

Natality

An Overview: 2009

Total Resident Live Births	11,930
Crude Birth Rate per 1,000 Population	15.8
Median Live Birth Weight (Grams)	3,373
Low Weight Births (Less than 2,500 grams)	700
Low Birth Weight Rate per 1,000 Live Births	58.7
Mean Age of Mother	27
No Prenatal Care	0.7%

Starting in 2006, the Department of Health, Office of Data, Statistics, and Vital Records implemented the 2003 U.S. Standard Certificate of Live Birth. **Please note education, prenatal care, and tobacco use data are no longer comparable with data years before 2006.** There were 11,930 births to South Dakota residents in 2009, for a crude birth rate of 15.8 per 1,000 South Dakota resident population.

Resident births decreased by 1.2 percent from 2008 when there were 12,074 births. In 2009, 50.9 percent of the babies born were male and 49.1 percent were female. Racially, white births were 50.8 percent male and 49.2 percent female; American Indian births were 51.0 percent male, 49.0 percent female.

The low birth weight rate per 1,000 live births decreased from 64.9 in 2008 to 58.7 in 2009. This was a 9.6 percent decrease from the 2008 low birth weight rate.

Table 8, below and Figure 2, page 22, display the live births and crude birth rates for the United States and South Dakota for the past 20 years. As the illustrations indicate, South Dakota's birth rate remains above the national average.

Table 8
Resident Live Births and Crude Birth Rates, South Dakota and United States, 1990-2009

Year	United States		South Dakota	
	Number	Crude Rate	Number	Crude Rate
2009	*4,131,019	*13.5	11,930	15.8
2008	4,247,694	14.0	12,074	16.0
2007	4,316,223	14.3	12,253	16.2
2006	4,265,555	14.2	11,914	15.8
2005	4,138,349	14.0	11,466	15.2
2004	4,112,052	14.0	11,339	15.0
2003	4,089,950	14.1	11,022	14.6
2002	4,021,726	13.9	10,698	14.2
2001	4,025,933	14.5	10,475	13.8
2000	4,058,814	14.7	10,346	13.7
1999	3,959,417	14.5	10,516	15.1
1998	3,941,553	14.6	10,281	14.8
1997	3,880,894	14.5	10,168	14.6
1996	3,891,494	14.7	10,469	15.0
1995	3,899,589	14.8	10,470	15.0
1994	3,952,767	15.2	10,504	15.1
1993	4,000,240	15.5	10,718	15.4
1992	4,065,014	15.9	11,007	15.8
1991	4,110,907	16.3	10,930	15.7
1990	4,158,212	16.7	10,987	15.8

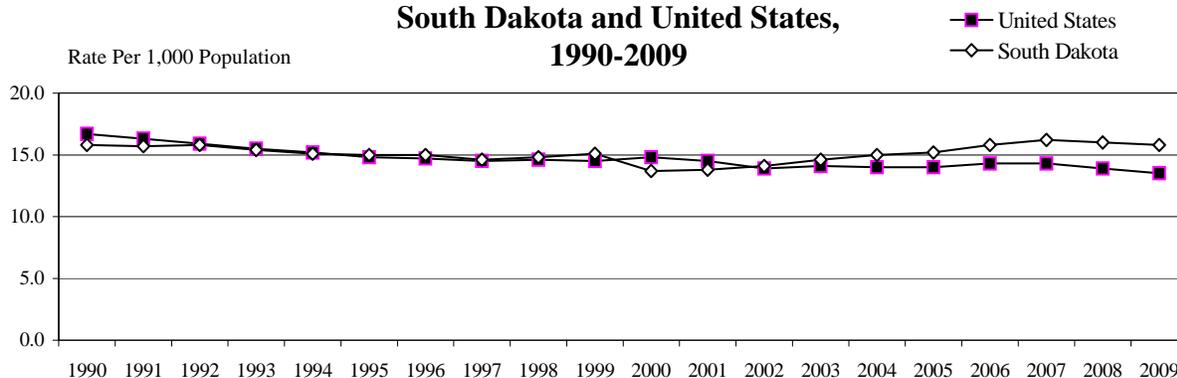
Note: *U.S 2009 data are provisional.

The decrease in the South Dakota crude rate in 2000 is at least partially due to the change in population from the 2000 census. Crude birth rates are per 1,000 population.

Source: National Center for Health Statistics

South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 2
Resident Live Birth Rates,
South Dakota and United States,
1990-2009



Note: 2009 U.S. data are provisional.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Births by Race

Table 9 shows the number and percent of resident births by mother's race since 1990. In 2009, the percentage of births to whites increased slightly, while the percentage of births for American Indians decreased by 0.4 percentage points. The percentage of births to other races increased by 0.4 percentage points as well.

In 2003, the South Dakota Department of Health (SDDOH) began utilizing the multiple race data on the birth certificate for the mother and father. Therefore, in order to assign a single race to each mother, the SDDOH allocated multiple races into one single race. The methods used for this allocation can be found on page 229. Consequently, it should be noted that any changes illustrated in Table 9 beginning in 2003 in the racial breakdown of mothers should be interpreted with this reporting change in mind.

Table 10, on the next page, shows a more detailed racial breakdown since these changes were implemented in 2003. These specific racial groups were not all possible prior to 2003.

Table 9
South Dakota Resident Live Births by Mother's Race,
1990-2009

Year	Births Num	White		American Indian		Other	
		Num	%	Num	%	Num	%
2009	11,930	9,330	78.2	2,149	18.0	436	3.7
2008	12,074	9,432	78.1	2,222	18.4	402	3.3
2007	12,253	9,571	78.1	2,286	18.7	380	3.1
2006	11,914	9,371	78.7	2,160	18.1	365	3.1
2005	11,466	8,974	78.3	2,155	18.8	322	2.8
2004	11,339	8,924	78.7	2,100	18.5	313	2.8
2003	11,022	8,642	78.4	2,091	19.0	289	2.6
2002	10,698	8,648	80.8	1,805	16.9	244	2.3
2001	10,475	8,469	80.8	1,770	17.0	233	2.2
2000	10,346	8,416	81.3	1,682	16.3	245	2.4
1999	10,516	8,658	82.3	1,665	15.8	192	1.8
1998	10,281	8,383	81.5	1,716	16.7	181	1.8
1997	10,168	8,412	82.7	1,538	15.1	218	2.1
1996	10,469	8,655	82.7	1,632	15.6	181	1.7
1995	10,470	8,684	82.9	1,564	14.9	221	2.1
1994	10,504	8,771	83.5	1,533	14.6	197	1.9
1993	10,718	8,822	82.3	1,720	16.0	173	1.6
1992	11,007	9,090	82.6	1,739	15.8	159	1.4
1991	10,930	9,068	83.0	1,665	15.2	132	1.2
1990	10,987	9,165	83.4	1,668	15.2	154	1.4

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

In 2009, 78.2 percent of South Dakota resident births were white, 18.0 percent were American Indian, 2.2 percent were black, and 1.4 percent were Asian.

