

Natality

An Overview: 2017

Total Resident Live Births	12,128
Crude Birth Rate per 1,000 Population	13.9
Median Live Birth Weight (Grams)	3,374
Low Weight Births (Less than 2,500 grams)	841
Percent Low Birth Weight	6.9%
Mean Age of Mother	28
No Prenatal Care	1.1%

Resident births decreased by less than one percent from 2016 when there were 12,270 births. In 2017, 50.4 percent of the babies born were male and 49.6 percent were female. Racially, white births were 50.5 percent male and 49.5 percent female; American Indian births were 50.1 percent male, 49.9 percent female.

The low birth weight rate per 1,000 live births increased from 67.6 in 2016 to 69.3 in 2017. This was a 2.5 percent increase from the 2016 low birth weight rate.

There were 12,128 births to South Dakota residents in 2017, for a crude birth rate of 13.9 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, 2003-2017

Year	United States		South Dakota	
	Number	Crude Rate	Number	Crude Rate
2017	*3,853,472	*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
2003	4,089,950	14.1	11,022	14.4

Note: *U.S. 2017 data are provisional.
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 now categorized in the following manner:

Single-race white
 Single-race American Indian
 Single-race black
 Two or more races

The remaining categories (Single-race Asian, and Single-race Pacific Islander) 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 2008. In 2017, the number of births to whites decreased by 2.5 percent, the number of births to American Indians increased by 0.7 percent, the number of births to blacks increased 11.4 percent and the number of births to two or more races increased by 10.6 percent.

Table 8
South Dakota Resident Live Births by Mother's Race, 2008-2017

Births		White		American Indian		Black		Two or More Races		Other		Not Stated	
Year	Num	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2017	12,128	9,002	74.2	1,859	15.5	410	3.4	440	3.7	265	2.2	152	-
2016	12,270	9,230	75.2	1,846	15.0	368	3.0	398	3.2	279	2.3	149	-
2015	12,323	9,065	75.2	1,988	16.5	270	2.2	442	3.7	287	2.3	271	-
2014	12,281	9,175	76.4	1,889	15.7	299	2.5	412	3.4	236	1.9	270	-
2013	12,243	9,142	76.2	1,956	16.3	283	2.4	365	3.0	258	2.1	239	-
2012	12,092	9,111	76.5	1,936	16.3	278	2.3	399	3.3	187	1.5	181	-
2011	11,834	8,921	76.5	1,953	16.8	240	2.1	340	2.9	204	1.7	176	-
2010	11,795	9,245	78.5	1,835	15.6	228	1.9	326	2.8	146	1.2	15	-
2009	11,930	9,330	78.3	1,885	15.8	218	1.8	341	2.9	141	1.2	15	-
2008	12,074	9,432	78.2	1,992	16.5	185	1.5	302	2.5	145	1.2	18	-

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, 2008-2017

Year of Birth	Twins	Triplets or More
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
2008	208	3

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

Marital Status

In 2017, the majority of women who gave birth, 62.8 percent, were married as displayed in Table 10 below. When looking at the data by race, American

Indian women have consistently had the highest percent of births out of wedlock with 83.9 percent in 2017.

Table 10
South Dakota Resident Births Out of Wedlock by Year of Birth and Race, 2008-2017

Year	All Races		White		American Indian		Black		Two or More Races		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2017	4,506	37.2	2,351	26.1	1,559	83.9	179	43.7	289	65.7	52	19.6
2016	4,519	36.8	2,418	26.2	1,566	84.9	163	44.3	251	63.1	59	21.1
2015	4,571	37.1	2,336	25.8	1,658	83.6	108	40.0	281	63.6	48	16.7
2014	4,623	37.7	2,440	26.6	1,583	84.1	138	46.2	274	66.5	54	22.9
2013	4,669	38.1	2,483	27.2	1,653	84.5	125	44.2	245	67.1	42	16.3
2012	4,671	38.6	2,530	27.8	1,631	84.2	131	47.2	251	62.9	36	19.3
2011	4,597	38.8	2,461	27.6	1,662	85.1	109	45.4	226	66.5	48	23.5
2010	4,427	37.5	2,570	27.8	1,522	82.9	91	39.9	205	62.9	34	23.3
2009	4,573	38.3	2,644	28.3	1,543	81.9	115	52.8	238	69.8	28	19.9
2008	4,633	38.4	2,647	28.1	1,650	82.8	93	50.3	195	64.6	34	23.4

