

CHAPTER 1

REPRODUCTIVE AND PERINATAL HEALTH, ARIZONA, 2008-2018

- 1A. PREGNANCIES BY PREGNANCY OUTCOME,
RACE/ETHNICITY, AND AGE GROUP**
- 1B. NATALITY: MATERNAL CHARACTERISTICS
AND NEWBORN'S HEALTH**
- 1C. FETAL, PERINATAL, AND MATERNAL DEATHS**
- 1D. ABORTIONS**



1A.

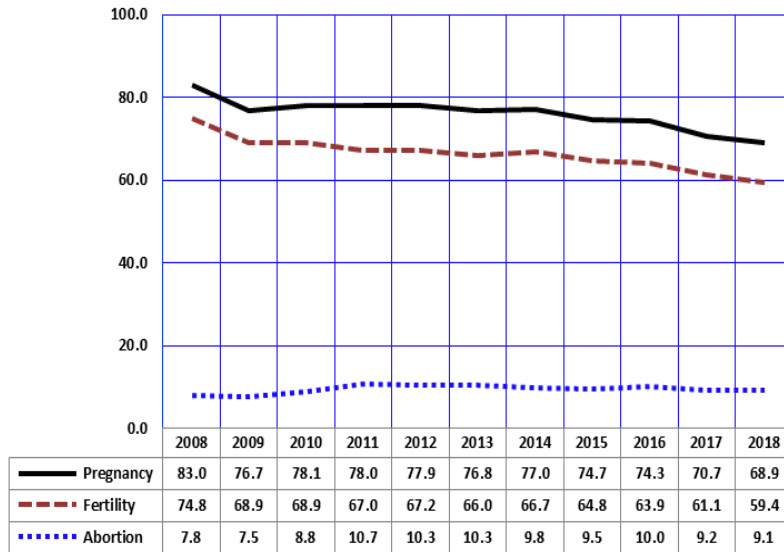
PREGNANCIES BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND AGE GROUP

The expression “reproductive and perinatal health” refers to a variety of health and sociodemographic characteristics of women who became pregnant, factors related to the course of their pregnancies, and the status of pregnancy outcomes. In this report, pregnancies are measured as the sum of three components: **live births** (see Section 1B), **spontaneous terminations of pregnancy** (fetal deaths or stillbirths; Section 1C), and **abortions** (Section 1D).

There were 93,373 pregnancies in 2018 compared to 94,481 pregnancies in Arizona in 2017, 98,060 in 2016, and 110,155 in 2008. The number of resident live births decreased by 1.4 percent, from 81,664 in 2017 to 80,539 in 2018 (**Table 1A-1**). The number of reported abortions increased by 0.2 percent, from 12,336 in 2017 to 12,362 in 2018. The number of reportable spontaneous fetal losses decreased 1.9 percent, from 481 in 2017 to 472 in 2018.

1A. PREGNANCIES BY PREGNANCY OUTCOME, ETHNICITY, AND AGE GROUP

Figure 1A-1
Pregnancy, Fertility, and Abortion Rates^a by Outcome and Year among Females of Childbearing Ages (15 – 44 years), Arizona, 2008-2018



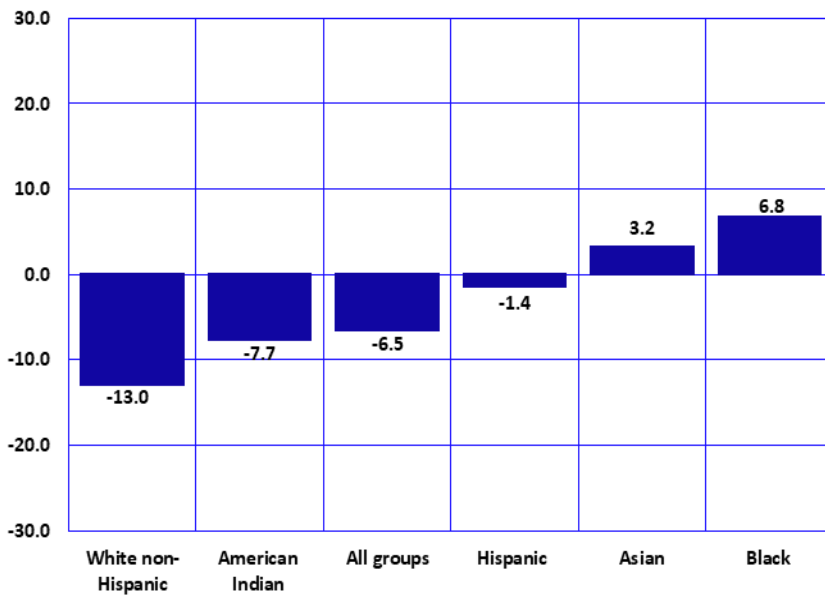
Rate is a measure of the frequency of some event (such as pregnancy, or live birth) in relation to a unit of population during a specified time period such as a year; events in the numerator of the year occur to individuals in the denominator. The pregnancy rate decreased slightly from 70.7 pregnancies per 1,000 females of childbearing age in 2017 to 68.9 pregnancies per 1,000 females of childbearing age in 2018 (**Figure 1A-1, Table 1A-1**).

The fertility rate (the number of births per 1,000 women of childbearing age) also decreased from 61.1/1,000 in 2017 to 59.4/1,000 in 2018. In 2018, the fertility rate was 20.6 percent lower than the high rate recorded in 2008.

Between 2017 and 2018, the abortion rate (the number of abortions per 1,000 women of childbearing age) decreased 1.1 percent from 9.2 to 9.1 per 1,000 women of childbearing age.

Note: ^aAll rates per 1,000 females in specified age group.

Figure 1A-2
Percent Change from 2014 to 2018 in the Number of Pregnancies by Woman's Race/Ethnicity, Arizona



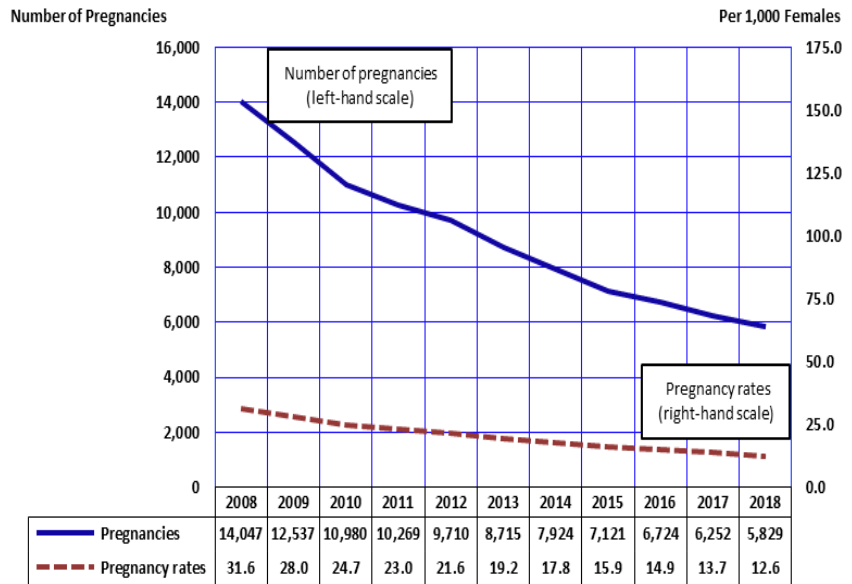
Overall, pregnancies in Arizona decreased 6.5 percent from 2014 to 2018. The changes in number of pregnancies varied by race/ethnicity. Between 2014 and 2018, while White non-Hispanic females (13.0 percent) American Indian (7.7 percent) and Hispanic females (1.4 percent) experienced a decrease in number of pregnancies, Black (6.8 percent), and Asian females (3.2 percent), witnessed an increase in their pregnancy counts (**Figure 1A-2, Table 1A-1**).

1A. PREGNANCIES BY PREGNANCY OUTCOME, ETHNICITY, AND AGE GROUP

Figure 1A-3
Trends in the Number of Pregnancies and Pregnancy Rates^a
among Females 19 or Younger, Arizona, 2008-2018

There is a difference between pregnancy rates and the absolute number of pregnancies. The teen pregnancy rate measures the proportion of teenagers becoming pregnant in a given year; in other words, the relative “risk for pregnancy” in a population “at risk.” The number of pregnancies is also determined by the size of the population “at risk:” or in this case, by the number of teenage females in the population.

The number of teen pregnancies decreased by 58.5 percent from 14,047 in 2008 to 5,829 in 2018 (Figure 1A-3). The teen pregnancy rate declined even more, by 60.1 percent, from 31.6 pregnancies per 1,000 females 10-19 years in 2008 to 12.6 per 1,000 females in 2018. The number of teenage pregnancies and the teen pregnancy rate of 2018 were the lowest recorded since at least 1980.

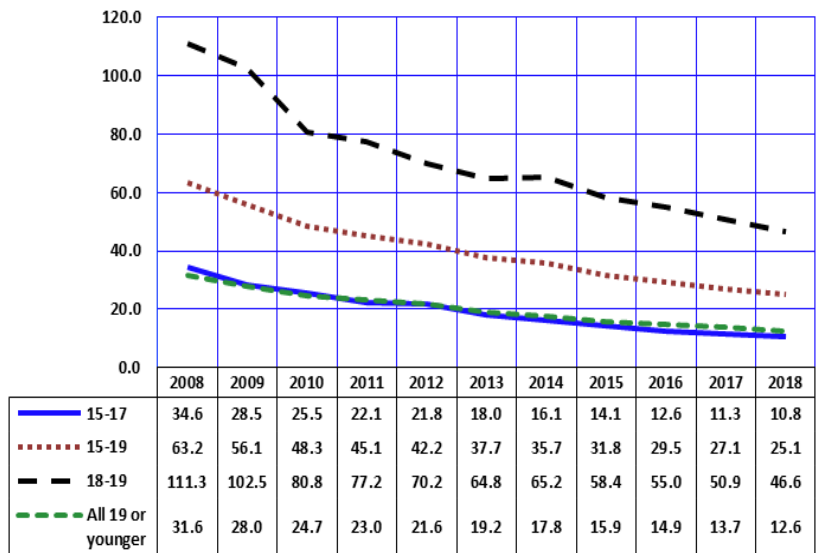


Note: ^a Pregnancy rate is the number of pregnancies per 1,000 females in specified age group.

Figure 1A-4
Pregnancy Rates^a by Age Group and Year among Females
19 or Younger, Arizona, 2008-2018

The pregnancy rate for Arizona teenagers 15-19 years old in 2018 was 25.1 pregnancies per 1,000 females (Figure 1A-4, Table 5A-2), 7.4 percent lower than in 2017 and 60.3 percent lower than in 2008. The pregnancy rate for younger teenagers 15-17 years old declined by 68.8 percent (Table 1A-3) from 34.6/1,000 in 2008 to 10.8 /1,000 in 2018. The pregnancy rate for older teenagers 18-19 years old declined by 58.1 percent from 111.3/1,000 in 2008 to 46.6/1,000 in 2018 (Table 1A-4).

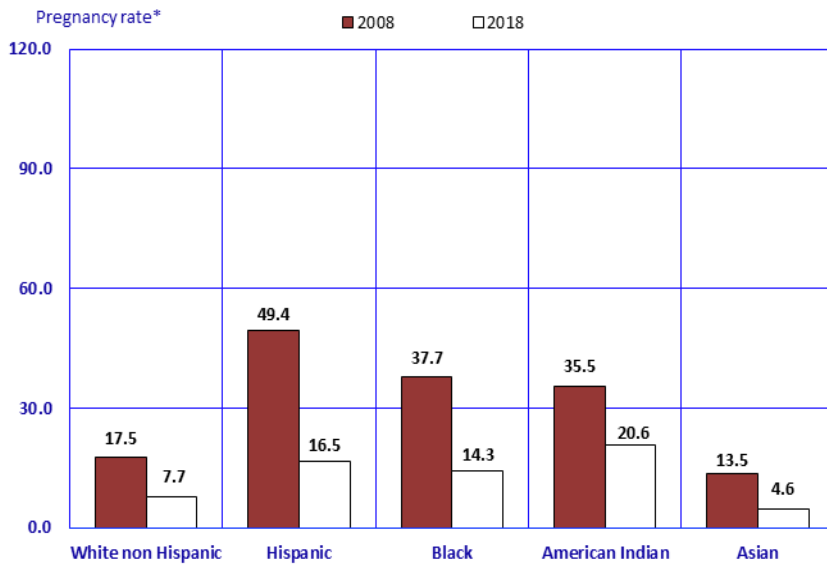
County-level information about teen pregnancies and pregnancy rates is provided in Table 5A-2, Table 5A-3, and Table 5A-5. Pregnancy statistics for Arizona are not available on a sub-county level.



Note: ^a All rates per 1,000 females in specified age group.

1A. PREGNANCIES BY PREGNANCY OUTCOME, ETHNICITY, AND AGE GROUP

Figure 1A-5
Comparison of Pregnancy Rates^a by Race/Ethnicity and Year among Females 19 or Younger in Arizona, 2008 and 2018



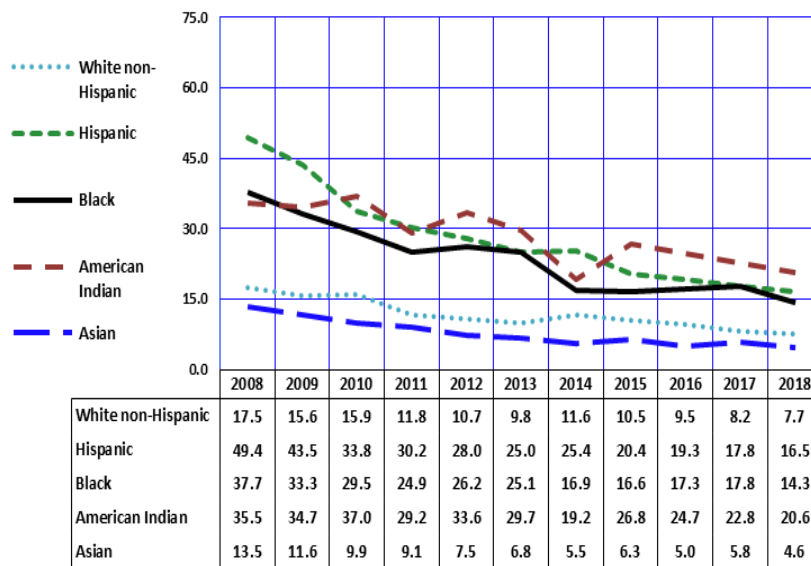
Teen pregnancy rates differ by race/ethnicity.

Between 2008 and 2018, pregnancy rates among females aged 19 and younger declined for all racial/ethnic groups (Figure 1A-5). The steepest decline in teenage pregnancy rates was recorded for Hispanic females, who experienced a 66.6 percent drop from 2008 to 2018. The Asian teenage pregnancy rate decreased greatly also, by 65.9 percent from 13.5 in 2008 to 4.6 in 2018.

The changes in annual teen pregnancy rates from 2008 to 2018 are shown in detail below.

Note: ^a All rates per 1,000 females in specified age group.

Figure 1A-6
Pregnancy Rates^a by Race/Ethnicity and Year among Females 19 or Younger, Arizona, 2008-2018



The teen pregnancy rates for all racial/ethnic groups were lower in 2018 than in 2008 (Figure 1A-6). Compared to 2008, the teen pregnancy rate declined substantially, by more than half for all racial/ethnic groups except among American Indians where it decreased by 42.0 percent.

From 2017 to 2018, teenage pregnancy rates decreased for all race/ethnic groups, more so among Asian females (20.7 percent) and Black females (19.7 percent) than American Indians (9.6 percent), Hispanics (7.3 percent) and White non-Hispanic females (6.1 percent).

Note: ^a All rates per 1,000 females in specified age group.

1A. PREGNANCIES BY PREGNANCY OUTCOME, ETHNICITY, AND AGE GROUP

In 2018, Hispanic females accounted for approximately 43.7 percent of all females 10-19 years old in Arizona. As in the past, they accounted for a large percentage of teen pregnancies (57.1 percent) and live births (60.0 percent; **Figure 1A-7**). In contrast, White non-Hispanic females made up 41.9 percent of all females 10-19 years old in Arizona, but had a lower proportional contribution to teen pregnancies (25.6 percent) and live births (23.4 percent). Note: percentages are based on the number of pregnancies and births in **Table 1A-5**.

Figure 1A-7
Proportional Contribution by Race/Ethnicity to Pregnancies and Live Births among Females 19 or Younger, Arizona, 2018

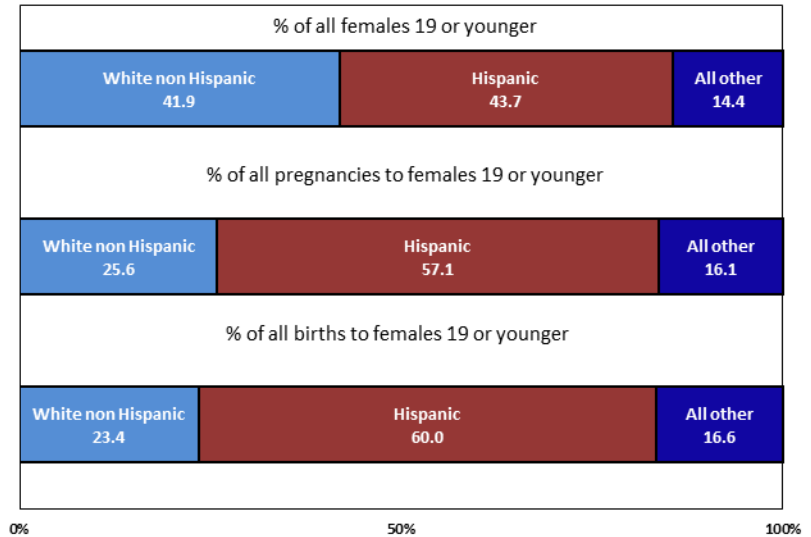
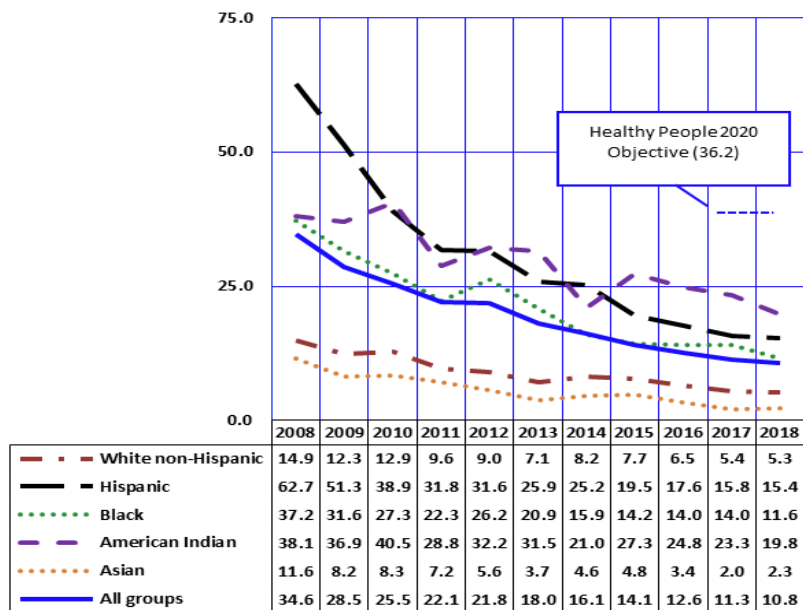


Figure 1A-8
Pregnancy Rates^a by Race/Ethnicity and Year among Females 15-17 Years: 2008-2018 and the "Healthy Arizona 2020" Objective

In 2018, the pregnancy rate of 10.8 pregnancies per 1,000 adolescent females 15-17 years old in Arizona was 70.2 percent lower than the **Healthy People 2020** objective of 36.2/1,000 (**Figure 1A-8**, **Table 1A-3**). The 2018 pregnancy rate among Asians age 15-17 was 93.6 percent lower than the objective and among White non-Hispanics 85.4 percent lower than the objective. While lower than the 2020 objective, the 2018 pregnancy rates of American Indians, Hispanics, and Blacks were substantially higher than their White non-Hispanic and Asian counterparts.



Note: ^a All rates per 1,000 females in specified age group.

**TABLE 1A-1
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND YEAR WITH RATES^b, ARIZONA, 2008-2018**

Race/ethnicity Pregnancy outcome	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Rates
WHITE^c NON-HISPANIC, total:	46,860	44,737	44,174	40,871	40,769	40,982	45,864	43,758	43,287	40,654	39,921	62.2
Births	41,925	39,781	38,777	38,294	38,670	38,220	40,097	38,180	37,762	35,685	34,909	54.4
Abortions	4,737	4,759	5,241	2,385	1,904	2,515	5,562	5,378	5,321	4,762	4,807	7.5
Fetal deaths	198	197	156	192	195	247	205	200	204	207	205	0.3
HISPANIC OR LATINO, total:	45,997	41,869	37,953	36,853	36,720	37,469	38,396	38,841	38,892	38,001	37,848	74.0
Births	42,639	38,362	34,333	32,398	33,146	33,075	33,715	34,264	33,874	33,191	32,995	64.5
Abortions	3,124	3,303	3,422	4,274	3,393	4,189	4,499	4,350	4,823	4,639	4,679	9.2
Fetal deaths	234	204	198	181	181	205	182	227	195	171	174	0.3
BLACK OR AFRICAN AMERICAN,^d total:	5,089	5,166	4,843	4,538	4,867	4,955	5,551	5,485	5,688	5,838	5,926	81.0
Births	4,301	4,378	4,328	4,366	4,715	4,726	4,522	4,361	4,388	4,595	4,655	63.6
Abortions	744	736	476	145	116	189	981	1,074	1,253	1,196	1,229	16.8
Fetal deaths	44	52	39	27	36	40	48	50	47	47	42	0.6
AMERICAN INDIAN OR ALASKA NATIVE,^e total:	6,706	6,516	6,063	5,921	5,650	5,577	5,483	5,355	5,406	5,254	5,060	75.8
Births	6,362	6,170	5,815	5,830	5,569	5,476	5,145	4,984	5,030	4,866	4,709	70.6
Abortions	297	300	218	48	38	61	291	331	340	348	315	4.7
Fetal deaths	47	46	30	43	43	40	47	40	36	40	36	0.5
ASIAN OR PACIFIC ISLANDER,^f total:	3,856	3,797	3,564	3,579	3,715	3,589	3,720	3,774	3,960 [†]	3,941	3,838	60.9
Births	3,425	3,396	3,293	3,505	3,625	3,466	3,169	3,235	3,350	3,327	3,271	51.9
Abortions	412	390	254	47	75	110	534	532	608	598	552	8.8
Fetal deaths	19	11	17	27	15	13	17	7	*	16	15	0.2
ALL RACIAL/ETHNIC GROUPS^d, total:	110,155	103,172	98,548	99,266	99,324	98,762	99,914	98,027	98,060	94,481	93,373	68.9
Births	99,215	92,616	87,053	85,190	85,725	84,963	86,648	85,024	84,404	81,664	80,539	59.4
Abortions	10,396	10,045	11,059	13,606	13,129	13,254	12,747	12,479	13,170	12,336	12,362	9.1
Fetal deaths	544	511	443	470	470	545	519	524	486	481	472	0.3
Pregnancy rate, total:	83.0	76.7	78.1	78.0	77.9	76.8	77.0	74.7	74.3	70.7	68.9	
Fertility rate^g	74.8	68.9	68.9	67.0	67.2	66.0	66.7	64.8	63.9	61.1	59.4	
Abortion rate	7.8	7.5	8.8	10.7	10.3	10.3	9.8	9.5	10.0	9.2	9.1	

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a The sum of recorded live births, abortions and fetal deaths; beginning in 2003, fetal deaths are spontaneous terminations of pregnancy at 20 or more weeks of gestation (or, if the gestational period is unknown, these are the deaths of fetuses weighing 350 grams or more); ^b All rates per 1,000 females of childbearing age (15-44 years); ^c Not of Hispanic origin; ^d Includes other and unspecified ethnicity; ^e Number of births per 1,000 females of childbearing age.

**TABLE 1A-2
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND YEAR AMONG FEMALES AGED 17
AND YOUNGER WITH RATES^b, ARIZONA, 2008-2018**

Race/ethnicity Pregnancy outcome	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Rates
WHITE^c NON-HISPANIC, total:	1,074	894	770	600	564	448	496	462	401	327	325	2.1
Births	784	669	553	507	483	373	352	344	291	225	217	1.4
Abortions	287	218	214	90	71	72	140	117	107	100	104	0.7
HISPANIC OR LATINO, total:	3,057	2,496	2,106	1,731	1,728	1,443	1,292	1,144	1,055	976	953	5.9
Births	2,835	2,340	1,927	1,528	1,574	1,291	1,138	1,000	909	837	812	5.0
Abortions	207	144	167	196	150	142	141	131	139	136	139	0.9
BLACK OR AFRICAN AMERICAN, total:	266	221	189	170 [†]	174	140	145	106	111	111	94	4.5
Births	215	187	161	162	164	128	107	78	84	76	61	2.9
Abortions	48	31	25	*	9	9	36	27	27	34	31	1.5
AMERICAN INDIAN OR ALASKA NATIVE, total:	452	436	361	310 [†]	260 [†]	260 [†]	217	204	191	180 [†]	147	7.6
Births	430	411	345	307	258	251	205	184	178	171	141	7.3
Abortions	19	22	15	*	*	*	7	17	13	*	6	0.3
ASIAN OR PACIFIC ISLANDER, total:	41	30	30 [†]	30 [†]	20 [†]	20 [†]	25	20 [†]	20 [†]	10 [†]	10 [†]	0.9
Births	27	20	24	28	18	13	14	17	12	7	10	0.8
Abortions	14	9	*	*	*	*	11	*	*	*	*	**
ALL RACIAL/ETHNIC GROUPS^d, total:	4,970	4,101	3,513	3,089	2,976	2,476	2,193	1,953	1,792	1,619	1,548	4.2
Births	4,312	3,633	3,015	2,548	2,497	2,056	1,816	1,623	1,474	1,316	1,241	3.4
Abortions	634	442	479	527	463	402	352	312	308	296	299	0.8
Pregnancy rate, total:	13.7	11.2	10.0	8.7	8.4	6.9	6.1	5.4	5.0	4.4	4.2	
Fertility rate^e	11.9	9.9	8.6	7.2	7.1	5.8	5.1	4.5	4.1	3.6	3.4	
Abortion rate	1.7	1.2	1.4	1.5	1.3	1.1	1.0	0.9	0.9	0.8	0.8	

Notes: * Cell suppressed due to non-zero count less than 6; ** Cell suppressed due to rate based on non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero added less than 6; ^a Fetal deaths are included in the total counts of pregnancies; ^b All rates per 1,000 females 10-17 years old; ^c Not of Hispanic origin; ^d Includes other and unspecified ethnicity; ^e Number of births per 1,000 females 10-17 years old.

**TABLE 1A-3
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND YEAR AMONG FEMALES 15-17 YEARS OLD
WITH RATES^b, ARIZONA, 2008-2018**

Race/ethnicity Pregnancy outcome	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Rates
WHITE^c NON-HISPANIC, total:	1,038	863	742	577	549	434	481	451	382	319	310	5.3
Births	769	649	541	494	475	365	344	339	283	224	213	3.6
Abortions	266	207	198	80	65	66	133	111	96	93	93	1.6
HISPANIC OR LATINO, total:	2,911	2,401	2,021	1,653	1,670	1,390	1,262	1,103	1,015	936	925	15.4
Births	2,724	2,253	1,859	1,467	1,528	1,244	1,115	972	877	816	795	13.3
Abortions	173	136	151	179	138	136	134	118	131	117	128	2.1
BLACK OR AFRICAN AMERICAN, total:	248	212	178	160†	166	133	138	103	104	105	90	11.6
Births	203	181	151	152	159	122	102	77	81	71	60	7.7
Abortions	43	28	24	*	6	8	34	25	23	33	28	3.6
AMERICAN INDIAN OR ALASKA NATIVE, total:	428	419	345	300†	250†	250†	210†	193	178	170†	140†	19.8
Births	408	394	331	293	251	243	196	177	167	163	134	19.1
Abortions	17	22	13	*	*	*	*	13	11	*	*	**
ASIAN OR PACIFIC ISLANDER, total:	38	30†	30†	26	20†	10†	23	20†	20†	10†	10†	2.3
Births	26	18	23	26	17	11	13	17	12	6	10	2.1
Abortions	12	*	*	0	*	*	10	*	*	*	*	**
ALL RACIAL/ETHNIC GROUPS^d, total:	4,740	3,945	3,363	2,939	2,860	2,385	2,125	1,887	1,707	1,554	1,491	10.8
Births	4,151	3,501	2,910	2,447	2,430	1,985	1,770	1,582	1,420	1,280	1,212	8.8
Abortions	567	418	435	478	414	382	330	287	277	267	271	2.0
Pregnancy rate, total:	34.6	28.5	25.5	22.1	21.8	18.0	16.1	14.1	12.6	11.3	10.8	
Fertility rate^e	30.3	25.3	22.1	18.4	18.5	15.0	13.4	11.8	10.5	9.3	8.8	
Abortion rate	4.1	3.0	3.3	3.6	3.1	2.9	2.5	2.1	2.0	1.9	2.0	

Notes: * Cell suppressed due to non-zero count less than 6; ** Cell suppressed due to rate based on non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Fetal deaths are included in the total counts of pregnancies; ^b All rates per 1,000 females 15-17 years old; ^c Not of Hispanic origin; ^d Includes other and unspecified ethnicity; ^e Number of births per 1,000 females 15-17 years old.

**TABLE 1A-4
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND YEAR AMONG FEMALES 18-19 YEARS OLD
WITH RATES^b, ARIZONA, 2008-2018**

Race/ethnicity Pregnancy outcome	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Rates
WHITE^c NON-HISPANIC, total:	2,778	2,560	2,316	1,792	1,675	1,602	1,759	1,562	1,433	1,248	1,170	29.7
Births	2,209	2,046	1,833	1,582	1,494	1,408	1,405	1,187	1,056	939	872	22.1
Abortions	554	502	480	199	167	185	348	371	369	300	292	7.4
HISPANIC OR LATINO, total:	4,707	4,400	3,812	3,566	3,357	3,175	3,078	2,764	2,668	2,537	2,377	60.8
Births	4,333	4,001	3,421	3,103	3,053	2,789	2,675	2,409	2,227	2,137	1,982	50.7
Abortions	354	381	365	442	291	367	390	336	425	390	389	9.9
BLACK OR AFRICAN AMERICAN, total:	546	501	446	413	390 [†]	397	345	294	320	339	278	52.9
Births	441	416	401	399	380	379	287	234	232	253	210	40.0
Abortions	95	79	42	13	*	14	54	58	86	83	65	12.4
AMERICAN INDIAN OR ALASKA NATIVE, total:	794	793	664	690 [†]	640 [†]	530 [†]	417	423	388	369	348	74.1
Births	755	759	643	680	632	524	397	385	362	348	322	68.6
Abortions	35	30	21	*	*	*	18	34	25	18	25	5.3
ASIAN OR PACIFIC ISLANDER, total:	108	99	88	90 [†]	68	70 [†]	67	72	61	79	62	17.8
Births	86	68	79	83	61	66	43	46	39	48	32	9.2
Abortions	22	31	9	*	7	*	24	25	22	31	30	8.6
ALL RACIAL/ETHNIC GROUPS^d, total:	9,077	8,436	7,467	7,180	6,734	6,239	5,731	5,168	4,932	4,633	4,281	46.6
Births	7,849	7,319	6,401	5,887	5,620	5,166	4,807	4,261	3,916	3,725	3,418	37.2
Abortions	1,179	1,077	1,033	1,258	1,077	1,039	897	877	989	883	847	9.2
Pregnancy rate, total:	111.3	102.5	80.8	77.2	70.2	64.8	65.2	58.4	55.0	50.9	46.6	
Fertility rate^e	96.3	89.0	69.2	63.3	58.6	53.6	54.7	48.2	43.7	41.0	37.2	
Abortion rate	14.5	13.1	11.2	13.5	11.2	10.8	10.2	9.9	11.0	9.7	9.2	

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Fetal deaths are included in the total count of pregnancies; ^b All rates per 1,000 females 18-19 years old; ^c Not of Hispanic origin; ^d Includes other and unspecified ethnicity; ^e Number of births per 1,000 females 18-19 years old.

**TABLE 1A-5
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, RACE/ETHNICITY, AND YEAR AMONG FEMALES 19 AND YOUNGER,
WITH RATES^b, ARIZONA, 2008-2018**

Race/ethnicity Pregnancy outcome	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Rates
WHITE^c NON-HISPANIC, total:	3,852	3,454	3,086	2,392	2,239	2,050	2,255	2,024	1,834	1,575	1,495	7.7
Births	2,993	2,715	2,386	2,089	1,977	1,781	1,757	1,531	1,347	1,164	1,089	5.6
Abortions	841	720	694	289	238	257	488	488	476	400	396	2.1
HISPANIC OR LATINO, total:	7,764	6,896	5,918	5,297	5,085	4,618	4,370	3,908	3,723	3,513	3,330	16.5
Births	7,168	6,341	5,348	4,631	4,627	4,080	3,813	3,409	3,136	2,974	2,794	13.9
Abortions	561	525	532	638	441	509	531	467	564	526	528	2.6
BLACK OR AFRICAN AMERICAN, total:	812	722	635	580	562	537	490	400	431	450	372	14.3
Births	656	603	562	561	544	507	394	312	316	329	271	10.4
Abortions	143	110	67	17	14	23	90	85	113	117	96	3.7
AMERICAN INDIAN OR ALASKA NATIVE, total:	1,246	1,229	1,025	1,000 [†]	900 [†]	787	634	627	579	546	495	20.6
Births	1,185	1,170	988	987	890	775	602	569	540	519	463	19.2
Abortions	54	52	36	*	*	8	25	51	38	23	31	1.3
ASIAN OR PACIFIC ISLANDER, total:	149	129	117	120 [†]	88	80 [†]	92	92	77	89	74	4.6
Births	113	88	103	111	79	79	57	63	51	55	42	2.6
Abortions	36	40	14	*	9	*	35	28	26	34	32	2.0
ALL RACIAL/ETHNIC GROUPS^d, total:	14,047	12,537	10,980	10,269	9,710	8,715	7,924	7,121	6,724	6,252	5,829	12.6
Births	12,161	10,952	9,416	8,435	8,117	7,222	6,623	5,884	5,390	5,041	4,659	10.1
Abortions	1,813	1,519	1,512	1,785	1,539	1,441	1,249	1,189	1,297	1,179	1,146	2.5
Pregnancy rate, total:	31.6	28.0	24.7	23.0	21.6	19.2	17.8	15.9	14.9	13.7	12.6	
Fertility rate^e	27.4	24.4	21.2	18.9	18.0	15.9	14.9	13.1	12.0	11.1	10.1	
Abortion rate	4.1	3.4	3.4	4.0	3.4	3.2	2.8	2.7	2.9	2.6	2.5	

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Fetal deaths are included in the total counts of pregnancies; ^b All rates per 1,000 females 19 or younger; ^c Not of Hispanic origin; ^d Includes other and unspecified ethnicity; ^e Number of births per 1,000 females 19 or younger.