Table 10
South Dakota Resident Live Births by Mother's Race, 2003-2009

Births		White		American Indian		Black		Asian		Other	
Year	Num	Num	%	Num	%	Num	%	Num	%	Num	%
2009	11,930	9,330	78.2	2,149	18.0	261	2.2	164	1.4	11	0.1
2008	12,074	9,432	78.1	2,222	18.4	223	1.8	170	1.4	9	0.1
2007	12,253	9,571	78.1	2,286	18.7	219	1.8	148	1.2	13	0.1
2006	11,914	9,371	78.7	2,160	18.1	212	1.8	147	1.2	6	0.1
2005	11,466	8,974	78.3	2,155	18.8	153	1.3	116	1.0	42	0.4
2004	11,339	8,924	78.7	2,100	18.5	154	1.4	142	1.3	15	0.1
2003	11,022	8,642	78.4	2,091	19.0	131	1.2	134	1.2	15	0.1

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Births by Ethnicity

Table 11 displays the number and percent of resident births by ethnicity of mother since 2000. In 2009, the percentage of births to non-Hispanic mothers was 96.0 percent, while the percentage of births to Hispanic mothers was 4.0 percent. Overall, the percent of Hispanic births has been increasing since 2000 with a percent increase of 81.8 percent.

Table 11
South Dakota Resident Live Births by Ethnicity of Mother, 2000-2009

Births		Non-Hispanic		Hispanic	
Year	Num	Num	%	Num	%
2009	11,930	11,447	96.0	474	4.0
2008	12,074	11,613	96.2	460	3.8
2007	12,253	11,761	96.0	471	3.8
2006	11,914	11,504	96.6	398	3.3
2005	11,466	11,070	96.5	392	3.4
2004	11,339	10,936	96.4	395	3.5
2003	11,022	10,682	96.9	340	3.1
2002	10,698	10,380	97.0	317	3.0
2001	10,475	10,211	97.5	257	2.5
2000	10,346	10,109	97.7	225	2.2

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 12
South Dakota Resident Live Births by Mother's Ethnicity and Race, 2009

Births		Non-Hispanic		Hispanic	
Race	Num	Num	%	Num	%
Total	11,930	11,447	96.0	474	4.0
White	9,330	8,958	96.0	369	4.0
American Indian	2,149	2,060	95.9	86	4.0
Black	261	255	97.7	6	2.3
Asian	164	159	97.0	5	3.0
Other	11	9	81.8	2	18.2

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 12, on the right, displays resident births by mother's ethnicity and race. Asian, white, and American Indian race groups had the highest percent of Hispanic mothers.

Table 13

South Dakota Resident Multiple Live Births, 2000-2009

Year of Birth	Twins	Triplets	Quadruplets
2009	144	4	0
2008	204	3	0
2007	173	7	0
2006	188	2	0
2005	143	3	1
2004	182	5	0
2003	153	1	0
2002	159	7	0
2001	166	4	0
2000	118	6	1

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Multiple Births

Table 13, on the right, displays resident multiple births for the last ten years. The highest number of twins was born in 2008 with 204 sets. The highest number of triplets happened in 2007 and 2002 with seven sets of triplets born each year.

Marital Status

In 2009, the majority of women who gave birth, 61.6 percent, were married. However, the percent of single mothers giving birth has increased by 14.3 percent from 2000 through 2009.

South Dakota Resident and Occurrence Births

Table 15 shows that of the 11,930 South Dakota resident births in 2009, 405 occurred out of state. The four states where the majority of these births occurred are bordering states. The percent of births occurring in each are as follows:

- North Dakota-1.2 percent
- Iowa-1.2 percent
- Minnesota-0.4 percent
- Nebraska-0.3 percent

In comparison, Table 16 shows 956 of the 12,481 births occurring in South Dakota during 2009 were to non-residents of South Dakota. Of the 12,481 live births occurring in South Dakota 9,914 were to white women while 2,111 were to American Indian women.

Attendant During Birth

South Dakota physicians and certified nurse midwives attended 92.6 percent and 6.5 percent of the births respectively. In 2009, home births represented 0.5 percent of South Dakota resident live births.

Table 14
South Dakota Resident Births by Year of Birth and Marital Status, 2000-2009

Year	Total		Married		Single	
	Num	%	Num	%	Num	%
2009	11,774	100	7,250	61.6	4,524	38.4
2008	11,851	100	7,299	61.6	4,552	38.4
2007	12,043	100	7,406	61.5	4,637	38.5
2006	11,713	100	7,339	62.7	4,374	37.3
2005	11,295	100	7,179	63.6	4,116	36.4
2004	11,135	100	7,213	64.8	3,922	35.2
2003	10,862	100	7,141	65.7	3,721	34.3
2002	10,521	100	6,829	64.9	3,692	35.1
2001	10,295	100	6,829	66.3	3,466	33.7
2000	10,204	100	6,780	66.4	3,424	33.6

Note: For purposes of reporting marital status of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 15
South Dakota Resident Live Births by State in Which Birth Occurred and Mother's Race, 2009

	Total	Race of Mother		
		White	American Indian	Other
Total	11,930	9,330	2,149	436
South Dakota	11,525	9,036	2,052	428
North Dakota	146	79	64	0
Iowa	140	133	1	6
Minnesota	49	48	1	0
Nebraska	38	8	29	0
All Other	32	26	2	2

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 16
Live Births Occurring in South Dakota by Mother's Resident State and Race, 2009

	Total	Race of Mother		
		White	American Indian	Other
Total	12,481	9,914	2,111	443
South Dakota	11,525	9,036	2,052	428
Minnesota	313	294	10	9
Iowa	243	239	1	2
Nebraska	179	144	33	1
Wyoming	131	126	2	3
North Dakota	63	54	9	0
All Other	27	21	4	0

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

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records.

Birth Weight

Table 17, below, indicates that in 2009 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 700 low weight births or 5.9 percent of all South Dakota resident live births in 2009.

When looking at race, 5.6 percent of white babies and 5.9 percent of American Indian babies were low birth weight in 2009. In comparison, in 2008 white and American Indian low birth weight births were 6.2 and 6.7 percent, respectively.

Table 17
South Dakota Resident Live Births by Birth Weight and Mother's Race, 2009

Birth Weight (in Grams)	Total		Race of Mother					
			White		American Indian		Other	
	Num	%	Num	%	Num	%	Num	%
0-499	17	0.1	14	0.2	2	0.1	1	0.2
500-999	45	0.4	35	0.4	7	0.3	3	0.7
1,000-1,499	71	0.6	44	0.5	18	0.8	9	2.1
1,500-1,999	119	1.0	90	1.0	19	0.9	10	2.3
2,000-2,499	448	3.8	342	3.7	81	3.8	25	5.7
2,500-2,999	1,918	16.1	1,506	16.1	319	14.8	90	20.6
3,000-3,499	4,674	39.2	3,735	40.0	750	34.9	182	41.7
3,500-3,999	3,571	29.9	2,787	29.9	684	31.8	98	22.5
4,000-4,499	941	7.9	708	7.6	214	10.0	17	3.9
4,500-4,999	108	0.9	62	0.7	45	2.1	1	0.2
5,000 & Over	16	0.1	6	0.1	10	0.5	0	0.0
Total	11,930	100.0	9,330	100.0	2,149	100.0	436	100.0
Median birth weight in grams	3,373		3,367		3,430		3,218	
Mean birth weight in grams	3,335		3,331		3,393		3,151	
Modal birth weight in grams	3,430		3,430		3,430		3,203	

Note: Failure of the races and birth weights to add to the total is due to unknown races and birth weights in the total birth column and row.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 18, below, shows a more detailed racial breakdown by birth weight from 2005 to 2009. For all races, the majority of births fell into the 3,000 to 3,499 category.

From 2005 to 2009, there were 3,932 low weight births or 6.6 percent of all South Dakota resident live births.