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 2017 the majority of births fell into the 3,000 to 3,499 gram range. This is consistent with data from the past several years. There were 841 low weight births or 6.9 percent of all South Dakota resident live births in 2017. When looking at race, 6.7 percent of

white babies, 7.8 percent of American Indian babies, and 9.0 percent of black babies were low birth weight in 2017. In 2016, white, American Indian, and black low birth weight births were 6.2, 8.1, and 10.3 percent, respectively. 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, 2017

Birth Weight (in Grams)	Total		Race of Mother									
			White		American Indian		Black		Two or More Races		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
<2,000	313	2.6	218	2.4	61	3.3	17	4.1	6	1.4	8	3.0
2,000-2,499	528	4.4	381	4.2	84	4.5	20	4.9	19	4.3	21	7.9
2,500-2,999	1,908	15.7	1,367	15.2	267	14.4	80	19.5	88	20.0	73	27.5
3,000-3,499	4,569	37.7	3,439	38.2	642	34.6	166	40.5	151	34.3	102	38.5
3,500-3,999	3,620	29.9	2,730	30.3	572	30.8	102	24.9	131	29.8	51	19.2
4,000-4,499	1,006	8.3	752	8.4	177	9.5	21	5.1	40	9.1	9	3.4
4,500+	183	1.5	115	1.3	55	3.0	4	1.0	5	1.1	1	0.4
Not Stated	1	-	0	-	1	-	0	-	0	-	0	-
Total	12,128	100	9,002	100	1,859	100	410	100	440	100	265	100
Median birth weight in grams	3,374		3,380		3,420		3,238		3,355		3,150	
Mean birth weight in grams	3,333		3,339		3,369		3,196		3,337		3,113	
Modal birth weight in grams	3,430		3,220		3,430		3,180		2,920		3,070	

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, 2008-2017

Year	Total Births		< 2500 Grams		2500 + Grams		Not Stated	
	Num	%	Num	%	Num	%	Num	%
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	-
2008	12,074	100	783	6.5	11,283	93.5	8	-

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

Table 13, below, compares the low birth weight babies by race of mother. In 2017, there were 599 (6.7%) low birth weight babies born to white women. For American Indian women there were 145 (7.8%) low birth weight babies and for black women

there were 37 (9.0%) low birth weight babies. In 2017, there was an 8.1 percent increase in white low birth weight babies, a 3.7 percent decrease in American Indian low birth weight babies, and a 12.6 percent decrease in black low birth weight babies.

Table 13
South Dakota Resident Low Birth Weight Births by Race of Mother, 2008-2017

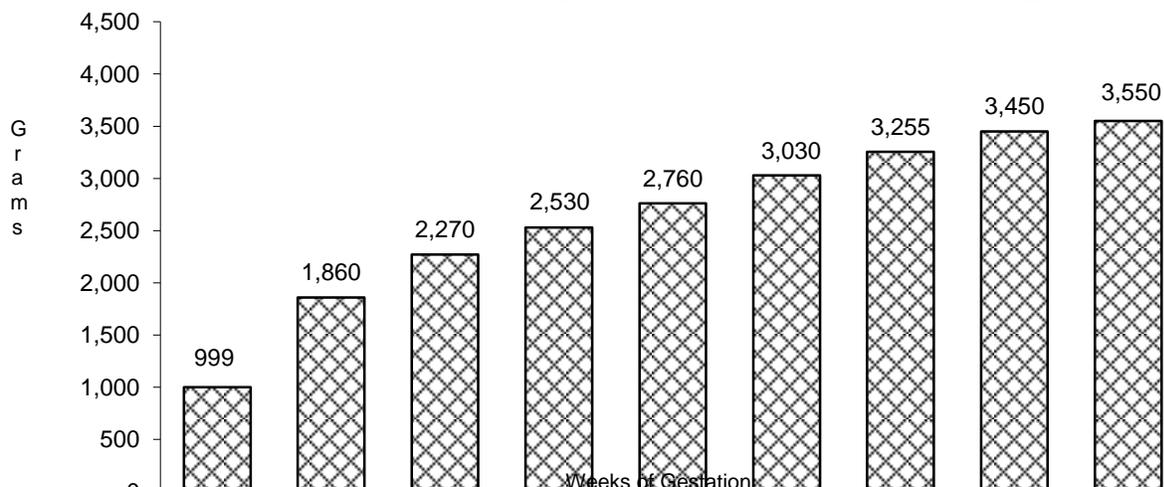
Year	Mother's Race					
	Total	White	American Indian	Black	Two or More Races	Other
2017	6.9%	6.7%	7.8%	9.0%	5.7%	10.9%
2016	6.8%	6.2%	8.1%	10.3%	7.5%	7.9%
2015	6.2%	5.7%	7.2%	5.9%	8.6%	8.7%
2014	6.6%	6.3%	7.0%	10.4%	6.3%	6.8%
2013	6.3%	5.9%	6.8%	8.1%	6.3%	8.9%
2012	6.2%	5.7%	7.8%	10.4%	6.5%	8.0%
2011	6.3%	5.8%	6.8%	12.5%	7.9%	10.3%
2010	6.9%	6.9%	6.1%	10.1%	6.7%	9.6%
2009	5.9%	5.6%	5.9%	13.8%	6.2%	9.2%
2008	6.5%	6.2%	6.7%	11.9%	7.0%	10.3%