**TABLE 1A-6
NUMBER OF PREGNANCIES^a BY PREGNANCY OUTCOME, AGE GROUP, AND RACE/ETHNICITY, ARIZONA, 2018
PREGNANCIES BY OUTCOME:**

	All ages	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un- known
All groups											
Total pregnancies	93,373	57	1,491	4,281	21,631	27,862	23,049	12,013	2,755	230†	0†
Births	80,539	29	1,212	3,418	17,783	24,275	20,760	10,562	2,298	198	*
Abortions^b	12,362	28	271	847	3,763	3,449	2,164	1,376	435	29	0
Fetal deaths	470†	0	8	16	85	138	125	75	22	*	0
White non Hispanic											
Total pregnancies	39,921	20†	310†	1,170	7,501	11,986	11,460	6,126	1,230	120†	0†
Births	34,909	*	213	872	6,085	10,571	10,548	5,471	1,035	106	*
Abortions^b	4,810†	11	93	292	1,389	1,347	859	617	189	10	0
Fetal deaths	210†	0	*	6	27	68	53	38	6	*	0
Hispanic or Latino											
Total pregnancies	37,848	28	930†	2,377	10,590	11,421	7,641	3,785	1,011	70	0
Births	32,995	17	795	1,982	9,021	10,084	6,840	3,325	871	60	0
Abortions^b	4,679	11	128	389	1,528	1,294	756	434	129	10	0
Fetal deaths	170†	0	*	6	41	43	45	26	11	0	0
Black or African American											
Total pregnancies	5,930†	0†	90†	280†	1,578	1,771	1,309	696	180†	18	0
Births	4,660†	*	60	210	1,176	1,394	1,081	574	141	18	0
Abortions^b	1,230†	*	28	65	396	363	222	114	38	0	0
Fetal deaths	40†	0	*	*	6	14	6	8	*	0	0
American Indian or Alaska Native											
Total pregnancies	5,060†	10†	140†	350†	1,322	1,520	1,088	510†	120†	0†	0
Births	4,710†	7	134	322	1,205	1,421	1,031	478	107	*	0
Abortions^b	320†	*	*	25	107	92	41	31	13	0	0
Fetal deaths	40†	0	0	*	10	7	16	*	*	0	0
Asian or Pacific Islander											
Total pregnancies	3,840†	0†	10†	62	420†	929	1,400†	820†	180†	18	0
Births	3,270†	0	10	32	296	805	1,260	714	144	10	0
Abortions^b	552	*	*	30	121	118	136	103	34	8	0
Fetal deaths	20†	0	0	0	*	6	*	*	*	0	0

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a The sum of recorded live births, spontaneous fetal losses and abortions; ^b Abortions include unknown or multiple race.

**TABLE 1A-7
PREGNANCY RATES^a AND NUMBER OF LIVE BIRTHS, FETAL DEATHS, AND
ABORTIONS TO TEENS BY INDIVIDUAL AGE, ARIZONA, 2018**

Age	Population	PREGNANCIES BY OUTCOME			TOTAL PREGNANCIES	
		Live births	Abortions	Spontaneous fetal losses	Number	Rate
10	47,082	0	0	0	0	0.0
11	46,431	0	*	0	*	**
12	46,219	0	0	0	0	0.0
13	45,953	*	*	0	10	0.2
14	44,816	24	22	0	46	1.0
10-14	230,501	29	28	0	57	0.2
15	45,135	140	33	*	175	3.9
16	46,259	375	94	*	472	10.2
17	46,972	697	144	*	844	18.0
15-17	138,366	1,212	271	8	1,491	10.8
18	46,489	1,294	358	*	1,657	35.6
19	45,474	2,124	489	11	2,624	57.7
18-19	91,963	3,418	847	16	4,281	46.6
Total 10-19	460,830	4,660 [†]	1,150 [†]	20 [†]	5,830 [†]	12.6

Notes: * Cell suppressed due to non-zero count less than 6; ** Cell suppressed due to rate based on non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Rates per 1,000 female population in specific group.



1B.

**NATALITY:
MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH**

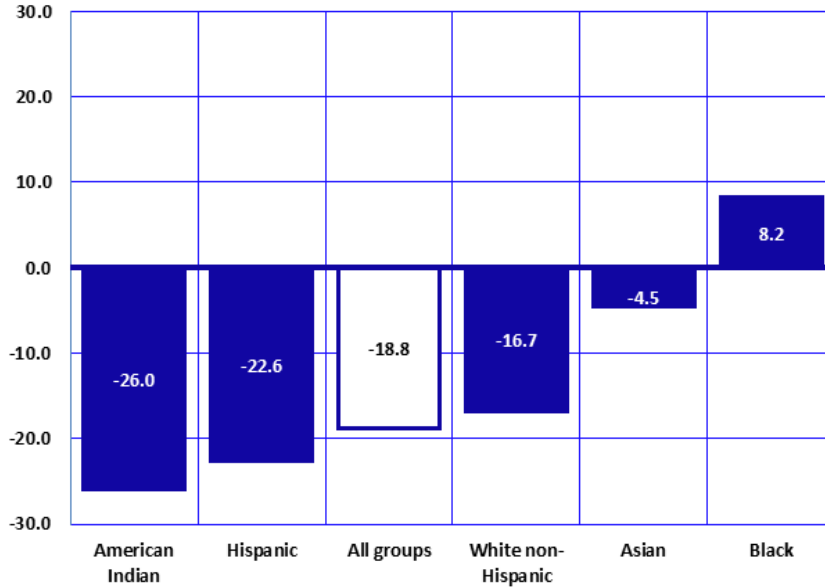
The number of resident births reached its recent peak in 2007 at 102,687 (**Table 1B-2**). In 2008, the number of resident births declined to 99,215; the first annual decline since 1991 (which, like 2008, also was an economic downturn year). Since 2008, the number of births has been declining—with exception of 2014—reaching a low of 80,539 resident births in 2018, the lowest number of births recorded in Arizona since 1999 (80,505). From 2017 to 2018, the number of residents births decreased by 1.4 percent, representing a reduction of 1,125 births.

There were striking differences in how the number of births changed from 2008 to 2018 by mother's race/ethnicity. Compared to 2008, the number of births for all combined racial/ethnic groups was 18.8 percent lower in 2018. Taken separately, while the number of births rose by 8.2 percent for Black or African American mothers between 2008 and 2018, the remaining racial/ethnic groups witnessed a decline in their birth counts, with American Indian women experiencing most of the decrease (26.0) during the period of time under consideration (**Figure 1B-1**).

Since the 2008 edition of this report, we have been pointing out that Hispanics, unlike any other racial/ethnic group in the State were hit the hardest by the recession, which may explain the decline in their birth rate. However, it is important to note that the decline in births to Hispanic or Latino mothers started before the recession, then accelerated during the recession and even as the economy was recovering. Meanwhile, the estimated number of Hispanic women of childbearing age (15–44 years) has increased from 411,660 in 2008 to 511,275 in 2018. Hence, the decrease in Hispanic births may only be attributed in part to the unfavorable economic conditions of this group, and to a large extent to changes in childbearing behaviors, as more Hispanic women are delaying motherhood.

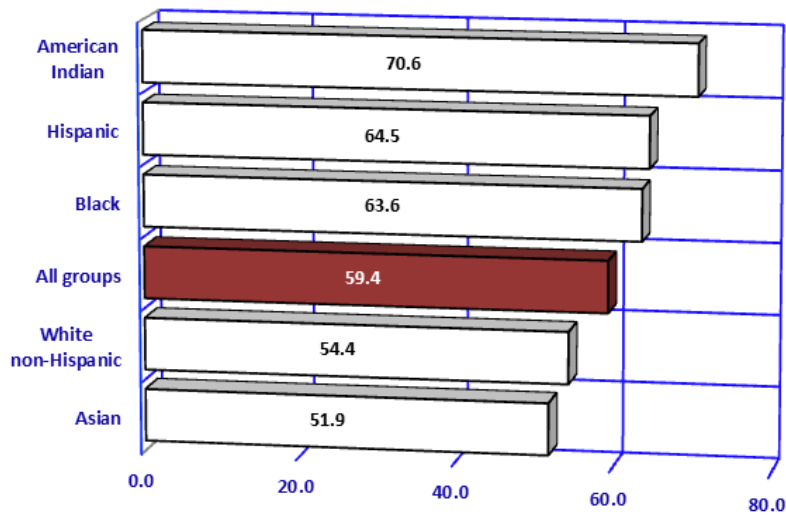
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-1
Percent Change from 2008 to 2018 in the Number of Resident Live Births by
Mother's Race/Ethnicity, Arizona



From 2008 to 2018, the number of resident live births declined by 18.8 percent (**Figure 1B-1**). All racial/ethnic groups experienced a decrease in the number of live births, with the exception of Blacks. The magnitude of the reduction in the number of births was the largest among American Indians (-26.0 percent). And Hispanics or Latinos (-22.6 percent).

Figure 1B-2
General Fertility Rates^a by Race/Ethnicity among Females of all Ages,
Arizona, 2018



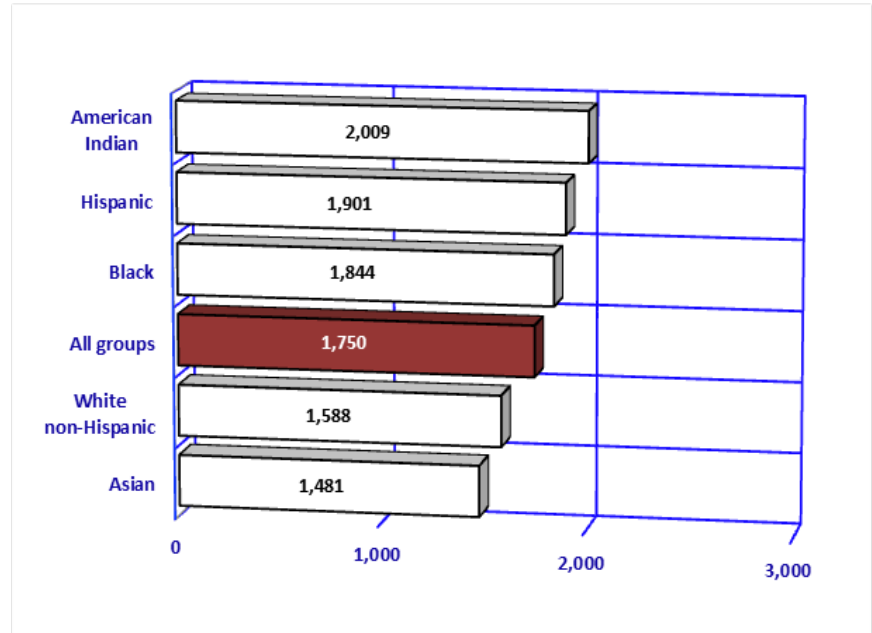
From among 1,356,089 women of childbearing age (15-44 years), 5.8 percent gave birth in 2018. The *general fertility rate* (the number of births per 1,000 women 15-44 years old; GFR) was the highest for American Indian followed by Hispanic females, and Black females. The GFR for Asian females was the lowest of all racial/ethnic groups.

A comparison of fertility rates by county in Arizona is provided in **Table 5A-1**.

Note: ^a Number of births per 1,000 females 15-44 years old in specified group.

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

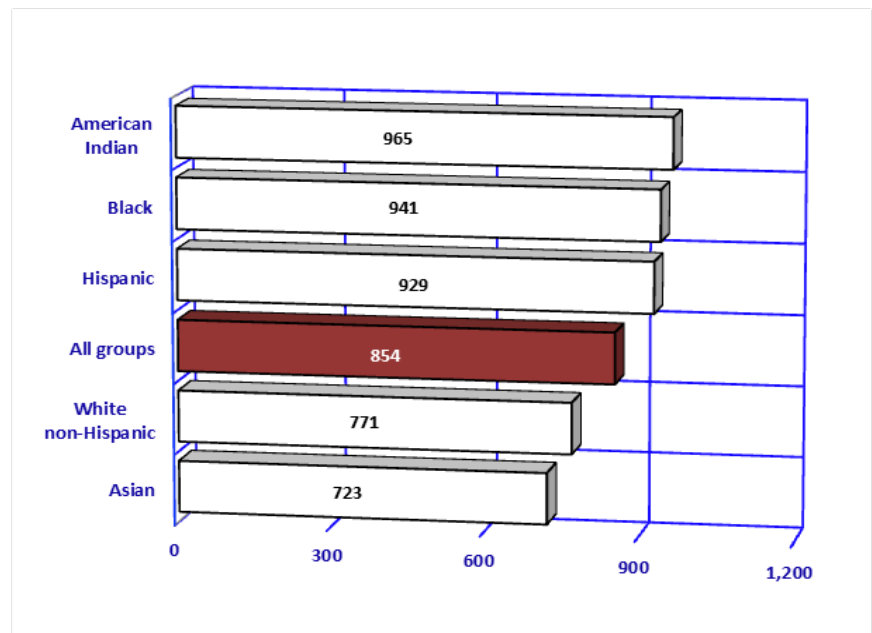
Figure 1B-3
Total Fertility Rates^a by Race/Ethnicity, Arizona, 2018



The *total fertility rate* (TFR) indicates the average number of births to a hypothetical cohort of 1,000 women, if they experienced the age-specific birth rates observed in a given year throughout their childbearing years. From 2003 to 2008, Arizona's TFRs always exceeded the rate of "replacement" (2,110 births per 1,000 women). The "replacement" rate is considered the value at which a given generation can exactly replace itself. The TFR was 2,058 births per 1,000 women of childbearing age in 2009 and 2010, decreasing to 1,750 in 2018 (**Table 1B-1**). In 2018, The TFR for American Indian women (2,009) fell below the generation replacement rate by 4.8 percent. The rate for Asian women (1,481), -the lowest of all groups- was 29.8 percent lower than the replacement rate.

Notes: ^a The sum of age group-specific birth rates multiplied by five (the number of years in the age group). The rate of 1,750 above for example, means that if a hypothetical group of 1,000 women were to have the same birth rates in each age group that were observed in the actual childbearing population in 2018, they would have a total of 1,750 children (or 1.7 children each) by the time they reached the end of the reproductive period (taken here as age 50), assuming that all of the women survived to that age.

Figure 1B-4
Gross Reproduction Rates^a by Race/Ethnicity, Arizona, 2018

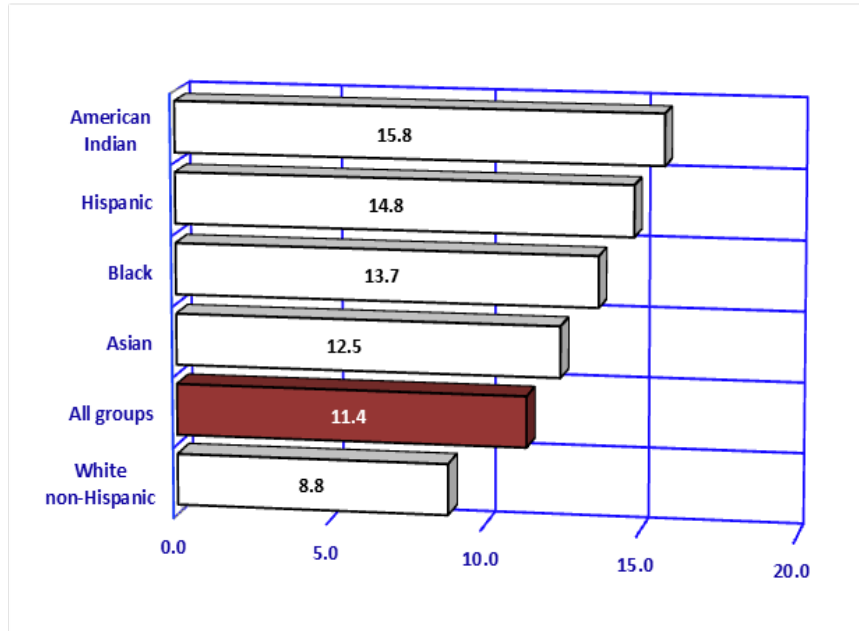


Notes: ^a The sum of birth rates by 5-year age groups multiplied by the proportion of births which were female. The gross reproduction rate represents the average number of daughters born to a hypothetical cohort of 1,000 women if they experienced the age-specific birth rates observed in a given year throughout their childbearing years, and if none of the cohort was to die during their childbearing years.

Another measure used to summarize reproduction patterns is the *gross reproduction rate* (GRR). It represents the average number of daughters born to a hypothetical cohort of 1,000 women if they experienced the age-specific birth rates observed in a given year throughout their childbearing years. This measure is similar to the total fertility rate except that it measures only female births, since reproduction is largely dependent on the number of females in a given population. In 2018, the gross reproduction rates in Arizona ranged from 723 for Asian women to 965 for American Indian women (**Figure 1B-4, Table 1B-1**).

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-5
Birth Rates^a by Race/Ethnicity, Arizona, 2018



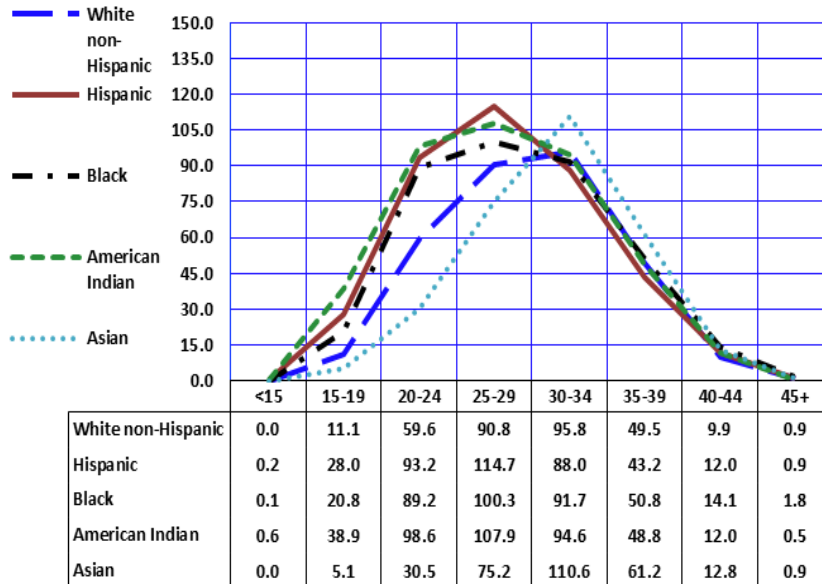
The crude birth rate, often simply called the birth rate, relates the number of births to the total population in a specified group. The birth rate is expressed as the total number of births per 1,000 persons, without regard to the age or sex distribution of the population.

The birth rate for Arizona decreased from 11.7 in 2017 to 11.4 in 2018.

In 2018, the crude birth rates by mother's race/ethnicity ranged from 8.8 births per 1,000 White non-Hispanics to 15.8 per 1,000 American Indians (**Figure 1B-5**).

Note: ^a Number of births per 1,000 population in specified group.

Figure 1B-6
Birth Rates^a by Mother's Age Group and Race/Ethnicity, Arizona, 2018



The age-specific birth rates (the number of births to mothers in a particular age group per 1,000 women in that age group) differed substantially by race/ethnicity (**Figure 1B-6**).

In 2018, American Indian and Hispanic women had the highest birth rates for women under the age of 25 years. The birth rates for women between the ages of 30-34 and 35-39 were the highest among Asian women. In general, Hispanic, Black, and American Indian women tend to give birth at younger ages than Asian and non-Hispanic White women.

Note: ^a Number of births per 1,000 females in specified group.

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-7
Percent of Births to Unmarried Mothers by Age Group, Arizona, 2018

Unmarried mothers have accounted for an increasing annual proportion of births throughout the 1980s and 1990s. In 2018, 35,927 infants were born to unmarried mothers compared to 44,728 in 2008. It is important to note that beginning 2015, divorced mothers have been included in the proportion of unmarried mothers; therefore caution should be exercised in comparing data for this year to those of the previous years.

A decade ago, the proportion of births among unmarried women aged 20-24 years was 60.8 percent, while in 2018, approximately 66.5 percent of mothers 20-24 years old were unmarried (**Figure 1B-7**).

Births and birth ratios by mother's marital status, age group, and race/ethnicity are given in (**Table 1B-22**). County-level information is provided in (Table **5B-14** and **5B-15**).

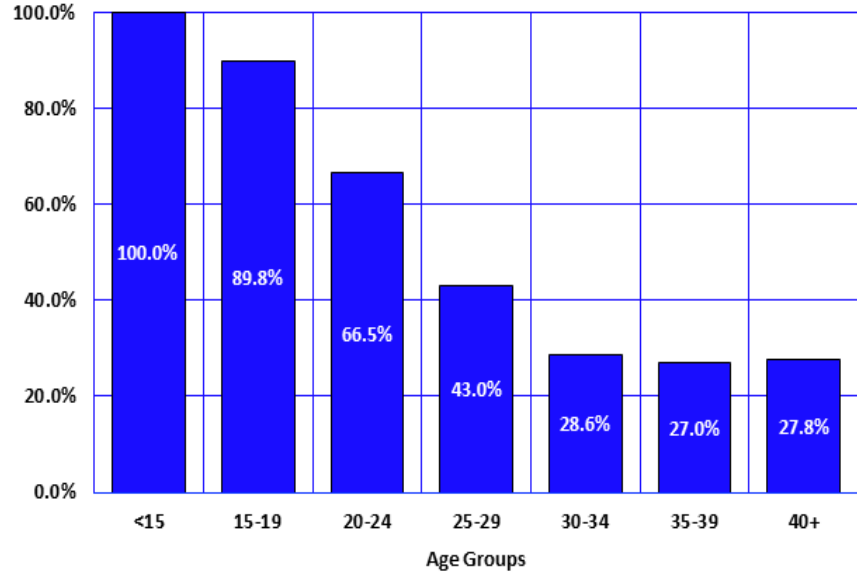
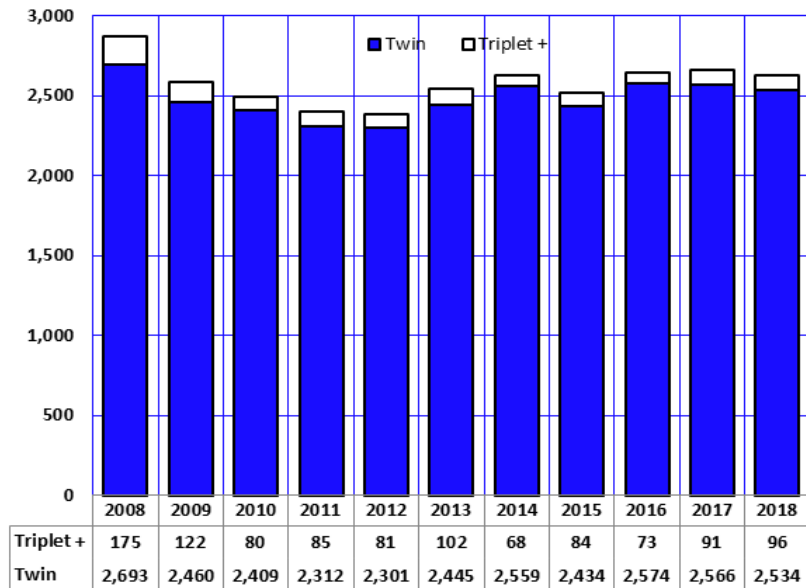


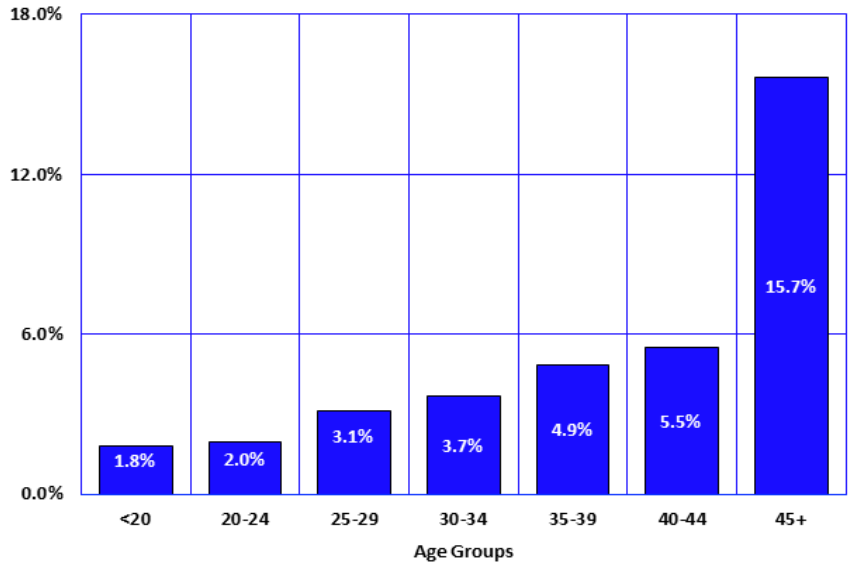
Figure 1B-8
Number of Births in Twin and Triplet+ Deliveries by Year, Arizona, 2008-2018

The number of multiple birth events in Arizona declined from 2,868 in 2008, (the highest number ever recorded) to 2,630 in 2018 (**Figure 1B-8**). The number of babies born in twin deliveries decreased from 2,693 in 2008 to 2,534 in 2018 (**Figure 1B-8**). The number of triplets and higher order multiple birth events decreased by 45.1 percent from 175 in 2008 to 96 in 2018.



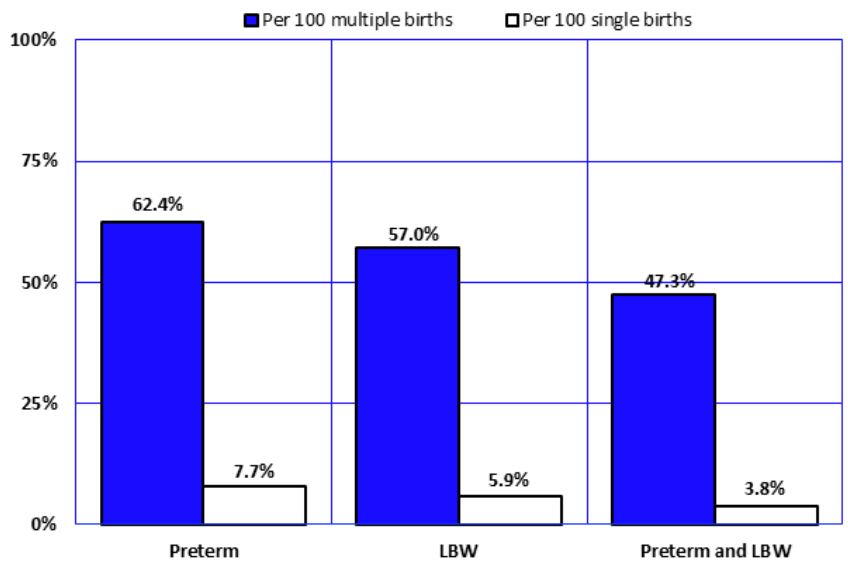
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-9
Multiple Births by Mother's Age Group, Arizona, 2018



In 2018, the proportion of multiple births gradually increased with maternal age among mothers below 45 years of age and sharply increased among mothers age 45 years and older. Among women aged 45 years and older, 15.7 percent of all births were twins, triplets, or quadruplets (**Figure 1B-9**). The percent of all births that were multiple births to women age 45 and over decreased from 16.6 percent in 2017 to 15.7 percent in 2018. Ongoing monitoring of multiple births among older mothers will help better understand the recent variation that has been found in this measure.

Figure 1B-10
Infants Born too Early (Preterm)^a and Infants Born too Small (LBW)^b among Multiple and Single Births, Arizona, 2018



Infants born in multiple deliveries tend to be born at shorter gestation age and with low birth weight than those born in singleton deliveries (**Figure 1B-10**). In 2018, infants born in multiple deliveries were 8.1 times more likely (62.4 vs. 7.7 percent) to be born earlier than expected (at less than 37 completed weeks of gestation) and smaller (at less than 2,500 grams) than singleton births.

Preterm birth is a leading cause of infant morbidity and mortality, accounting for more than 60 percent of all infant deaths (only those with matching death records); (**Figure 2C-4** in section 2C). The weight of the newborn also is an important predictor of future morbidity and mortality. Infants born at low birth weight (<1,500 grams) account for 51.7 percent of all infant deaths (**Figure 2C-3**).

Notes: ^a Preterm is < 37 weeks of gestation; ^b Low birthweight is less than 2,500 grams or 5 pounds 8 ounces.

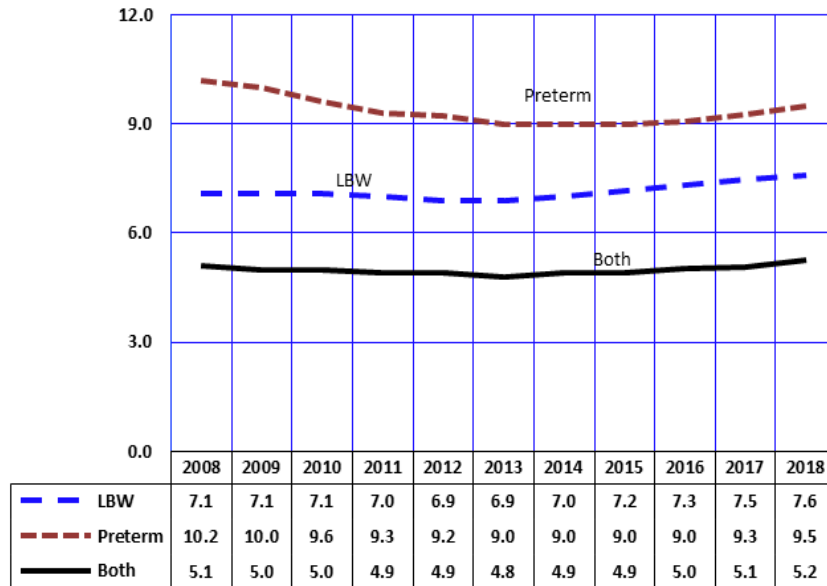
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-11
Preterm^a and Low Birthweight (LBW)^b Births by Year, Arizona, 2008-2018

The proportion of preterm births reached 9.5 percent of all births in 2018, an increase from 9.0 percent, the lowest recorded rate since 2013.

The proportion of infants born prematurely and who were also low birth weight (LBW; at less than 2,500 grams) slightly increased from 5.1/100 births in 2017 to 5.2/100 births in 2018 (Figure 1B-11).

Detailed characteristics of births by birthweight and gestational age are provided in (Table 1B-32). Comparative data by county of residence are available in (Table 5B-16 – Table 5B-24).

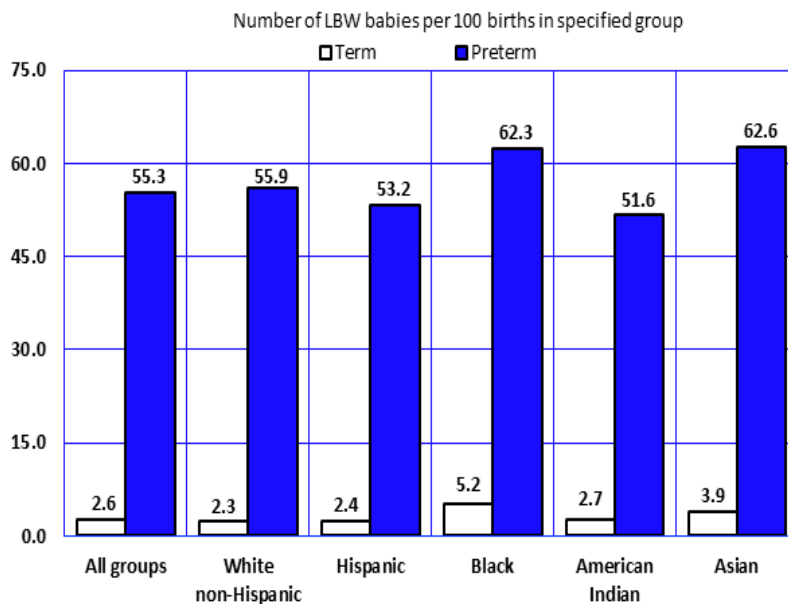


Notes: ^a Preterm: < 37 weeks of gestation; ^b Low birthweight (less than 2,500 grams or 5 pounds 8 ounces); In this report, the primary measure used to determine the gestational age is the clinical estimate of gestation as reported on the birth certificate.

Figure 1B-12
Low-Birthweight (LBW) Births by Length of Gestation and Mother's Race/Ethnicity, Arizona, 2018

In 2018, 7.6 percent of all babies were born at low birthweight (LBW), (weight less than 2,500 grams or 5 pounds 8 ounces), representing a slight increase from the rate recorded in 2008 (7.1 percent). Preterm delivery is the strongest risk factor for LBW. Infants born at less than 37 completed weeks of gestation were 21.3 times (55.3 vs. 2.6 percent) more likely to be LBW than infants born at term (Figure 1B-12). Seven out of ten (69.2 percent) LBW babies born in 2018 were preterm (Table 1B-3).

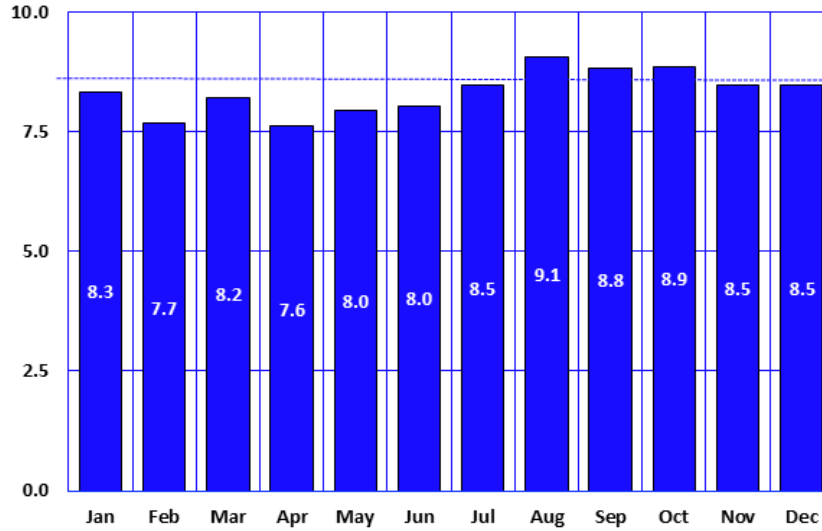
County-level data for LBW newborns are available in (Tables 5B-16 – 5B-23). Community-level information is in (Table 9A).