Table 18
South Dakota Resident Live Births by Birth Weight and Mother's Race, 2005-2009

Birth Weight (in Grams)	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
0-499	90	0.2	65	0.1	20	0.2	4	0.4	1	0.1	0	0.0
500-999	219	0.4	157	0.3	51	0.5	8	0.7	3	0.4	0	0.0
1,000-1,499	343	0.6	234	0.5	79	0.7	15	1.4	12	1.6	1	1.1
1,500-1,999	763	1.3	585	1.3	141	1.3	24	2.2	6	0.8	6	6.5
2,000-2,499	2,517	4.2	1,935	4.1	471	4.3	60	5.6	38	5.1	9	9.8
2,500-2,999	9,692	16.3	7,610	16.3	1,647	15.0	249	23.3	156	20.9	15	16.3
3,000-3,499	23,235	39.0	18,438	39.5	3,997	36.4	414	38.8	325	43.6	32	34.8
3,500-3,999	17,452	29.3	13,696	29.3	3,303	30.1	233	21.8	177	23.8	23	25.0
4,000-4,499	4,589	7.7	3,501	7.5	1,004	9.2	54	5.1	23	3.1	2	2.2
4,500-4,999	646	1.1	412	0.9	220	2.0	6	0.6	4	0.5	2	2.2
5,000 & Over	63	0.1	35	0.1	26	0.2	1	0.1	0	0.0	1	1.1
Total	59,637	100.0	46,678	100.0	10,972	100.0	1,068	100.0	745	100.0	92	100.0
Median birth weight in grams	3,360		3,350		3,402		3,203		3,232		3,175	
Mean birth weight in grams	3,324		3,322		3,360		3,152		3,188		3,140	
Modal birth weight in grams	3,430		3,260		3,430		3,005		3,232		3,119	

Note: Failure of the races and birth weights to add to the total is due to unknown races and birth weights contained in the total birth column and row.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 19, below, shows resident births by birth weight and mother's ethnicity. The majority of births for both non-Hispanic and Hispanic mothers fell into the 3,000 to 3,499 grams category.

When looking at ethnicity, 5.9 percent of non-Hispanic babies and 5.9 percent of Hispanic babies were low birth weight in 2009.

Table 19
South Dakota Resident Live Births by Birth Weight and Mother's Ethnicity, 2009

Birth Weight (in Grams)	Total		Ethnicity of Mother			
			Non-Hispanic		Hispanic	
	Num	%	Num	%	Num	%
0-1,999	252	2.1	241	2.1	11	2.3
2,000-2,499	448	3.8	431	3.8	17	3.6
2,500-2,999	1,918	16.1	1,830	16.0	88	18.6
3,000-3,499	4,674	39.2	4,468	39.0	202	42.6
3,500-3,999	3,571	29.9	3,452	30.2	116	24.5
4,000-4,499	941	7.9	905	7.9	35	7.4
4,500-4,999	108	0.9	105	0.9	3	0.6
5,000 & Over	16	0.1	15	0.1	1	0.2
Total	11,930	100.0	11,447	100.0	474	100.0
Median birth weight in grams	3,373		3,374		3,310	
Mean birth weight in grams	3,335		3,338		3,279	
Mode birth weight in grams	3,430		3,430		3,090	

Note: Failure of the ethnicity and birth weights to add to the total is due to unknown ethnicity and birth weights contained in the total birth column and row.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

In 2009, 69.7 percent of low birth weight infants in South Dakota were born preterm. Preterm birth is among the leading causes of infant death¹.

Table 20, below, displays preterm and full term low birth weight births to South Dakota residents by mother's age.

Table 20
South Dakota Resident Preterm and Full Term Births Less Than 2,500 Grams by Mother's Age, 2009

Mother's Age	Weeks of Gestation							
	Total		Less than 32 Weeks		32 to 36 Weeks		37 and Above	
	Num	%	Num	%	Num	%	Num	%
< 18 Years	21	100.0	7	33.3	5	23.8	8	38.1
18-19 Years	46	100.0	14	30.4	19	41.3	13	28.3
20-24 Years	191	100.0	33	17.3	92	48.2	66	34.6
25-29 Years	202	100.0	41	20.3	105	52.0	56	27.7
30-34 Years	148	100.0	28	18.9	78	52.7	42	28.4
35 + Years	92	100.0	19	20.7	47	51.1	25	27.2
Total	700	100.0	142	20.3	346	49.4	210	30.0

Note: Failure to add up to 700 is due to 2 unknown gestations.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 21, on the next page, displays preterm and full term low birth weight births to South Dakota residents by mother's race. From 2005 to 2009, 70.1 percent of low birth weight infants in South Dakota were born preterm.

American Indian low birth weight infants were born preterm from 2005 to 2009. That was followed by 70.4 percent of white low birth weight infants, 64.8 percent of black low birth weight infants, and 61.7 percent of Asian low birth weight infants were born preterm from 2005 to 2009.

When looking at race, 70.9 percent of

Table 21
South Dakota Resident Preterm and Full Term Births Less Than 2,500 Grams by
Mother's Race, 2005-2009

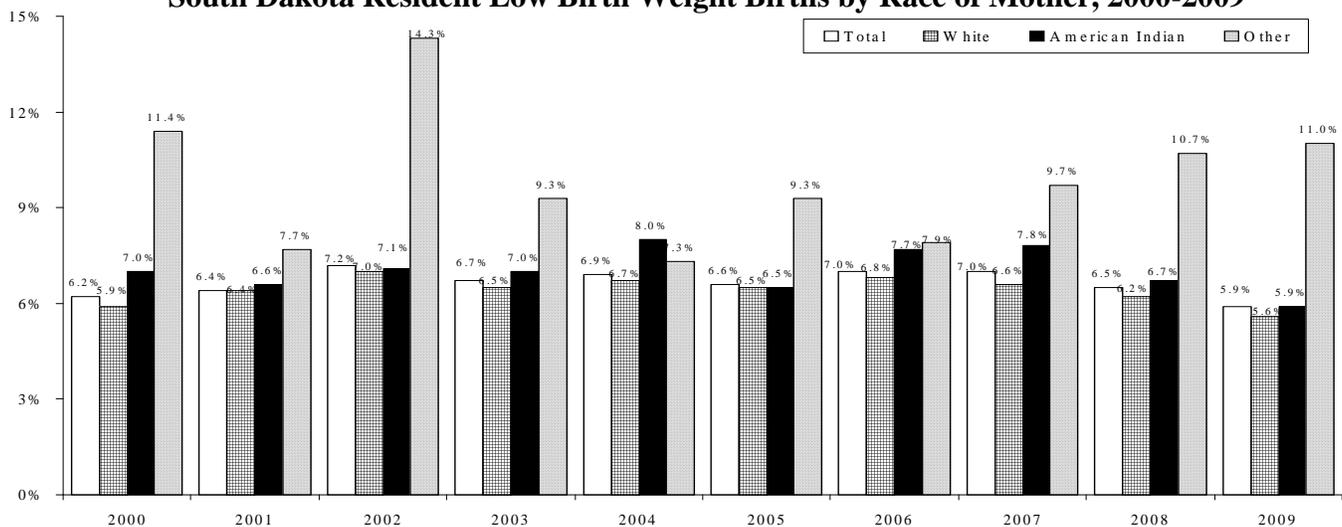
Mother's Race	Weeks of Gestation							
	Total		Less than 32 Weeks		32 to 36 Weeks		37 and Above	
	Num	%	Num	%	Num	%	Num	%
White	2,976	100.0	494	16.6	1,600	53.8	870	29.2
American Indian	762	100.0	167	21.9	373	49.0	217	28.5
Black	111	100.0	29	26.1	43	38.7	36	32.4
Asian	60	100.0	12	20.0	25	41.7	23	38.3
Other	16	100.0	0	0.0	11	68.8	5	31.3
Total	3,932	100.0	704	17.9	2,053	52.2	1,153	29.3

Note: Failure to add up to 3,932 is due to 7 unknown gestations.
 Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 3, below, compares the low birth weight babies by race of mother from 2000 to 2009. In 2009, there were 525 low birth weight babies born to white women, which was 5.6 percent of their total births. Similarly, there were 127 babies born to

American Indian women, which was 5.9 percent of their total births. In 2009, there was a 0.6 percentage point decrease in white low birth weight babies and a 0.8 percentage point decrease in low birth weight babies among American Indians.