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, 2013-2017



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 2017, the majority of births, 60.5 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, 2008-2017

Year	Total		<35		35-36		37-39		40+		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
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	-
2008	12,074	100	382	3.2	660	5.5	7,031	58.4	3,971	33.0	30	-

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

Tobacco Use

Table 15, below, displays the percent of mothers who smoked during the past 10 years. In 2017, 18.1 percent stated they

smoked three months prior to pregnancy, and 12.6 percent smoked anytime during their pregnancy.

Table 15
South Dakota Resident Live Births by Cigarette Smoking Status, 2008-2017

Year	Mother's Smoking Status				
	Three Months Prior to Pregnancy	First Trimester	Second Trimester	Third Trimester	Anytime During Pregnancy
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%
2008	25.9%	17.7%	14.0%	13.2%	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 prior to pregnancy by their smoking status during pregnancy since 2008.

The largest percentage of women stated they never quit smoking during their pregnancy with 45.8 percent in 2017.

Table 16
South Dakota Resident Births to Mothers Who Smoked Prior to Pregnancy by Smoking Status
During Pregnancy, 2008-2017

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
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%
2008	31.0%	13.4%	5.4%	47.2%	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 2017, at 33.2 percent. Women less than 20 years of age comprised 5.1 percent of the total resident births.

The median ages for white, American Indian, and black mothers were 29, 25, and 29 years of age, respectively. The modal ages for the same race groups were 28, 24, and 28 years of age, respectively.

Table 17
South Dakota Resident Live Births by Mother's Age and Race, 2017

Age of Mother	Total		Race of Mother									
			White		American Indian		Black		Two or More Races		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Less than 18	155	1.3	51	0.6	85	4.6	1	0.2	11	2.5	2	0.8
18-19 Years	467	3.9	242	2.7	162	8.7	11	2.7	30	6.8	7	2.6
20-24 Years	2,493	20.6	1,571	17.5	593	31.9	86	21.0	155	35.2	53	20.0
25-29 Years	4,023	33.2	3,090	34.3	546	29.4	126	30.7	140	31.8	82	30.9
30-34 Years	3,401	28.0	2,785	30.9	309	16.6	126	30.7	67	15.2	75	28.3
35-39 Years	1,342	11.1	1,078	12.0	131	7.0	45	11.0	32	7.3	37	14.0
40 & over	247	2.0	185	2.1	33	1.8	15	3.7	5	1.1	9	3.4
Total	12,128	100	9,002	100	1,859	100	410	100	440	100	265	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, 2008-2017

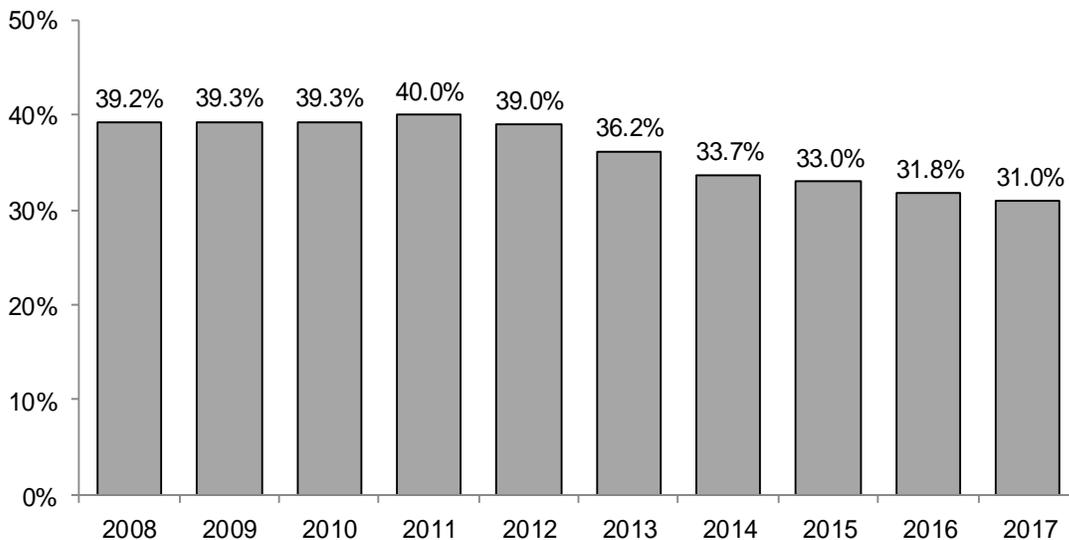
Year	Total Births		Age of Mother													
			< 18		18-19		20-24		25-29		30-34		35-39		40+	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2017	12,128	100	155	1.3	467	3.9	2,493	20.6	4,023	33.2	3,401	28.0	1,342	11.1	247	2.0
2016	12,270	100	208	1.7	481	3.9	2,615	21.3	4,166	34.0	3,312	27.0	1,255	10.2	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
2008	12,074	100	358	3.0	772	6.4	3,250	26.9	3,988	33.0	2,551	21.1	956	7.9	198	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 2017, 31.0 percent of mothers were on WIC during their pregnancy.