Notes: Number of LBW babies per 100 births in specified group; Preterm: < 37 weeks of gestation; Low birthweight (less than 2,500 grams or 5 pounds 8 ounces).

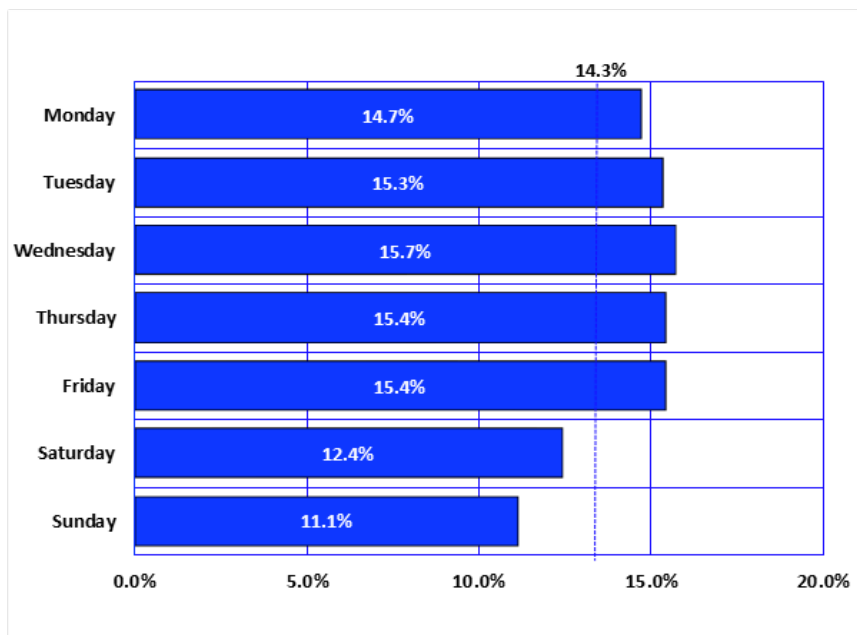
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-13
Percent of Resident Births by Month, Arizona, 2018



Historically, births in Arizona have peaked during August and September, with a monthly average around 8.3 percent. (Figure 1B-13). In 2018, the seasonal fluctuation of the frequency of births is marked by peak in August, October, and September.

Figure 1B-14
Percent of Resident Births by Day of the Week, Arizona, 2018



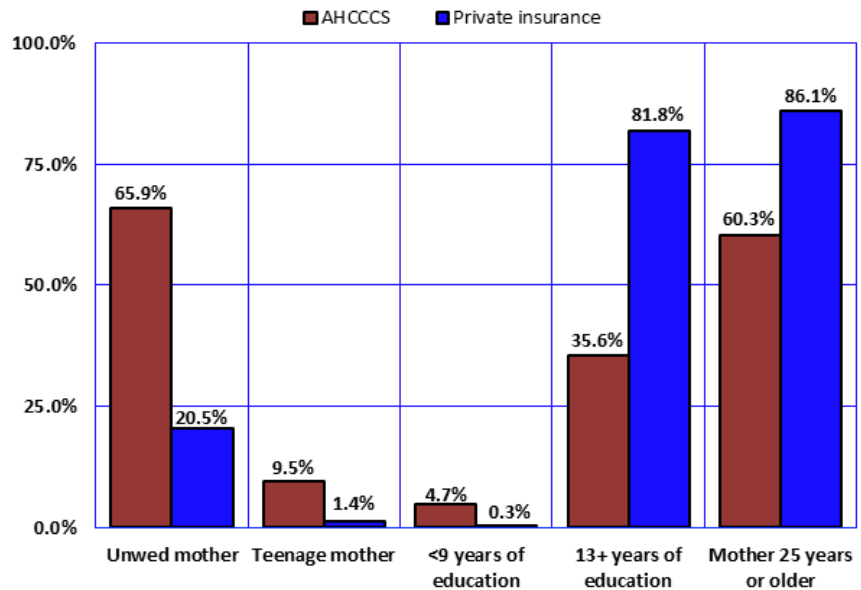
On average, 221 infants were born per day in 2018 to Arizona residents. The daily average of resident live births in 2018 was substantially lower on weekdays than on weekends (Figure 1B-14). Many studies suggest that weekly, daily, and hourly variations observed in hospitals and clinics are not due to a biological rhythm of labor, but to increased frequency of obstetric interventions in the timing of delivery (induced labors and elective cesarean deliveries), making it more aligned with the work week schedule.

In 2018, only 8.5 percent of cesarean deliveries occurred on Sundays, compared to 16.2 percent on Mondays. The average rate of induction of labor was substantially lower on weekend days (11.7 percent) than it was on week days (15.3 percent).

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

The number of years of maternal education was the only possible proxy of socioeconomic status (SES) on the birth certificate prior to 1989. Paying party for the delivery became another SES indicator in 1989. The Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid Program) versus private health insurance (PHI) compares mothers of lower and higher SES respectively. PHI mothers were 2.3 times more likely to have some college education than were AHCCCS mothers (81.8 and 35.6 percent respectively, **Figure 1B-15**). Around 5 percent of AHCCCS mothers had less than 9 years of education, 13.9 times the proportion of PHI mothers. Only 20.5 percent of mothers with PHI were unmarried compared to 65.9 percent of AHCCCS mothers. Nine out of ten mothers with PHI were at least 25 years old compared to 6 out of 10 AHCCCS mothers.

Figure 1B-15
Comparison of Selected Sociodemographic Characteristics by the Payer for Delivery, Arizona, 2018

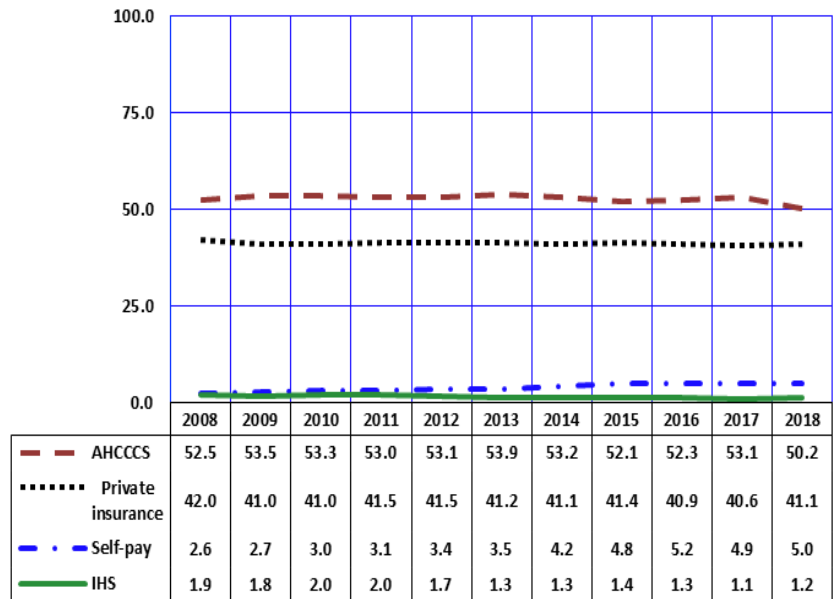


Note: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

Since 2002, the share of resident births paid for by AHCCCS has exceeded the share paid by private health insurance (**Figure 1B-16**). In 2008, private insurance funded 42.0 percent of births and AHCCCS paid for 52.5 percent of births. Compared to 2008, in 2018 AHCCCS paid for 4.3 percent fewer births and private insurance paid for 2.1 percent fewer births.

The share of AHCCCS funded births varied little from 2008 to 2018. The share of private health insurance also remained stable during this time period. In 2018, 5 percent of births were paid by mothers themselves and/or their families (i.e. self-pay). The Indian Health Service (IHS) paid for 1.2 percent of the births in 2018, a slight increase from last year (**Table 1B-25 and Table 1B-27**).

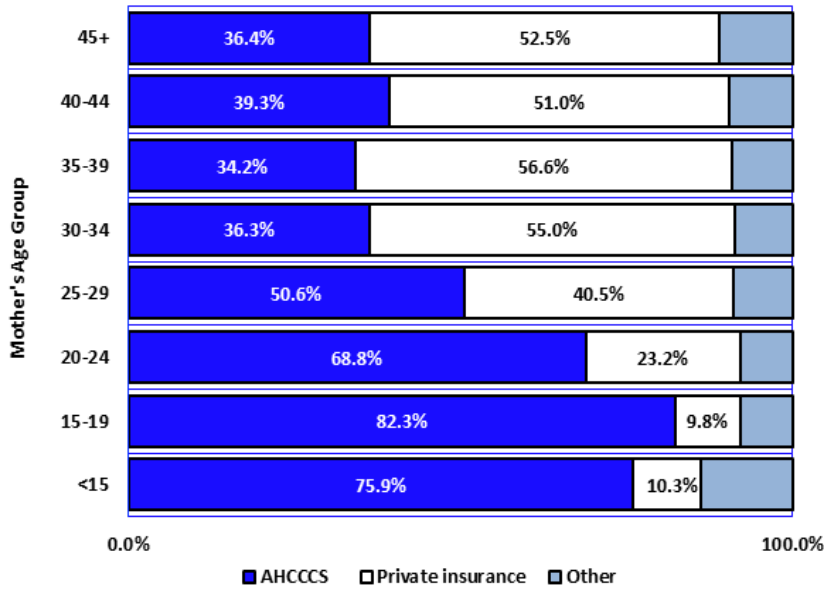
Figure 1B-16
Births by Payer and Year, Arizona, 2008-2018



Notes: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program; IHS is the Indian Health Service.

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-17
Payer for Delivery by Mother's Age Group, Arizona, 2018



In 2018, the Arizona Health Care Cost Containment System (AHCCCS) paid for the majority of the deliveries to mothers 29 years or younger (**Figure 1B-17**). In contrast, private insurance was the largest payer for the deliveries of women giving birth who were 30 years old or older in 2018 (based on data in **Table 1B-28**).

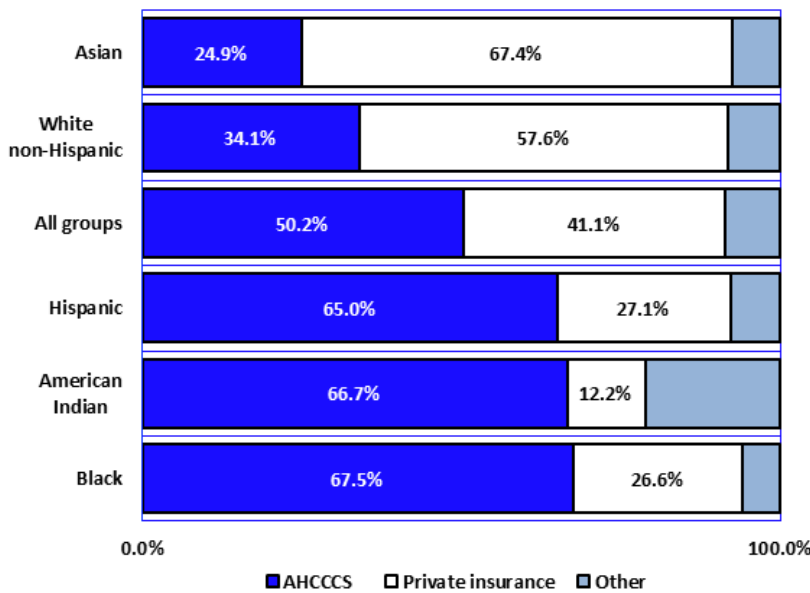
For each of the age groups the AHCCCS share substantially increased since 1989. Below are the proportions of deliveries paid for by AHCCCS in 1989:

- <15 years: 45.3 percent
- 15-19 years: 49.0 percent
- 20-24 years: 34.3 percent
- 25-29 years: 19.4 percent
- 30-34 years: 14.5 percent
- 35-39 years: 13.9 percent
- 40+ years: 14.2 percent.

From 1989 to 2018, the share of births paid for by AHCCCS more than doubled among mothers 24 years old or younger.

Note: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

Figure 1B-18
Payer for Delivery by Mother's Race/Ethnicity, Arizona, 2018



In 2018, private insurance was the largest payer for deliveries of Asian (67.4 percent) and White non-Hispanic infants (57.6 percent). In contrast, the Arizona Health Care Cost Containment System was the largest payer for deliveries of Black or African American (67.5 percent), American Indian (66.7 percent) Hispanic or Latino infants (65.0 percent).

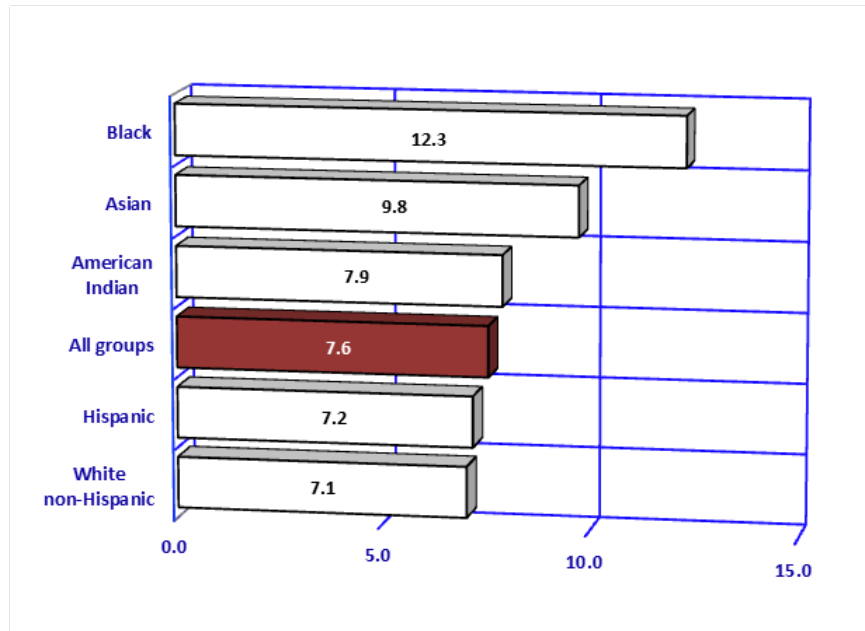
The Indian Health Service as a payer accounted for 17.9 percent of deliveries of American Indian or Alaska Native infants in the State (**Figure 1B-18**, based on data in **Table 1B-27**).

Hispanics or Latinos accounted for 53.0 percent of the 40,470 deliveries paid for by AHCCCS. About 29.4 percent of all AHCCCS births were to White non-Hispanic women (based on data in **Table 1B-27**).

Notes: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program; Other includes Indian Health Service, self-pay, or unknown.

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-19
Percent of Low Birthweight^a by Mother's Race/Ethnicity,
Arizona Residents, 2018

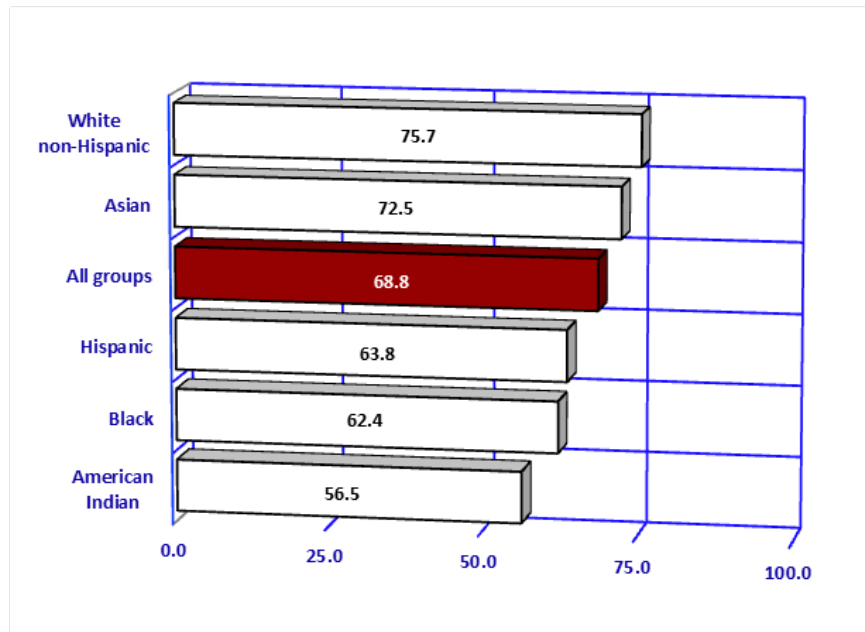


Note: ^a Low birthweight is less than 2,500 grams (less than 5 pounds 8 ounces).

In 2018, 7.6 percent of all Arizona infants were born at a low birthweight (LBW), or at less than 2,500 grams (5 pounds 8 ounces).

In Arizona, LBW rates differed by mother's racial/ethnic group. LBW rates were highest for newborns of Black or African American mothers (12.3 percent), Asian or Pacific Islander mothers (9.8 percent), and American Indian mothers (7.9 percent). Newborns of Hispanic or Latino and White non-Hispanic had the lowest LBW rates among all racial/ethnic groups (**Table 1B-25**).

Figure 1B-20
First Trimester Prenatal Care by Mother's Race/Ethnicity,
Arizona Residents, 2018

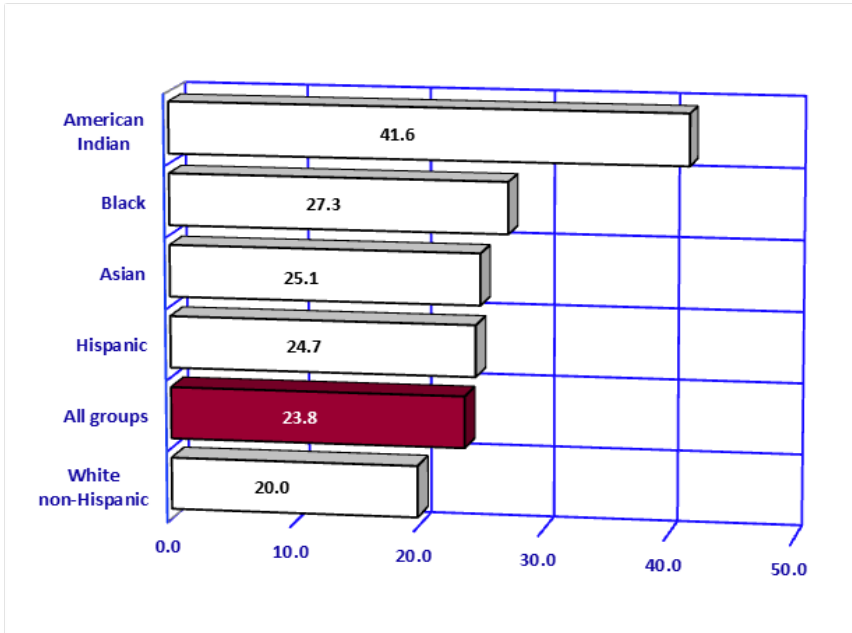


The percent of Arizona mothers giving birth who received early prenatal care (i.e., in the first trimester) has remained relatively stable from 2008 (79.4 percent) to 2013 (81.3 percent; **Table 1B-2**). In 2018, 68.8 percent of Arizona mothers initiated prenatal care during the first trimester. It should be noted that with the adoption of the 2003 revised U.S. birth certificate in 2014, trend analysis of the timing of prenatal care is compromised by significant changes in reporting of prenatal care initiation. Hence, the low proportion of women with timely entry to prenatal care in 2018 may be attributable for the most part to differences in reporting.

In Arizona, American Indian, Black or African American, and Hispanic or Latino mothers were least likely to begin prenatal care in the first trimester (**Figure 1B-20**). Timely entry to prenatal care was essentially reported among White non-Hispanic and Asian or Pacific Islander mothers based on data in (**Table 1B-25**).

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

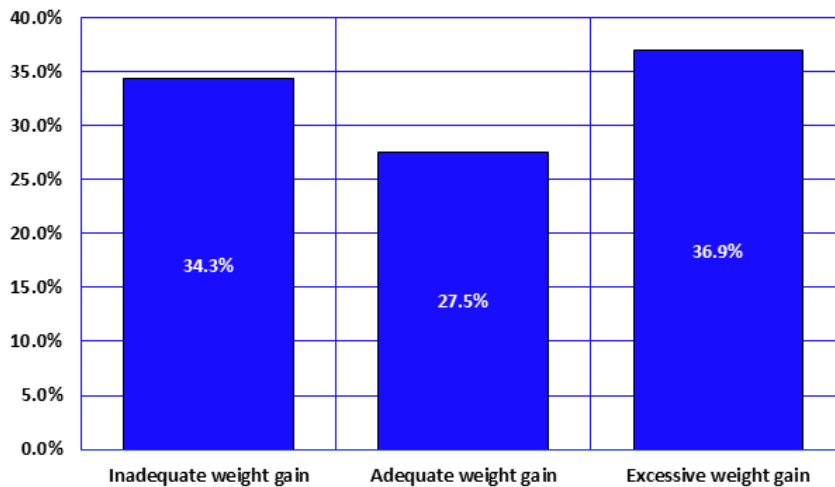
Figure 1B-21
Maternal Medical Risk Factors^a by Mother's Race/Ethnicity, Arizona, 2018



Note: ^a Births with medical risk factors reported per 100 births in specified group.

Maternal medical risk factors (such as, diabetes, hypertension, eclampsia, or sexually transmissible diseases) can contribute to serious pregnancy complications and infant deaths, if not treated properly. In 2018, with exception to White non-Hispanic mothers, all the mothers from the remaining race/ethnic groups recorded highest proportions of medical risk factors (**Figure 1B-21**).

Figure 1B-22
Low-Birthweight by Maternal Weight Gain during Pregnancy, Arizona, 2018



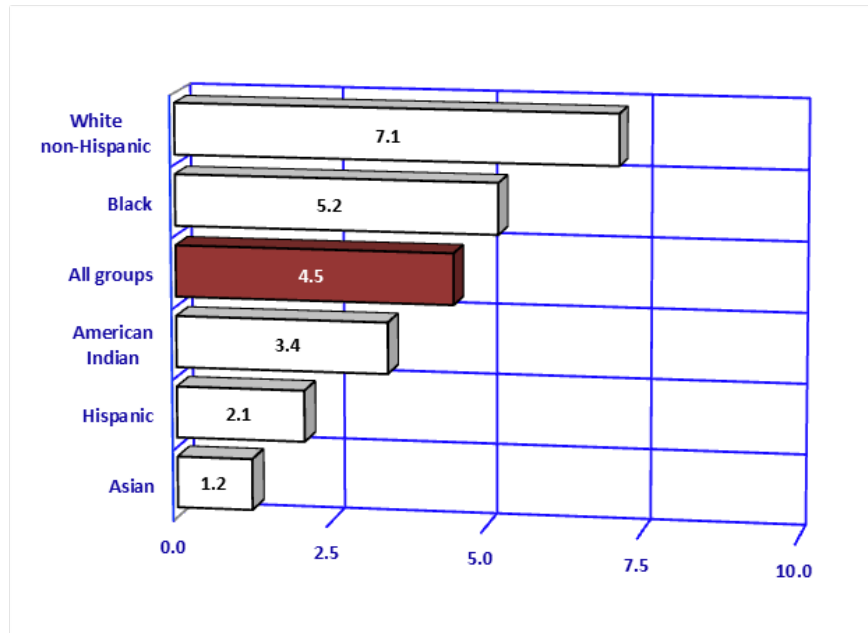
Maternal weight gain during pregnancy is a determinant of both fetal growth and birthweight. Insufficient or excessive weight gain during pregnancy can negatively influence outcomes of both mother and infant. Based on the Institute of Medicine guidelines, women who are of normal weight (body mass index or BMI 18.5-24.9) should gain 25-35 pounds during pregnancy. Underweight women (BMI <18.5) should aim to gain 28-40 pounds, while overweight women (BMI 25.0-29.9), and obese women (BMI ≥30.0) should gain 15-25 pounds and 11-20 pounds, respectively. Prior to the adoption of the 2003 revised birth certificate in 2014, it was not possible to analyze gestational weight gain in relation to mother's pre-pregnancy BMI. The revised birth certificate includes new fields (mother's height, pre-pregnancy weight, and weight at delivery) providing the opportunity to assess whether pregnancy weight gain is within the recommended range for the mother's BMI.

In 2018, the proportion of newborns with low birthweight was the lowest among mothers who gained the recommended amount of weight during pregnancy (**Figure 1B-22**).

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-23
Self-reported Tobacco Use during Pregnancy^a by Race/Ethnicity, Arizona, 2018

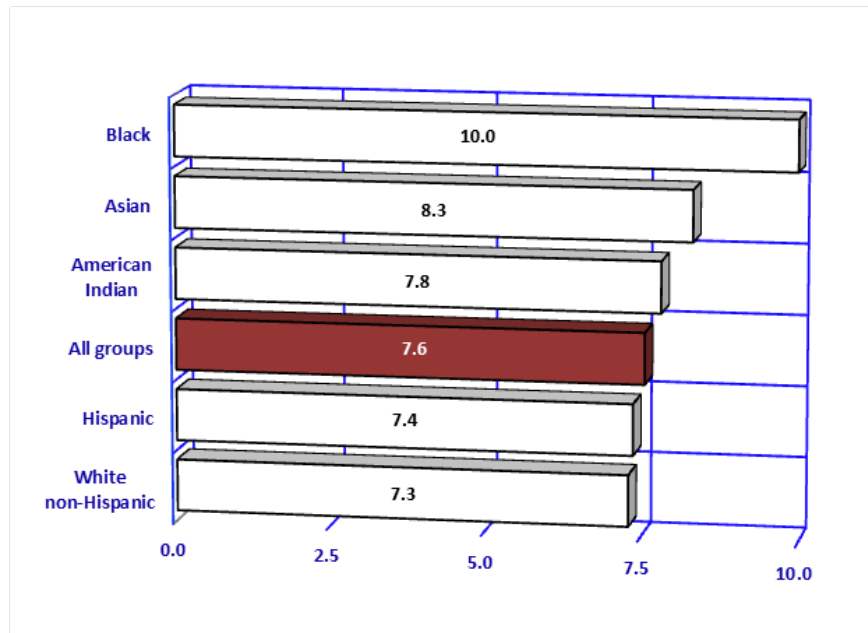
Cigarette smoking during pregnancy has been associated with reduced infant weight at birth, intrauterine growth retardation, and preterm births. Smoking during pregnancy was reported by 4.5 percent of women giving birth in 2018 (**Table 1B-25, Table 5B-30**), compared to 10.5 percent in 1989, when this information was first reported on Arizona birth certificates. It is unclear whether this decline means that women giving birth in Arizona are less likely to use tobacco during pregnancy or, perhaps, less likely to report it if they use. White non-Hispanic and Black mothers continued to be more likely to report smoking than American Indian, Hispanic, and Asian mothers (**Figure 1B-23**).



Note: ^a Mothers giving birth who reported tobacco use per 100 births in specified group.

Figure 1B-24
Rates of Admission to Newborn Intensive Care Units^a by Mother's Race/Ethnicity, Arizona, 2018

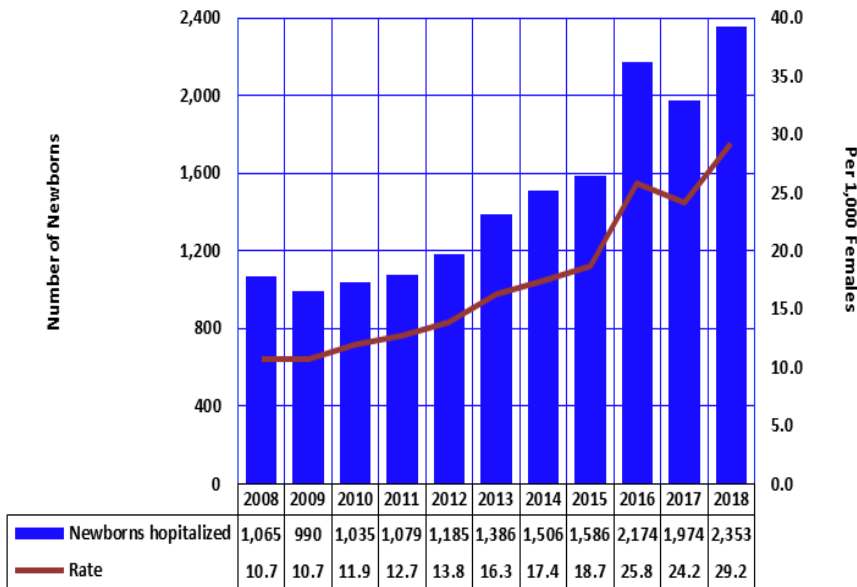
In 2018, 6,086 or 7.6 percent of newborns were admitted to newborn intensive care units (NICUs). Around 46.2 percent of the NICU admissions were low birthweight (LBW) babies. Prematurity, i.e., gestational age before 37 weeks captured more NICU admissions than did LBW, with 54.6 percent of NICU admissions being premature (based on data in **Table 1B-32**). The proportion of NICU admissions differed among racial/ethnic groups. In 2018 the rate of NICU admissions for Black or African American births was the highest among racial/ethnic groups (10.0 percent; **Table 1B-25**).



Note: ^a The number of newborns admitted to Intensive Care Units per 100 births in specified group.

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

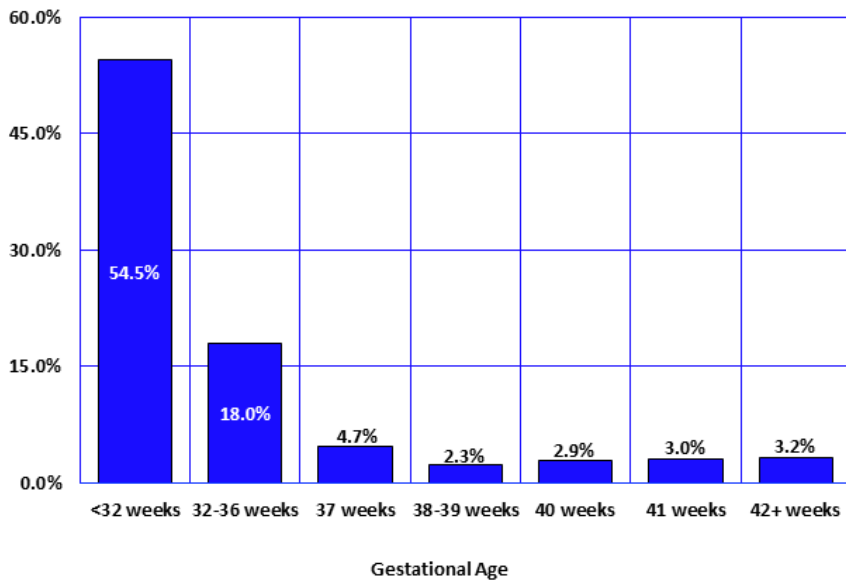
Figure 1B-25
Newborns Who Were Hospitalized after Birth because They Were Affected by Maternal Use of Drugs during Pregnancy, Arizona, 2008-2018



Information about maternal drug use during pregnancy is not reported on Arizona birth certificates. However, it can be obtained from the hospital discharge database. There are several diagnostic codes which identify exposure of fetus or newborn to specific noxious substances (such as narcotics, hallucinogenic agents, or cocaine) transmitted via placenta or breast milk. During the 11-year period under consideration, the newborn hospitalization rate due to maternal use of drug during pregnancy increased from 10.7/1,000 in 2008 to 29.2/1,000 in 2018.

Note: Rate is the number of newborns admitted to Intensive Care Units per 1000 births in specified group.

Figure 1B-26
Abnormal Conditions of the Newborn by Gestational Age, Arizona, 2018



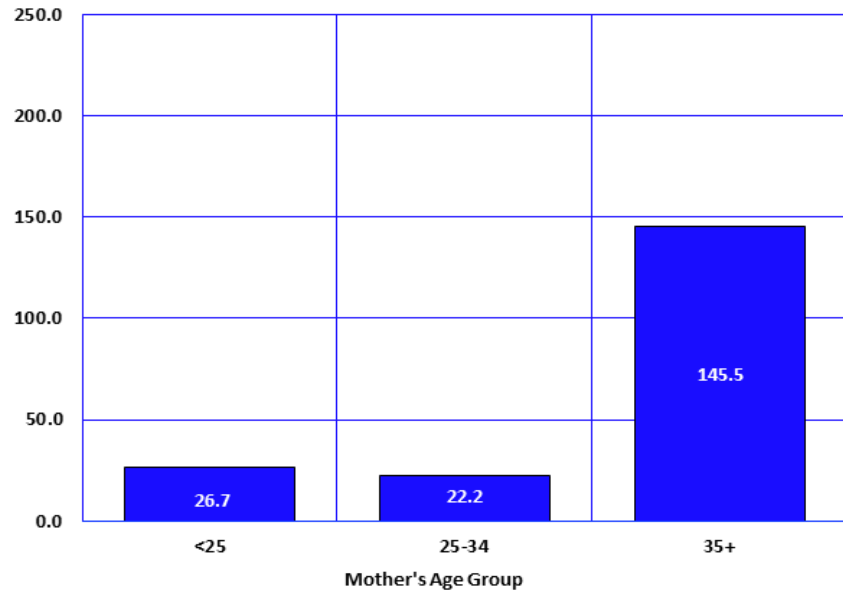
With the implementation of the revised birth certificate, three of the six specific abnormal conditions listed on the birth certificate have been reported most frequently: *assisted ventilation immediately after delivery, assisted ventilation for more than six hours, and suspected neonatal sepsis*. The rates of abnormal conditions are the highest among the very preterm (less than 32 weeks of gestation) and moderately preterm babies (32-36 weeks of gestation; **Figure 1B-26**).

1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

Figure 1B-27
The Incidence of Down Syndrome by Mother's Age Group, Arizona, 2018

Congenital anomalies (birth defects) are the leading cause of infant death in Arizona and nationally. They are also the cause of physical defects and metabolic diseases.

For various anomalies, rates vary widely with maternal age. For example, in 2018 as in prior years, the rate of Down's Syndrome, the most frequently recognized cause of intellectual disability, was substantially higher for births to mothers aged 35 years and older (**Figure 1B-27, Table 1B-33**). The incidence rate of 145.5 cases of Down's Syndrome per 100,000 births to women 35 years or older was 5.4 times greater than the incidence rate of 26.7 for women aged 24 years or younger.