Figure 3
South Dakota Resident Low Birth Weight Births by Race of Mother, 2000-2009

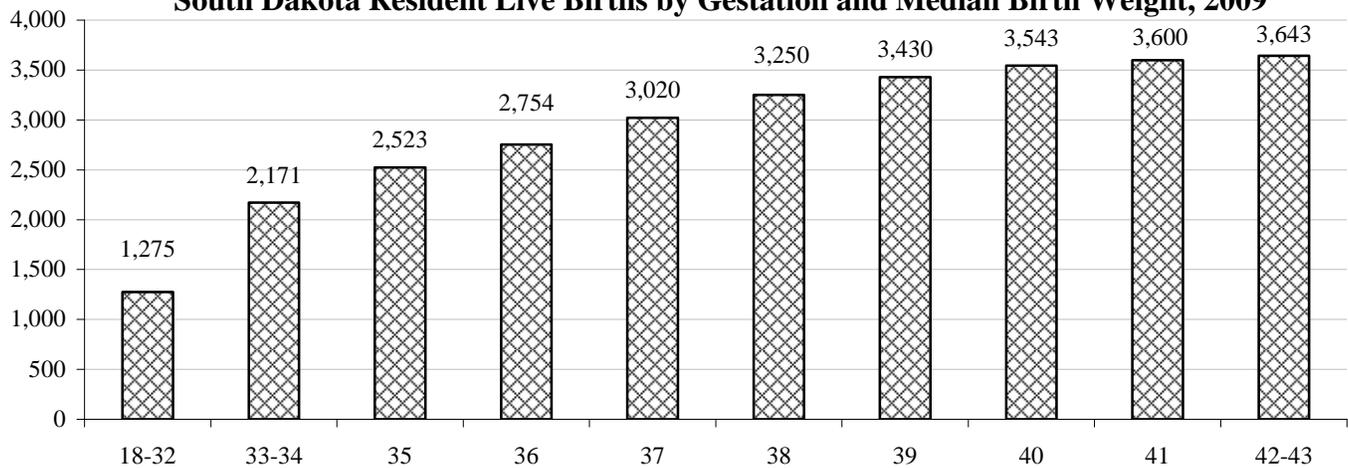


Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 4, on the next page, shows live births by weeks of gestation and median birth weight.

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

Figure 4
South Dakota Resident Live Births by Gestation and Median Birth Weight, 2009



Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 22, below, displays resident births by year of birth and weeks of gestation. In 2009, the majority of births, 57.5

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

Table 22
South Dakota Resident Births by Year of Birth and Weeks of Gestation, 2000-2009

Year	Total		<35		35-36		37-39		40+	
	Num	%	Num	%	Num	%	Num	%	Num	%
2009	11,602	100	264	2.3	494	4.3	6,667	57.5	4,177	36.0
2008	11,624	100	267	2.3	529	4.6	6,867	59.1	3,961	34.1
2007	11,850	100	318	2.7	600	5.1	6,681	56.4	4,251	35.9
2006	11,505	100	317	2.8	575	5.0	6,584	57.2	4,029	35.0
2005	11,107	100	271	2.4	535	4.8	6,128	55.2	4,173	37.6
2004	10,932	100	293	2.7	536	4.9	5,876	53.8	4,227	38.7
2003	10,707	100	245	2.3	513	4.8	5,636	52.6	4,313	40.3
2002	10,348	100	257	2.5	464	4.5	5,332	51.5	4,295	41.5
2001	10,116	100	246	2.4	419	4.1	5,009	49.5	4,442	43.9
2000	10,071	100	252	2.5	458	4.5	4,852	48.2	4,509	44.8

Note: Table does not include multiple pregnancies

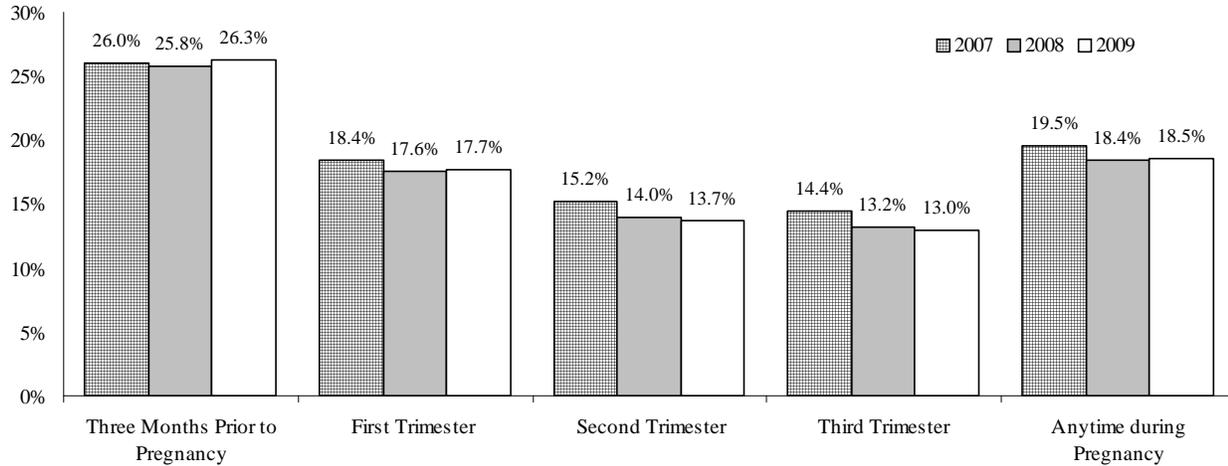
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Tobacco Use

Figure 5, on the next page, illustrates the percent of mothers who smoked in 2007, 2008, and 2009. From 2007-2009, the rate has remained fairly consistent with 26.3 percent of mothers in 2009 stating they

smoked three months prior to pregnancy. In 2009, 13.0 percent stated they still smoked during the third trimester, and 18.5 percent smoked anytime during their pregnancy.

Figure 5
South Dakota Resident Live Births by Cigarette Smoking Status, 2007-2009

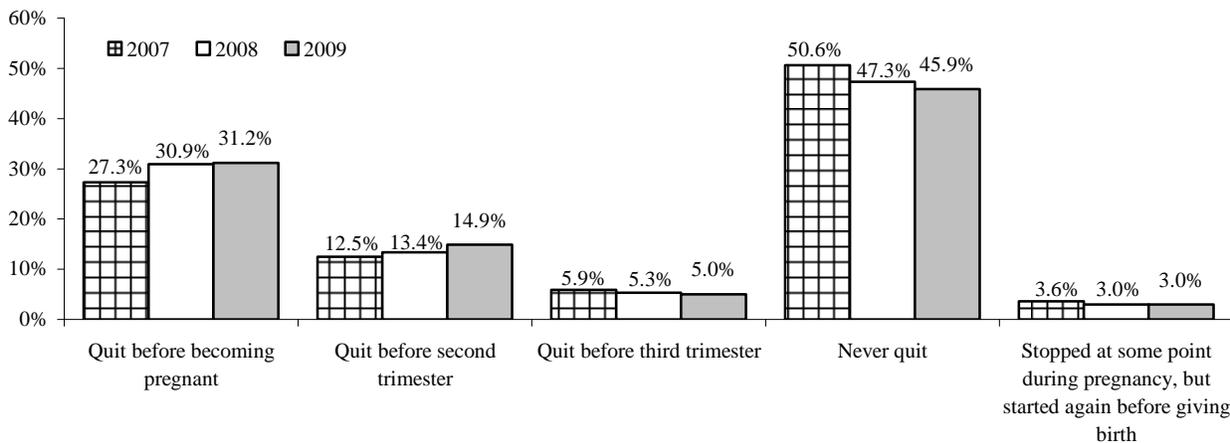


Note: For purposes of reporting cigarette smoking status during this pregnancy, multiple births (twins, triplets, etc.) are counted only as a single birth.
 Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 6, below, illustrates the percent of mothers who smoked prior to pregnancy from 2007-2009 by their smoking status during pregnancy.