Figure 3
South Dakota Resident Live Births by WIC Status, 2008-2017

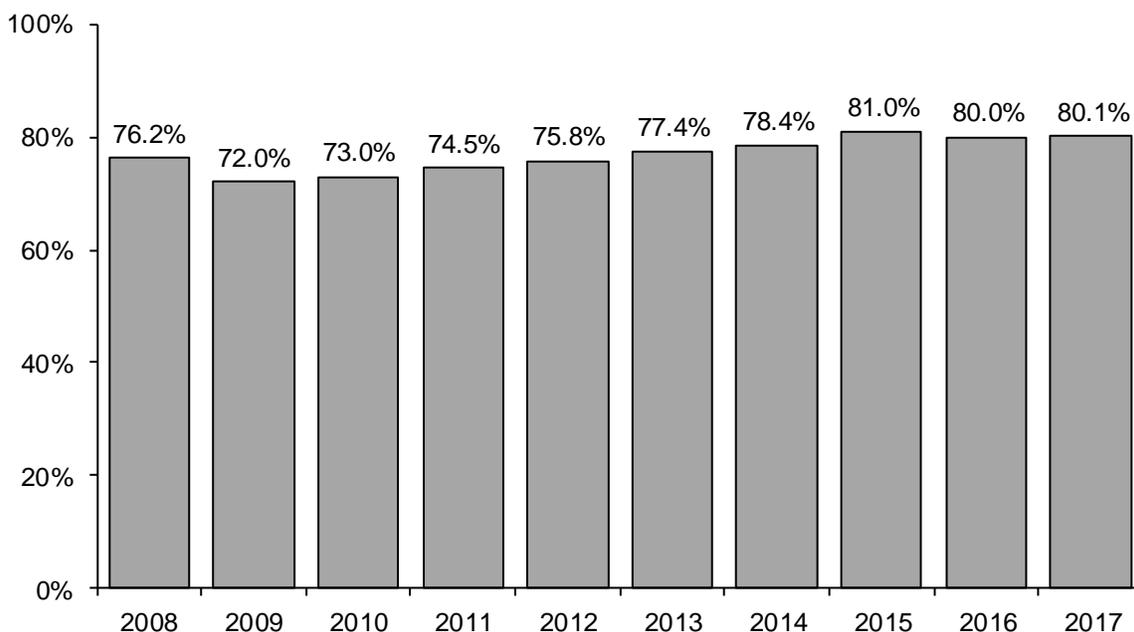


Source: South Dakota Department of Health, Office of Health Statistics

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 80.0 percent in 2016 to 80.1 percent in 2017.

Figure 4
South Dakota Resident Live Births by Breastfeeding Status at Time of Discharge, 2008-2017



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 2008 to 2017. In 2017, the teen birth rate was 9.1, down from the 2016 rate

of 12.5. When looking at race, the white teen birth rate was 3.8 compared to a teen birth rate of 35.0 for American Indians in 2017.