**TABLE 1B-1
BIRTH RATE^a, GENERAL FERTILITY RATE^b, TOTAL FERTILITY RATE^c,
GROSS REPRODUCTION RATE^d, AND AGE-SPECIFIC BIRTH RATES^e BY YEAR,
ARIZONA AND UNITED STATES^f, 2008-2018**

Year	Area	Birth rate	General fertility rate	Total fertility rate	Gross reproduction rate	Age specific birth rates:							
						Under 15 years	15-19 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45-49 years
2008	AZ	15.2	74.8	2,236	1,093	0.7	54.9	122.2	119.5	94.2	46.2	9.0	0.6
	U.S.	14.0	68.6	2,084	NA	0.6	41.5	103.0	115.1	99.3	46.9	9.8	0.7
2009	AZ	14.0	68.9	2,058	1,006	0.6	49.1	110.4	110.7	88.6	42.5	8.9	0.8
	U.S.	13.5	66.7	2,007	NA	0.5	39.1	96.3	110.5	97.7	46.5	10.1	0.7
2010	AZ	13.6	68.9	2,058	1,011	0.5	41.6	104.3	116.1	94.4	44.4	9.7	0.7
	U.S.	13.0	64.1	1,931	NA	0.4	34.2	90.0	108.3	96.5	45.9	10.2	0.7
2011	AZ	13.2	67.0	2,001	976	0.5	36.9	101.4	112.3	94.0	44.2	10.3	0.2
	U.S.	12.7	63.2	1,894	NA	0.4	31.3	85.3	107.2	96.5	47.2	10.3	0.7
2012	AZ	13.2	67.2	2,018	984	0.3	35.4	100.1	116.4	94.6	459.0	10.3	0.6
	U.S.	12.6	63.0	1,881	NA	0.4	29.4	83.1	106.5	97.3	48.3	10.4	0.7
2013	AZ	12.9	66.0	1,981	963	0.3	31.3	96.7	118.4	93.0	46.4	9.8	0.1
	U.S.	12.5	62.5	1,870	NA	0.3	26.6	81.2	106.2	98.7	49.6	10.5	0.8
2014	AZ	13.0	66.7	1,986	968	0.2	29.9	90.7	117.6	98.1	49.7	10.1	0.9
	U.S.	12.5	62.9	1,863	NA	0.3	24.2	79.0	105.8	100.8	51.0	10.6	0.8
2015	AZ	12.6	64.8	1,924	938	0.2	26.3	86.6	115.4	95.9	48.9	10.5	0.9
	U.S.	12.5	62.5	1,843	NA	0.2	22.3	76.9	104.3	101.4	51.7	11.0	0.8
2016	AZ	12.3	63.9	1,895	930	0.2	23.7	84.2	112.9	98.2	48.7	10.2	0.8
	U.S.	12.4	62.0	1,818	NA	0.2	20.3	73.7	101.9	102.6	52.6	11.4	0.9
2017	AZ	11.7	61.1	1,805	888	0.2	21.9	78.9	105.6	94.9	47.8	10.6	1.1
	U.S.	12.2	60.3	1,764	NA	0.2	18.8	71.0	97.9	100.3	52.2	11.6	0.9
2018	AZ	11.4	59.4	1,750	854	0.1	20.1	76.0	100.3	93.6	48.0	11.1	0.9
	U.S.	11.6	59.1	1,728	NA	0.2	17.4	68.0	95.3	99.7	52.6	11.8	0.9

Notes: ^a The number of births per 1,000 population.

^b The number of births per 1,000 women of childbearing age (15-44 years old).

^c The total fertility rate (TFR) is the sum of age group specific birth rates multiplied by the number of years in the age group (five years in this case). This rate estimates the number of children a hypothetical cohort of 1,000 women would bear if they all went through their childbearing years experiencing the same age-specific birth rates for a specified time period. For example, the Arizona 2018 TFR of 1,750 can be interpreted at the individual level as the average number of children a female resident would have by age 50 ($1,750/1000 = 2$ live births) if she were subjected throughout her life to the age-specific birth rates observed in 2018.

^d The sums of birth rates by 5-year age groups multiplied by the proportion of births that were female. The gross reproduction rate represents the average number of daughters born to a hypothetical cohort of 1,000 women if they experienced the age-specific birth rates observed in a given year throughout their childbearing years, and if none of the cohort was to die during her childbearing years. See Table 1B-2 for the annual proportions of births that were female in 2008-2018.

^e The number of births per 1,000 women in specified age group. For females under 15, the rate is calculated using the female population 10-14 years of age. For women over 44, the rate is calculated using the female population 45-49 years of age.

^f The U.S. rates are from the National Center for Health Statistics:

<https://www.cdc.gov/nchs/nvss/vsrr/natalty-dashboard.htm#>

**TABLE 1B-2
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE
AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX,
BIRTH ORDER, AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(ALL RACE/ETHNIC GROUPS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	99,215	92,616	87,053	85,190	85,725	84,963	86,648	85,024	84,404	81,664	80,539
Age of mother											
≤19 years	12.3	11.8	10.8	9.9	9.5	8.5	7.6	6.9	6.4	6.2	5.8
≥30 years	33.1	33.8	35.0	36.1	36.7	37.2	38.8	39.3	40.2	40.9	42.0
Marital status											
Unmarried	45.1	45.2	44.7	44.3	45.2	45.1	44.7	45.3	44.8	44.4	44.6
Mother's education											
<9 years	6.9	6.1	5.3	4.6	4.3	3.8	3.7	3.5	3.2	3.1	3.0
Mother's race/ethnicity											
White ^b	42.3	43.0	44.5	45.0	45.1	45.0	46.3	44.9	44.7	43.7	43.3
Hispanic	43.0	41.4	39.4	38.0	38.7	38.9	38.9	40.3	40.1	40.6	41.0
Black	4.3	4.7	5.0	5.1	5.5	5.6	5.2	5.1	5.2	5.6	5.8
American Indian	6.4	6.7	6.7	6.8	6.5	6.4	5.9	5.9	6.0	6.0	5.8
Asian or Pacific Islander	4.1	4.2	4.4	5.0	4.2	4.1	3.7	3.8	4.0	4.1	4.1
Prenatal care begin											
1 st Trimester	79.4	80.3	81.9	81.7	82.6	81.3	66.0	67.9	68.9	68.3	68.8
3 rd Trimester	3.6	3.4	3.2	3.1	3.2	3.6	5.3	5.5	5.8	5.7	6.2
No Care	1.8	1.8	1.6	1.6	1.2	1.4	2.1	2.2	2.4	2.9	2.8
Prenatal visits											
1-4	3.6	3.5	3.3	3.4	3.6	3.8	4.4	4.4	4.6	4.6	5.0
≥5	94.5	94.5	94.9	94.5	94.9	94.7	92.1	92.2	91.5	90.8	90.9
≥9	77.8	78.9	80.5	80.6	81.3	81.2	77.6	77.0	76.0	75.6	74.5
≥13	29.9	30.0	31.6	33.7	34.6	34.8	30.7	30.4	29.9	31.2	31.0
Medical risk/ Complications^c	46.5	48.1	49.7	46.3	52.4	55.5	34.5	39.0	40.7	42.7	44.2
Gestational age^d											
Preterm (<37 weeks)	10.2	10.0	9.6	9.3	9.2	9.0	9.0	9.0	9.0	9.3	9.5
Birth weight											
<2,500 grams	7.1	7.1	7.1	7.0	6.9	6.9	7.0	7.2	7.3	7.5	7.6
<1,500 grams	1.2	1.2	1.1	1.2	1.2	1.1	1.2	1.1	1.2	1.2	1.2
Child's sex											
Male	51.1	51.1	50.9	51.2	51.2	51.4	51.3	51.3	50.9	50.8	51.2
Female	48.9	48.9	49.1	48.8	48.8	48.6	48.7	48.7	49.1	49.2	48.8
Plurality											
Multiple births	2.9	2.8	2.9	2.8	2.8	3.0	3.0	3.0	3.1	3.3	3.3
Caesarean delivery	27.5	27.7	27.6	27.9	27.6	27.8	27.7	27.5	27.5	26.8	27.5
Place of delivery											
Hospital ^e	99.0	98.8	98.8	98.5	98.6	98.7	98.5	98.5	98.3	98.3	98.2
Attendant at birth											
Midwife ^f	6.1	6.5	6.6	6.4	7.2	7.4	10.2	11.8	12.8	13.5	13.1
Previous live births											
1 or more	63.3	63.1	63.0	62.6	62.7	63.6	64.0	64.3	64.8	64.4	64.2

Notes: ^a Rates per 100 births.

^b Non-Hispanic.

^c Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^d Physician's estimate.

^e Hospital, clinic, medical center or maternity home.

^f Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-3
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL
CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX,
BIRTH ORDER, AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(ALL RACE/ETHNIC GROUPS)

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	7,026	6,573	6,155	5,949	5,946	5,849	6,069	6,093	6,186	6,109	6,106
Age of mother											
≤19 years	13.2	13.1	12.3	11.6	10.7	8.9	7.8	7.8	7.0	7.1	6.5
≥30 years	35.8	37.4	37.8	37.9	39.4	37.9	40.9	42.0	42.4	43.0	46.3
Marital status											
Unmarried	48.6	48.5	49.4	50.0	51.4	51.3	49.1	47.5	48.2	49.6	49.8
Mother's education											
<9 years	6.3	5.7	4.7	4.5	4.5	4.2	3.8	3.5	3.7	3.0	3.0
Mother's race/ethnicity											
White ^b	41.0	41.5	41.9	43.5	42.1	42.0	44.7	41.7	41.8	41.0	40.3
Hispanic	40.8	38.7	38.1	34.9	37.9	37.6	37.0	38.8	38.8	38.3	38.9
Black	7.2	8.5	8.0	9.2	9.3	8.9	8.8	8.8	8.5	9.4	9.4
American Indian	6.1	6.0	6.6	6.8	6.3	6.7	5.2	6.0	5.9	6.2	6.1
Asian or Pacific Islander	5.0	5.2	5.4	5.7	4.4	4.7	4.2	4.8	5.1	5.2	5.2
Prenatal care began											
1st Trimester	79.5	80.6	81.0	81.2	80.0	78.9	63.6	65.0	66.0	65.9	64.2
3rd Trimester	2.9	2.6	2.7	2.3	2.7	3.4	4.1	3.9	4.5	4.0	4.8
No Care	3.8	3.6	3.2	3.2	2.9	2.9	4.8	5.2	5.0	5.6	6.9
Prenatal visits											
1-4	7.7	7.6	7.5	7.3	8.6	8.2	8.6	9.4	9.5	9.4	10.2
≥5	88.2	88.3	88.8	88.5	87.9	88.5	84.8	83.1	82.6	82.3	79.6
≥9	63.0	64.1	65.2	65.0	65.5	66.4	60.4	58.1	57.4	56.1	52.1
≥13	25.6	25.7	27.1	28.5	26.7	27.7	22.1	20.2	20.1	21.3	20.1
Medical risks/ Complications^c	68.7	70.5	73.3	69.2	73.2	72.5	58.9	60.0	62.0	65.1	68.7
Gestational age^d											
Preterm (<37 weeks)	71.7	71.2	70.2	70.1	71.2	70.2	69.4	68.8	68.7	67.8	69.2
Birth weight											
<1,500 grams	16.5	16.7	15.3	16.8	16.6	15.8	16.8	16.0	16.3	15.8	16.1
<1,000 grams	7.7	8.0	7.1	8.3	8.1	7.4	8.4	7.4	8.0	7.7	7.8
Child's sex											
Male	48.1	47.8	46.5	46.8	48.7	49.3	47.7	47.4	48.0	46.9	47.2
Female	51.9	52.2	53.5	53.2	51.3	50.7	52.3	52.6	52.0	53.1	52.8
Plurality											
Multiple births	23.3	22.1	23.1	22.8	23.0	24.4	23.7	22.5	23.9	22.8	24.6
Caesarean delivery	46.7	46.4	46.5	46.8	47.7	47.6	47.4	48.6	48.4	47.0	49.1
Place of delivery											
Hospital ^e	99.7	99.8	99.6	99.4	99.7	99.7	99.7	99.5	99.4	99.3	99.6
Attendant at birth											
Midwife ^f	2.6	2.3	2.6	2.3	2.5	2.7	9.5	10.5	11.0	12.3	11.8
Previous live births											
1 or more	60.5	59.7	60.3	59.6	61.4	60.5	61.4	60.9	61.0	60.7	61.8

Notes: ^a Rates per 100 births.

^b Non-Hispanic.

^c Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^d Physician's estimate.

^e Hospital, clinic, medical center or maternity home.

^f Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-4
ALL LIVE BIRTHS AND LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED
MATERNAL, PRENATAL CARE, DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY,
CHILD'S SEX, BIRTH ORDER, AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(URBAN REGIONS)^b

Characteristic		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births		85,263	79,046	74,624	73,040	74,128	73,493	74,677	73,547	72,899	70,780	69,890
Age of mother	≤19 years	11.7	11.2	10.3	9.4	9.0	8.2	7.3	6.6	6.1	5.8	5.5
	≥30 years	34.1	35.1	36.2	37.4	37.9	38.4	40.0	40.6	41.2	42.0	43.1
Marital status	Unmarried	44.1	44.2	43.6	43.2	44.1	44.1	43.6	44.1	43.7	43.2	43.4
Mother's education	<9 years	7.4	6.5	5.6	4.9	4.7	4.0	3.9	3.7	3.5	3.2	3.1
Mother's race/ethnicity	White ^c	41.5	42.1	44.1	45.0	44.6	44.3	45.7	44.5	44.0	43.1	42.6
	Hispanic	45.8	44.4	42.0	40.5	40.9	41.3	41.3	42.5	42.5	43.0	43.2
	Black	4.8	5.3	5.6	5.7	6.1	6.2	5.9	5.8	5.9	6.3	6.5
	American Indian	3.5	3.6	3.6	3.7	3.7	3.7	3.1	3.1	3.2	3.1	3.2
	Asian	4.3	4.6	4.7	5.0	4.7	4.5	4.0	4.2	4.4	4.5	4.4
Prenatal care began	1st Trimester	80.4	81.5	83.1	82.5	83.4	82.1	66.6	68.3	69.4	68.7	69.5
	3rd Trimester	3.3	3.0	2.9	2.9	3.1	3.5	5.2	5.3	5.6	5.4	6.1
	No care	1.7	1.9	1.6	1.6	1.2	1.3	2.1	2.1	2.3	2.8	2.6
Prenatal visits	1-4	3.1	3.0	2.9	3.0	3.2	3.5	4.0	4.1	4.3	4.2	4.7
	≥5	95.1	94.9	95.4	94.8	95.3	95.1	92.4	92.6	91.9	91.2	91.5
	≥9	79.1	80.1	81.9	81.8	82.4	82.3	78.7	78.2	77.1	76.7	75.6
	≥13	30.1	30.6	32.1	34.1	35.1	35.3	31.1	31.0	30.1	31.7	31.7
Medical risks/complications^d		46.3	48.6	50.1	47.2	52.5	56.1	34.5	39.4	41.4	43.1	44.7
Gestational age^e	Preterm (<37 weeks)	10.2	10.1	9.7	9.4	9.2	9.1	9.1	9.0	9.0	9.2	9.5
Birth weight	<2,500 grams	7.0	7.0	7.0	6.9	6.9	6.8	7.0	7.1	7.2	7.4	7.6
	<1,500 grams	1.2	1.2	1.1	1.2	1.2	1.1	1.2	1.1	1.2	1.2	1.2
Child's sex	Male	51.0	51.3	50.8	51.2	51.2	51.4	51.3	51.3	51.0	50.7	51.1
	Female	49.0	48.7	49.2	48.8	48.8	48.6	48.7	48.7	49.0	49.3	48.9
Plurality	Multiple births	3.0	2.8	3.0	2.9	2.9	3.1	3.1	3.0	3.2	3.3	3.3
Caesarean delivery		27.8	28.1	28.0	28.3	27.9	28.1	28.1	27.9	27.7	27.2	27.7
Place of delivery	Hospital ^f	99.3	99.1	99.0	98.8	98.7	98.7	98.7	98.6	98.4	98.4	98.3
Attendant at birth	Midwife ^g	5.1	5.5	5.4	5.2	6.3	6.3	10.1	12.1	13.0	13.8	13.1
Previous live births	1 or more	63.1	62.9	62.8	62.4	62.6	63.4	63.7	64.0	64.6	64.0	63.9
Number of LBW births		5,974	5,548	5,238	5,065	5,096	5,013	5,232	5,199	5,270	5,224	5,277
Age of mother	≤19 years	12.6	12.7	12.1	10.9	10.2	8.8	7.3	7.4	6.3	6.9	6.1
	≥30 years	37.0	38.5	38.8	39.3	40.4	39.3	42.0	43.6	44.2	44.1	47.5
Marital status	Unmarried	47.4	48.1	48.4	49.0	50.1	50.8	48.3	49.5	47.1	48.4	48.1
Mother's education	<9 years	6.7	5.8	5.2	4.9	4.7	4.3	4.0	3.6	3.9	3.2	3.2
Mother's race/ethnicity	White ^c	39.8	40.5	41.1	42.8	41.1	40.9	43.3	40.4	41.1	40.2	39.9
	Hispanic	43.6	40.9	40.5	37.2	40.2	39.8	39.4	41.3	40.8	40.6	40.7
	Black	8.0	9.8	9.1	10.3	10.4	10.2	9.9	10.0	9.7	10.8	10.5
	American Indian	3.2	3.0	3.5	3.4	3.3	4.0	2.7	3.0	2.8	2.7	3.2
	Asian	5.5	5.7	5.7	6.3	4.9	5.1	4.6	5.3	5.7	5.6	5.7
Prenatal care began	1st Trimester	80.2	81.3	82.1	81.9	80.5	79.8	63.8	66.0	66.8	66.7	65.2
	3rd Trimester	2.6	2.2	2.4	2.0	2.6	3.3	4.1	3.8	4.3	3.8	4.7
	No care	3.9	3.8	3.0	3.0	2.8	2.7	4.9	4.8	4.3	5.3	6.2
Prenatal visits	1-4	7.3	7.2	7.1	7.0	7.8	7.8	8.4	8.9	8.6	8.7	9.7
	≥5	88.6	88.7	89.5	88.8	88.9	89.1	84.8	84.1	84.0	83.3	81.0
	≥9	63.7	65.0	66.6	65.8	66.5	67.7	60.8	59.6	58.6	57.7	53.7
	≥13	25.7	26.3	28.1	29.1	27.3	28.4	22.6	20.6	20.6	21.8	21.0
Medical risks/complications^d		69.6	71.8	74.6	70.8	74.2	73.7	59.0	60.0	61.7	65.3	68.3
Gestational age^e	Preterm (<37 weeks)	72.7	72.2	70.6	71.2	71.3	70.8	70.7	69.5	69.5	67.7	69.6
Birth weight	<1,500 grams	16.8	17.2	15.3	17.4	16.9	15.9	17.0	16.0	16.6	15.7	16.0
	<1,000 grams	8.0	8.3	7.3	8.7	8.4	7.6	8.6	7.7	8.2	7.9	7.7
Child's sex	Male	47.9	48.0	45.9	47.0	48.6	49.2	48.1	47.8	48.3	46.8	46.9
	Female	52.1	52.0	54.1	53.0	51.4	50.8	51.9	52.2	51.7	53.2	53.1
Plurality	Multiple births	23.9	22.8	24.0	23.3	23.9	25.2	24.3	23.4	24.6	23.9	25.4
Caesarean delivery		47.4	47.2	47.0	47.7	48.7	48.0	48.3	49.2	48.8	47.5	49.4
Place of delivery	Hospital ^f	99.8	99.8	99.7	99.5	99.8	99.8	99.8	99.7	99.6	99.5	99.8
Attendant at birth	Midwife ^g	2.2	1.9	2.1	1.6	2.0	2.2	9.5	10.6	11.0	12.3	11.9
Previous live births	1 or more	59.8	59.7	59.3	59.2	61.2	60.0	61.4	60.6	61.0	60.2	61.4

Notes: ^a Rates per 100 births.

^b Urban = Maricopa, Pima, Pinal, and Yuma counties. The remaining counties comprise Arizona's rural areas; see Technical Notes for more

^c Non-Hispanic.

^d Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^e Physician's estimate.

^f Hospital, clinic, medical center or maternity home.

^g Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-5
ALL LIVE BIRTHS AND LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED
MATERNAL, PRENATAL CARE AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY,
CHILD'S SEX, BIRTH ORDER, AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(RURAL REGIONS)^b**

Characteristic		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births		13,952	13,570	12,429	12,150	11,597	11,470	11,955	11,467	11,502	10,873	10,640
Age of mother	≤19 years	15.4	15.4	13.9	12.7	12.2	10.6	9.8	9.0	8.5	8.3	7.5
	≥30 years	26.8	26.7	27.9	28.2	29.3	29.4	31.3	30.9	33.4	33.9	34.7
Marital status	Unmarried	51.1	50.7	51.2	51.0	52.4	52.0	51.7	53.0	51.8	52.8	52.3
Mother's education	<9 years	4.0	4.0	3.1	2.5	2.2	2.4	2.3	1.9	1.8	1.9	1.9
Mother's race/ethnicity	White ^c	46.7	48.1	47.2	47.9	48.7	49.1	49.8	47.7	49.3	47.5	47.9
	Hispanic	25.7	24.3	24.4	23.0	24.1	24.0	24.2	26.4	25.3	25.1	26.3
	Black	1.3	1.2	1.2	1.4	1.5	1.3	0.9	0.9	1.0	1.1	1.0
	American Indian	24.4	24.4	25.0	25.7	24.2	24.0	23.5	23.6	23.2	24.7	23.2
	Asian	2.0	2.1	2.2	2.0	1.5	1.7	1.5	1.4	1.2	1.6	1.6
Prenatal care began	1st Trimester	72.7	73.3	74.8	77.1	77.7	76.3	62.5	64.8	65.4	65.4	64.0
	3rd Trimester	5.2	5.5	5.3	4.1	4.3	4.1	6.3	6.7	7.3	7.3	7.1
	No care	1.9	1.5	1.8	1.5	1.5	2.2	1.9	3.0	3.0	3.1	4.1
Prenatal visits	1-4	6.8	6.1	5.9	5.7	5.7	5.6	6.6	6.2	7.0	7.4	7.0
	≥5	91.1	92.0	91.8	92.3	92.4	92.0	90.5	89.9	89.1	88.5	86.9
	≥9	69.7	71.5	71.9	73.3	73.9	73.8	71.1	69.5	69.1	68.4	67.3
	≥13	28.8	26.5	28.7	31.2	31.0	31.7	28.3	26.7	28.4	28.2	26.4
Medical risks/complications^d		48.2	45.1	47.9	41.1	52.0	51.8	34.1	36.7	37.8	39.8	41.3
Gestational age^e	Preterm (<37 weeks)	9.7	9.7	9.4	8.8	9.1	8.7	8.3	8.9	9.1	9.6	9.3
Birth weight	<2,500 grams	7.5	7.6	7.4	7.3	7.3	7.3	7.0	7.8	8.0	8.1	7.8
	<1,500 grams	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3
Child's sex	Male	51.3	50.3	51.4	51.3	51.2	51.3	51.1	51.0	50.3	51.6	51.9
	Female	48.7	49.7	48.6	48.7	48.8	48.7	48.9	49.0	49.7	48.4	48.1
Plurality	Multiple births	2.4	2.5	2.3	2.6	2.2	2.4	2.5	2.6	2.9	2.9	2.7
Caesarean delivery		26.0	25.4	25.2	25.8	25.7	25.8	25.2	25.0	26.2	24.6	26.1
Place of delivery	Hospital ^f	97.1	96.9	97.2	97.0	98.0	98.2	97.7	97.6	97.3	97.1	97.4
Attendant at birth	Midwife ^g	12.7	12.6	13.4	14.0	13.4	14.2	10.7	10.2	11.3	11.2	13.1
Previous live births	1 or more	64.4	64.3	64.3	63.8	63.3	64.8	66.0	65.8	66.3	67.1	66.5
Number of LBW births		1,052	1,025	917	884	850	836	835	891	916	884	827
Age of mother	≤19 years	16.4	15.1	13.1	15.5	13.9	9.7	11.3	10.3	10.6	8.6	9.1
	≥30 years	29.4	31.1	31.7	30.1	32.8	29.9	34.5	32.8	32.3	36.5	38.8
Marital status	Unmarried	55.2	50.6	55.2	55.7	59.1	54.2	53.9	57.1	54.3	56.3	60.5
Mother's education	<9 years	3.9	4.9	2.3	2.3	3.1	3.0	2.3	2.5	2.3	1.9	1.6
Mother's race/ethnicity	White ^c	47.6	46.8	46.6	47.3	48.1	49.2	53.5	49.2	46.0	45.7	43.0
	Hispanic	24.9	26.9	24.1	21.6	24.2	24.4	22.0	24.2	27.4	24.5	27.7
	Black	2.6	1.3	1.4	2.6	2.2	1.4	2.2	1.5	1.6	0.9	2.2
	American Indian	22.7	22.2	24.1	26.2	24.0	22.8	20.7	23.2	23.5	26.6	24.8
	Asian	2.2	2.8	3.8	2.3	1.4	2.2	1.6	1.9	1.5	2.3	2.3
Prenatal care began	1st Trimester	75.7	76.7	74.3	77.3	76.5	74.0	62.5	59.5	61.6	61.4	58.2
	3rd Trimester	4.1	4.4	4.0	3.5	3.4	4.2	4.0	5.1	5.6	5.0	5.3
	No care	3.5	2.6	4.4	4.0	3.8	4.1	4.0	7.3	8.7	7.2	11.2
Prenatal visits	1-4	10.2	9.8	9.5	8.7	13.1	10.3	9.7	12.2	14.3	13.1	13.3
	≥5	85.8	86.4	85.1	86.2	82.0	84.7	84.9	77.6	74.7	77.0	70.9
	≥9	59.0	59.2	57.4	60.4	59.2	58.9	58.2	49.5	50.0	46.9	41.5
	≥13	24.9	22.6	21.3	25.2	22.9	23.3	19.2	17.8	17.6	18.8	14.1
Medical risks/complications^d		63.9	63.6	66.1	60.2	67.4	65.4	58.0	59.9	63.9	63.6	70.9
Gestational age^e	Preterm (<37 weeks)	65.9	65.7	67.8	64.0	70.5	66.6	61.0	65.2	63.6	67.9	66.5
Birth weight	<1,500 grams	14.5	14.4	15.3	13.5	14.5	15.7	15.3	10.0	14.7	16.4	17.0
	<1,000 grams	5.7	5.9	6.3	6.0	6.2	6.3	7.1	5.7	6.7	6.7	8.6
Child's sex	Male	49.1	47.0	50.2	45.9	49.2	50.0	45.0	44.6	46.4	47.9	49.0
	Female	50.8	53.0	49.8	54.1	50.8	50.0	55.0	55.4	53.6	52.1	51.0
Plurality	Multiple births	19.8	18.4	17.9	20.5	17.9	19.5	20.2	17.5	19.8	16.5	19.2
Caesarean delivery		42.7	42.0	43.2	41.4	41.8	45.5	42.3	45.2	46.0	44.3	47.2
Place of delivery	Hospital ^f	99.1	99.4	99.2	98.5	98.9	99.2	99.0	98.4	98.1	98.0	98.8
Attendant at birth	Midwife ^g	5.1	4.6	5.3	6.3	5.2	5.7	9.2	9.7	10.7	11.9	11.4
Previous live births	1 or more	64.6	59.8	65.6	62.2	62.4	63.3	61.1	62.3	61.0	63.7	64.1

Notes: ^a Rates per 100 births.

^b Rural = Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Mohave, Navajo, Santa Cruz, and Yavapai counties; the remaining counties comprise Arizona's urban areas; see Technical Notes for more information.

^c Non-Hispanic.

^d Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^e Physician's estimate.

^f Hospital, clinic, medical center or maternity home.

^g Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-6
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY
CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(WHITE NON-HISPANIC MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	41,925	39,781	38,777	38,294	38,670	38,220	40,097	38,180	37,762	35,685	34,909
Age of mother											
≤19 Years	7.1	6.8	6.2	5.5	5.1	4.7	4.4	4.0	3.6	3.3	3.1
≥30 Years	38.7	39.3	40.4	41.5	42.9	43.2	45.1	45.6	47.0	48.0	49.2
Marital status											
Unmarried	29.5	29.7	29.9	29.5	30.4	30.3	31.1	31.5	31.3	30.7	31.1
Mother's education											
<9 years	1.1	1.2	1.1	1.2	1.0	0.8	0.7	0.8	0.6	0.8	0.7
Prenatal care began											
1st Trimester	87.3	87.9	88.2	88.0	88.4	87.4	71.7	73.2	74.7	74.6	75.7
3rd Trimester	1.9	1.9	2.1	1.8	1.8	2.0	3.5	3.7	3.9	4.2	4.3
No Care	0.7	0.7	0.6	0.6	0.6	0.7	1.1	1.3	1.4	1.6	1.6
Prenatal visits											
1-4	2.0	1.8	1.7	1.7	2.0	2.1	2.6	2.7	2.8	3.1	3.2
≥5	97.2	97.3	97.5	97.1	97.1	97.1	94.8	94.5	94.0	93.8	94.0
≥9	85.0	86.4	87.6	86.9	87.3	87.2	83.7	83.2	82.2	82.0	81.5
≥13	34.8	35.0	37.4	39.7	41.2	41.9	36.6	36.2	35.5	37.3	36.8
Medical risks/ Complications^b	47.7	48.1	49.5	46.1	50.6	55.1	32.8	35.4	37.9	39.7	40.3
Gestational Age^c											
Preterm (<37 weeks)	10.1	9.9	9.2	9.1	8.7	8.4	8.6	8.6	8.5	8.6	8.9
Birth weight											
<2,500 grams	6.9	6.9	6.7	6.7	6.5	6.4	6.8	6.6	6.8	7.0	7.1
<1,500 grams	1.1	1.1	0.9	1.1	1.0	1.0	1.1	1.0	1.1	1.0	1.1
Child's sex											
Male	51.1	51.2	51.4	51.1	51.3	51.3	51.3	51.6	50.9	50.7	51.5
Female	48.9	48.8	48.6	48.9	48.7	48.7	48.7	48.4	49.1	49.3	48.5
Plurality											
Multiple births	3.6	3.4	3.5	3.5	3.4	3.6	3.7	3.4	3.8	3.9	3.7
Caesarean delivery	29.5	29.5	29.1	29.4	28.7	28.4	28.8	28.1	28.0	27.2	27.4
Place of delivery											
Hospital ^d	97.9	97.6	97.7	97.4	97.4	97.6	97.4	97.2	96.9	96.9	96.8
Attendant at birth											
Midwife ^e	4.0	4.5	4.8	4.9	6.0	6.5	12.6	14.1	15.1	15.6	15.4
Previous live births											
1 or more	59.5	59.4	59.6	59.2	59.6	60.5	60.9	61.5	62.2	61.7	62.0

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-7
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND
DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(WHITE NON-HISPANIC MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of LBW births	2,878	2,727	2,579	2,586	2,505	2,459	2,715	2,538	2,585	2,507	2,463
Age of mother											
≤19 years	7.6	8.7	7.1	6.8	6.5	5.2	4.8	5.5	4.3	4.4	3.7
≥30 years	41.8	43.2	43.6	44.8	45.5	42.5	47.5	47.8	49.5	49.9	54.1
Marital status											
Unmarried	34.1	33.5	34.7	36.2	37.2	36.9	37.9	39.9	35.8	37.5	37.0
Mother's education											
<9 years	1.4	1.1	1.1	1.5	1.4	1.6	1.1	0.9	0.8	0.7	1.0
Prenatal care began											
1st Trimester	86.5	86.8	86.1	86.4	84.2	83.9	69.4	71.1	70.9	71.5	70.8
3rd Trimester	1.7	1.9	2.1	1.4	2.0	2.2	3.2	3.0	3.8	3.7	3.8
No Care	2.1	1.9	2.2	1.7	2.2	1.6	3.4	3.9	3.6	3.8	5.0
Prenatal visits											
1-4	4.7	5.3	4.5	4.5	6.1	5.6	6.0	7.8	7.0	8.0	8.7
≥5	92.9	92.4	92.9	92.5	91.1	92.4	88.7	85.3	86.0	85.5	82.8
≥9	69.8	70.6	74.4	71.5	71.4	70.6	67.4	64.3	63.5	61.1	57.3
≥13	29.9	30.5	34.3	34.6	31.7	33.0	28.4	24.0	25.3	25.5	24.8
Medical risks/ Complications^b	71.5	71.5	73.2	72.2	74.2	75.2	60.4	58.6	62.3	64.5	67.5
Gestational age^c											
Preterm (<37 weeks)	72.9	71.7	69.5	70.9	71.4	70.7	68.7	70.0	69.4	66.5	70.8
Birth weight											
<1,500 grams	15.7	15.5	13.3	16.7	16.1	15.3	16.4	8.8	15.6	13.6	15.1
<1,000 grams	6.8	6.9	5.7	7.6	7.6	6.9	7.3	6.3	7.0	6.1	7.2
Child's sex											
Male	47.0	46.3	45.4	47.1	46.7	49.3	47.0	46.7	45.9	45.8	46.7
Female	53.0	53.7	54.6	52.9	53.3	50.7	53.0	53.3	54.1	54.2	53.3
Plurality											
Multiple births	30.1	26.7	29.2	29.1	28.8	29.7	30.3	27.2	30.6	27.3	30.1
Caesarean delivery	53.2	50.5	51.1	50.9	52.5	49.5	52.2	52.2	52.3	49.3	51.1
Place of delivery											
Hospital ^d	99.4	99.7	99.5	99.2	99.4	99.6	99.5	99.3	99.2	99.0	99.4
Attendant at birth											
Midwife ^e	1.3	1.1	1.1	1.0	1.3	1.7	11.4	11.9	12.8	13.3	14.0
Previous live births											
1 or more	58.3	56.7	58.2	56.2	57.9	56.8	58.8	56.5	59.1	57.1	59.9