The majority of women stated they never quit during their pregnancies, although this decreased from 50.6 percent in 2007 to 45.9 percent in 2009.

Figure 6
South Dakota Resident Births to Mothers Who Smoked Prior to Pregnancy by Smoking Status During Pregnancy, 2007-2009



Note: Multiple births (twins, triplets, etc.) were counted as only one single birth.
 Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Mother's Age and Race

Table 23, on the next page, displays that women aged 25 to 29 accounted for the largest percentage of South Dakota resident births in 2009, at 32.7 percent. Women less than 20 years of age comprised 9.2 percent of the total resident births.

The median ages for white, American Indian, black, and Asian mothers were 27, 23, 25, 28 years of age, respectively. The modal ages for the same race groups were 27, 21, 23, 28 years of age respectively.

Table 23
South Dakota Resident Live Births by Mother's Age and Race, 2009

Age of Mother	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Less than 18	313	2.6	151	1.6	145	6.7	16	6.1	1	0.6	0	0.0
18-19 Years	789	6.6	475	5.1	283	13.2	19	7.3	11	6.7	1	9.1
20-24 Years	3,151	26.4	2,237	24.0	783	36.4	86	33.0	36	22.0	2	18.2
25-29 Years	3,903	32.7	3,247	34.8	535	24.9	67	25.7	47	28.7	4	36.4
30-34 Years	2,599	21.8	2,243	24.0	271	12.6	41	15.7	41	25.0	2	18.2
35-39 Years	960	8.0	805	8.6	105	4.9	24	9.2	20	12.2	2	18.2
40 & over	215	1.8	172	1.8	27	1.3	8	3.1	8	4.9	0	0.0
Total	11,930	100.0	9,330	100.0	2,149	100.0	261	100.0	164	100.0	11	100.0

Note: Failure of age and races to add to the total is due to unknown ages and races contained in the total and other birth column and row.
Failure of births to add to the total is due to unknown age.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 24, right, displays resident births by mother's age and ethnicity. Non-Hispanic women less than 20 years of age accounted for 8.9 percent of total non-Hispanic births, while Hispanic women less than 20 accounted for 18.1 percent of total Hispanic births. Non-Hispanic women aged 25 to 29 accounted for the largest percentage of total non-Hispanic births at 33.0 percent, while Hispanic women aged 20 to 24 accounted for the largest percentage of total Hispanic births at 28.5 percent.

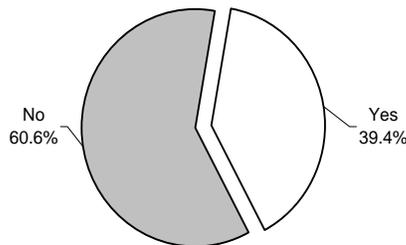
Table 24
South Dakota Resident Live Births by Mother's Age and Ethnicity, 2009

Age of Mother	Total		Ethnicity of Mother			
			Non-Hispanic		Hispanic	
	Num	%	Num	%	Num	%
Less than 18	313	2.6	287	2.5	26	5.5
18-19 Years	789	6.6	727	6.4	60	12.7
20-24 Years	3,151	26.4	3,012	26.3	135	28.5
25-29 Years	3,903	32.7	3,774	33.0	127	26.8
30-34 Years	2,599	21.8	2,517	22.0	82	17.3
35-39 Years	960	8.0	926	8.1	33	7.0
40 & over	215	1.8	204	1.8	11	2.3
Total	11,930	100.0	11,447	100.0	474	100.0

Note: Failure of ethnicity to add to the total is due to unknown ethnicity.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 7, below, displays the percent of South Dakota resident live births by WIC status. Almost 40 percent (39.4 percent) of mothers were on WIC during their pregnancy.

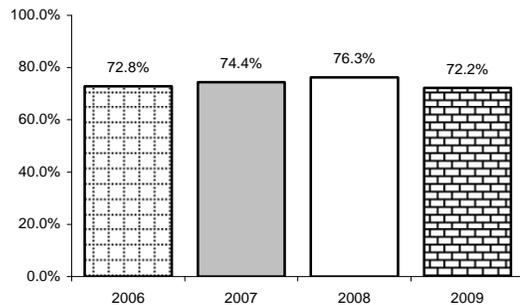
Figure 7
South Dakota Resident Live Births by WIC Status, 2009



Note: For purposes of reporting WIC status, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Figure 8, below, displays the percent of mothers breastfeeding at time of discharge. The percent of women who stated they were breastfeeding at time of discharge from the hospital decreased from 76.3 percent in 2008 to 72.2 percent in 2009.

Figure 8
South Dakota Resident Live Births by Breastfeeding Status at Time of Discharge, 2006-2009



Note: For purposes of reporting breastfeeding status at time of discharge, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 25, below, displays South Dakota resident teen births (15 to 17 years old) by race from 2000 through 2009. In 2009, the teen birth rate was 16.5.

When race is taken into account, the white teen birth rate was 9.5 compared to a teen birth rate of 56.3 for American Indians in 2009.

Table 25
South Dakota Resident Teen Births and Rates by Year and Mother's Race, 2000-2009

Year	Total		White		American Indian		Other	
	Num	Rate	Num	Rate	Num	Rate	Num	Rate
2009	303	16.5	147	9.5	139	56.3	17	59.2
2008	341	18.6	151	9.8	173	70.0	15	52.3
2007	330	18.0	159	10.3	164	66.4	5	17.4
2006	315	17.2	149	9.7	159	64.3	7	24.4
2005	336	18.3	157	10.2	174	70.4	5	17.4
2004	297	16.2	141	9.1	146	59.1	10	34.8
2003	303	16.5	129	8.4	165	66.8	9	31.4
2002	304	16.6	159	10.3	139	56.3	6	20.9
2001	336	18.3	176	11.4	152	61.5	8	27.9
2000	354	19.3	189	12.2	157	63.5	8	27.9

Note: Rates are per 1,000 female population ages 15-17.
Rates are based on the 2000 census.
For purposes of reporting birth rates, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records.

Prenatal Care

Table 26, below, shows the number and percentage of South Dakota resident live births and when the mothers started prenatal care in 2009. Less than 70 percent of mothers initiated care in the first trimester - 71 percent of white mothers, 47.8 percent of American Indian mothers, 41.6 percent of black mothers, and 50.6 percent of Asian

mothers. Less than 1 percent (0.7%) did not obtain prenatal care at all - 0.3 percent of white mothers, 2.5 percent of American Indian mothers, 0.8 percent black mothers and 0.6 percent Asian mothers. Due to a change in reporting, data in this table are not comparable to data prior to 2006.