Table 19
South Dakota Resident Teen Births and Rates by Year and Mother's Race, 2008-2017

Year	Total		White		American Indian		Black		Two or More Races		Other	
	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate	Num	Rate
2017	147	9.1	48	3.8	80	35.0	1	3.0	11	16.5	2	6.6
2016	200	12.5	74	5.9	97	43.8	4	13.0	16	24.2	5	16.2
2015	153	9.5	52	4.1	78	34.9	2	6.8	10	15.0	4	13.2
2014	216	13.2	95	7.4	88	40.2	8	19.3	15	23.1	1	3.8
2013	214	13.2	84	6.5	96	43.3	5	13.8	19	31.0	2	9.0
2012	264	16.4	117	9.2	105	48.6	6	17.8	28	47.0	2	9.0
2011	245	15.2	103	8.0	112	52.2	4	15.5	19	32.9	1	4.5
2010	259	15.8	130	9.9	112	50.1	2	7.7	14	23.6	1	4.9
2009	303	18.5	147	11.1	114	48.9	15	56.4	26	64.0	1	8.0
2008	345	20.7	151	11.2	158	67.7	5	20.5	27	64.6	2	17.2

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 2017. Just over 72.0 percent of mothers started care in the first trimester – 78.5 percent of white mothers, 48.1 percent of American

Indian mothers, and 61.1 percent of black mothers. Overall, 1.1 percent failed to obtain prenatal care at all (0.5 percent of white mothers, 4.4 percent of American Indian mothers, and 0.5 percent of black mothers).

Table 20
South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Race, 2017

Trimester Prenatal Care Began	Total		Race of Mother									
			White		American Indian		Black		Two or More Races		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
First	8,632	72.2	7,007	78.5	853	48.1	248	61.1	285	66.3	147	55.9
Second	2,531	21.2	1,571	17.6	586	33.0	119	29.3	110	25.6	100	38.0
Third	657	5.5	301	3.4	258	14.5	37	9.1	31	7.2	16	6.1
None	129	1.1	45	0.5	78	4.4	2	0.5	4	0.9	0	0.0
Not Stated	179	-	78	-	84	-	4	-	10	-	2	-
Total	12,128	100	9,002	100	1,859	100	410	100	440	100	265	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, on the following page, shows the number of mothers who began prenatal care by trimester for the past 10 years.

The majority of mothers in all years began prenatal care in their first trimester.

Table 21
South Dakota Resident Live Births by Trimester Prenatal Care Began, 2008-2017

Year	Total		First		Second		Third		No Prenatal Care		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
2017	12,128	100	8,632	72.2	2,531	21.2	657	5.5	129	1.1	179	-
2016	12,270	100	8,812	72.7	2,566	21.2	647	5.3	98	0.8	147	-
2015	12,323	100	8,813	72.8	2,579	21.3	610	5.0	107	0.9	214	-
2014	12,281	100	8,725	72.2	2,611	21.6	653	5.4	98	0.8	194	-
2013	12,243	100	8,645	72.0	2,676	22.3	609	5.1	73	0.6	240	-
2012	12,092	100	8,332	70.5	2,756	23.3	650	5.5	78	0.7	276	-
2011	11,834	100	8,085	69.7	2,805	24.2	632	5.5	75	0.6	237	-
2010	11,795	100	8,208	70.9	2,684	23.2	594	5.1	79	0.7	230	-
2009	11,930	100	7,841	66.9	3,076	26.2	719	6.1	88	0.8	206	-
2008	12,074	100	8,179	68.9	2,948	24.8	641	5.4	96	0.8	210	-

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 2017 the majority of births, 59.3

percent, were paid by private insurance. The second highest payment type was Medicaid with 32.1 percent.

Table 22
South Dakota Resident Live Births by Payment Type, 2013-2017

Payment Type	Year									
	2013		2014		2015		2016		2017	
	Num	%								
Private Insurance	6,850	56.2	6,975	57.1	7,259	59.0	7,431	60.7	7,160	59.3
Medicaid	4,078	33.5	3,906	32.0	3,831	31.2	3,806	31.1	3,867	32.1
Champus/Tricare	334	2.7	396	3.2	348	2.8	377	3.1	369	3.1
Self-Pay	348	2.9	359	2.9	379	3.1	348	2.8	360	3.0
Indian Health Service	382	3.1	408	3.3	386	3.1	204	1.7	246	2.0
Other Government	113	0.9	82	0.7	42	0.3	36	0.3	33	0.3
Other	80	0.7	82	0.7	48	0.4	34	0.3	30	0.2
Not Stated	58	-	73	-	30	-	34	-	63	-