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-8
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY
CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(HISPANIC OR LATINO MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	42,639	38,362	34,333	32,398	33,146	33,075	33,715	34,264	33,874	33,191	32,995
Age of mother											
≤19 years	16.8	16.5	15.6	14.3	14.0	12.3	11.3	9.9	9.3	9.0	8.5
≥30 years	27.5	28.4	29.4	29.8	30.2	30.6	31.9	32.3	32.5	33.3	33.6
Marital status											
Unmarried	56.5	56.9	56.2	56.6	57.2	57.1	56.1	56.2	55.8	55.1	54.7
Mother's education											
<9 years	13.9	12.3	10.7	9.3	8.7	7.6	7.5	6.7	6.2	5.5	5.3
Prenatal care began											
1st Trimester	73.4	74.1	76.6	76.5	78.2	76.2	60.5	63.6	63.9	63.4	63.8
3rd Trimester	4.5	4.4	4.1	4.1	4.3	5.0	6.9	6.9	7.4	6.8	7.7
No Care	2.5	2.9	2.6	2.5	1.9	2.1	3.2	3.0	3.4	4.1	3.7
Prenatal visits											
1-4	4.4	4.5	4.2	4.4	4.5	4.8	5.4	5.3	5.6	5.3	6.1
≥5	93.0	92.4	93.0	92.7	93.3	93.0	90.2	90.9	89.9	88.8	89.0
≥9	73.3	73.4	75.0	76.3	77.0	77.0	73.5	73.0	72.0	71.6	70.3
≥13	26.7	26.3	27.2	28.8	29.1	29.0	26.2	26.1	25.8	26.8	26.9
Medical risks/ Complications^b	43.7	46.4	48.0	44.2	52.6	54.6	34.2	40.0	41.6	43.0	45.2
Gestational age^c											
Preterm (<37 weeks)	9.9	9.7	9.5	9.1	9.4	9.3	9.2	9.0	9.2	9.3	9.5
Birth weight											
<2,500 grams	6.7	6.6	6.8	6.4	6.8	6.6	6.7	6.9	7.1	7.0	7.2
<1,500 grams	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.3	1.3
Child's sex											
Male	51.0	51.1	50.5	51.4	51.2	51.3	51.3	50.9	50.9	50.6	51.1
Female	49.0	48.9	49.5	48.6	48.8	48.7	48.7	49.1	49.1	49.4	48.9
Plurality											
Multiple births	2.2	2.2	2.3	2.1	2.1	2.4	2.2	2.4	2.5	2.6	2.8
Caesarean delivery	25.7	25.8	25.9	26.1	26.0	26.7	26.1	26.3	26.3	25.6	26.7
Place of delivery											
Hospital ^d	99.8	99.7	99.7	99.6	99.6	99.6	99.5	99.5	99.4	99.3	99.3
Attendant at birth											
Midwife ^e	5.6	6.0	5.7	5.3	6.1	5.9	7.4	9.8	10.9	11.8	11.4
Previous live births											
1 or more	67.4	67.2	66.9	66.6	66.2	67.0	67.4	67.1	67.7	66.8	65.9

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-9
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND
DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(HISPANIC OR LATINO MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of LBW births	2,866	2,546	2,342	2,075	2,256	2,199	2,247	2,364	2,400	2,339	2,378
Age of mother											
≤19 years	18.7	18.1	17.1	16.6	15.0	12.9	11.7	10.9	9.9	10.0	9.3
≥30 years	29.0	31.7	32.6	29.3	32.3	31.7	33.0	35.4	35.0	34.7	37.2
Marital status											
Unmarried	58.6	58.7	60.6	61.7	61.9	61.5	58.1	58.5	58.4	58.4	58.8
Mother's education											
<9 years	12.2	12.2	9.5	9.3	8.5	7.2	7.4	6.4	7.0	5.6	5.1
Prenatal care began											
1st Trimester	74.8	75.9	76.7	77.2	76.5	74.8	59.3	60.3	62.2	61.9	60.6
3rd Trimester	3.2	2.7	3.2	2.7	3.2	3.8	4.9	4.4	5.0	4.9	5.6
No Care	4.7	5.2	3.9	4.3	3.7	4.2	5.8	5.6	6.1	7.1	7.4
Prenatal visits											
1-4	9.6	9.5	9.2	9.7	10.6	9.5	10.5	9.5	10.7	10.7	10.8
≥5	85.5	85.0	86.2	85.4	85.4	85.9	82.2	83.4	80.7	79.9	78.8
≥9	58.5	58.2	58.7	59.9	59.9	63.7	55.2	54.0	52.2	52.5	48.9
≥13	22.5	21.3	21.4	23.6	21.9	24.1	16.3	15.7	16.3	17.2	16.5
Medical risks											
Complications^b	67.1	69.0	72.8	66.4	73.8	70.3	57.1	61.1	61.0	65.2	69.2
Gestational age^c											
Preterm (<37 weeks)	72.0	71.1	70.9	71.4	72.0	71.5	72.0	69.4	68.6	69.9	70.0
Birth weight											
<1,500 grams	16.3	17.1	15.6	16.6	16.8	16.7	16.6	16.2	16.3	17.9	17.4
<1,000 grams	7.4	8.4	7.3	8.9	8.2	8.0	8.9	7.7	8.1	9.1	8.3
Child's sex											
Male	48.9	48.5	47.8	46.7	51.1	49.9	49.3	48.3	50.5	48.2	49.0
Female	51.1	51.5	52.2	53.3	48.9	50.1	50.7	51.7	49.5	51.8	51.0
Plurality											
Multiple births	18.3	18.6	18.8	18.1	18.5	21.3	18.0	18.4	19.5	20.9	21.6
Caesarean delivery	41.4	42.6	42.5	44.4	43.3	46.5	42.9	45.3	45.4	44.5	48.0
Place of delivery											
Hospital ^d	99.9	99.9	99.9	99.6	99.8	99.8	99.9	99.7	99.5	99.5	100.0
Attendant at birth											
Midwife ^e	2.9	2.6	3.0	2.4	3.0	2.5	7.0	9.1	9.6	11.3	10.3
Previous live births											
1 or more	62.2	63.0	63.0	62.8	63.9	63.4	63.7	64.0	63.1	63.1	62.8

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-10
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY
CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(BLACK OR AFRICAN AMERICAN MOTHERS)

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	4,301	4,378	4,328	4,366	4,715	4,726	4,522	4,361	4,388	4,595	4,655
Age of mother											
≤19 years	15.3	13.8	13.0	12.8	11.5	10.7	8.7	7.2	7.2	7.2	5.8
≥30 years	26.7	28.2	28.3	30.3	30.2	30.6	34.1	36.0	35.0	37.1	39.0
Marital status											
Unmarried	62.6	62.7	63.1	63.6	64.8	63.7	62.5	63.2	61.3	60.6	60.6
Mother's education											
<9 years	5.0	4.4	5.2	4.3	4.3	3.7	3.3	4.1	4.3	4.7	3.7
Prenatal care began											
1st Trimester	77.6	80.3	81.6	80.4	79.9	78.2	61.4	62.2	62.8	61.4	62.4
3rd Trimester	3.7	2.9	3.3	3.0	3.4	4.5	7.7	6.9	7.9	6.5	7.6
No Care	2.1	1.6	1.7	1.6	1.1	1.3	2.8	2.5	2.2	3.3	3.0
Prenatal visits											
1-4	3.7	3.6	4.1	4.0	4.5	4.7	6.2	6.4	6.3	5.6	6.4
≥5	93.9	94.5	94.0	93.4	94.1	93.8	89.7	89.9	89.6	88.2	88.8
≥9	75.4	78.6	78.4	79.1	78.5	79.1	72.1	71.5	70.2	69.2	68.2
≥13	28.5	29.5	30.4	33.6	32.7	31.0	24.7	25.4	25.7	26.3	28.3
Medical risks											
Complications^b	50.3	53.4	56.0	52.0	56.6	57.2	36.0	44.3	44.3	45.8	49.6
Gestational age^c											
Preterm (<37 weeks)	14.0	14.4	12.3	12.7	11.9	11.8	12.1	12.2	12.4	12.4	12.4
Birth weight											
<2,500 grams	11.7	12.8	11.4	12.5	11.7	11.1	11.9	12.3	12.0	12.4	12.3
<1,500 grams	2.6	2.8	2.6	2.5	2.3	2.0	2.5	2.3	2.4	2.3	2.1
Child's sex											
Male	52.4	52.0	50.8	50.5	50.5	51.8	51.9	51.5	50.7	51.8	49.0
Female	47.6	48.0	49.2	49.5	49.5	48.2	48.1	48.5	49.3	48.2	51.0
Plurality											
Multiple births	4.1	4.2	3.3	3.6	4.1	3.7	4.7	3.9	3.3	4.0	4.7
Caesarean delivery	30.5	30.9	30.7	31.1	31.9	31.4	33.0	32.8	32.4	30.8	33.7
Place of delivery											
Hospital ^d	99.4	99.6	99.5	99.3	99.6	99.3	99.5	99.6	99.1	99.0	99.1
Attendant at birth											
Midwife ^e	3.4	3.2	3.4	2.7	3.5	3.9	8.8	11.7	12.0	13.2	12.0
Previous live births											
1 or more	62.7	62.8	62.8	63.0	63.8	64.6	66.9	66.2	66.2	67.1	67.4

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-11
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND
DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(BLACK OR AFRICAN AMERICAN MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of LBW births	503	559	492	546	551	523	536	535	525	572	573
Age of mother											
≤19 years	16.7	13.8	17.5	13.7	10.2	12.8	9.0	6.9	9.1	7.9	7.5
≥30 years	31.8	30.6	27.6	33.5	32.3	33.8	35.8	38.7	33.9	38.6	40.1
Marital status											
Unmarried	65.2	69.8	72.2	67.9	69.0	72.8	67.0	64.9	64.0	64.2	64.9
Mother's education											
<9 years	4.4	3.2	4.3	2.9	2.9	3.1	2.4	3.0	4.6	3.0	2.8
Prenatal care began											
1st Trimester	77.7	79.4	82.5	80.0	78.8	77.8	59.1	63.9	62.5	61.0	60.0
3rd Trimester	3.4	2.5	1.6	3.1	3.4	3.3	4.7	4.5	5.1	2.8	5.4
No Care	4.4	4.1	2.4	2.4	2.4	3.4	6.2	5.0	4.6	6.5	7.2
Prenatal visits											
1-4	6.8	7.3	9.3	9.5	10.3	8.6	11.2	12.9	10.9	9.3	10.8
≥5	88.5	88.0	87.8	86.3	86.0	87.2	81.2	80.4	81.0	80.6	79.1
≥9	62.0	64.0	60.4	64.1	64.4	66.7	55.2	55.7	55.6	51.6	53.9
≥13	21.3	23.8	26.6	29.3	27.6	25.2	20.1	22.2	16.0	20.1	20.9
Medical risks											
Complications^b	68.4	72.8	74.0	68.7	68.4	70.0	56.7	57.9	59.4	61.0	68.1
Gestational age^c											
Preterm (<37 weeks)	71.6	72.1	68.9	65.6	65.7	66.9	68.3	65.0	68.2	65.2	62.8
Birth weight											
<1,500 grams	22.1	22.2	23.0	20.0	20.0	18.0	21.5	18.5	20.0	18.4	16.9
<1,000 grams	13.1	10.9	12.6	10.8	10.3	10.3	12.9	10.5	11.4	11.4	9.2
Child's sex											
Male	49.7	49.7	42.3	46.0	45.7	47.2	45.9	46.9	46.1	44.9	41.7
Female	50.3	50.3	57.7	54.0	54.3	52.8	54.1	53.1	53.9	55.1	58.3
Plurality											
Multiple births	19.1	22.0	19.7	17.8	21.2	21.4	22.2	22.8	15.6	20.6	22.7
Caesarean delivery	44.9	45.6	43.9	43.4	45.6	42.8	45.9	47.9	47.6	44.8	49.7
Place of delivery											
Hospital ^d	99.8	99.6	99.4	99.8	100.0	99.0	99.8	100.0	99.6	99.5	99.7
Attendant at birth											
Midwife ^e	2.0	1.3	2.0	2.6	0.9	1.9	8.6	10.3	11.2	12.2	12.0
Previous live births											
1 or more	62.8	61.4	59.3	62.5	65.2	61.8	66.6	64.9	60.6	68.9	64.6

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-12
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY
CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(AMERICAN INDIAN OR ALASKA NATIVE MOTHERS)

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	6,362	6,170	5,815	5,830	5,569	5,476	5,145	4,984	5,030	4,866	4,709
Age of mother											
≤19 years	18.6	19.0	17.0	16.9	16.0	14.2	11.7	11.4	10.7	10.7	9.8
≥30 years	24.0	23.8	24.1	25.0	25.2	26.6	26.7	28.9	31.3	31.0	34.4
Marital status											
Unmarried	75.8	76.9	77.7	77.1	78.5	79.2	78.9	79.6	78.1	77.9	78.9
Mother's education											
<9 years	3.2	2.8	2.8	2.5	2.5	2.4	2.2	2.1	1.9	1.7	1.9
Prenatal care began											
1st Trimester	65.1	66.0	69.4	68.6	68.2	68.7	58.4	58.5	60.7	59.4	56.5
3rd Trimester	7.8	7.4	6.2	6.1	7.0	6.1	7.5	8.4	8.2	8.4	9.4
No Care	3.1	2.1	2.3	2.5	2.0	2.4	2.9	4.3	4.0	4.1	5.1
Prenatal visits											
1-4	9.3	8.6	8.8	9.0	9.1	9.5	10.5	10.4	11.0	11.5	11.2
≥5	87.4	88.9	88.5	87.8	88.4	87.7	85.0	84.2	83.9	83.0	81.5
≥9	59.9	61.5	64.0	62.8	64.0	63.7	59.3	60.0	59.9	58.8	55.5
≥13	18.7	17.9	18.8	19.7	20.7	21.3	18.2	18.7	19.0	19.9	18.4
Medical risks/ Complications^b	54.8	54.3	55.3	53.8	60.4	61.7	45.9	52.4	53.5	56.1	59.2
Gestational age^c											
Preterm (<37 weeks)	9.8	9.6	10.6	9.0	9.7	9.7	8.2	9.6	9.9	10.9	10.4
Birth weight											
<2,500 grams	6.7	6.4	7.0	6.9	6.7	7.2	6.1	7.3	7.2	7.7	7.9
<1,500 grams	1.1	0.9	1.2	1.3	1.1	1.0	0.9	1.3	1.3	1.3	1.4
Child's sex											
Male	50.1	50.4	50.4	50.7	50.5	51.6	49.7	50.8	50.4	51.6	52.0
Female	49.9	49.6	49.6	49.3	49.5	48.4	50.3	49.2	49.6	48.4	48.0
Plurality											
Multiple births	1.5	1.6	1.8	1.5	1.6	1.8	1.3	1.8	2.2	2.2	2.0
Caesarean delivery	23.1	23.2	22.9	23.1	23.8	24.0	22.7	22.6	23.5	24.4	25.2
Place of delivery											
Hospital ^d	99.7	99.7	99.6	99.6	99.7	99.7	99.7	99.4	99.5	99.5	99.2
Attendant at birth											
Midwife ^e	28.0	27.6	28.6	27.9	27.8	27.6	10.6	9.1	9.8	10.0	10.0
Previous live births											
1 or more	66.9	66.6	67.3	66.5	67.6	68.5	70.0	71.0	71.4	70.5	71.2

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-13
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND
DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(AMERICAN INDIAN OR ALASKA NATIVE MOTHERS)**

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of LBW births	428	396	406	403	372	393	315	365	363	376	373
Age of mother											
≤19 years	16.8	18.2	15.3	18.9	18.0	10.2	10.8	10.1	8.5	10.4	9.4
≤30 years	26.6	28.8	29.6	26.8	33.1	29.5	30.8	34.5	35.5	38.0	42.9
Marital status											
Unmarried	80.1	79.3	75.4	81.1	80.9	82.2	78.4	81.9	75.2	79.8	80.7
Mother's education											
<9 years	4.4	2.5	3.0	2.0	3.2	5.1	2.9	3.6	1.1	2.9	2.4
Prenatal care began											
1st Trimester	66.8	65.2	69.7	70.0	69.1	66.9	46.7	48.5	54.0	54.0	45.0
3rd Trimester	6.8	5.8	4.2	4.0	4.3	8.4	5.1	6.6	6.3	4.3	5.9
No Care	7.5	4.3	6.7	6.7	5.9	4.3	8.6	13.7	9.9	10.1	17.2
Prenatal visits											
1-4	16.4	12.1	13.5	11.4	15.1	17.6	15.6	15.3	18.5	15.2	17.7
≥5	75.7	81.8	78.8	79.7	78.2	76.8	72.7	66.6	69.4	70.5	59.5
≥9	44.6	52.0	47.8	47.4	51.6	50.6	40.6	40.5	41.3	40.2	28.7
≥13	16.6	16.9	15.5	13.9	16.4	15.3	10.2	11.2	12.9	14.9	8.8
Medical risks/ Complications^b	66.1	69.4	74.4	65.5	70.2	71.2	65.7	68.5	70.8	71.3	77.2
Gestational age^c											
Preterm (<37 weeks)	71.7	69.7	74.9	69.0	79.0	70.7	65.1	69.9	71.1	72.1	68.1
Birth weight											
<1,500 grams	16.8	14.4	16.7	18.4	16.7	13.7	14.6	18.1	17.6	16.8	17.4
<1,000 grams	7.9	8.1	7.4	9.2	8.9	4.6	7.9	8.5	7.7	6.4	8.3
Child's sex											
Male	45.6	48.2	54.9	46.4	49.2	51.4	44.4	45.8	52.1	50.3	49.9
Female	54.4	51.8	45.1	53.6	50.8	48.6	55.6	54.2	47.9	49.7	50.1
Plurality											
Multiple births	13.3	13.1	15.5	11.7	15.6	12.7	9.8	13.4	17.4	10.6	13.1
Caesarean delivery	39.3	39.4	44.6	34.5	47.3	44.3	41.9	43.8	43.3	47.3	42.9
Place of delivery											
Hospital ^d	99.8	99.5	99.8	99.5	99.7	100.0	100.0	98.6	99.2	99.2	98.4
Attendant at birth											
Midwife ^e	10.7	11.1	11.1	10.7	8.9	11.5	10.2	7.9	8.5	11.4	8.6
Previous live births											
1 or more	66.4	64.1	67.2	64.3	69.6	68.7	69.8	70.4	69.7	68.4	71.3

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-14
LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND DELIVERY
CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(ASIAN OR PACIFIC ISLANDER MOTHERS)

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of births	3,425	3,396	3,293	3,505	3,625	3,466	3,169	3,235	3,350	3,327	3,271
Age of mother											
≤19 years	3.3	2.6	3.1	3.2	2.2	2.3	1.8	1.9	1.5	1.7	1.3
≥30 years	55.9	55.6	55.9	57.4	57.3	59.2	60.4	60.5	60.8	61.9	65.1
Marital status											
Unmarried	17.4	15.8	17.4	17.3	17.3	16.0	15.2	14.3	15.4	14.6	14.8
Mother's education											
<9 years	2.3	2.2	3.3	3.1	3.1	2.7	3.0	3.1	3.0	2.9	3.0
Prenatal care began											
1st Trimester	86.4	88.1	88.1	86.5	87.1	86.4	70.5	71.8	73.2	72.2	72.5
3rd Trimester	3.1	1.9	2.3	2.3	2.0	2.9	4.5	5.0	4.3	4.7	5.0
No Care	1.3	1.3	1.2	1.0	0.7	0.7	1.4	1.2	1.3	1.9	1.9
Prenatal visits											
1-4	2.4	2.1	1.9	2.3	2.4	2.6	2.6	3.6	3.1	2.8	3.3
≥5	96.2	96.4	96.7	96.2	96.8	96.6	94.5	93.9	93.7	93.9	93.6
≥9	83.2	85.6	86.7	84.2	86.2	85.6	82.3	80.6	79.8	81.2	79.0
≥13	33.5	35.6	36.0	37.9	37.2	39.2	33.7	31.6	29.9	34.7	33.5
Medical risks/ Complications^b	46.4	48.1	51.5	47.4	52.9	57.4	37.9	42.2	44.4	47.0	47.1
Gestational age^c											
Preterm (<37 weeks)	10.0	10.0	9.9	9.0	8.4	8.9	8.0	9.4	8.7	9.6	10.0
Birth weight											
<2,500 grams	9.1	8.8	8.5	8.3	7.2	7.9	8.1	9.0	9.3	9.5	9.8
<1,500 grams	1.5	1.5	1.4	1.1	0.8	1.1	1.2	1.2	1.4	1.1	1.2
Child's sex											
Male	51.3	51.7	50.7	52.4	52.1	51.4	51.5	51.5	51.7	51.3	51.2
Female	48.7	48.3	49.3	47.6	47.9	48.6	48.5	48.5	48.3	48.7	48.8
Plurality											
Multiple births	3.6	2.9	2.5	3.3	2.5	3.2	3.2	3.3	3.7	3.4	3.0
Caesarean delivery	32.0	32.6	32.8	33.0	32.1	33.2	32.4	34.0	32.5	32.3	30.9
Place of delivery											
Hospital ^d	99.4	99.4	99.6	99.3	99.2	99.1	99.3	99.4	99.3	99.3	99.1
Attendant at birth											
Midwife ^e	2.7	3.0	2.8	3.1	4.0	3.3	10.0	10.4	11.1	11.8	11.4
Previous live births											
1 or more	52.9	54.8	55.5	54.6	55.5	56.2	53.4	54.0	54.1	56.6	56.3

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

TABLE 1B-15
LOW-BIRTHWEIGHT (LBW) BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE AND
DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX, BIRTH ORDER,
AND BIRTH COMPLICATIONS^a, ARIZONA, 2008-2018
(ASIAN OR PACIFIC ISLANDER MOTHERS)

Characteristic	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of LBW births	311	299	280	292	262	275	256	291	313	315	319
Age of mother											
≤19 years	3.5	3.3	5.4	5.1	5.0	1.5	1.2	1.7	1.0	1.9	2.2
≤30 years	59.5	54.8	52.1	58.6	64.9	66.2	64.1	61.5	63.3	63.5	69.3
Marital status											
Unmarried	21.5	20.4	18.9	18.2	18.3	12.4	14.1	15.1	13.7	17.1	17.9
Mother's education											
<9 years	2.6	1.7	3.2	4.1	3.8	3.6	4.3	2.7	3.2	2.9	3.1
Prenatal care began											
1st Trimester	82.6	87.0	84.3	83.9	87.8	86.9	70.3	72.9	74.4	74.0	70.2
3rd Trimester	3.5	3.0	2.9	2.1	0.4	3.6	4.7	3.8	2.9	2.5	4.1
No Care	4.2	2.0	1.4	2.7	0.8	0.7	3.5	2.7	2.9	2.5	4.7
Prenatal visits											
1-4	7.7	7.4	6.8	4.8	2.3	6.2	4.7	8.6	7.0	4.4	7.2
≥5	88.1	90.0	91.4	92.5	96.9	93.1	88.7	86.9	87.2	92.1	85.9
≥9	69.8	72.6	70.7	72.9	78.6	73.5	66.8	64.6	67.7	70.5	58.9
≥13	34.1	34.4	27.1	30.8	32.8	31.6	25.4	29.6	22.0	28.3	22.3
Medical risks/ Complications^b	61.1	70.2	74.3	68.8	72.5	73.8	54.7	56.0	61.0	67.9	64.9
Gestational age^c											
Preterm (<37 weeks)	60.5	66.2	65.4	64.7	63.0	61.1	60.2	60.1	60.7	61.9	63.9
Birth weight											
<1,500 grams	16.1	17.4	16.4	12.7	11.5	13.5	15.2	13.1	15.3	11.7	11.9
<1,000 grams	9.3	8.7	7.9	6.2	5.3	6.2	6.6	6.5	8.6	6.0	5.3
Child's sex											
Male	51.8	50.2	45.0	46.9	52.7	46.5	49.2	48.8	45.4	46.0	44.2
Female	48.2	49.8	55.0	53.1	47.3	53.5	50.8	51.2	54.6	54.0	55.8
Plurality											
Multiple births	26.7	22.4	18.9	25.7	20.2	23.6	24.2	25.1	24.0	20.3	20.4
Caesarean delivery	49.8	51.5	45.4	51.4	44.3	53.1	47.7	51.5	47.0	50.8	48.3
Place of delivery											
Hospital ^d	99.7	100.0	100.0	99.7	100.0	100.0	100.0	100.0	99.7	99.7	99.7
Attendant at birth											
Midwife ^e	2.6	1.7	1.1	0.3	2.7	2.2	12.1	12.0	8.6	12.4	9.4
Previous live births											
1 or more	51.8	48.8	49.6	55.5	53.1	56.4	46.9	54.6	50.8	47.6	52.7

Notes: ^a Rates per 100 births.

^b Reported medical risks for this pregnancy and/or complications of labor and delivery; data for years 2014 and 2015 in bold were updated due to correction.

^c Physician's estimate.

^d Hospital, clinic, medical center or maternity home.

^e Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-16
SINGLE AND PLURAL LIVE BIRTHS BY BIRTHWEIGHT, ARIZONA RESIDENTS, 2008-2018**

Weight in grams	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Under 1,000, total	538	523	439	496	480	433	509	448	492	472	476
Single	419	431	346	379	383	332	384	358	380	375	383
Plural	119	92	93	117	97	101	125	90	112	97	93
1,000-1,499, total	618	577	505	505	506	494	509	523	519	492	509
Single	431	420	386	374	387	341	379	386	395	369	358
Plural	187	157	119	131	119	153	130	137	124	123	151
1,500-1,999, total	1,360	1,211	1,194	1,131	1,197	1,152	1,156	1,133	1,166	1,105	1,257
Single	944	835	823	794	814	830	803	793	808	784	837
Plural	416	376	371	337	383	322	353	340	358	321	420
2,000-2,499, total	4,510	4,262	4,017	3,817	3,763	3,770	3,895	3,988	4,009	4,040	3,864
Single	3,598	3,432	3,178	3,043	2,994	2,920	3,063	3,186	3,124	3,186	3,028
Plural	912	830	839	774	769	850	832	802	885	854	836
2,500-3,999, total	84,904	79,423	74,680	72,777	73,096	72,494	73,627	72,240	71,613	69,200	68,157
Single	83,674	78,297	73,596	71,741	72,085	71,377	72,449	71,109	70,450	67,940	67,032
Plural	1,230	1,126	1,084	1,036	1,011	1,117	1,178	1,131	1,163	1,260	1,125
4,000 and over, total	7,270†	6,601	6,200†	6,450†	6,680†	6,540†	6,900†	6,630†	6,570†	6,310†	6,240†
Single	7,267	6,601	6,194	6,450	6,674	6,537	6,900	6,633	6,569	6,310	6,234
Plural	*	0	*	*	*	*	*	*	*	*	*
All weights, total^a	99,215	92,616	87,053	85,190	85,725	84,963	86,648	85,024	84,404	81,664	80,539
Single	96,347	90,034	84,535	82,793	83,342	82,415	84,014	82,501	81,752	79,005	77,909
Plural	2,870†	2,582	2,510†	2,400†	2,380†	2,550†	2,630†	2,518	2,647	2,657	2,630

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Includes records with unknown weight and/or plurality.

**TABLE 1B-17
RESIDENT BIRTHS BY MONTH OF OCCURRENCE, ARIZONA, 2008-2018**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2008	8,656	8,158	8,094	7,694	8,124	7,677	8,783	8,779	8,760	8,411	7,740	8,339	99,215
Percent	8.7	8.2	8.2	7.8	8.2	7.7	8.9	8.8	8.8	8.5	7.8	8.4	100.0
2009	7,784	7,333	8,069	7,371	7,464	7,377	8,060	8,194	8,097	7,872	7,267	7,728	92,616
Percent	8.4	7.9	8.7	8.0	8.1	8.0	8.7	8.8	8.7	8.5	7.8	8.3	100.0
2010	7,342	6,812	7,521	6,886	6,989	6,982	7,153	7,637	7,977	7,331	7,038	7,378	87,053 ^a
Percent	8.4	7.8	8.6	7.9	8.0	8.0	8.2	8.8	9.2	8.4	8.1	8.5	100.0
2011	7,127	6,500	7,254	6,498	6,678	7,086	7,222	7,688	7,750	7,361	6,987	7,039	85,190
Percent	8.4	7.6	8.5	7.6	7.8	8.3	8.5	9.0	9.1	8.6	8.2	8.3	100.0
2012	7,006	6,732	7,100	6,603	6,777	6,725	7,368	7,772	7,689	7,629	7,101	7,223	85,725
Percent	8.2	7.9	8.3	7.7	7.9	7.8	8.6	9.1	9.0	8.9	8.3	8.4	100.0
2013	7,090	6,414	7,083	6,694	6,681	6,685	7,337	7,436	7,538	7,515	7,130	7,360	84,963
Percent	8.3	7.5	8.3	7.9	7.9	7.9	8.6	8.8	8.9	8.8	8.4	8.7	100.0
2014	7,313	6,593	7,068	6,672	6,893	6,856	7,731	7,718	7,651	7,554	6,994	7,605	86,648
Percent	8.4	7.6	8.2	7.7	8.0	7.9	8.9	8.9	8.8	8.7	8.1	8.8	100.0
2015	7,169	6,660	7,175	6,613	6,814	6,770	7,030	7,372	7,685	7,487	6,940	7,309	85,024
Percent	8.4	7.8	8.4	7.8	8.0	8.0	8.3	8.7	9.0	8.8	8.2	8.6	100.0
2016	7,053	6,729	6,830	6,558	6,724	6,754	7,045	7,711	7,687	7,192	6,898	7,223	84,404
Percent	8.4	8.0	8.1	7.8	8.0	8.0	8.3	9.1	9.1	8.5	8.2	8.6	100.0
2017	6,931	6,147	6,774	6,285	6,507	6,613	6,964	7,402	7,200	7,299	6,791	6,751	81,664
Percent	8.5	7.5	8.3	7.7	8.0	8.1	8.5	9.1	8.8	8.9	8.3	8.3	100.0
2018	6,706	6,177	6,614	6,129	6,409	6,473	6,835	7,294	7,108	7,144	6,815	6,835	80,539
Percent	8.3	7.7	8.2	7.6	8.0	8.0	8.5	9.1	8.8	8.9	8.5	8.5	100.0

Note: ^a Includes 7 records where month of birth is missing.

**TABLE 1B-18
BIRTHS BY DAY AND MONTH OF OCCURRENCE, ARIZONA RESIDENTS, 2018**

	TOTAL	Month of birth											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TOTAL	80,539	6,706	6,177	6,614	6,129	6,409	6,473	6,835	7,294	7,108	7,144	6,815	6,835
Day of birth													
1	2,668	157	237	220	162	239	246	176	247	233	256	270	225
2	2,693	215	239	244	227	204	182	239	267	182	257	255	182
3	2,565	235	175	178	225	187	177	257	243	176	273	192	247
4	2,518	234	160	183	209	211	200	212	198	227	240	181	263
5	2,818	250	218	226	236	171	217	229	190	299	245	251	286
6	2,765	196	252	256	204	166	229	273	230	253	188	265	253
7	2,610	156	230	233	158	223	229	203	249	269	167	253	240
8	2,641	236	251	248	189	221	223	174	244	208	213	231	203
9	2,670	230	235	219	216	214	210	234	255	214	232	248	163
10	2,642	253	189	185	231	220	143	231	249	261	248	198	234
11	2,581	262	185	157	220	227	216	241	199	229	237	181	227
12	2,811	262	233	227	221	171	241	234	191	284	244	227	276
13	2,669	215	237	242	222	135	215	243	233	272	187	227	241
14	2,658	154	266	231	185	248	239	176	260	244	182	239	234
15	2,668	226	252	242	147	222	235	173	257	236	228	261	189
16	2,679	210	243	248	201	220	184	239	275	199	248	244	168
17	2,641	245	197	181	236	251	176	206	252	220	252	195	230
18	2,576	236	156	147	221	231	218	235	196	257	271	176	232
19	2,762	244	210	207	230	191	252	233	188	254	256	222	275
20	2,656	204	247	219	207	150	232	240	242	240	197	245	233
21	2,683	174	261	231	180	209	238	196	278	265	173	232	246
22	2,495	211	231	218	147	222	229	185	232	169	250	196	205
23	2,670	225	235	217	230	228	207	239	263	190	265	182	189
24	2,593	230	163	186	229	226	170	234	247	261	277	178	192
25	2,537	217	180	162	225	220	226	259	219	274	233	204	118
26	2,642	218	231	186	188	209	228	223	178	273	239	248	221
27	2,708	176	237	235	241	152	239	245	228	265	188	261	241
28	2,518	154	227	246	150	169	234	165	242	263	150	250	268
29	2,410	214		239	171	229	229	175	259	208	235	255	196
30	2,410	228		217	221	209	209	218	238	183	275	248	164
31	1,582	239		184		234		248	245		238		194

**TABLE 1B-19
LIVE BIRTHS BY MOTHER'S AGE AND FATHER'S AGE, ARIZONA, 2018**

Father's age group	Mother's age group										
	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known	TOTAL
<15	*	6	0	0	0	0	0	0	0	0	10†
15-17	6	246	113	19	0	0	0	0	0	0	384
18-19	0	294	823	425	30	11	0	*	0	0	1,580†
20-24	0	140	1,319	7,387	1,376	230	50	6	0	*	10,510
25-29	0	16	248	5,178	10,745	2,027	359	58	*	0	18,630†
30-34	0	*	63	1,377	6,764	9,352	1,701	173	*	0	19,440†
35-39	0	0	21	411	1,924	5,567	4,607	468	15	0	13,013
40-44	0	0	8	125	513	1,386	2,128	809	40	0	5,009
45-49	0	0	*	64	169	422	653	384	66	0	1,760†
50-54	0	0	*	13	68	128	181	132	27	*	550†
55+	0	0	*	*	39	63	90	50	21	0	270†
Unknown	20	508	815	2,779	2,647	1,574	793	217	24	*	9,378
TOTAL	30†	1,210†	3,420†	17,780†	24,275	20,760	10,562	2,300†	200†	0†	80,539

**TABLE 1B-20
LIVE BIRTHS BY MOTHER'S RACE/ETHNICITY AND FATHER'S RACE/ETHNICITY, ARIZONA, 2018**

Father's race/ethnicity	Mother's race/ethnicity					TOTAL
	White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	
White non-Hispanic	28,322	9,551	1,573	1,325	810	41,581
Hispanic or Latino	4,720	21,920	284	588	244	27,756
Black or African American	1,133	909	2,753	94	91	4,980
American Indian or Alaska Native	276	367	20	2,667	18	3,348
Asian or Pacific Islander	458	248	25	35	2,108	2,874
TOTAL	34,909	32,995	4,655	4,709	3,271	80,539

**TABLE 1B-21
LIVE BIRTHS BY MOTHER'S AND FATHER'S EDUCATION, ARIZONA, 2018**

Father's education	Mother's education								TOTAL
	8th Grade or Less	Some High School	High School/ GED	Some College	Associate Degree	Bachelor's Degree	Post graduate Education	Un-known	
8th Grade or Less	878	567	580	219	130	46	18	15	2,453
Some High School	442	3,612	2,916	1,450	366	239	73	17	9,115
High School/ GED	356	2,734	9,252	4,608	1,536	1,376	405	32	20,299
Some College	87	859	3,189	6,632	1,764	2,473	855	12	15,871
Associate Degree	59	210	862	1,439	1,213	1,286	429	7	5,505
Bachelor's Degree	35	123	811	1,756	1,034	5,294	2,250	8	11,311
Postgraduate Education	13	28	240	512	360	2,270	2,539	12	5,974
Unknown	510	2,859	3,349	1,996	480	341	117	359	10,011
TOTAL	2,380	10,992	21,199	18,612	6,883	13,325	6,686	462	80,539

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; 462 cases were missing mother's education, 10,011 cases were missing father's education.