Table 26
South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Race, 2009

Trimester Prenatal Care Began	Race of Mother											
	Total		White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
First	7,747	65.8	6,530	71.0	1,020	47.8	106	41.6	82	50.6	5	45.5
Second	3,022	25.7	2,047	22.3	789	37.0	115	45.1	61	37.7	4	36.4
Third	712	6.0	443	4.8	226	10.6	26	10.2	15	9.3	1	9.1
None	88	0.7	28	0.3	53	2.5	2	0.8	1	0.6	1	9.1
Unknown	206	1.7	152	1.7	44	2.1	6	2.4	3	1.9	0	0.0
Total	11,775	100.0	9,200	100.0	2,132	100.0	255	100.0	162	100.0	11	100.0

Note: Failure of the races to add to the total is due to the unknown races contained in the total birth column.
For purposes of reporting prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 27, below, displays when mothers began prenatal care by the ethnicity of the mother. The majority of non-Hispanic mothers, 66.5 percent, and Hispanic

mothers, 49.0 percent, began prenatal care in their first trimester. Less than one percent of non-Hispanic and slightly more than one percent of Hispanic mothers did not obtain prenatal care at all.

Table 27
South Dakota Resident Live Births by Trimester Prenatal Care Began and Mother's Ethnicity, 2009

Trimester Prenatal Care Began	Total		Ethnicity of Mother			
			Non-Hispanic		Hispanic	
	Num	%	Num	%	Num	%
First	7,747	65.8	7,515	66.5	231	49.0
Second	3,022	25.7	2,836	25.1	180	38.2
Third	712	6.0	670	5.9	42	8.9
None	88	0.7	82	0.7	5	1.1
Unknown	206	1.7	192	1.7	13	2.8
Total	11,775	100.0	11,295	100.0	471	100.0

Note: Failure of the ethnicities to add to the total is due to the unknown ethnicities contained in the total birth column. For purposes of reporting prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 28, below, indicates that 21.2 percent of pregnancies resulting in low birth weight babies (less than 2,500 grams) had fewer than five prenatal care visits; 35.5 percent

of American Indian and 17.3 percent of the white low birth weight babies were born to mothers with fewer than five prenatal care visits.

Table 28
South Dakota Resident Live Births by Number of Prenatal Visits and Mother's Race for Low Birth Weight Babies, 2009

Number of Prenatal Care Visits	Total		Race of Mother					
			White		American Indian		Other	
	Num	%	Num	%	Num	%	Num	%
None	10	1.6	3	0.7	6	5.0	1	2.4
1-4	120	19.6	75	16.6	37	30.6	8	19.5
5-9	242	39.5	180	39.9	45	37.2	17	41.5
10-14	179	29.2	149	33.0	19	15.7	11	26.8
15-19	28	4.6	23	5.1	3	2.5	2	4.9
20+	6	1.0	6	1.3	0	0.0	0	0.0
Not Stated	28	4.6	15	3.3	11	9.1	2	4.9
Total	613	100.0	451	100.0	121	100.0	41	100.0

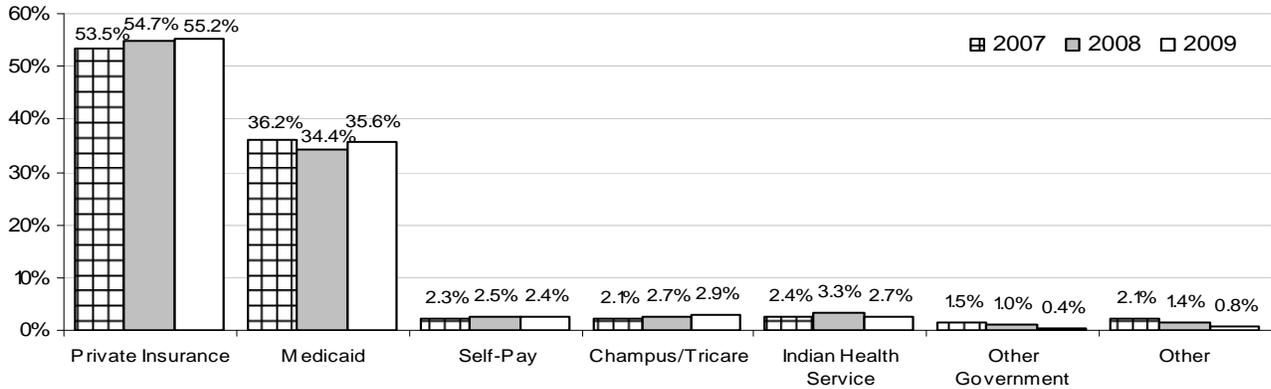
Note: For purposes of calculating prenatal care, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Payment Type

Figure 9, on the next page, illustrates the percent of births by payment type. In 2009 the majority of births, 55.2 percent, were

paid by private insurance. The second highest payment type was Medicaid with 35.6 percent.

Figure 9
South Dakota Resident Live Births by Payment Type, 2007-2009



Note: For purposes of reporting payment type, multiple births (twins, triplets, etc.) are counted only as a single birth.
Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Infections Present and/or Treated

Table 29, below, displays resident births by infections present and/or treated during mother’s pregnancy by race. American Indian mothers had the highest percent of infections present and/or treated during pregnancy with 11.6 percent. Black mothers

had the second highest percent of infections present and/or treated during pregnancy with 9.0 percent. Asian mothers had 5.6 percent followed by white mothers with 2.1 percent of infections present and/or treated during pregnancy.

Table 29
South Dakota Resident Live Births by Infections Present and/or Treated During This Pregnancy by Mother’s Race, 2009

	Race of Mother											
	Total		White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Chlamydia	292	2.5	91	1.0	183	8.6	14	5.5	3	1.9	1	9.1
Genital herpes*	110	0.9	88	1.0	18	0.8	3	1.2	1	0.6	0	0.0
Gonorrhea	33	0.3	5	0.1	27	1.3	1	0.4	0	0.0	0	0.0
Hepatitis C	20	0.2	13	0.1	7	0.3	0	0.0	0	0.0	0	0.0
Hepatitis B	15	0.1	3	0.0	2	0.1	5	2.0	5	3.1	0	0.0
Rubella	4	0.0	0	0.0	4	0.2	0	0.0	0	0.0	0	0.0
Cytomegalovirus (CMV)	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Toxoplasmosis	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Syphilis	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No infections	11,294	96.1	8,981	97.9	1,905	89.4	232	91.0	153	94.4	10	90.9

Note: For purposes of reporting infections present and/or treated during this pregnancy, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, genital herpes is comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Medical History Factors

Table 30, on the next page, lists the medical history factors for South Dakota resident mothers for 2009. American Indian mothers had the highest with 29.3 percent, followed

by white mothers with 25.8 percent. Black mothers and Asian mothers had 23.9 and 21.0 percent of medical history factors associated with pregnancies, respectively.

Table 30
South Dakota Resident Live Births by Mother’s Medical History Factors for this
Pregnancy by Mother’s Race, 2009

	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Mother had a previous cesarean delivery	1,526	13.0	1,149	12.5	317	14.9	37	14.5	18	11.1	2	18.2
Hypertension, gestational	517	4.4	414	4.5	94	4.4	6	2.4	3	1.9	0	0.0
Diabetes, gestational	517	4.4	415	4.5	82	3.8	7	2.7	10	6.2	0	0.0
Previous preterm births	377	3.2	269	2.9	101	4.7	5	2.0	1	0.6	0	0.0
Other previous poor pregnancy outcomes	377	3.2	251	2.7	115	5.4	9	3.5	2	1.2	0	0.0
Hypertension, pre-pregnancy*	134	1.1	101	1.1	28	1.3	2	0.8	2	1.2	0	0.0
Fertility-enhancing drugs, artificial insemination or intrauterine insemination	103	0.9	101	1.1	2	0.1	0	0.0	0	0.0	0	0.0
Diabetes, pre-existing	91	0.8	49	0.5	41	1.9	0	0.0	1	0.6	0	0.0
Assisted reproductive technology	24	0.2	23	0.3	0	0.0	0	0.0	1	0.6	0	0.0
Hypertension, eclampsia	22	0.2	13	0.1	9	0.4	0	0.0	0	0.0	0	0.0
Hypertension, unknown type	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Fertility treatment, unspecified	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
No medical risk factors for this pregnancy	8,668	73.6	6,822	74.2	1,507	70.7	194	76.1	128	79.0	9	81.8

Note: For purposes of reporting medical history factors of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

*According to the National Center for Health Statistics, hypertension, pre-pregnancy is comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

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 condition¹.

