	621	5.1	628	5.1	596	4.9	580	4.8	495	4.2
Assisted ventilation required for more than 6 hrs	258	2.1	281	2.3	296	2.4	315	2.6	280	2.4
Newborn given surfactant replacement therapy	86	0.7	87	0.7	92	0.7	95	0.8	62	0.5
Significant birth injury	13	0.1	13	0.1	12	0.1	13	0.1	18	0.2
Seizure or serious neurologic dysfunction	11	0.1	9	0.1	11	0.1	9	0.1	3	0.0
None of the above	10,650	86.7	10,724	87.0	10,666	86.9	10,520	86.8	10,472	88.1

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 33, below, displays congenital anomalies for the past five years. In 2018 the most prevalent congenital anomaly was

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

Table 33

South Dakota Resident Births with Reported Congenital Anomalies and Year of Birth, 2014-2018

	Year of Birth									
	2014		2015		2016		2017		2018	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chromosomal disorder	13	0.1	20	0.2	21	0.2	21	0.2	21	0.2
Cleft palate alone	13	0.1	2	0.0	12	0.1	13	0.1	14	0.1
Cleft lip with or without a cleft palate	14	0.1	11	0.1	25	0.2	11	0.1	14	0.1
Down syndrome (Trisomy 21)	17	0.1	8	0.1	15	0.1	20	0.2	13	0.1
Hypospadias	10	0.1	6	0.0	17	0.1	12	0.1	11	0.1
Cyanotic congenital heart disease	16	0.1	8	0.1	15	0.1	13	0.1	9	0.1
Other craniofacial abnormality	16	0.1	13	0.1	17	0.1	10	0.1	8	0.1
Meningomyelocele/Spina bifida	3	0.0	5	0.0	6	0.0	5	0.0	6	0.1
Gastroschisis	4	0.0	5	0.0	10	0.1	4	0.0	5	0.0
Limb reduction defect	4	0.0	6	0.0	8	0.1	4	0.0	3	0.0
Omphalacele	2	0.0	2	0.0	1	0.0	2	0.0	2	0.0
Anencephaly	2	0.0	0	0.0	1	0.0	0	0.0	2	0.0
Congenital diaphragmatic hernia	5	0.0	5	0.0	1	0.0	3	0.0	1	0.0
At least one anomaly	97	0.8	79	0.6	121	1.0	96	0.8	94	0.8
None of the above	12,178	99.2	12,236	99.4	12,149	99.0	12,029	99.2	11,793	99.2

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