**TABLE 1B-22
TOTAL BIRTHS AND RATIOS OF BIRTH BY MOTHER'S MARITAL STATUS^a,
AGE GROUP, AND RACE/ETHNICITY, ARIZONA, 2018**

			TOTAL	Mother's age group								
				<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+
All racial/ ethnic groups	Married	Count	43,565	0	44	411	5,806	13,532	14,544	7,512	1,585	130
		Percent	54.1%	0.0%	3.6%	12.0%	32.6%	55.7%	70.1%	71.1%	69.0%	65.7%
	Unmarried	Count	35,927	29	1,166	2,993	11,826	10,430	5,935	2,855	651	42
		Percent	44.6%	100.0%	96.2%	87.6%	66.5%	43.0%	28.6%	27.0%	28.3%	21.2%
	Unknown	Count	1,050†	0	*	14	151	313	281	195	62	26
		Percent	1.3%	0.0%	**	0.4%	0.8%	1.3%	1.4%	1.8%	2.7%	13.1%
TOTAL	Count	80,539	29	1,212	3,418	17,783	24,275	20,760	10,562	2,298	198	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
White non- Hispanic	Married	Count	23,552	0	15	131	2,560	7,187	8,478	4,331	778	71
		Percent	67.5%	0.0%	7.0%	15.0%	42.1%	68.0%	80.4%	79.2%	75.2%	67.0%
	Unmarried	Count	10,850†	*	197	736	3,457	3,253	1,932	1036	224	11
		Percent	31.1%	**	92.5%	84.4%	56.8%	30.8%	18.3%	18.9%	21.6%	10.4%
	Unknown	Count	510†	0	*	*	68	131	138	104	33	24
		Percent	1.5%	0.0%	**	**	1.1%	1.2%	1.3%	1.9%	3.2%	22.6%
TOTAL	Count	34,910†	*	213	872	6,085	10,571	10,548	5,471	1,035	106	
	Percent	100.0%	**	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Hispanic or Latino	Married	Count	14,535	0	27	245	2,769	4,868	4,028	2,022	542	34
		Percent	44.1%	0.0%	3.4%	12.4%	30.7%	48.3%	58.9%	60.8%	62.2%	56.7%
	Unmarried	Count	18,059	17	767	1,728	6,186	5,077	2,710	1,243	307	24
		Percent	54.7%	100.0%	96.5%	87.2%	68.6%	50.3%	39.6%	37.4%	35.2%	40.0%
	Unknown	Count	400†	0	*	9	66	139	102	60	22	*
		Percent	1.2%	0.0%	**	0.5%	0.7%	1.4%	1.5%	1.8%	2.5%	**
TOTAL	Count	32,995	17	795	1,982	9,021	10,084	6,840	3,325	871	60	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
Black or African American	Married	Count	1,780†	0	*	14	218	503	588	339	97	15
		Percent	38.1%	0.0%	**	6.7%	18.5%	36.1%	54.4%	59.1%	68.8%	83.3%
	Unmarried	Count	2,820†	*	59	196	949	870	481	222	40	*
		Percent	60.6%	**	98.3%	93.3%	80.7%	62.4%	44.5%	38.7%	28.4%	**
	Unknown	Count	60†	0	0	0	9	21	12	13	*	0
		Percent	1.3%	0.0%	0.0%	0.0%	0.8%	1.5%	1.1%	2.3%	**	0.0%
TOTAL	Count	4,660†	*	60	210	1,176	1,394	1081	574	141	18	
	Percent	100.0%	**	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
American Indian or Alaska Native	Married	Count	930†	0	0	14	109	290	304	171	40	*
		Percent	19.7%	0.0%	0.0%	4.3%	9.0%	20.4%	29.5%	35.8%	37.4%	**
	Unmarried	Count	3,710†	7	134	308	1,092	1,113	702	291	64	*
		Percent	78.9%	100.0%	100.0%	95.7%	90.6%	78.3%	68.1%	60.9%	59.8%	**
	Unknown	Count	70†	0	0	0	*	18	25	16	*	0
		Percent	1.4%	0.0%	0.0%	0.0%	**	1.3%	2.4%	3.3%	**	0.0%
TOTAL	Count	4,710†	7	134	322	1,205	1,421	1031	478	107	*	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	**	
Asian or Pacific Islander	Married	Count	2,770†	0	*	7	150	684	1,146	649	128	9
		Percent	84.8%	0.0%	**	21.9%	50.7%	85.0%	91.0%	90.9%	88.9%	90.0%
	Unmarried	Count	480†	0	9	25	142	117	110	63	16	*
		Percent	14.8%	0.0%	90.0%	78.1%	48.0%	14.5%	8.7%	8.8%	11.1%	**
	Unknown	Count	10†	0	0	0	*	*	*	*	0	0
		Percent	0.4%	0.0%	0.0%	0.0%	**	**	**	**	0.0%	0.0%
TOTAL	Count	3,271	0	10	32	296	805	1,260	714	144	10	
	Percent	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Notes: * Cell suppressed due to non-zero count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced.

**TABLE 1B-23
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY, AND NUMBER OF
PREVIOUS LIVE BIRTHS, ARIZONA, 2018**

	TOTAL	Mother's age group										
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-know	
All racial/ethnic groups	TOTAL	80,539	29	1,212	3,420†	17,783	24,275	20,760	10,562	2,298	198	0†
	None	28,805	29	1,120	2,794	9,122	7,942	5,261	2,090	395	51	*
	1	24,241	0	84	539	5,825	7,882	6,397	2,972	507	34	*
	2	14,591	0	8	78	2,132	4,991	4,576	2,329	441	36	0
	3	7,260†	0	0	*	537	2,228	2,578	1,518	366	29	*
	4 or more	5,630†	0	0	*	164	1,227	1,943	1,652	588	48	*
	Unknown	20†	0	0	0	*	*	*	*	*	0	0
White non-Hispanic	TOTAL	34,910†	0†	210†	870†	6,085	10,571	10,548	5,471	1,035	106	0†
	None	13,250†	*	198	751	3,411	4,130	3,158	1,312	243	37	*
	1	11,245	0	12	109	1,946	3,582	3,579	1,725	269	22	*
	2	5,910†	0	*	11	587	1,828	2,117	1,154	190	18	0
	3	2,620†	0	0	*	109	700	1,027	637	135	9	*
	4 or more	1,883	0	0	0	30	329	664	642	197	20	*
	Unknown	10†	0	0	0	*	*	*	*	*	0	0
Hispanic or Latino	TOTAL	32,995	17	800†	1,980†	9,021	10,084	6,840	3,325	871	60	0
	None	11,261	17	739	1,607	4,428	2,654	1,254	464	90	8	0
	1	9,351	0	53	321	3,020	3,264	1,817	729	141	6	0
	2	6,550†	0	*	51	1,154	2,490	1,817	829	188	14	0
	3	3,390†	0	0	*	320	1,084	1,150	641	183	14	0
	4 or more	2,440†	0	0	*	99	591	801	662	269	18	0
	Unknown	0†	0	0	0	0	*	*	0	0	0	0
Black or African American	TOTAL	4,660†	0†	60†	210	1,176	1,394	1,081	574	141	20†	0
	None	1,520†	*	55	166	575	398	218	86	12	*	0
	1	1,310†	0	*	38	362	431	291	137	37	*	0
	2	840†	0	0	6	176	270	240	125	18	*	0
	3	500†	0	0	0	49	186	156	82	21	*	0
	4 or more	500	0	0	0	14	108	175	144	53	6	0
	Unknown	0†	0	0	0	0	*	*	0	0	0	0
American Indian or Alaska Native	TOTAL	4,710†	7	130†	320†	1,205	1,421	1,031	478	107	0†	0
	None	1,355	7	119	243	536	295	103	46	6	0	0
	1	1,140†	0	13	66	410	378	196	56	17	*	0
	2	900†	0	*	10	189	338	257	95	13	0	0
	3	600†	0	0	*	49	222	200	110	17	*	0
	4 or more	710†	0	0	*	20	187	275	171	54	*	0
	Unknown	0†	0	0	0	*	*	0	0	0	0	0
Asian or Pacific Islander	TOTAL	3,271	0	10†	30†	300†	805	1,260	714	144	10†	0
	None	1,430†	0	9	27	172	465	528	182	44	*	0
	1	1,200†	0	*	*	87	227	514	325	43	*	0
	2	400†	0	0	0	26	65	145	126	32	*	0
	3	150†	0	0	0	10	36	45	48	10	*	0
	4 or more	90†	0	0	0	*	12	28	33	15	*	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; totals include records with unknown number of previous live births.

**TABLE 1B-24
CHANGES FROM 2008 TO 2018 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH
BY AREA AND RACE/ETHNICITY**

Characteristics	Urban ^a		Rural		White non-Hispanic		Hispanic or Latino		Black or African American		American Indian or Alaska Native		Asian or Pacific Islander								
	2008	2018	% Change	2008	2018	% Change	2008	2018	% Change	2008	2018	% Change	2008	2018	% Change						
	Per 100 births:																				
Number of births^b	85,263	69,890	-18.0	13,952	10,640	-23.7	41,925	34,909	-16.7	42,639	32,995	-22.6	4,301	4,655	8.2	6,362	4,709	-26.0	3,425	3,271	-4.5
Teenage mother^c	11.7	5.5	-53.0	15.4	7.5	-51.2	7.1	3.1	-56.3	16.8	8.5	-49.4	15.3	5.8	-62.1	18.6	9.8	-47.1	3.3	1.3	-60.6
Unwed mother^d	44.1	43.4	-1.6	51.1	52.3	2.3	29.5	31.1	5.4	56.5	54.7	-3.1	62.6	60.6	-3.2	75.8	78.9	4.1	17.4	14.8	-14.9
Early prenatal care^e	80.4	69.5	-13.6	72.7	64.0	-12.0	87.3	75.7	-13.3	73.4	63.8	-13.1	77.6	62.4	-19.6	65.1	56.5	-13.3	86.4	72.5	-16.1
0-4 prenatal visits	4.8	7.3	52.1	8.7	11.1	27.6	2.7	4.8	77.8	6.9	9.8	42.0	5.8	9.4	62.1	12.4	16.2	30.6	3.7	5.2	40.5
C-Section	27.8	27.7	-0.4	26.0	26.1	0.4	29.5	27.4	-7.1	25.7	26.7	3.9	30.5	33.7	10.5	23.1	25.2	9.1	32.0	30.9	-3.4
LBW rate	7.0	7.6	8.6	7.5	7.8	4.0	6.9	7.1	2.9	6.7	7.2	7.5	11.7	12.3	5.1	6.7	7.9	17.9	9.1	9.8	7.7
Newborn intensive care	6.2	7.7	24.2	4.6	6.8	47.8	6.5	7.3	12.3	5.4	7.4	37.0	7.6	10.0	31.6	4.9	7.8	59.2	6.7	8.3	23.9
Preterm births (< 37 weeks)	10.2	9.5	-6.9	9.7	9.3	-4.1	10.1	8.9	-11.9	9.9	9.5	-4.0	14.0	12.4	-11.4	9.8	10.4	6.1	10.0	10.0	0.0
Births paid for by the AHCCCS^f	52.1	48.8	-6.3	54.9	60.0	9.3	32.0	34.1	6.6	73.5	65.0	-11.6	61.7	67.5	9.4	55.8	66.7	19.5	23.2	24.9	7.3

Notes: ^a Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see **Technical Notes** for more information; ^b Per 100 live births; ^c Less than 20 years old; ^d Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^e Entered care in first trimester of pregnancy; ^f The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

**TABLE 1B-25
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,
ARIZONA, 2018**

	TOTAL	Urban ^a	Rural	Un- known	Mother's race/ethnicity				
					White non- Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander
Mother's age group	80,539	69,890	10,640	10†	34,910†	32,995	4,660†	4,710†	3,271
<15	30†	21	8	0	*	17	*	7	0
15-17	1,212	1,006	206	0	213	795	60	134	10
18-19	3,418	2,833	585	0	872	1,982	210	322	32
20-24	17,783	14,955	2,826	*	6,085	9,021	1,176	1,205	296
25-29	24,275	20,951	3,322	*	10,571	10,084	1,394	1,421	805
30-34	20,760	18,393	2,366	*	10,548	6,840	1,081	1,031	1,260
35-39	10,562	9,472	1,090	0	5,471	3,325	574	478	714
40-44	2,298	2,078	219	*	1,035	871	141	107	144
45+	200†	180	18	0	106	60	18	*	10
Unknown	0†	*	0	*	*	0	0	0	0
Payer for birth	40,470	34,081	6,382	7	11,917	21,458	3,140	3,139	816
AHCCS	970†	597	372	0	65	54	*	845	*
IHS	33,090	30,025	3,064	*	20,113	8,957	1,238	576	2,206
Private insurance	3,998	3,424	574	0	2,020	1,557	155	106	160
Self-pay	2,012	1,763	248	*	794	969	118	43	88
Unknown	2,380	2,178	202	0	252	1,765	173	91	99
Mother's education	10,992	9,308	1,683	*	2,400	6,787	584	1,071	150
8th Grade or Less	21,199	17,850	3,346	*	7,060	10,641	1,382	1,685	431
Some High School	18,612	15,865	2,747	0	8,486	7,194	1,302	1,247	383
High School / GED	6,883	5,813	1,070	0	3,394	2,542	376	363	208
Some College	13,325	12,243	1,082	0	8,671	2,906	521	171	1,056
Associate Degree	6,686	6,234	452	0	4,340	1,060	280	69	937
Bachelor's Degree	462	399	58	*	306	100	37	12	7
Postgraduate Education	43,565	38,665	4,899	*	23,552	14,535	1,775	929	2,774
Unknown	35,927	30,364	5,561	*	10,850	18,059	2,821	3,714	483
Marital status	1,047	861	180	6	507	401	59	66	14
Married	18,082	15,617	2,463	*	6,712	8,148	1,165	1,101	956
Unmarried ^b	24,608	21,344	3,263	*	10,834	9,989	1,281	1,328	1,176
Unknown	37,402	32,547	4,850	*	17,234	14,647	2,161	2,230	1,130
Weight gain	447	382	64	*	129	211	48	50	9
Inadequate	76,089	66,811	9,275	*	32,024	32,141	4,379	4,334	3,211
Adequate	2,129	1,608	520	*	1,334	466	175	120	34
Excessive	1,497	1,092	404	*	1,160	221	68	42	6
Unknown	824	379	441	*	391	167	33	213	20
Smoking during pregnancy	7,644	6,656	986	*	3,116	3,132	578	492	326
Non-smoker	72,595	63,007	9,581	7	31,654	29,768	4,063	4,174	2,936
Light smoker (less than 10 cigarettes per day)	190†	156	29	0	96	59	11	14	*
Heavy smoker (10 or more cigarettes per day)	120†	71	44	0	43	36	*	29	*
Unknown	476	405	71	0	177	198	53	31	17
Length of gestation	509	439	70	0	194	216	44	34	21
<37 weeks	5,121	4,433	686	*	2,092	1,964	476	308	281
37-41 weeks	68,157	59,073	9,077	7	29,315	28,244	3,878	3,902	2,818
42+ weeks	6,239	5,512	727	0	3,111	2,361	203	431	133
Unknown	40†	28	9	0	20	12	*	*	*
Weight at birth	1,000-1,499	1,500-2,499	2,500-3,999	4,000+ grams	Unknown				

**TABLE 1B-25 (continued)
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,
ARIZONA, 2018**

	TOTAL	Urban ^a	Rural	Un- known	Mother's race/ethnicity					
					White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	
Prenatal care										
No care	2,235	1,802	432	*	566	1,230	139	238	62	
1st trimester	55,392	48,577	6,813	*	26,410	21,049	2,903	2,659	2,371	
2nd trimester	14,202	12,051	2,146	*	4,798	6,700	1,013	1,149	542	
3rd trimester	5,006	4,250	756	0	1,513	2,533	352	445	163	
Unknown	3,704	3,210	493	*	1,622	1,483	248	218	133	
Prenatal visits										
No visits	2,235	1,802	432	*	566	1,230	139	238	62	
1-4 visits	4,036	3,289	744	*	1,107	1,999	297	526	107	
5-8 visits	13,168	11,087	2,080	*	4,358	6,154	956	1,224	476	
9-12 visits	35,025	30,674	4,349	*	15,604	14,324	1,861	1,747	1,489	
13+ visits	24,998	22,185	2,812	*	12,845	8,873	1,316	868	1,096	
Unknown	1,077	853	223	*	429	415	86	106	41	
Newborn intensive care										
Yes	6,086	5,361	723	*	2,549	2,433	464	368	272	
No	74,453	64,529	9,917	7	32,360	30,562	4,191	4,341	2,999	
Method of delivery										
Vaginal	56,202	48,727	7,468	7	24,364	23,320	2,954	3,452	2,112	
C-Section	22,133	19,351	2,780	*	9,569	8,795	1,570	1,188	1,011	
Forceps	330†	287	39	0	148	138	19	*	16	
Vacuum	1,878	1,525	353	0	828	742	112	64	132	
Obstetric procedures^c										
Total	38,030	32,993	5,035	2	16,045	16,239	2,079	2,277	1,390	
Induction of labor	23,536	20,268	3,268	0	10,519	9,407	1,327	1,455	828	
Augmentation of labor	20,105	17,793	2,310	*	7,672	9,429	1,087	1,175	742	
Cervical cerclage	180†	171	13	0	85	57	32	*	9	
Tocolysis	508	416	92	0	201	223	25	40	19	
External cephalic version successful	60†	49	13	0	25	21	6	9	*	
External cephalic version failed	110†	90	16	0	59	27	*	12	*	
Births with medical risk factors^c										
Total	19,178	16,614	2,563	1	6,981	8,146	1,270	1,961	820	
Pre-existing diabetes	932	768	164	0	260	414	50	168	40	
Gestational diabetes	6,841	6,019	821	*	2,305	2,880	325	813	518	
Pre-existing hypertension	1,129	989	140	0	477	417	104	94	37	
Gestational hypertension	6,207	5,411	796	0	2,471	2,510	470	601	155	
Eclampsia	120†	99	25	0	33	62	14	12	*	
Previous preterm birth	3,555	3,047	508	0	1,370	1,570	254	255	106	
Other previous poor pregnancy outcome	1,380	1,152	228	0	542	520	107	144	67	
Gonorrhea	300†	244	51	0	61	139	38	54	*	
Syphilis	150†	117	30	0	35	65	11	32	*	
Chlamydia	2,243	1,900	343	0	456	1,250	172	346	19	
Hepatitis B	100†	92	*	0	22	13	24	*	33	
Hepatitis C	230†	191	42	0	140	65	*	21	*	

**TABLE 1B-25 (continued)
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,
ARIZONA, 2018**

	TOTAL	Urban ^a	Rural	Un- known	Mother's race/ethnicity						
					White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander		
Births with complications of labor and delivery^c											
Total	22,564	19,956	2,603	5	9,209	9,416	1,493	1,443	1,003		
Premature rupture of the membranes	4,010	3,499	509	*	1,647	1,646	223	330	164		
Precipitous labor	3,862	3,356	503	*	1,485	1,738	240	264	135		
Prolonged labor	1,741	1,475	266	0	731	675	94	164	77		
Breech presentation	3,080	2,669	410	*	1,437	1,110	209	179	145		
Chorioamnionitis	1,893	1,753	140	0	622	953	90	108	120		
Meconium staining of the amniotic fluid	5,591	5,047	543	*	2,126	2,461	392	367	245		
Fetal intolerance	6,432	5,779	652	*	2,715	2,588	557	278	294		
Maternal transfusion	494	393	101	0	158	199	17	94	26		
Third or fourth degree perineal laceration	320	271	49	0	128	106	23	30	33		
Ruptured uterus	40†	28	9	0	17	8	*	*	*		
Unplanned Hysterectomy	30†	27	*	0	10	14	*	*	*		
Admission to intensive care unit	100†	83	20	0	39	37	9	13	*		
Unplanned surgery following delivery	162	123	39	0	60	58	6	28	10		
Total	3,770	3,164	605	1	1,687	1,424	244	252	163		
Abnormal conditions of the newborn^c											
Assisted ventilation immediately after delivery	2,517	2,059	457	*	1,176	919	177	153	92		
Assisted ventilation for more than 6 hours	1,700	1,423	276	*	810	608	120	99	63		
Surfactant replacement therapy	355	312	43	0	176	121	19	21	18		
Suspected neonatal sepsis	1,675	1,458	217	0	725	651	103	111	85		
Seizure or serious neurologic dysfunction	20†	17	*	0	6	9	*	*	*		
Significant birth injury	60†	43	12	0	18	29	*	*	*		
Total	390	321	68	1	158	159	18	43	12		
Congenital anomalies of the newborn^c											
Anencephalus	10†	*	*	0	*	*	0	0	0		
Spina bifida / Meningocele	20†	17	*	0	7	10	0	*	0		
Cyanotic congenital heart disease	50†	42	*	0	24	14	*	6	*		
Congenital diaphragmatic hernia	10†	8	*	0	*	6	*	0	*		
Omphalocele / Gastroschisis	40†	36	6	0	19	17	*	*	0		
Limb reduction defect	20†	12	6	0	6	7	*	*	*		
Cleft lip / palate	60†	51	12	0	24	19	*	12	*		
Down syndrome	40†	32	*	0	17	15	0	*	0		
Suspected chromosomal disorder	60†	52	6	0	18	28	*	6	*		
Hypospadias	30†	24	*	0	14	9	*	*	*		
Unknown congenital anomalies	90†	69	21	*	35	40	*	10	*		

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; a Urban = Maricopa, Pima, Pinal, and Yuma counties; the remaining counties comprise Arizona's rural areas; see Technical Notes for more information; ^b Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^c Total birth where an obstetric procedure; medical risk factor; complication of labor and delivery; abnormal condition of the newborn; or a congenital anomaly of the newborn was identified.

**TABLE 1B-26
CHANGES FROM 2008 TO 2018 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH
WHICH DIFFER BY PAYER FOR THE DELIVERY**

Characteristics	AHCCCS ^a			Indian Health Service			Private Health Insurance			Self-pay		
	2008	2018	% Change	2008	2018	% Change	2008	2018	% Change	2008	2018	% Change
Number of births^b	52,081	40,470	-22.3	1,884	969	-48.6	41,688	33,090	-20.6	2,614	3,998	52.9
Per 100 births:												
Teenage mother^c	19.0	9.5	-50.0	20.2	11.0	-45.5	3.6	1.4	-61.1	9.5	4.1	-56.8
Unwed mother^d	66.1	65.9	-0.3	77.5	77.6	0.1	18.0	20.5	13.9	35.7	26.6	-25.5
Early prenatal care^e	71.4	61.4	-14.0	58.9	49.0	-16.8	91.5	80.2	-12.3	66.6	58.5	-12.2
0-4 prenatal visits	7.3	10.4	42.5	15.2	23.7	55.9	1.5	3.0	100.0	17.3	15.8	-8.7
C-Section^f	25.1	26.5	5.6	22.4	26.5	18.3	31.4	29.6	-5.7	19.7	21.0	6.6
LBW rate	7.2	8.1	12.5	5.2	8.7	66.7	6.9	7.2	4.3	7.7	5.4	-29.9
Newborn intensive care	5.6	8.0	42.9	3.4	7.8	129.4	6.6	7.0	6.1	5.5	6.4	16.4
Preterm birth < 37 weeks	10.2	10.0	-2.0	6.7	11.1	65.7	10.2	9.1	-10.8	10.0	7.2	-28.0

Notes: ^a The Arizona Health Care Cost Containment System is the State's Medicaid program; ^b Per 100 live births; ^c Less than 20 years old; ^d Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^e Entered care in first trimester of pregnancy; ^f C-section includes primary and repeat.

**TABLE 1B-27
PAYER FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2018**

	TOTAL	Payer for birth				
		AHCCCS ^a	IHS	Private Insurance	Self-pay	Unknown
TOTAL	80,539	40,470	970†	33,090†	4,000†	2,010†
Mother's age group						
<15	30†	22	*	*	*	*
15-17	1,212	994	35	97	56	30
18-19	3,418	2,817	70	358	107	66
20-24	17,783	12,242	253	4,130	732	424
25-29	24,275	12,278	295	9,823	1,267	614
30-34	20,760	7,527	200	11,420	1,123	490
35-39	10,562	3,611	95	5,982	572	302
40-44	2,298	904	17	1,172	125	80
45+	200†	72	*	104	15	*
Unknown	0†	*	0	*	0	0
Mother's race/ethnicity						
White non-Hispanic	34,909	11,917	65	20,113	2,020	794
Hispanic or Latino	32,995	21,458	54	8,957	1,557	969
Black or African American	4,660†	3,140	*	1,238	155	118
American Indian or Alaska Native	4,709	3,139	845	576	106	43
Asian or Pacific Islander	3,270†	816	*	2,206	160	88
8th Grade or Less	2,380	1,917	35	113	134	181
Some High School	10,992	9,273	242	840	333	304
High School / GED	21,199	14,547	363	5,008	850	431
Some College	18,612	9,282	217	7,763	928	422
Associate Degree	6,883	2,697	63	3,521	416	186
Bachelor's Degree	13,325	1,951	30	10,100	937	307
Postgraduate Education	6,686	491	15	5,674	354	152
Unknown	460†	312	*	71	46	29
Marital status						
Married	43,565	13,031	201	26,156	2,845	1,332
Unmarried ^b	35,927	26,684	752	6,779	1,062	650
Unknown	1,047	755	16	155	91	30
Weight gain						
Inadequate	18,082	9,994	212	6,410	1,004	462
Adequate	24,608	11,904	253	10,609	1,239	603
Excessive	37,402	18,327	492	15,999	1,690	894
Unknown	447	245	12	72	65	53
Smoking during pregnancy						
Non-smoker	76,089	37,177	888	32,363	3,723	1,938
Light smoker (less than 10 cigarettes per day)	2,129	1,726	31	297	46	29
Heavy smoker (10 or more cigarettes per day)	1,497	1,221	11	202	46	17
Unknown	824	346	39	228	183	28
Length of gestation						
<37 weeks	7,644	4,040	108	3,023	289	184
37-41 weeks	72,595	36,297	850	29,980	3,656	1,812
42+ weeks	190†	74	*	75	29	*
Unknown	115	59	8	12	24	12
Weight at birth						
<1,000 grams	476	256	8	183	17	12
1,000-1,499	509	283	9	189	21	7
1,500-2,499	5,121	2,750	67	2,002	176	126
2,500-3,999	68,157	34,400	786	27,886	3,387	1,698
4,000+ grams	6,239	2,769	99	2,819	388	164
Unknown	37	12	0	11	9	*

**TABLE 1B-27 (continued)
PAYER FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2018**

	TOTAL	Payer for birth				
		AHCCCS ^a	IHS	Private Insurance	Self-pay	Unknown
Prenatal care						
No care	2,235	1,471	82	291	346	45
1st trimester	55,392	24,835	475	26,538	2,339	1,205
2nd trimester	14,202	8,901	255	3,904	662	480
3rd trimester	5,006	3,248	122	1,035	401	200
Unknown	3,704	2,015	35	1,322	250	82
Prenatal visits						
No visits	2,235	1,471	82	291	346	45
1-4 visits	4,036	2,743	148	701	287	157
5-8 visits	13,168	8,226	282	3,663	619	378
9-12 visits	35,025	17,140	329	15,138	1,562	856
13+ visits	24,998	10,275	115	13,010	1,077	521
Unknown	1,077	615	13	287	107	55
Newborn intensive care						
Yes	6,086	3,235	76	2,301	254	220
No	74,453	37,235	893	30,789	3,744	1,792
Method of delivery						
Vaginal	56,202	28,700	699	22,349	3,031	1,423
C-Section	22,133	10,718	257	9,784	839	535
Forceps	330†	160	*	143	11	11
Vacuum	1,878	892	12	814	117	43
Total	38,030	19,491	459	15,427	1,542	1,111
Obstetric procedures^c						
Induction of labor	23,536	11,747	256	10,025	888	620
Augmentation of labor	20,105	10,525	264	7,691	909	716
Cervical cerclage	184	81	0	84	9	10
Tocolysis	508	241	19	203	19	26
External cephalic version successful	60†	25	*	23	6	7
External cephalic version failed	110†	40	*	55	0	7
Total	19,178	10,528	408	7,009	641	592
Births with medical risk factors^c						
Pre-existing diabetes	932	509	38	323	24	38
Gestational diabetes	6,841	3,426	164	2,898	196	157
Pre-existing hypertension	1,129	557	34	445	35	58
Gestational hypertension	6,207	3,147	119	2,530	207	204
Eclampsia	120†	75	*	41	*	*
Previous preterm birth	3,555	2,102	47	1,136	135	135
Other previous poor pregnancy outcome	1,380	730	25	478	61	86
Gonorrhea	295	245	8	24	10	8
Syphilis	147	113	11	11	9	*
Chlamydia	2,243	1,754	70	283	69	67
Hepatitis B	100†	54	*	31	*	6
Hepatitis C	230†	184	*	27	15	*

**TABLE 1B-27 (continued)
PAYER FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2018**

	TOTAL	Payer for birth				
		AHCCCS ^a	IHS	Private Insurance	Self-pay	Unknown
Births with complications of labor and delivery^c						
Total	22,564	11,141	340	9,268	1,083	732
Premature rupture of the membranes	4,010	1,920	83	1,659	194	154
Precipitous labor	3,862	2,136	47	1,233	269	177
Prolonged labor	1,741	764	40	780	86	71
Breech presentation	3,080	1,342	43	1,502	113	80
Chorioamnionitis	1,893	923	14	791	92	73
Meconium staining of the amniotic fluid	5,591	2,857	95	2,185	290	164
Fetal intolerance	6,432	3,189	75	2,751	213	204
Maternal transfusion	494	262	25	162	21	24
Third or fourth degree perineal laceration	320	126	9	152	14	19
Ruptured uterus	40 [†]	19	0	14	*	*
Unplanned Hysterectomy	30 [†]	9	0	19	*	0
Admission to intensive care unit	103	47	0	45	8	*
Unplanned surgery following delivery	160 [†]	76	*	66	10	*
Total	3,770	1,932	51	1,486	172	129
Abnormal conditions of the newborn^c						
Assisted ventilation immediately after delivery	2,517	1,292	31	1,002	111	81
Assisted ventilation for more than 6 hours	1,700	857	27	708	64	44
Surfactant replacement therapy	355	160	7	165	13	10
Suspected neonatal sepsis	1,675	853	24	650	79	69
Seizure or serious neurologic dysfunction	20 [†]	8	*	10	*	*
Significant birth injury	60 [†]	26	*	21	*	*
Total	390	226	7	116	18	23
Congenital anomalies of the newborn^c						
Anencephalus	10 [†]	*	0	*	0	*
Spina bifida / Meningocele	20 [†]	11	0	6	*	*
Cyanotic congenital heart disease	50 [†]	21	0	22	*	*
Congenital diaphragmatic hernia	10 [†]	*	0	*	*	*
Omphalocele / Gastroschisis	42	27	0	13	0	*
Limb reduction defect	20 [†]	11	0	*	*	*
Cleft lip / palate	60 [†]	32	*	19	6	*
Down syndrome	40 [†]	18	*	12	*	*
Suspected chromosomal disorder	60 [†]	34	*	22	0	*
Hypospadias	30 [†]	13	0	13	*	0
Unknown congenital anomalies	90 [†]	65	*	13	*	8

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program; ^b Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^c Total birth where an obstetric procedure; medical risk factor; complication of labor and delivery; abnormal condition of the newborn; or a congenital anomaly of the newborn was identified.