In 2009, 1.5 percent of South Dakota resident infants received five minute Apgar scores less than seven.

Considering race, 1.3 percent of white infants, 1.9 percent of American Indian infants, 2.3 percent of black infants, and 2.4 percent of Asian infants received a five-minute Apgar score less than seven in 2009.

Characteristics of Labor and Delivery

Table 31, on the next page, lists the characteristics of labor and delivery in 2009 reported on South Dakota resident birth certificates. The four most prevalent characteristics in 2009 were epidural or spinal anesthesia with 56.6 percent, induction of labor with 31.4 percent, augmentation of labor with 27.8 percent and antibiotics during labor with 26.5 percent. Overall characteristics of labor and delivery were present in 81.1 percent of resident births in 2009.

Table 31
South Dakota Resident Live Births by
Characteristics of Labor and Delivery by Mother's Race, 2009

	Race of Mother											
	Total		White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Epidural or spinal anesthesia	6,658	56.6	5,516	60.0	928	43.5	112	43.9	91	56.2	5	45.5
Induction of labor*	3,694	31.4	3,100	33.7	487	22.8	58	22.7	41	25.3	4	36.4
Augmentation of labor	3,272	27.8	2,676	29.1	451	21.2	80	31.4	60	37.0	2	18.2
Antibiotics during labor	3,116	26.5	2,461	26.8	524	24.6	83	32.5	41	25.3	5	45.5
Fetal intolerance	984	8.4	729	7.9	210	9.8	23	9.0	18	11.1	3	27.3
Meconium staining of the amniotic fluid	926	7.9	632	6.9	236	11.1	39	15.3	16	9.9	3	27.3
Non-vertex presentation	400	3.4	316	3.4	68	3.2	11	4.3	5	3.1	0	0.0
Steroids (glucocorticoids) for fetal lung maturation received by the mother prior to delivery	159	1.4	110	1.2	40	1.9	5	2.0	3	1.9	1	9.1
Chorioamnionitis diagnosed during labor	71	0.6	41	0.4	21	1.0	4	1.6	4	2.5	1	9.1
None of the above	2,221	18.9	1,551	16.9	584	27.4	51	20.0	31	19.1	1	9.1

Note: For purposes of reporting characteristics of labor and delivery, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, induction of labor is comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Obstetric Procedures

Table 32, below, shows obstetric procedures by race for 2009. Tocolysis was the top obstetric procedure used for all races. Asian and American Indian mothers had the

highest percent of tocolysis with 2.5 percent and 2.3 percent, respectively. White mothers and black mothers followed with 1.7 percent and 1.6 percent, respectively.

Table 32
South Dakota Resident Live Births by Obstetric Procedures by Mother's Race, 2009

	Race of Mother											
	Total		White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Tocolysis*	209	1.8	153	1.7	48	2.3	4	1.6	4	2.5	0	0.0
Cervical cerclage	36	0.3	27	0.3	8	0.4	1	0.4	0	0.0	0	0.0
External cephalic version-failed	32	0.3	26	0.3	6	0.3	0	0.0	0	0.0	0	0.0
External cephalic version-successful	23	0.2	20	0.2	3	0.1	0	0.0	0	0.0	0	0.0
No obstetric procedures	11,464	97.5	8,964	97.6	2,067	97.0	250	98.0	158	97.5	11	100.0

Note: For purposes of reporting obstetric procedures of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, tocolysis is comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Onset of Labor

Table 33, on the next page, displays the complications associated with the onset of labor by mother's race. The highest complication associated with onset of labor for white mothers and Asian mothers

was premature rupture of membranes with 5.0 and 5.6 percent, respectively. In 2009 9.9 percent of births had a complication associated with the onset of labor.

Table 33
South Dakota Resident Live Births by Onset of Labor by Mother's Race, 2009

	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Premature rupture of membranes	571	4.9	458	5.0	94	4.4	10	3.9	9	5.6	0	0.0
Precipitous labor (< 3 hours)*	362	3.1	254	2.8	83	3.9	19	7.5	5	3.1	0	0.0
Prolonged labor (20 + hours)	259	2.2	204	2.2	42	2.0	8	3.1	5	3.1	0	0.0
None of the above	10,595	90.1	8,297	90.3	1,912	89.8	218	85.5	144	88.9	11	100.0

Note: For purposes of reporting onset of labor, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, precipitous labor is comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Maternal Complications

Table 34, below, illustrates the maternal complications by mother's race. The highest maternal complication in 2009 was third or fourth degree perineal laceration with 1.8 percent of births. Likewise, the highest maternal complication for white,

American Indian, black, and Asian mothers was third or fourth degree perineal laceration. Overall, maternal complications were present in 2.6 percent of resident births in 2009.

Table 34
South Dakota Resident Live Births by Maternal Complications by Mother's Race, 2009

	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Third or fourth degree perineal laceration	214	1.8	171	1.9	24	1.1	10	3.9	8	4.9	0	0.0
Maternal transfusion	51	0.4	25	0.3	24	1.1	2	0.8	0	0.0	0	0.0
Unplanned operating procedure following delivery	34	0.3	27	0.3	7	0.3	0	0.0	0	0.0	0	0.0
Admitted to intensive care	17	0.1	13	0.1	4	0.2	0	0.0	0	0.0	0	0.0
Ruptured uterus	6	0.1	4	0.0	2	0.1	0	0.0	0	0.0	0	0.0
Unplanned hysterectomy	2	0.0	2	0.0	0	0.0	0	0.0	0	0.0	0	0.0
None of the above	11,448	97.4	8,951	97.5	2,076	97.4	243	95.3	154	95.1	11	100.0

Note: For purposes of reporting obstetric procedures of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Methods of Delivery

Table 35, on the next page, displays the method of delivery by mother's race from 2009. Vaginal birth was the largest method of delivery for all races. Primary C-section

was the second largest method of delivery for all races followed by repeat C-section methods.

Table 35
South Dakota Resident Live Births by Method of Delivery by Mother's Race, 2009

	Race of Mother											
	Total		White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Vaginal (Total)*	8,744	74.3	6,873	74.7	1,548	72.6	185	72.5	119	73.5	7	63.6
Vaginal with no previous C-section	8,515	72.3	6,697	72.8	1,510	70.8	176	69.0	116	71.6	7	63.6
Vaginal after previous C-section	228	1.9	176	1.9	38	1.8	9	3.5	3	1.9	0	0.0
Vaginal (unknown previous types)	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
C-Section (Total)*	3,029	25.7	2,327	25.3	583	27.3	70	27.5	43	26.5	4	36.4
Primary C-section	1,731	14.7	1,354	14.7	304	14.3	42	16.5	28	17.3	2	18.2
Repeat C-section	1,298	11.0	973	10.6	279	13.1	28	11.0	15	9.3	2	18.2
Not Stated	2	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0

Note: For purposes of reporting methods of delivery, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, vaginal and total C-section are comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 36, below, displays the method of delivery by fetal presentation. The majority of births, 95.9 percent, were cephalic while

3.1 percent were breech. When looking at primary C-section births, 16.1 percent were breech while 81.3 percent were cephalic.