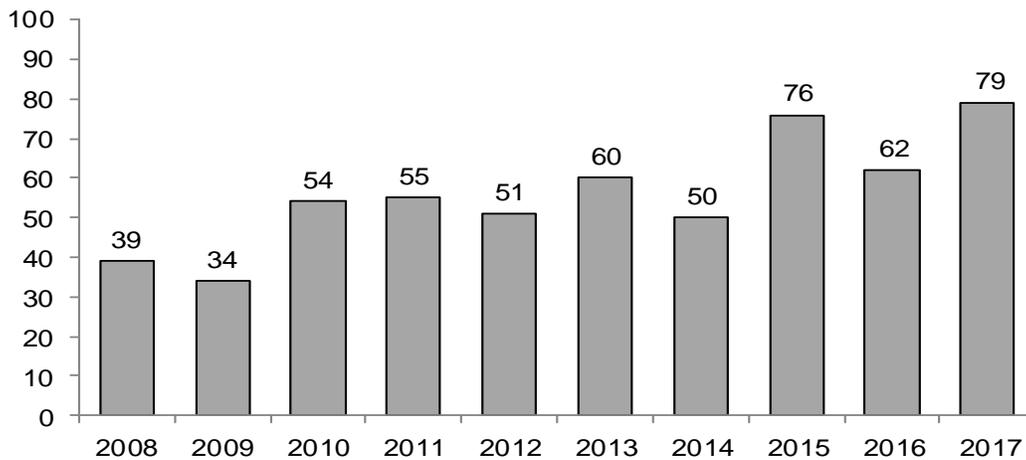
Source: South Dakota Department of Health, Office of Health Statistics

Home Births

Figure 5, below, displays the number of intended home births for South Dakota residents in the past 10 years. In 2017,

intended home births constituted less than one percent (0.7 percent) of South Dakota resident births.

Figure 5
South Dakota Resident Intended Home Births, 2008-2017



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, 2008-2017**

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	%
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	-
2008	12,074	100	10,717	88.8	449	3.7	770	6.4	68	0.6	8	0.1	54	0.4	5	-

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, below, displays resident births by infections present and/or treated during mother's pregnancy for the past five years. The majority of births, 95.4 percent in 2017, had no infections present or treated.

For all five years, chlamydia was the main infection present and/or treated during pregnancy. In 2017, chlamydia infections were present or treated in 2.5 percent of births.

**Table 24
South Dakota Resident Live Births by Infections Present and/or Treated During This Pregnancy and Year of Birth, 2013-2017**

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	310	2.5	299	2.4	324	2.6	312	2.5	306	2.5
Genital herpes*	156	1.3	165	1.3	178	1.4	190	1.5	166	1.4
Gonorrhea	38	0.3	38	0.3	54	0.4	52	0.4	64	0.5
Hepatitis C	19	0.2	22	0.2	43	0.3	32	0.3	37	0.3
Hepatitis B	15	0.1	16	0.1	19	0.2	22	0.2	23	0.2
Syphilis	4	0.0	12	0.1	5	0.0	6	0.0	15	0.1
Cytomegalovirus (CMV)	2	0.0	5	0.0	4	0.0	4	0.0	5	0.0
Rubella	5	0.0	4	0.0	0	0.0	2	0.0	2	0.0
Toxoplasmosis	0	0.0	3	0.0	5	0.0	1	0.0	1	0.0
No infections	11,707	95.8	11,710	95.6	11,712	95.3	11,688	95.3	11,565	95.4

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 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, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Mother had a previous cesarean delivery	1,673	13.7	1,655	13.5	1,864	15.2	1,739	14.2	1,680	13.9
Diabetes, gestational	775	6.3	904	7.4	962	7.8	954	7.8	951	7.8
Hypertension, gestational	493	4.0	578	4.7	619	5.1	724	5.9	749	6.2
Other previous poor pregnancy outcomes	438	3.6	519	4.2	481	3.9	573	4.7	552	4.6
Previous preterm births	370	3.0	322	2.6	370	3.0	403	3.3	381	3.2
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	143	1.2	181	1.5	132	1.1	177	1.5	178	1.5
Hypertension, pre-pregnancy*	169	1.4	158	1.3	169	1.3	154	1.3	155	1.3
Diabetes, pre-existing	109	0.9	113	0.9	104	0.8	119	1.0	141	1.2
Hypertension, eclampsia	37	0.3	36	0.3	36	0.3	72	0.6	75	0.6
Assisted reproductive technology	53	0.4	45	0.4	40	0.3	70	0.6	72	0.6
No medical risk factors for this pregnancy	8,727	71.4	8,521	69.6	8,299	68.0	8,204	67.3	8,125	67.5

Note: *According to the National Center for Health Statistics, hypertension, pre-pregnancy is comparable with data prior to 2006. 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 2017, 2.1 percent of South Dakota resident infants received five minute Apgar scores less than seven.