**TABLE 1B-28
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY, AND PARTY PAYING FOR THE DELIVERY,
ARIZONA, 2018**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
All racial/ ethnic groups	AHCCCS	40,470	22	994	2,817	12,242	12,278	7,527	3,611	904	72	*
	IHS	970†	*	35	70	255	293	200	95	17	*	0
	Private insurance	33,090†	*	97	358	4,130	9,823	11,420	5,982	1,172	104	*
	Self-pay	4,000†	*	56	107	732	1,267	1,123	572	125	15	0
	Unknown	2,010†	*	30	66	424	614	490	302	80	*	0
	TOTAL	80,539	30†	1,212	3,418	17,783	24,275	20,760	10,562	2,298	200†	0†
White non- Hispanic	AHCCCS	11,920†	*	162	643	3,482	3,779	2,387	1,174	256	27	*
	IHS	70†	0	*	*	13	25	10	9	*	*	0
	Private insurance	20,113	0	32	176	2,124	5,881	7,287	3,855	691	66	*
	Self-pay	2,020	0	10	37	298	634	652	308	71	10	0
	Unknown	790†	0	*	14	168	252	212	125	16	*	0
	TOTAL	34,910†	0†	210†	870†	6,085	10,571	10,548	5,471	1,040†	110†	0†
Hispanic or Latino	AHCCCS	21,458	12	675	1,729	6,814	6,331	3,645	1,728	488	36	0
	IHS	50†	0	*	*	14	20	13	*	0	0	0
	Private insurance	8,960†	*	55	145	1,626	2,933	2,622	1,263	291	19	0
	Self-pay	1,560†	*	41	61	366	517	345	184	38	*	0
	Unknown	970†	*	23	44	201	283	215	147	54	*	0
	TOTAL	32,995	20†	800†	1,980†	9,021	10,084	6,840	3,330†	871	60†	0
Black or African American	AHCCCS	3,140†	*	52	190	930	946	634	308	73	6	0
	IHS	0†	0	0	0	*	*	*	0	0	0	0
	Private insurance	1,240†	0	*	14	182	359	380	230	58	10	0
	Self-pay	160†	0	*	*	33	50	38	25	6	*	0
	Unknown	120†	0	*	*	30	38	27	11	*	*	0
	TOTAL	4,660†	0†	60†	210†	1,180†	1,390†	1,080†	574	141	20†	0
American Indian or Alaska Native	AHCCCS	3,140†	*	98	232	833	990	637	288	55	*	0
	IHS	850†	*	30	65	227	246	175	83	16	*	0
	Private insurance	580†	0	*	16	108	150	175	91	32	*	0
	Self-pay	110†	0	*	7	24	27	29	13	*	0	0
	Unknown	40†	0	0	*	13	8	15	*	*	0	0
	TOTAL	4,710†	10†	130†	322	1,205	1,421	1,031	478	110†	0†	0
Asian or Pacific Islander	AHCCCS	820†	0	7	23	183	232	224	113	32	*	0
	IHS	0†	0	0	0	0	*	0	0	0	0	0
	Private insurance	2,210†	0	*	7	90	500	956	543	100	7	0
	Self-pay	160†	0	0	*	11	39	59	42	8	0	0
	Unknown	90†	0	0	*	12	33	21	16	*	*	0
	TOTAL	3,270†	0	10†	30†	296	810†	1,260	714	144	10†	0

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 1B-29
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY, AND TRIMESTER
OF PREGNANCY PRENATAL CARE BEGAN, ARIZONA, 2018**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
All racial/ethnic groups	No care	2,240†	*	83	140	585	626	467	245	71	15	0
	1st trimester	55,392	6	523	1,870	11,265	16,913	15,379	7,746	1,571	118	*
	2nd trimester	14,202	11	367	885	3,770	4,065	3,007	1,615	441	39	*
	3rd trimester	5,006	6	187	363	1,302	1,464	1,013	513	138	20	0
	Unknown	3,700†	*	52	160	861	1,207	894	443	77	6	*
	TOTAL	80,539	30†	1,212	3,418	17,783	24,275	20,760	10,562	2,298	198	0†
White non-Hispanic	No care	570†	0	11	19	109	176	133	87	26	*	0
	1st trimester	26,410†	*	99	554	4,257	7,945	8,409	4,305	773	66	*
	2nd trimester	4,798	0	67	171	1,053	1,427	1,223	673	159	23	*
	3rd trimester	1,510†	*	27	71	340	477	369	180	40	8	0
	Unknown	1,620†	*	9	57	326	546	414	226	37	*	*
	TOTAL	34,910†	0†	213	872	6,085	10,571	10,548	5,471	1,035	110†	0†
Hispanic or Latino	No care	1,230†	*	61	96	377	314	227	111	34	8	0
	1st trimester	21,050†	*	342	1,012	5,488	6,720	4,671	2,237	543	33	0
	2nd trimester	6,700	8	233	555	2,019	1,888	1,195	602	190	10	0
	3rd trimester	2,530†	*	122	233	722	710	438	221	76	7	0
	Unknown	1,480†	0	37	86	415	452	309	154	28	*	0
	TOTAL	32,995	20†	795	1,982	9,021	10,084	6,840	3,325	871	60	0
Black or African American	No care	140†	0	*	8	40	44	29	11	*	0	0
	1st trimester	2,903	0	28	117	689	876	704	387	89	13	0
	2nd trimester	1,010†	0	17	52	294	285	214	114	35	*	0
	3rd trimester	350†	0	10	24	90	102	73	42	8	*	0
	Unknown	250†	*	*	9	63	87	61	20	6	0	0
	TOTAL	4,660†	1	60†	210	1,176	1,394	1,081	574	140†	20†	0
American Indian or Alaska Native	No care	240†	*	*	15	52	81	53	24	6	*	0
	1st trimester	2,660†	*	49	171	667	809	629	272	60	0	0
	2nd trimester	1,150†	*	48	95	319	329	206	118	28	*	0
	3rd trimester	450†	*	28	34	124	121	84	44	9	0	0
	Unknown	220†	0	*	7	43	81	59	20	*	0	0
	TOTAL	4,710†	10†	130†	322	1,205	1,421	1,031	478	107	0†	0
Asian or Pacific Islander	No care	60†	0	*	*	7	11	25	12	*	*	0
	1st trimester	2,370†	0	*	16	164	563	966	545	106	6	0
	2nd trimester	540†	0	*	12	85	136	169	108	29	*	0
	3rd trimester	160†	0	0	*	26	54	49	26	*	*	0
	Unknown	130†	0	*	*	14	41	51	23	*	0	0
	TOTAL	3,271	0	10†	30†	296	805	1,260	714	140†	10†	0

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 1B-30
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY, AND NUMBER OF PRENATAL VISITS,
ARIZONA, 2018**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
All racial/ ethnic groups	No visits	2,240†	*	83	140	585	626	467	245	71	15	0
	1-4 visits	4,040†	*	117	292	1,079	1,219	804	406	102	13	*
	5-8 visits	13,168	10	327	770	3,414	3,887	2,927	1,451	344	37	*
	9-12 visits	35,025	10	454	1,436	7,699	10,590	9,315	4,503	953	65	0
	13+ visits	25,000†	*	210	730	4,756	7,586	6,994	3,846	804	68	*
	Unknown	1,080†	*	21	50	250	367	253	111	24	0	0
	TOTAL	80,539	30†	1,212	3,418	17,783	24,275	20,760	10,562	2,298	198	0†
White non- Hispanic	No visits	570†	0	11	19	109	176	133	87	26	*	0
	1-4 visits	1,110†	*	15	45	253	372	238	144	30	8	*
	5-8 visits	4,360†	*	51	148	918	1,304	1,198	592	123	20	*
	9-12 visits	15,604	0	93	395	2,742	4,655	4,862	2,377	443	37	0
	13+ visits	12,845	0	40	249	1,988	3,894	4,014	2,221	401	36	*
	Unknown	430†	0	*	16	75	170	103	50	12	0	0
	TOTAL	34,910†	0†	213	872	6,085	10,571	10,548	5,471	1,035	110†	0†
Hispanic or Latino	No visits	1,230†	*	61	96	377	314	227	111	34	8	0
	1-4 visits	2,000†	*	78	189	593	589	353	142	52	*	0
	5-8 visits	6,150†	*	213	458	1,805	1,782	1,157	568	156	11	0
	9-12 visits	14,324	7	294	824	3,902	4,472	3,031	1,426	346	22	0
	13+ visits	8,870†	*	136	385	2,218	2,807	1,988	1,043	276	18	0
	Unknown	415	0	13	30	126	120	84	35	7	0	0
	TOTAL	32,995	20†	795	1,982	9,021	10,084	6,840	3,325	871	60†	0
Black or African American	No visits	140†	0	*	8	40	44	29	11	*	0	0
	1-4 visits	300†	0	7	17	89	83	56	39	*	*	0
	5-8 visits	960†	0	12	53	273	299	198	93	24	*	0
	9-12 visits	1,860†	0	25	81	463	548	450	233	58	*	0
	13+ visits	1,316	0	12	49	287	390	330	189	50	9	0
	Unknown	90†	*	0	*	24	30	18	9	*	0	0
	TOTAL	4,660†	1	60†	210	1,176	1,394	1,081	574	140†	20†	0
American Indian or Alaska Native	No visits	240†	*	*	15	52	81	53	24	6	*	0
	1-4 visits	530†	0	17	38	128	150	122	59	11	*	0
	5-8 visits	1,220†	*	50	100	358	358	219	111	25	0	0
	9-12 visits	1,750†	*	39	124	469	544	384	147	35	*	0
	13+ visits	868	0	19	43	180	250	220	128	28	0	0
	Unknown	110†	0	*	*	18	38	33	9	*	0	0
	TOTAL	4,710†	10†	130†	322	1,205	1,421	1,031	478	107	0†	0
Asian or Pacific Islander	No visits	60†	0	*	*	7	11	25	12	*	*	0
	1-4 visits	110†	0	0	*	16	25	35	22	*	*	0
	5-8 visits	480†	0	*	11	60	144	155	87	16	*	0
	9-12 visits	1,490†	0	*	12	123	371	588	320	71	*	0
	13+ visits	1,100†	0	*	*	83	245	442	265	49	*	0
	Unknown	40†	0	*	0	7	9	15	8	*	0	0
	TOTAL	3,271	0	10†	30†	296	805	1,260	714	140†	10†	0

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6.

**TABLE 1B-31
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2018**

	TOTAL	Prenatal care				Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Un-known	Less than 5	5 or more	Un-known
Mother's age group									
TOTAL	80,539	2,240†	55,392	14,202	5,010†	3,700†	6,271	73,191	1,080†
<15	30†	*	6	11	6	*	6	22	*
15-17	1,212	83	523	367	187	52	200	991	21
18-19	3,418	140	1,870	885	363	160	432	2,936	50
20-24	17,783	585	11,265	3,770	1,302	861	1,664	15,869	250
25-29	24,275	626	16,913	4,065	1,464	1,207	1,845	22,063	367
30-34	20,760	467	15,379	3,007	1,013	894	1,271	19,236	253
35-39	10,562	245	7,746	1,615	513	443	651	9,800	111
40-44	2,298	71	1,571	441	138	77	173	2,101	24
45+	198	15	118	39	20	6	28	170	0
Unknown	0†	0	*	*	0	*	*	*	0
Payer for birth									
AHCCCS	40,470	1,471	24,835	8,901	3,248	2,015	4,214	35,641	615
IHS	969	82	475	255	122	35	230	726	13
Private insurance	33,090	291	26,538	3,904	1,035	1,322	992	31,811	287
Self-pay	3,998	346	2,339	662	401	250	633	3,258	107
Unknown	2,012	45	1,205	480	200	82	202	1,755	55
Mother's education									
8th Grade or Less	2,380	207	1,075	669	310	119	446	1,887	47
Some High School	10,992	572	6,016	2,728	1,126	550	1,623	9,185	184
High School / GED	21,199	683	13,721	4,329	1,456	1,010	1,898	19,004	297
Some College	18,612	327	13,258	3,173	971	883	1,082	17,283	247
Associate Degree	6,883	141	5,116	977	323	326	386	6,422	75
Bachelor's Degree	13,325	160	10,587	1,556	506	516	486	12,721	118
Postgraduate Education	6,686	62	5,449	676	262	237	208	6,421	57
Unknown	462	83	170	94	52	63	142	268	52
Marital status									
Married	43,565	672	32,758	6,241	2,034	1,860	2,103	41,016	446
Unmarried*	35,927	1,457	22,110	7,733	2,864	1,763	3,927	31,411	589
Unknown	1,047	106	524	228	108	81	241	764	42
Inadequate	18,082	792	11,296	3,451	1,624	919	2,130	15,653	299
Adequate	24,608	592	17,164	4,400	1,395	1,057	1,737	22,580	291
Excessive	37,402	746	26,799	6,281	1,932	1,644	2,242	34,736	424
Unknown	447	105	133	70	55	84	162	222	63
Smoking during pregnancy									
Non-smoker	76,089	1,870	52,980	13,228	4,591	3,420	5,445	69,710	934
Light smoker (less than 10 cigarettes per day)	2,129	161	1,175	468	207	118	387	1,693	49
Heavy smoker (10 or more cigarettes per day)	1,497	122	797	353	142	83	285	1,175	37
Unknown	824	82	440	153	66	83	154	613	57

**TABLE 1B-31 (continued)
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2018**

	TOTAL	Prenatal care				Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Un- known	Less than 5	5 or more	Un- known
Length of gestation									
<37 weeks	7,644	548	4,979	1,200	332	585	1,312	6,077	255
37-41 weeks	72,595	1,631	50,336	12,927	4,647	3,054	4,887	66,931	777
42+ weeks	185	19	77	55	25	9	31	151	*
Unknown	120†	37	0	20	*	56	41	32	42
Weight at birth									
<1,000 grams	480†	66	283	60	*	64	191	252	33
1,000-1,499	509	44	317	97	15	36	114	376	19
1,500-2,499	5,121	310	3,323	861	275	352	736	4,233	152
2,500-3,999	68,157	1,710	46,954	12,155	4,339	2,999	4,881	62,455	821
4,000+ grams	6,239	100	4,502	1,022	372	243	342	5,853	44
Unknown	40†	*	13	7	*	10	7	22	8
Newborn intensive care									
Yes	6,086	424	3,821	1,063	401	377	1,025	4,890	171
No	74,453	1,811	51,571	13,139	4,605	3,327	5,246	68,301	906
Method of delivery									
Vaginal	56,202	1,591	38,357	10,153	3,466	2,635	4,346	51,084	772
C-Section	22,133	583	15,560	3,646	1,361	983	1,745	20,113	275
Forceps	330†	*	216	64	32	10	26	296	*
Vacuum	1,878	57	1,259	339	147	76	154	1,698	26
Obstetric procedures^b									
Total	38,030	826	26,192	7,070	2,500	1,442	2,571	35,102	357
Induction of labor	23,536	352	16,576	4,319	1,519	770	1,293	22,064	179
Augmentation of labor	20,105	560	13,471	3,801	1,422	851	1,607	18,271	227
Cervical cerclage	180†	*	133	32	*	11	22	158	*
Tocolysis	508	40	328	90	26	24	98	399	11
External cephalic version successful	60†	0	48	6	*	*	*	59	*
External cephalic version failed	110†	0	75	19	7	*	*	101	0
Births with medical risk factors^b									
Total	19,178	609	12,952	3,590	1,258	769	1,775	17,142	261
Pre-existing diabetes	932	33	662	134	65	38	86	832	14
Gestational diabetes	6,841	103	4,920	1,159	388	271	377	6,385	79
Pre-existing hypertension	1,129	40	771	197	72	49	116	996	17
Gestational hypertension	6,207	214	4,236	1,115	383	259	598	5,517	92
Eclampsia	120†	7	84	21	*	8	12	108	*
Previous preterm birth	3,555	171	2,354	672	215	143	430	3,068	57
Other previous poor pregnancy outcome	1,380	53	925	265	90	47	152	1,208	20
Gonorrhea	295	14	141	95	37	8	55	236	*
Syphilis	147	12	61	42	22	10	32	111	*
Chlamydia	2,243	88	1,255	585	242	73	312	1,903	28
Hepatitis B	100†	*	58	22	8	*	13	81	*
Hepatitis C	233	28	98	59	34	14	69	159	*

**TABLE 1B-31
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2018**

	TOTAL	Prenatal care				Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Un-known	Less than 5	5 or more	Un-known
Births with complications of labor and delivery^b									
Total	22,564	900	14,997	4,141	1,507	1,019	2,245	19,977	342
Premature rupture of the membranes	4,010	262	2,647	691	228	182	565	3,372	73
Precipitous labor	3,862	199	2,331	813	322	197	524	3,256	82
Prolonged labor	1,741	53	1,199	310	116	63	144	1,579	18
Breech presentation	3,080	136	2,123	503	158	160	342	2,690	48
Chorioamnionitis	1,893	61	1,276	367	123	66	152	1,717	24
Meconium staining of the amniotic fluid	5,591	253	3,668	1,017	415	238	553	4,976	62
Fetal intolerance	6,432	156	4,422	1,120	423	311	485	5,852	95
Maternal transfusion	494	42	303	87	33	29	76	401	17
Third or fourth degree perineal laceration	320	10	209	63	24	14	28	288	*
Ruptured uterus	40†	*	19	7	6	*	8	29	0
Unplanned Hysterectomy	30†	*	23	*	*	0	*	29	0
Admission to intensive care unit	100†	17	55	13	*	14	20	74	9
Unplanned surgery following delivery	162	7	104	33	6	12	16	143	*
Abnormal conditions of the newborn^b									
Total	3,770	240	2,408	660	221	241	617	3,058	95
Assisted ventilation immediately after delivery	2,517	170	1,604	431	137	175	447	2,001	69
Assisted ventilation for more than 6 hours	1,700	134	1,075	288	93	110	352	1,299	49
Surfactant replacement therapy	355	28	238	52	9	28	74	258	23
Suspected neonatal sepsis	1,675	121	1,080	299	102	73	278	1,368	29
Seizure or serious neurologic dysfunction	20†	*	11	7	0	*	8	13	0
Significant birth injury	60†	*	38	10	0	*	10	45	0
Congenital anomalies of the newborn^b									
Total	390	26	223	88	25	28	75	299	16
Anencephalus	10†	0	*	*	*	0	*	*	0
Spina bifida / Meningocele	20†	*	15	*	0	0	*	18	0
Cyanotic congenital heart disease	50†	0	27	13	*	*	*	41	*
Congenital diaphragmatic hernia	10†	*	*	*	*	0	*	8	0
Omphalocele / Gastroschisis	40†	*	21	10	*	*	10	30	*
Limb reduction defect	20†	*	11	*	*	0	*	13	0
Cleft lip / palate	60†	*	43	12	*	*	7	55	*
Down syndrome	40†	0	22	8	*	*	*	31	*
Suspected chromosomal disorder	60†	*	37	14	*	*	7	49	*
Hypospadias	30†	*	15	*	*	*	*	21	*
Unknown congenital anomalies	90†	14	40	24	*	9	33	51	7

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ‡ Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^b Total birth where an obstetric procedure; medical risk factor; complication of labor and delivery; abnormal condition of the newborn; or a congenital anomaly of the newborn was identified.

**TABLE 1B-32
SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2018**

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
TOTAL	80,539	6,110†	74,396	40†	7,640†	72,595	190†	120†
Mother's age group								
<15	30†	*	27	0	*	26	0	0
15-17	1,210†	110	1,102	0	100	1,103	*	*
18-19	3,420†	285	3,130	*	309	3,103	*	*
20-24	17,783	1,264	16,516	*	1,466	16,265	31	21
25-29	24,275	1,617	22,648	10	2,094	22,086	59	36
30-34	20,760	1,545	19,202	13	2,114	18,556	59	31
35-39	10,562	970	9,585	7	1,196	9,326	26	14
40-44	2,300†	271	2,026	*	318	1,972	*	*
45+	198	42	156	0	44	154	0	0
Unknown	0†	0	*	0	0	*	0	0
Payer for birth								
AHCCCS	40,470	3,289	37,169	12	4,040	36,297	74	59
IHS	970†	84	885	0	108	850	*	8
Private insurance	33,090	2,374	30,705	11	3,023	29,980	75	12
Self-pay	3,998	214	3,775	9	289	3,656	29	24
Unknown	2,010†	145	1,862	*	184	1,812	*	12
Mother's education								
8th Grade or Less	2,380	182	2,197	*	232	2,132	11	*
Some High School	10,992	933	10,055	*	1,220	9,726	21	25
High School / GED	21,199	1,652	19,535	12	1,999	19,125	40	35
Some College	18,612	1,383	17,222	7	1,768	16,793	34	17
Associate Degree	6,883	523	6,356	*	653	6,199	21	10
Bachelor's Degree	13,325	863	12,457	*	1,095	12,187	36	7
Postgraduate Education	6,686	489	6,195	*	575	6,086	22	*
Unknown	462	81	379	*	102	347	0	13
Marital status								
Married	43,565	2,927	40,622	16	3,817	39,594	115	39
Unmarried ^a	35,927	3,040	32,867	20	3,651	32,143	68	65
Unknown	1,050†	139	907	*	176	858	*	11
Weight gain								
Inadequate	18,082	2,097	15,971	14	2,356	15,651	36	39
Adequate	24,608	1,680	22,922	6	2,098	22,438	48	24
Excessive	37,402	2,256	35,135	11	3,109	34,159	100	34
Unknown	450†	73	368	6	81	347	*	18
Smoking during pregnancy								
Non-smoker	76,089	5,439	70,618	32	6,916	68,907	170	96
Light smoker (less than 10 cigarettes per day)	2,129	292	1,834	*	318	1,801	6	*
Heavy smoker (10 or more cigarettes per day)	1,500†	227	1,268	*	231	1,252	*	9
Unknown	820†	148	676	0	179	635	*	6

TABLE 1B-32 (continued)
 SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2018

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
Prenatal care								
No care	2,235	420	1,810	*	548	1,631	19	37
1st trimester	55,392	3,923	51,456	13	4,979	50,336	77	0
2nd trimester	14,202	1,018	13,177	7	1,200	12,927	55	20
3rd trimester	5,006	293	4,711	*	332	4,647	25	*
Unknown	3,704	452	3,242	10	585	3,054	9	56
Prenatal visits								
No visits	2,235	420	1,810	*	548	1,631	19	37
1-4 visits	4,036	621	3,413	*	764	3,256	12	*
5-8 visits	13,168	1,682	11,484	*	2,109	11,022	26	11
9-12 visits	35,025	1,952	33,063	10	2,545	32,424	46	10
13+ visits	24,998	1,227	23,761	10	1,423	23,485	79	11
Unknown	1,080†	204	865	8	255	777	*	42
Newborn intensive care								
Yes	6,086	2,809	3,273	*	3,323	2,740	8	15
No	74,453	3,297	71,123	33	4,321	69,855	177	100
Method of delivery								
Vaginal	56,202	3,010	53,157	35	3,798	52,171	136	97
C-Section	22,133	3,000	19,131	*	3,734	18,339	42	18
Forceps	330†	13	313	0	19	306	*	0
Vacuum	1,878	83	1,795	0	93	1,779	6	0
Obstetric procedures^b								
Total	38,030	2,207	35,820	3	2,474	35,433	101	22
Induction of labor	23,536	1,440	22,093	*	1,380	22,074	74	8
Augmentation of labor	20,105	905	19,199	*	1,244	18,792	53	16
Cervical cerclage	184	70	114	0	86	97	0	*
Tocolysis	510†	213	295	0	241	264	*	*
External cephalic version successful	60†	*	57	0	6	56	0	0
External cephalic version failed	106	6	100	0	7	99	0	0
Births with medical risk factors^b								
Total	19,178	2,643	16,528	7	3,466	15,667	22	23
Pre-existing diabetes	930†	121	811	0	230	699	*	*
Gestational diabetes	6,841	572	6,268	*	922	5,905	7	7
Pre-existing hypertension	1,130†	223	905	*	270	857	*	*
Gestational hypertension	6,207	1,249	4,956	*	1,539	4,655	7	6
Eclampsia	124	50	74	0	64	60	0	0
Previous preterm birth	3,560†	675	2,877	*	998	2,550	*	*
Other previous poor pregnancy outcome	1,380†	230	1,149	*	243	1,136	*	0
Gonorrhea	295	24	271	0	31	264	0	0
Syphilis	150†	13	134	0	16	130	*	0
Chlamydia	2,240†	212	2,030	*	227	2,010	*	*
Hepatitis B	100†	11	84	*	12	83	*	0
Hepatitis C	233	37	196	0	46	187	0	0

**TABLE 1B-32 (continued)
SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2018**

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500 + grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
Births with complications of labor and delivery^b								
Total	22,564	2,784	19,774	6	3,389	19,083	65	27
Premature rupture of the membranes	4,010	923	3,086	*	1,298	2,699	8	*
Precipitous labor	3,862	372	3,485	*	451	3,393	7	11
Prolonged labor	1,741	114	1,627	0	185	1,544	12	0
Breech presentation	3,080†	966	2,114	0	1,096	1,979	*	*
Chorioamnionitis	1,890†	141	1,752	0	170	1,718	*	*
Meconium staining of the amniotic fluid	5,591	199	5,392	0	231	5,326	26	8
Fetal intolerance	6,432	741	5,690	*	784	5,624	22	*
Maternal transfusion	494	109	384	*	137	354	0	*
Third or fourth degree perineal laceration	320†	11	309	0	7	311	*	0
Ruptured uterus	37	6	30	*	13	24	0	0
Unplanned Hysterectomy	32	7	25	0	9	23	0	0
Admission to intensive care unit	103	38	65	0	46	56	0	*
Unplanned surgery following delivery	162	24	138	0	33	128	0	*
Total	3,770	1,527	2,235	8	1,792	1,965	6	7
Abnormal conditions of the newborn^b								
Assisted ventilation immediately after delivery	2,520†	1,163	1,347	7	1,338	1,172	*	*
Assisted ventilation for more than 6 hours	1,700†	977	720	*	1,132	562	*	*
Surfactant replacement therapy	355	287	68	0	317	38	0	0
Suspected neonatal sepsis	1,680†	656	1,019	0	751	916	*	*
Seizure or serious neurologic dysfunction	21	6	15	0	11	10	0	0
Significant birth injury	55	9	45	*	13	42	0	0
Total	390†	126	261	3	123	260	1	6
Congenital anomalies of the newborn^b								
Anencephalus	10†	*	*	0	*	*	0	0
Spina bifida / Meningocele	20	6	14	0	6	14	0	0
Cyanotic congenital heart disease	50†	16	31	0	13	33	*	0
Congenital diaphragmatic hernia	10†	*	7	0	*	9	0	0
Omphalocele / Gastroschisis	42	21	21	0	20	22	0	0
Limb reduction defect	18	6	12	0	7	11	0	0
Cleft lip / palate	63	7	55	*	10	53	0	0
Down syndrome	35	9	26	0	9	26	0	0
Suspected chromosomal disorder	58	22	36	0	19	39	0	0
Hypospadias	28	6	22	0	6	22	0	0
Unknown congenital anomalies	91	43	46	*	45	40	0	6

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^b Total birth where an obstetric procedure; medical risk factor; complication of labor and delivery; abnormal condition of the newborn; or a congenital anomaly of the newborn was identified.

**TABLE 1B-33
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2018**

	TOTAL	Mother's age group									Un- known
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	
TOTAL	80,539	29	1,212	3,418	17,783	24,275	20,760	10,562	2,298	198	4
Mother's race/ethnicity											
White non-Hispanic	34,910†	*	213	872	6,085	10,571	10,548	5,471	1,035	106	*
Hispanic or Latino	32,995	17	795	1,982	9,021	10,084	6,840	3,325	871	60	0
Black or African American	4,660†	*	60	210	1,176	1,394	1,081	574	141	18	0
American Indian or Alaska Native	4,710†	7	134	322	1,205	1,421	1,031	478	107	*	0
Asian or Pacific Islander	3,270†	0	10	32	296	805	1,260	714	144	10	0
Payer for birth											
AHCCCS	40,470	22	994	2,817	12,242	12,278	7,527	3,611	904	72	*
IHS	970†	*	35	70	255	293	200	95	17	*	0
Private insurance	33,090†	*	97	358	4,130	9,823	11,420	5,982	1,172	104	*
Self-pay	4,000†	*	56	107	732	1,267	1,123	572	125	15	0
Unknown	2,010†	*	30	66	424	614	490	302	80	*	0
Mother's education											
8th Grade or Less	2,380	16	114	119	398	519	553	448	192	21	0
Some High School	10,992	13	972	1,439	3,457	2,531	1,519	827	221	13	0
High School / GED	21,200†	0	113	1,432	7,211	6,660	3,761	1,643	357	22	0
Some College	18,610†	0	*	391	4,768	6,609	4,448	1,977	396	20	0
Associate Degree	6,880†	0	*	24	1,056	2,398	2,128	1,044	216	15	*
Bachelor's Degree	13,330†	0	0	*	746	4,231	5,226	2,582	494	44	0
Postgraduate Education	6,690†	0	0	0	76	1,222	3,016	1,944	387	41	0
Unknown	460†	0	9	11	71	105	109	97	35	22	*
Marital status											
Married	43,570†	0	44	411	5,806	13,532	14,544	7,512	1,585	130	*
Unmarried ^a	35,927	29	1,166	2,993	11,826	10,430	5,935	2,855	651	42	0
Unknown	1,050†	0	*	14	151	313	281	195	62	26	*
Weight gain											
Inadequate	18,082	9	366	830	4,089	5,373	4,467	2,305	575	67	*
Adequate	24,608	10	313	949	5,249	7,382	6,597	3,336	715	57	0
Excessive	37,402	9	516	1,619	8,338	11,388	9,593	4,869	996	71	*
Unknown	450†	*	17	20	107	132	103	52	12	*	0
Smoking during pregnancy											
Non-smoker	76,089	29	1,174	3,226	16,657	22,865	19,708	10,039	2,200	189	*
Light smoker (less than 10 cigarettes per day)	2,130†	0	19	95	581	693	481	224	31	*	*
Heavy smoker (10 or more cigarettes per day)	1,500†	0	6	56	345	471	385	196	34	*	*
Unknown	820†	0	13	41	200	246	186	103	33	*	0
Length of gestation											
<37 weeks	7,640†	*	100	309	1,466	2,094	2,114	1,196	318	44	0
37-41 weeks	72,595	26	1,103	3,103	16,265	22,086	18,556	9,326	1,972	154	*
42+ weeks	190†	0	*	*	31	59	59	26	*	0	0
Unknown	120†	0	*	*	21	36	31	14	*	0	0

**TABLE 1B-33 (continued)
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2018**

	TOTAL	Mother's age group										Un- known		
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+				
Weight at birth														
<1,000 grams	480†	0	9	18	104	135	109	74	21	6	0			
1,000-1,499	510†	0	6	22	113	133	133	83	16	*	0			
1,500-2,499	5,120†	*	95	245	1,047	1,349	1,303	813	234	33	0			
2,500-3,999	68,157	27	1,054	2,953	15,406	20,697	17,353	8,661	1,853	149	*			
4,000+ grams	6,240†	0	48	177	1,110	1,951	1,849	924	173	7	0			
Unknown	40†	0	0	*	*	10	13	7	*	0	0			
Prenatal care														
No care	2,240†	*	83	140	585	626	467	245	71	15	0			
1st trimester	55,392	6	523	1,870	11,265	16,913	15,379	7,746	1,571	118	*			
2nd trimester	14,202	11	367	885	3,770	4,065	3,007	1,615	441	39	*			
3rd trimester	5,006	6	187	363	1,302	1,464	1,013	513	138	20	0			
Unknown	3,700†	*	52	160	861	1,207	894	443	77	6	*			
Prenatal visits														
No visits	2,240†	*	83	140	585	626	467	245	71	15	0			
1-4 visits	4,040†	*	117	292	1,079	1,219	804	406	102	13	*			
5-8 visits	13,168	10	327	770	3,414	3,887	2,927	1,451	344	37	*			
9-12 visits	35,025	10	454	1,436	7,699	10,590	9,315	4,503	953	65	0			
13+ visits	25,000†	*	210	730	4,756	7,586	6,994	3,846	804	68	*			
Unknown	1,080†	*	21	50	250	367	253	111	24	0	0			
Newborn intensive care														
Yes	6,090†	*	97	262	1,260	1,674	1,576	938	243	33	0			
No	74,453	26	1,115	3,156	16,523	22,601	19,184	9,624	2,055	165	*			
Method of delivery														
Vaginal	56,202	24	978	2,680	13,489	17,386	13,836	6,420	1,293	93	*			
C-Section	22,130†	*	164	598	3,748	6,241	6,401	3,914	966	98	*			
Forceps	330†	*	9	17	83	97	71	42	6	0	0			
Vacuum	1,880†	*	61	123	463	551	452	186	33	7	0			
Obstetric procedures^b														
Total	38,030	17	686	1,911	9,396	11,618	8,859	4,451	1,013	79	0			
Induction of labor	23,536	6	382	1,041	5,469	7,028	5,632	3,188	733	57	0			
Augmentation of labor	20,105	11	417	1,139	5,313	6,196	4,544	2,007	446	32	0			
Cervical cerclage	180†	0	*	*	16	57	52	43	11	*	0			
Tocolysis	510†	*	7	20	116	151	126	72	14	*	0			
External cephalic version successful	60†	0	0	*	*	21	16	15	*	*	0			
External cephalic version failed	110†	0	*	6	18	39	21	16	*	0	0			
Births with medical risk factors^b														
Total	19,180†	4	253	742	3,658	5,284	5,116	3,183	865	73	0			
Pre-existing diabetes	930†	0	*	17	113	222	274	227	72	6	0			
Gestational diabetes	6,840†	0	24	119	829	1,761	2,178	1,484	414	32	0			
Pre-existing hypertension	1,130†	0	*	16	137	255	311	293	102	13	0			
Gestational hypertension	6,210†	*	106	300	1,338	1,734	1,559	918	231	18	0			
Eclampsia	120†	0	*	6	26	32	31	18	7	0	0			
Previous preterm birth	3,560†	0	9	33	566	1,080	1,025	660	168	14	0			
Other previous poor pregnancy outcome	1,380†	0	6	16	180	383	423	289	75	8	0			
Gonorrhea	300†	0	16	25	107	80	42	21	*	*	0			
Syphilis	150†	0	*	9	41	47	29	13	*	0	0			
Chlamydia	2,240†	*	115	296	941	563	234	73	17	*	0			
Hepatitis B	100†	0	0	*	16	24	34	15	*	0	0			
Hepatitis C	230†	0	*	*	37	86	55	41	7	*	0			

**TABLE 1B-33 (continued)
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2018**

	TOTAL	Mother's age group									Un- known	
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+		
Births with complications of labor and delivery^b												
Total	22,564	7	381	1,084	5,164	6,816	5,695	2,728	625	61	3	
Premature rupture of the membranes	4,010†	0	71	192	1,025	1,205	977	433	94	13	0	
Precipitous labor	3,860†	*	55	144	764	1,202	1,046	525	114	7	*	
Prolonged labor	1,740†	0	38	101	501	502	397	165	29	8	0	
Breech presentation	3,080†	*	31	113	465	823	896	575	158	16	*	
Chorioamnionitis	1,890†	*	55	118	562	605	383	138	29	*	0	
Meconium staining of the amniotic fluid	5,590†	*	100	301	1,358	1,766	1,368	573	115	8	*	
Fetal intolerance	6,430†	*	101	311	1,582	1,939	1,521	779	182	16	0	
Maternal transfusion	490†	0	18	28	115	126	118	67	18	*	0	
Third or fourth degree perineal laceration	320†	0	7	21	89	108	62	27	*	*	0	
Ruptured uterus	40†	0	*	*	6	12	8	6	*	0	0	
Unplanned Hysterectomy	30†	0	0	0	*	*	8	15	*	0	0	
Admission to intensive care unit	100†	0	*	*	16	23	27	18	7	*	0	
Unplanned surgery following delivery	160†	0	*	*	30	42	51	29	*	0	0	
Total	3,770†	2	74	169	848	1,042	930	552	137	16	0	
Abnormal conditions of the newborn^b												
Assisted ventilation immediately after delivery	2,520†	*	41	101	532	684	633	413	99	13	0	
Assisted ventilation for more than 6 hours	1,700†	*	23	62	360	485	409	274	76	9	0	
Surfactant replacement therapy	360†	0	*	14	70	87	95	68	15	*	0	
Suspected neonatal sepsis	1,680†	*	45	94	449	468	381	179	51	7	0	
Seizure or serious neurologic dysfunction	20†	0	0	0	*	10	*	*	*	0	0	
Significant birth injury	60†	0	*	*	11	22	9	7	*	0	0	
Total	390†	0	2	18	80	106	89	64	28	2	1	
Congenital anomalies of the newborn^b												
Anencephalus	10†	0	0	0	*	*	*	*	0	0	0	
Spina bifida / Meningocele	20†	0	0	*	*	9	*	*	*	0	0	
Cyanotic congenital heart disease	50†	0	*	*	8	13	12	6	*	*	0	
Congenital diaphragmatic hernia	10†	0	0	0	*	*	*	0	0	0	0	
Omphalocele / Gastroschisis	40†	0	0	*	16	14	*	*	0	0	0	
Limb reduction defect	20†	0	*	0	*	8	*	*	*	0	0	
Cleft lip / palate	60†	0	0	*	15	16	17	10	*	0	0	
Down syndrome	40†	0	0	*	*	*	7	7	12	0	0	
Suspected chromosomal disorder	60†	0	0	*	9	14	13	12	6	*	0	
Hypospadias	30†	0	0	0	*	10	6	7	*	0	0	
Unknown congenital anomalies	90†	0	0	*	19	25	24	16	*	0	*	

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6; ^a Beginning with data year 2015, the coding of marital status has changed as such unmarried category includes divorced; ^b Total birth where an obstetric procedure; medical risk factor; complication of labor and delivery; abnormal condition of the newborn; or a congenital anomaly of the newborn was identified.