Table 36
South Dakota Resident Births by Method of Delivery and Fetal Presentation, 2009

	Total		Cephalic		Breech		Other	
	Num	%	Num	%	Num	%	Num	%
Total	11,775	100	11,292	95.9	364	3.1	99	0.8
Vaginal (Total)*	8,744	100	8,674	99.2	21	0.2	33	0.4
Vaginal with no previous C-section	8,515	100	8,446	99.2	20	0.2	33	0.4
Vaginal after previous C-section	228	100	227	99.6	1	0.4	0	0.0
Vaginal (unknown previous types)	1	100	1	100	0	0.0	0	0.0
C-Section (Total)*	3,029	100	2,618	86.4	343	11.3	66	2.2
Primary C-section	1,731	100	1,408	81.3	278	16.1	45	2.6
Repeat C-section	1,298	100	1,210	93.2	65	5.0	21	1.6

Note: Multiple births (twins, triplets, etc.) were counted as only one single birth.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 37, on the next page, shows South Dakota resident births delivered by C-section and whether labor was attempted. In over half, or 53.6 percent, of primary C-

sections labor was attempted. However, in 46.2 percent of primary C-sections labor was not attempted.

Table 37

South Dakota Resident Births Delivered by C-Section and Whether Labor was Attempted, 2009

	Total		Yes		No	
	Num	%	Num	%	Num	%
C-Section (Total)	3,029	100	997	32.9	2,025	66.9
Primary C-section	1,731	100	927	53.6	799	46.2
Repeat C-section	1,298	100	70	5.4	1,226	94.5

Note: Multiple births (twins, triplets, etc.) were counted as only one single birth.
 Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Abnormal Conditions of the Newborn

Table 38, below, shows abnormal conditions in newborns in 2009. In 2009, 10.5 percent of South Dakota resident live birth certificates reported abnormal conditions of the newborn. Racially, abnormal conditions were reported for 9.9 percent of white

infants while they were reported for 12.4 percent of American Indian infants. Overall, NICU admission was the most frequently reported condition in 2009 followed by antibiotics received by the newborn for suspected neonatal sepsis.

Table 38

South Dakota Resident Live Births by Abnormal Conditions of Newborn by Mother's Race, 2009

	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
NICU admission	978	8.2	728	7.8	189	8.8	35	13.4	22	13.4	3	27.3
Antibiotics received by the newborn for suspected neonatal sepsis	530	4.4	366	3.9	133	6.2	11	4.2	18	11.0	1	9.1
Assisted ventilation required immediately following delivery	514	4.3	371	4.0	114	5.3	16	6.1	11	6.7	1	9.1
Assisted ventilation required for more than six hours	206	1.7	150	1.6	39	1.8	9	3.4	7	4.3	0	0.0
Newborn given surfactant replacement therapy	78	0.7	53	0.6	18	0.8	3	1.1	4	2.4	0	0.0
Significant birth injury	22	0.2	17	0.2	4	0.2	0	0.0	1	0.6	0	0.0
Seizure or serious neurologic dysfunction	3	0.0	2	0.0	1	0.0	0	0.0	0	0.0	0	0.0
None of the above	10,670	89.5	8,408	90.1	1,883	87.6	223	85.4	137	83.5	7	63.6

Note: For purposes of reporting abnormal conditions of newborn, multiple births (twins, triplets, etc.) are counted only as a single birth.
 Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Congenital Anomalies

Congenital anomalies reported in 2009 are shown in Table 39, on the next page. The total number of infants with at least one anomaly in 2009 was 97 or a rate of 8.1

per 1,000 live births. The most frequently reported anomaly in 2009 was cleft lip with or without a cleft palate with 17 or a rate of 1.4 per 1,000 live births.

Table 39
South Dakota Resident Births with Reported Congenital Anomalies,
by Infant's Gender, 2009

	Total		Infant's Gender			
			Female		Male	
	Num	Rate	Num	Rate	Num	Rate
Cleft lip with or without a cleft palate	17	1.4	9	1.5	8	1.3
Chromosomal disorder	16	1.3	6	1.0	10	1.6
Down syndrome (trisomy 21)*	14	1.2	7	1.2	7	1.2
Cleft palate alone	13	1.1	7	1.2	6	1.0
Cyanotic congenital heart disease	12	1.0	8	1.4	4	0.7
Other craniofacial abnormality	12	1.0	2	0.3	10	1.6
Hypospadias	10	0.8	0	0.0	10	1.6
Gastroschisis	6	0.5	2	0.3	4	0.7
Limb reduction defect	6	0.5	2	0.3	4	0.7
Meningomyelocele/Spina bifida*	4	0.3	1	0.2	3	0.5
Congenital diaphragmatic hernia	3	0.3	2	0.3	1	0.2
Anencephaly*	2	0.2	1	0.2	1	0.2
Omphalacele	1	0.1	0	0.0	1	0.2
None of the above	11,830	991.9	5,816	993.0	6,014	990.8

Note: Rates are per 1,000 live births from 2009.

* According to the National Center for Health Statistics, Down syndrome, meningomyelocele/spina bifida, and anencephaly are comparable with data prior to 2006.

Failure of births to add to the total is due to unknown gender.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

Table 40, below, displays congenital anomalies in 2009 by mother's race. Babies born to white mothers showed the highest congenital anomalies with chromosomal

disorder while babies born to American Indian mothers showed the highest anomalies with cleft lip with or without a cleft palate.

Table 40
South Dakota Resident Births with Reported Congenital Anomalies by Mother's Race, 2009

	Total		Race of Mother									
			White		American Indian		Black		Asian		Other	
	Num	%	Num	%	Num	%	Num	%	Num	%	Num	%
Cleft lip with or without a cleft palate	17	0.1	9	0.1	8	0.4	0	0.0	0	0.0	0	0.0
Chromosomal disorder	16	0.1	13	0.1	3	0.1	0	0.0	0	0.0	0	0.0
Down syndrome (trisomy 21)*	14	0.1	10	0.1	2	0.1	1	0.4	1	0.6	0	0.0
Cleft palate alone	13	0.1	9	0.1	4	0.2	0	0.0	0	0.0	0	0.0
Cyanotic congenital heart disease	12	0.1	10	0.1	2	0.1	0	0.0	0	0.0	0	0.0
Other craniofacial abnormality	12	0.1	9	0.1	2	0.1	0	0.0	0	0.0	1	9.1
Hypospadias	10	0.1	10	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Gastroschisis	6	0.1	4	0.0	1	0.0	0	0.0	1	0.6	0	0.0
Limb reduction defect	6	0.1	4	0.0	2	0.1	0	0.0	0	0.0	0	0.0
Meningomyelocele/Spina bifida*	4	0.0	3	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Congenital diaphragmatic hernia	3	0.0	3	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Anencephaly*	2	0.0	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0
Omphalacele	1	0.0	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
None of the above	11,830	99.2	9,253	99.2	2,131	99.2	260	99.6	162	98.8	10	90.9

Note: For purposes of reporting congenital anomalies of the mother, multiple births (twins, triplets, etc.) are counted only as a single birth.

* According to the National Center for Health Statistics, Down syndrome, meningomyelocele/spina bifida, and anencephaly are comparable with data prior to 2006.

Source: South Dakota Department of Health, Office of Data, Statistics, and Vital Records