Considering race, 2.1 percent of white infants, 2.1 percent of American Indian infants, and 3.9 percent of black infants received a five-minute Apgar score less than seven in 2017.

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 2017 were epidural or spinal anesthesia with 55.4 percent,

augmentation of labor with 31.0 percent, induction of labor with 30.3 percent, and antibiotics during labor with 27.9 percent. Overall characteristics of labor and delivery were present in 80.8 percent of resident births in 2017.

Table 26
South Dakota Resident Live Births by Characteristics of Labor and Delivery and Year of Birth, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Epidural or spinal anesthesia	6,429	52.5	6,577	53.6	6,594	53.5	6,861	55.9	6,730	55.4
Augmentation of labor	3,435	28.1	3,693	30.1	3,712	30.2	3,754	30.7	3,755	31.0
Induction of labor*	3,240	26.5	3,158	25.7	3,219	26.1	3,553	28.9	3,680	30.3
Antibiotics during labor	3,403	27.8	3,420	27.9	3,394	27.6	3,334	27.2	3,383	27.9
Meconium staining of the amniotic fluid	1,020	8.3	1,009	8.2	1,125	9.2	835	6.8	1,023	8.5
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	204	1.7	206	1.7	369	3.0	643	5.3	769	6.3
Fetal intolerance	615	5.0	449	3.7	583	4.8	686	5.6	660	5.5
Non-vertex presentation	488	4.0	490	4.0	500	4.1	568	4.7	545	4.5
Chorioamnionitis diagnosed during labor	113	0.9	132	1.1	158	1.3	144	1.2	149	1.2
None of the above	2,623	21.4	2,569	20.9	2,487	20.4	2,410	19.8	2,316	19.2

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, below, 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, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Tocolysis*	172	1.4	143	1.2	160	1.3	118	1.0	141	1.2
Cervical cerclage	51	0.4	34	0.3	26	0.2	40	0.3	42	0.3
External cephalic version-failed	24	0.2	29	0.2	36	0.3	38	0.3	33	0.3
External cephalic version-successful	25	0.2	17	0.1	26	0.2	40	0.3	28	0.2
No obstetric procedures	11,961	97.8	12,035	97.3	12,052	98.0	12,040	98.1	11,894	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 28, below, displays the complications associated with the onset of labor for the past five years. The primary complication associated with onset of labor for mothers in

2017 was precipitous labor (< 3 hours). In 2017, 13.0 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, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Precipitous labor (< 3 hours)*	613	5.0	664	5.4	653	5.3	676	5.5	812	6.7
Premature rupture of membranes	300	2.5	274	2.2	365	3.0	422	3.4	458	3.8
Prolonged labor (20 + hours)	359	2.9	508	4.1	459	3.7	469	3.8	359	3.0
None of the above	10,998	89.9	10,857	88.4	10,852	88.2	10,751	87.6	10,543	87.0

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 2017 was third or fourth degree perineal

laceration with 0.9 percent of births. Overall, maternal complications were present in 1.6 percent of resident births in 2017.

Table 29
South Dakota Resident Live Births by Maternal Complications and Year of Birth, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Third or fourth degree perineal laceration	128	1.0	112	0.9	115	0.9	119	1.0	111	0.9
Maternal transfusion	58	0.5	55	0.4	42	0.3	43	0.4	48	0.4
Unplanned operating procedure following delivery	31	0.3	40	0.3	45	0.4	38	0.3	38	0.3
Admitted to intensive care	11	0.1	10	0.1	10	0.1	6	0.0	7	0.1
Ruptured uterus	4	0.0	4	0.0	4	0.0	3	0.0	7	0.1
Unplanned hysterectomy	5	0.0	6	0.0	7	0.1	3	0.0	4	0.0
None of the above	12,024	98.3	12,073	98.4	12,112	98.3	12,079	98.5	11,930	98.4

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, on the next page, 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, 2013-2017

	2013		2014		2015		2016		2017	
	Num	%								
Vaginal (Total)	9,115	74.5	9,242	75.3	9,157	74.3	9,162	74.7	9,155	75.5
Vaginal with no previous C-section	8,837	72.2	8,912	72.6	8,791	71.3	8,820	71.9	8,787	72.5
Vaginal after previous C-section	267	2.2	313	2.5	338	2.7	334	2.7	363	3.0
Vaginal (unknown previous types)	11	0.1	17	0.1	28	0.2	8	0.1	5	0.0
C-Section (Total)	3,128	25.5	3,039	24.7	3,166	25.7	3,108	25.3	2,973	24.5
Primary C-section	1,722	14.1	1,694	13.8	1,637	13.3	1,700	13.9	1,656	13.7
Repeat C-section	1,406	11.5	1,342	10.9	1,526	12.4	1,405	11.5	1,317	10.9
C-section (unknown previous types)	0	-	3	-	3	-	3	-	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, 94.6 percent, were cephalic while 4.0 percent were breech.

When looking at primary C-section births, 22.1 percent were breech while 72.9 percent were cephalic.

Table 31
South Dakota Resident Births by Method of Delivery and Fetal Presentation, 2017

	Total		Cephalic		Breech		Other		Not Stated	
	Num	%	Num	%	Num	%	Num	%	Num	%
Total	12,128	100	11,473	94.6	486	4.0	167	1.4	2	-
Vaginal (Total)	9,155	100	9,076	99.1	43	0.5	34	0.4	2	-
Vaginal with no previous C-section	8,787	100	8,711	99.2	41	0.5	33	0.4	2	-
Vaginal after previous C-section	363	100	360	99.2	2	0.6	1	0.3	0	-
Vaginal (unknown previous types)	5	100	5	100	0	-	0	-	0	-
C-Section (Total)	2,973	100	2,397	80.6	443	14.9	133	4.5		-
Primary C-section	1,656	100	1,207	72.9	366	22.1	83	5.0	0	-
Repeat C-section	1,317	100	1,190	90.4	77	5.8	50	3.8	0	-

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 2017, 13.2 percent of South Dakota resident live birth certificates reported abnormal conditions of the

newborn. Overall, NICU admission was the most frequently reported condition in 2017 followed by assisted ventilation required immediately following delivery.

Table 32

South Dakota Resident Live Births by Abnormal Conditions of Newborn and Year of Birth, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
NICU admission	1,189	9.7	1,245	10.1	1,224	9.9	1,241	10.1	1,243	10.3
Assisted ventilation required immediately following delivery	770	6.3	806	6.6	797	6.5	802	6.5	804	6.6
Antibiotics received by the newborn for suspected neonatal sepsis	644	5.3	621	5.1	628	5.1	596	4.9	580	4.8
Assisted ventilation required for more than 6 hrs	290	2.4	258	2.1	281	2.3	296	2.4	315	2.6
Newborn given surfactant replacement therapy	91	0.7	86	0.7	87	0.7	92	0.7	95	0.8
Significant birth injury	15	0.1	13	0.1	13	0.1	12	0.1	13	0.1
Seizure or serious neurologic dysfunction	9	0.1	11	0.1	9	0.1	11	0.1	9	0.1
None of the above	10,725	87.6	10,650	86.7	10,724	87.0	10,666	86.9	10,520	86.8

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 2017 the most prevalent congenital anomaly was

chromosomal disorder followed by Down syndrome (Trisomy 21).

Table 33

South Dakota Resident Births with Reported Congenital Anomalies and Year of Birth, 2013-2017

	Year of Birth									
	2013		2014		2015		2016		2017	
	Num	%	Num	%	Num	%	Num	%	Num	%
Chromosomal disorder	14	0.1	13	0.1	20	0.2	21	0.2	21	0.2
Down syndrome (Trisomy 21)*	15	0.1	17	0.1	8	0.1	15	0.1	20	0.2
Cyanotic congenital heart disease	13	0.1	16	0.1	8	0.1	15	0.1	13	0.1
Cleft palate alone	9	0.1	13	0.1	2	0.0	12	0.1	13	0.1
Hypospadias	16	0.1	10	0.1	6	0.0	17	0.1	12	0.1
Cleft lip with or without a cleft palate	16	0.1	14	0.1	11	0.1	25	0.2	11	0.1
Other craniofacial abnormality	22	0.2	16	0.1	13	0.1	17	0.1	10	0.1
Meningomyelocele/Spina bifida*	1	0.0	3	0.0	5	0.0	6	0.0	5	0.0
Gastroschisis	5	0.0	4	0.0	5	0.0	10	0.1	4	0.0
Limb reduction defect	1	0.0	4	0.0	6	0.0	8	0.1	4	0.0
Congenital diaphragmatic hernia	4	0.0	5	0.0	5	0.0	1	0.0	3	0.0
Omphalacele	1	0.0	2	0.0	2	0.0	1	0.0	2	0.0
Anencephaly*	1	0.0	2	0.0	0	0.0	1	0.0	0	0.0
At least one anomaly	98	0.8	97	0.8	79	0.6	121	1.0	96	0.8
None of the above	12,139	99.2	12,178	99.2	12,236	99.4	12,149	99.0	12,029	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