**TABLE 1B-34
BIRTHS WITH CONGENITAL ANOMALIES MENTIONED ON BIRTH CERTIFICATE BY MOTHER'S RACE/ETHNICITY AND
CHILD'S GENDER, ARIZONA, 2018**

	All groups			White non-Hispanic			Hispanic or Latino			Black or African American			American Indian or Alaska Native			Asian or Pacific Islander		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	390	223	167	158	91	67	159	93	66	18	12	6	43	21	22	12	6	6
Anencephalus	10†	*	*	0†	*	*	0†	*	*	0	0	0	0	0	0	0	0	0
Spina bifida / Meningocele	20	10	10	10†	*	*	10†	6	*	0	0	0	0†	*	*	0	0	0
Cyanotic congenital heart disease	47	23	24	24	12	12	14	7	7	0†	*	0	10†	*	*	0†	*	0
Congenital diaphragmatic hernia	10†	8	*	0†	*	*	10†	*	*	0†	*	0	0	0	0	0†	*	0
Omphalocele / Gastroschisis	42	22	20	19	9	10	17	9	8	0†	*	*	0†	*	*	0	0	0
Limb reduction defect	18	10	8	10†	*	*	10†	*	*	0†	*	*	0†	0	*	0†	*	0
Cleft lip / palate	63	38	25	24	16	8	20†	14	*	0†	*	*	10†	*	9	10†	*	*
Down syndrome	35	16	19	17	9	8	15	6	9	0	0	0	0†	*	*	0	0	0
Suspected chromosomal disorder	58	34	24	18	9	9	28	18	10	10†	*	*	10†	*	*	0†	*	0
Hypospadias	30†	26	*	14	14	0	10†	8	*	0†	*	0	0†	*	0	0†	0	*
Unknown congenital anomalies	91	45	46	35	18	17	40	19	21	0†	*	*	10†	6	*	0†	0	*
Ratio per 100 births^a	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.6	0.4	0.4	0.5	0.3	0.9	0.9	1.0	0.4	0.4	0.4

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a For denominators see Table 5B-8.



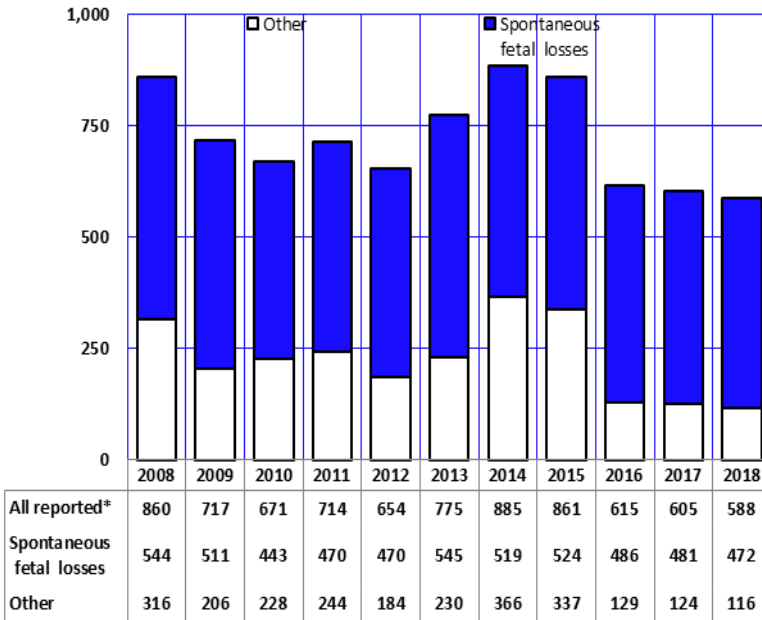
1C.

FETAL, PERINATAL, AND MATERNAL DEATHS

In Arizona, reportable fetal deaths are those after 20 completed weeks of gestation or if the fetus weighs more than 350 grams (*ARS 36-329; Arizona Administrative Code, R9-19-302*). In addition to spontaneous stillbirths, any induced termination of pregnancy at 20 or more weeks of gestation (or, if the gestation period is unknown, when the weight of the product of human conception is more than 350 grams) also requires the filing of a fetal death certificate.

1C. FETAL, PERINATAL, AND MATERNAL DEATHS

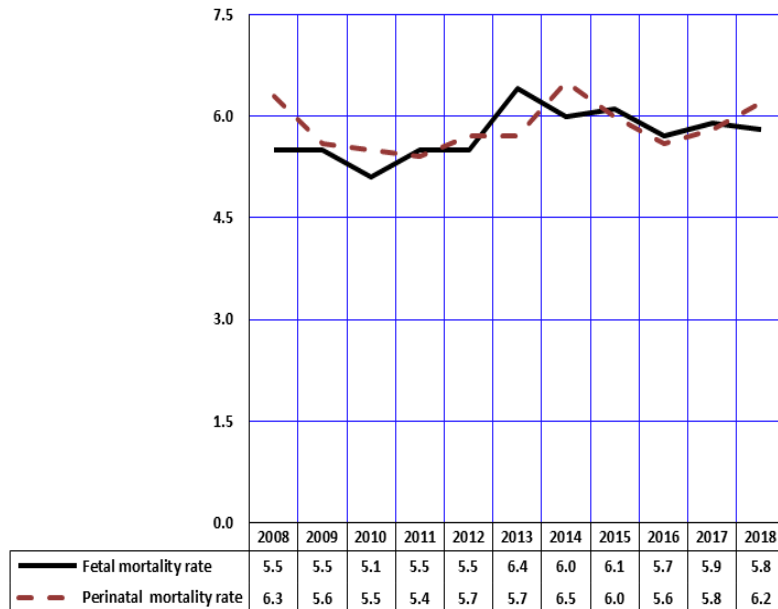
Figure 1C-1
Trends in Fetal Deaths, Arizona, 2008-2018



The number of all reported fetal deaths in Arizona (including late term abortions) in 2018 was 588, a 2.8 percent decrease from 2017 (**Figure 1C-1, Table 1C-3**). The annual number of reportable spontaneous fetal losses decreased 1.9 percent from 481 in 2017 to 472 in 2018. (**Figure 1C-1, Table 1C-3**).

Note: All reported includes spontaneous and induced termination of pregnancy at 20 or more weeks of gestation or 350 grams or more and some stillbirths prior to 20 weeks and of any weight.

Figure 1C-2
Fetal^a and Perinatal^b Mortality Rates, Arizona, 2008-2018



The fetal mortality rate decreased slightly from a rate of 5.9 deaths at 20 or more weeks of gestation per 1,000 live births in 2017 to a rate of 5.8 deaths in 2018.

Perinatal mortality refers here to death of a fetus of at least 28 weeks gestational age, or of an infant less than 7 days old. The perinatal death rate per 1,000 live births has been below 6 deaths per 1,000 since 2009 then increased at 6.5 in 2014. The perinatal mortality rate of 6.2 in 2018 represented an increase from the 2015, 2016 and 2017 rates (**Figure 1C-2, Table 1C-3**).

Early infant deaths accounted for 254 or 50.7 percent of the 501 perinatal deaths in 2018 (**Figure 1C-2, Table 1C-3**).

Notes: ^a Rate is the number of events per 1,000 live births and fetal deaths. ^b Infant deaths of less than 7 days and fetal deaths with gestation of 28 weeks or more, per 1,000 live births and fetal deaths.

1C. FETAL, PERINATAL, AND MATERNAL DEATHS

In 2018, 33 women giving birth were reported to have died from maternal causes (**Table 1C-1**). This represents a 43.5 percent increase from the number of maternal deaths recorded in 2017. The number of maternal deaths does not include all deaths occurring to pregnant women, but only those deaths assigned to causes related to or aggravated by pregnancy or pregnancy management.

Based on the total number of 160 maternal deaths from 2008 to 2018, women age 35 and older had the highest proportional contribution to maternal mortality followed by women age 25 - 34, and women age 24 and younger (**Figure 1C-3**).

Figure 1C-3
Percent of Death from Maternal Causes by Mother's Age Group, Arizona, 2008-2018

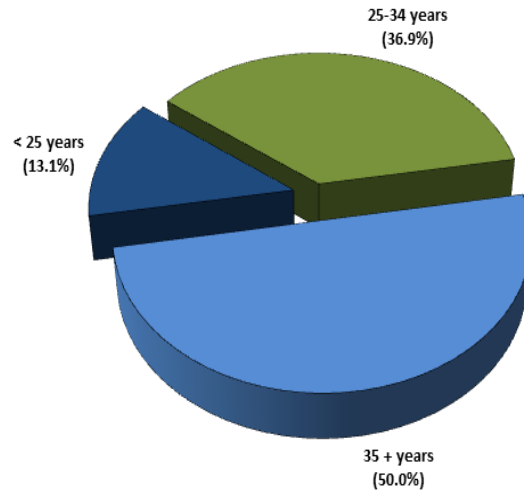
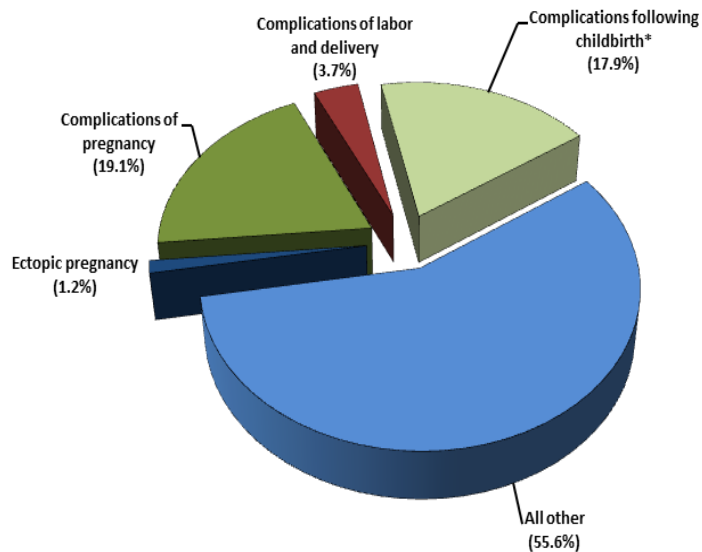


Figure 1C-4
Causes of Maternal Mortality^a, Arizona, 2008-2018

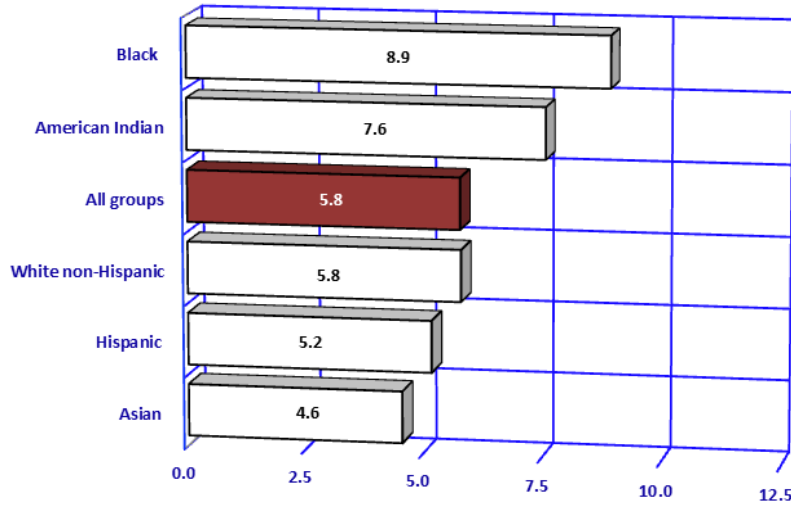
In the eleven-year period from 2008 to 2018, the major causes of maternal deaths in the state have included complications following childbirth (i.e. complications of the puerperium), complications mainly related to pregnancy, complications occurring in the course of labor and delivery, and ectopic pregnancy. All other possible causes of maternal death accounted for 55.6 percent of the maternal deaths from 2008 to 2018 (**Figure 1C-4**, **Table 1C-2**).



Notes: ^a Based on the total number of maternal deaths from 2008 to 2018; * Complications of the puerperium.

1C. FETAL, PERINATAL, AND MATERNAL DEATHS

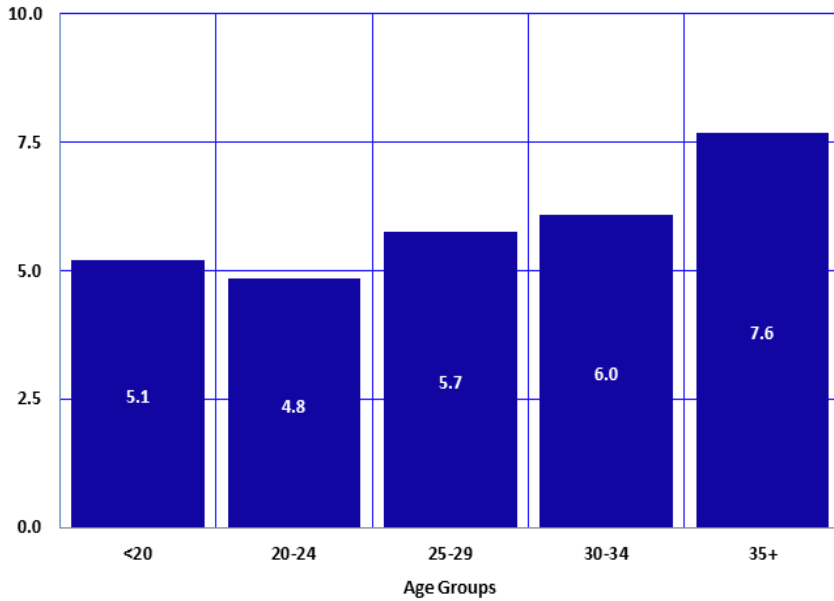
Figure 1C-5
Fetal Mortality Rates by Race/Ethnicity, Arizona, 2018



Fetal mortality rates vary by the race/ethnicity of the mother (**Figure 1C-5**). The fetal mortality rate for Black or African American women was 8.9 per 1,000 live births plus fetal deaths, the highest rate among the racial/ethnic groups. The fetal mortality rate was equally high for American Indian women (7.6), while the rates of White non-Hispanic (5.8), Hispanic or Latino (5.2), and Asian women (4.6) were below the state average.

Note: ^a Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

Figure 1C-6
Fetal Mortality Rates by Mother's Age Group, Arizona, 2018



Fetal mortality rates vary by maternal age (**Figure 1C-6**). In 2018 fetal mortality rates were lowest for women aged 20-24 years and highest for women aged 35 years and older. The fetal mortality rate for mothers aged 35 and older increased slightly from 7.5 per 1,000 live births in 2017 to 7.6 in 2018.

Note: ^a Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

**TABLE 1C-1
MATERNAL DEATHS^a BY AGE GROUP AND YEAR, ARIZONA, 2008-2018**

Year	Total maternal deaths	Under <15	15-19	20-24	25-29	30-34	35-39	40-44	45+
2008	10†	0	0	*	*	*	*	0	0
2009	10†	0	0	0	*	*	*	0	0
2010	10†	0	*	*	*	*	*	*	*
2011	10†	0	0	*	*	0	*	*	0
2012	20†	0	0	0	*	*	*	*	*
2013	10†	0	0	*	*	*	*	0	*
2014	10†	0	*	0	*	0	*	*	*
2015	10†	0	0	0	*	0	*	*	0
2016	30†	0	*	*	*	7	*	*	0
2017	20†	0	*	*	*	*	9	*	0
2018	30†	0	0	*	*	9	6	*	9

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Maternal deaths are those assigned to complications of pregnancy, childbirth, and puerperium, category codes O00-O99 of the Tenth Revision of the *International Classification of Diseases*.

**TABLE 1C-2
MATERNAL DEATHS BY CAUSE AND YEAR, ARIZONA, 2008-2018**

Cause of death (ICD-9/ICD-10 codes)	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
PREGNANCY WITH ABORTIVE OUTCOME (O00-O07)	*	*	0	0	0	*	*	0	*	0	0
Ectopic pregnancy (O00)	*	0	0	0	0	0	*	0	0	0	0
COMPLICATIONS MAINLY RELATED TO PREGNANCY (O10-O16)	*	*	*	*	*	*	*	*	*	6	*
COMPLICATIONS OCCURRING IN THE COURSE OF LABOR AND DELIVERY (O60-O75)	*	*	0	0	0	*	0	*	0	0	*
COMPLICATIONS OF THE PUERPERIUM^a (O85-O92)	*	*	*	*	7	0	0	*	*	6	*
ALL OTHER	*	0	*	*	8	*	7	*	20	11	30
TOTAL	10†	10†	10†	10†	20†	10†	10†	10†	30†	23	30†

Notes: * Cell suppressed due to non-zero count less than 6; † Sum rounded to nearest tens unit due to non-zero addend less than 6; ^a Complications following childbirth are category codes from Tenth Revision of the *International Classification of Diseases*.

**TABLE 1C-3
FETAL AND PERINATAL DEATHS AND RATES BY YEAR, ARIZONA, 2008-2018**

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
NUMBER OF ALL REPORTED FETAL DEATHS Includes spontaneous and induced terminations of pregnancy at 20 or more weeks of gestation (or if gestational age unknown, the deaths of fetuses of at least 350 grams or more) and some stillbirths prior to 20 weeks and of any weight. Excludes fetal deaths occurring in Arizona to out-of-State residents.	860	717	671	714	654	775	885	861	615	605	588
NUMBER OF REPORTABLE FETAL DEATHS Includes spontaneous and induced terminations of pregnancy at 20 or more weeks of gestation (or if gestational age is unknown, the deaths of fetuses of at least 350 grams in weight).	724	621	581	619	588	554	653	665	613	602	583
NUMBER OF REPORTABLE SPONTANEOUS FETAL LOSSES Includes spontaneous terminations of pregnancy at 20 or more weeks of gestation (or if gestational age is unknown, the deaths of fetuses of at least 350 grams in weight). Excludes induced terminations of pregnancy.	544	511	443	470	470	545	519	524	486	481	472
RATE OF REPORTABLE SPONTANEOUS FETAL LOSSES^a	5.5	5.5	5.1	5.5	5.5	6.4	6.0	6.1	5.7	5.9	5.8
NUMBER OF PERINATAL DEATHS	632	524	483	465	487	483	551	510	475	472	501
Spontaneous fetal losses of 28 or more weeks of gestation	293	243	214	216	221	262	265	275	236	238	247
Infant deaths of less than 7 days	339	281	269	249	266	221	286	235	239	234	254
PERINATAL DEATH RATE^b	6.3	5.6	5.5	5.4	5.7	5.7	6.5	6.0	5.6	5.8	6.2

Notes: ^a Per 1,000 live births + reportable spontaneous fetal losses of 20 or more weeks of gestation; ^b Per 1,000 live births + spontaneous fetal losses of 28 or more weeks of gestation.

**TABLE 1C-4
SELECTED CHARACTERISTICS OF REPORTABLE SPONTANEOUS^a FETAL LOSSES BY YEAR, ARIZONA, 2008-2018**

Characteristic	Year										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total reportable spontaneous fetal losses	544	511	443	470	470	545	519	524	486	481	472
Gender											
Male	295	262	229	218	239	260	293	296	248	226	222
Female	246	244	208	245	222	256	222	225	227	234	246
Unknown	*	*	6	7	9	29	*	*	11	21	*
Mother's race/ethnicity											
White non-Hispanic	198	197	156	192	195	247	205	200	204	207	205
Hispanic or Latino	234	204	198	181	181	205	182	227	195	171	174
Black or African American	44	52	39	27	36	40	48	50	47	47	42
American Indian or Alaska Native	47	46	30	43	43	40	47	40	36	40	36
Asian or Pacific Islander	19	11	17	27	15	13	17	7	*	16	15
Refused/Unknown	*	*	*	0	0	0	20	0	0	0	0
Mother's age group											
<15	*	0	*	0	*	0	0	0	0	0	0
15-17	22	26	18	14	16	18	25	18	10	7	8
18-19	49	40	33	35	37	34	27	30	27	25	16
20-24	132	111	104	117	130	115	120	101	94	104	85
25-29	141	126	114	111	100	159	131	135	123	118	138
30-34	113	105	74	114	98	123	117	122	121	125	125
35-39	63	76	75	56	58	79	67	83	71	75	75
40-44	18	24	20	22	27	13	30	27	36	18	22
45+	*	*	*	*	*	*	0	*	*	*	*
Unknown	*	*	*	0	*	*	*	*	*	6	0
Gestational age^b											
20-27 weeks	250	264	227	255	248	282	250	248	239	241	223
28+ weeks	293	243	214	215	221	262	265	275	236	238	247
Unknown	*	*	*	0	*	*	*	*	11	*	*
Weight in grams											
<350 grams	63	110	105	96	119	108	99	117	97	99	93
350-499	54	69	66	80	68	73	74	75	77	75	60
500-2,499	253	219	173	193	179	229	236	216	217	199	216
2,500-3,999	103	89	74	80	87	103	85	85	77	81	91
4,000+	9	13	20	11	14	6	9	9	6	14	8
Unknown	62	11	*	10	*	26	16	22	12	13	*

Notes: * Cell suppressed due to non-zero count less than 6; ^a Includes spontaneous terminations of pregnancy at 20 or more weeks of gestation (or if gestational age is unknown, the deaths of fetuses of at least 350 grams in weight), excludes abortions; ^b For statistical purposes, fetal deaths are classified according to gestational age; a death that occurs at 20 or more weeks of gestation constitutes a fetal death, and after 28 weeks it is considered a late fetal death.



1D.

ABORTIONS

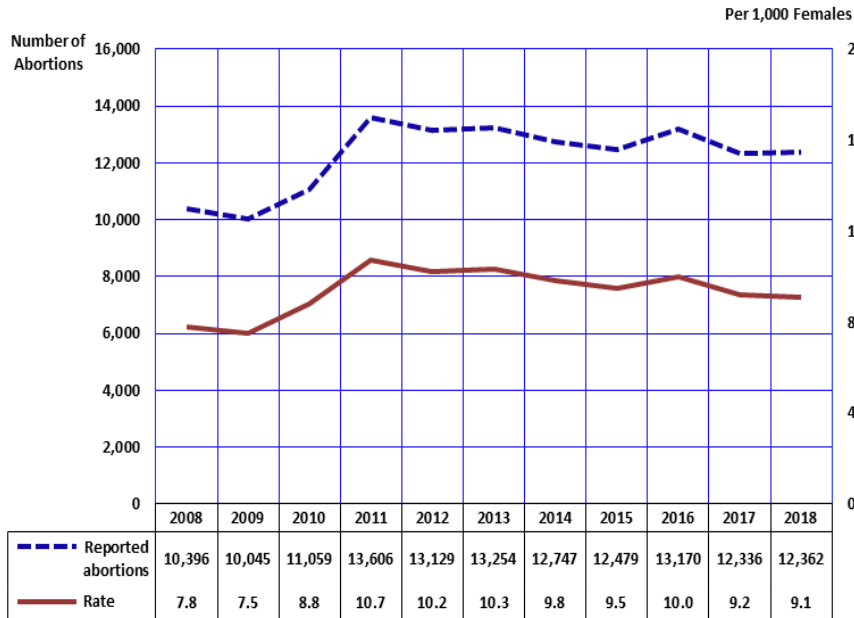
In July 1976, the Arizona Department of Health Services (ADHS) began an Abortion Surveillance Program (*Arizona Administrative Code, R9-19-302D*, as authorized by the *Arizona Revised Statute 36-344*). The program required the reporting of induced terminations of pregnancy performed in hospitals, outpatient treatment centers, and physicians' offices throughout the State.

In 2010, SB1304 was passed by the legislature that statutorily required the reporting of abortions and treatment of complications associated with abortions. In addition, the Administrative Office of the Courts was required to report the number of petitions received by the court for authorization to perform abortions on unemancipated minors as prescribed in Arizona Revised Statutes §36-2152. The collection of this information began on July 29, 2010.

Based on the information collected on race/ethnicity in the abortion reporting system, the racial/ethnic groups described in this section differ from that of other sections. In 2018, 4.2 percent (521) of abortion records had race and ethnicity identified as unknown, and 2.1 percent (259) of abortion records had two or more racial/ethnic groups identified. Due to the proportion of information on race/ethnicity that could not be categorized by the five racial/ethnic groups used through this report, this section reports numbers for records with unknown or multiple race information as separate groups.

1D. ABORTIONS

Figure 1D-1
Number of Reported Abortions and Abortion Rates^a by Year,
Arizona Residents, 2008-2018



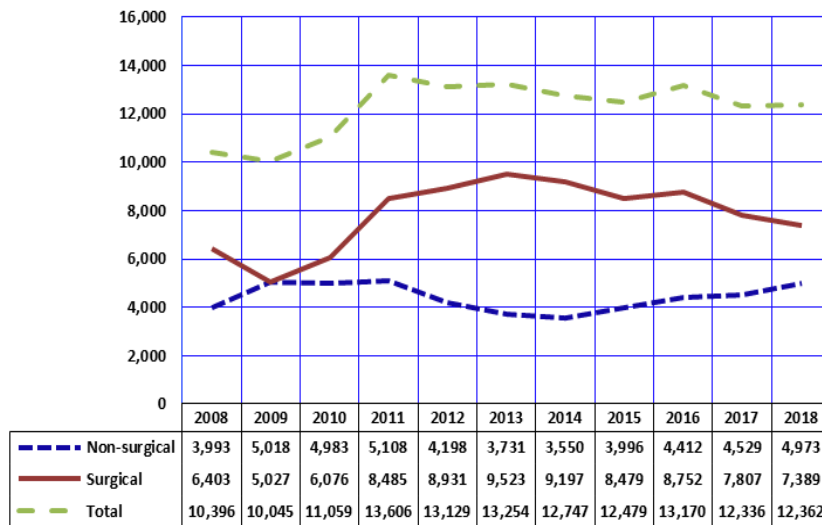
In calendar year 2018, the Arizona Department of Health Services received 12,362 reports of abortions obtained by Arizona residents, 26 more than the 12,336 reported in 2017 (**Figure 1-D1, Table 1D-1**).

There were 12,308 abortions in non-hospital clinics (**Table 1D-1**). Hospitals accounted for 51 abortion procedures, with less than 6 procedures being performed outside of clinics and hospitals.

Ninety-one percent of all reported abortions occurred at or before 13 weeks of pregnancy. Few reported abortions occurred after 14 or more weeks of gestation: 8.0 percent at 14 weeks or more (percentages based on data in **Table 1D-3**).

Notes: ^a Number of abortions per 1,000 females 15-44 years old. The sharp increase in number of reported abortions and rates was due to enhanced surveillance as noted in the abortion report.

Figure 1D-2
Trends in the Number of Surgical and Non-Surgical Abortions by Year,
Arizona Residents, 2008-2018

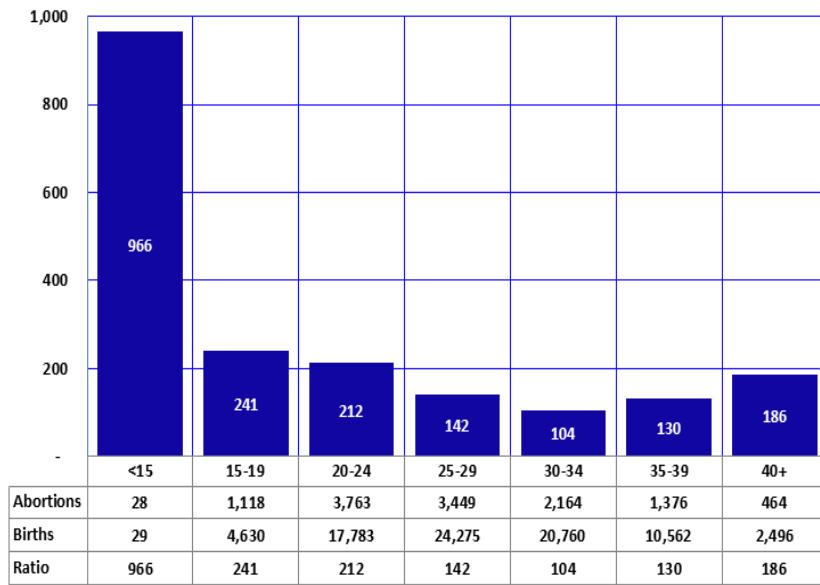


The rate of induced terminations of pregnancy per 1,000 female residents aged 15-44 decreased from 9.2 in 2017 to 9.1 in 2018 (**Table 1D-1**).

Trends in the percent of abortions conducted through surgical and non-surgical from 2008 to 2018 indicate shifting practices in methods used to complete abortions. In 2008, 61.6 percent of all abortion procedures were surgical procedures. By 2009, the number of abortions performed by surgical versus non-surgical means was nearly equal. Since then, the proportion of abortions conducted through surgical means has again increased, with 59.8 percent of all abortion procedures conducted in 2018 being surgical procedures.

1D. ABORTIONS

Figure 1D-3
Abortion Ratios^a by Age Group, Arizona Residents, 2018

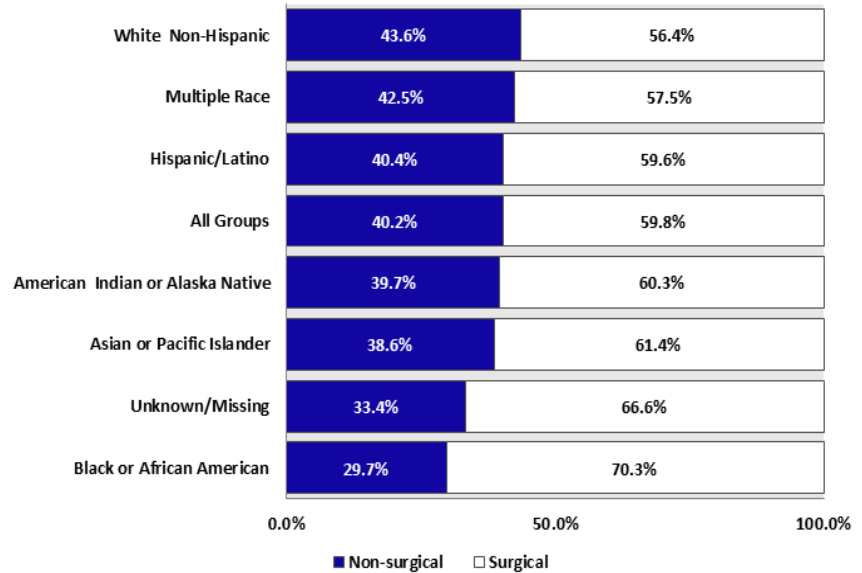


Abortion ratios (the number of abortions per 1,000 live births in each age group) vary by age at reported termination of pregnancy. Ratios tend to be higher at the extremes of the age distribution of the childbearing period, i.e., among women under age 15 and those aged 40 years or older (**Figure 1D-3**).

A comparison of abortion ratios by race/ethnicity is provided in **Table 1D-2**.

Note: ^a Number of reported abortions per 1,000 live births in specified group.

Figure 1D-4
Proportional Contribution of Non-Surgical^a and Surgical Abortions by Race/Ethnicity, Arizona Residents, 2018



In 2018 non-surgical (also called “medical”) abortions made up approximately 40 percent of all procedures reported in Arizona. Among White non-Hispanics, Hispanics and multiracial women, the proportion of non-surgical abortions exceeded the average for all groups (**Figure 1D-4**). The proportion of surgical abortions among Black or African American women was the highest among racial/ethnic groups.

Notes: ^a Non-surgical: Mifepristone, Methotrexate, Cytotec, etc.; Reporting changes related to race/ethnicity makes comparisons with previous years difficult.

**TABLE 1D-1
CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS, ARIZONA, 2008-2018**

Characteristics	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
ABORTIONS PERFORMED IN ARIZONA	10,660	10,271	11,438	14,401	13,340	13,401	12,900	12,655	13,332	12,533	12,438
RESIDENT ABORTIONS	10,396	10,045	11,059	13,606	13,129	13,254	12,747	12,479	13,170	12,336	12,362
RACE/ETHNICITY											
White non-Hispanic	4,737	4,759	5,241	2,385	1,904	2,515	5,562	5,378	5,321	4,762	4,807
Hispanic or Latino	3,124	3,303	3,422	4,274	3,393	4,189	4,499	4,350	4,823	4,639	4,679
Black or African American	744	736	476	145	116	189	981	1,074	1,253	1,196	1,229
American Indian	297	300	218	48	38	61	291	331	340	348	315
Asian or other Pacific Islander	412	390	254	47	75	110	534	532	608	598	552
Multiple race ^a	NA	NA	NA	4,442	2,985	4,257	361	175	244	216	259
Refused/Unknown	1,082	557	1,448	2,265	4,618	1,933	519	639	581	577	521
AGE											
19 years and under	1,813	1,519	1,512	1,785	1,539	1,441	1,249	1,189	1,297	1,179	1,146
20-29 years	5,854	5,753	6,278	7,814	7,602	7,676	7,520	7,265	7,680	7,245	7,212
30 years and over	2,403	2,532	3,113	4,007	3,987	4,136	3,978	4,021	4,186	3,912	4,004
Not stated	326	241	156	NA	*	*	0	*	7	0	0
YEARS OF EDUCATION											
Elementary/secondary (1-12)	6,964	5,244	4,316	4,757	3,615	2,400	1,372	2,561	3,234	3,228	3,457
College (1-4 or 5+)	2,565	3,372	3,199	2,252	2,518	2,522	2,706	3,203	3,801	3,365	2,966
Not stated or unknown	867	1,429	3,544	6,597	6,996	8,332	8,064	6,715	6,135	5,743	5,939
WEEKS OF GESTATION											
12 weeks or under	9,175	9,238	9,967	12,156	11,677	11,767	11,232	11,062	11,762	10,917	10,924
13 weeks or over	916	597	948	1,427	1,432	1,487	1,507	1,411	1,396	1,419	1,438
Not stated or unknown	305	210	144	23	20	0	8	6	12	0	0
FACILITY											
Clinic	10,391	9,362	9,689	14,358	13,072	13,023	12,671	12,065	13,139	12,301	12,308
Hospital	0	0	16	42	54	152	70	24	27	31	51
Other	*	683	^d 1,354	0	*	79	6	390	*	*	*

**TABLE 1D-1 (continued)
CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS, ARIZONA, 2008-2018**

Characteristics	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
PREVIOUS LIVE BIRTHS											
None	4,441	4,377	4,867	5,820	5,829	5,810	5,201	5,267	5,586	5,326	5,430
One or more	5,955	5,668	6,178	7,772	7,280	7,387	7,337	7,187	7,542	6,972	6,856
PREVIOUS ABORTIONS											
None	6,338	5,874	6,746	8,382	8,445	8,450	7,872	7,843	8,177	7,900	7,893
One or more	4,058	4,171	4,282	5,183	4,616	4,672	4,616	4,549	4,913	4,365	4,346
PREVIOUS SPONTANEOUS TERMINATIONS OF PREGNANCY											
None	8,756	8,424	9,300	11,257	10,941	10,825	10,241	10,146	10,462	9,930	9,932
One or more	1,640	1,621	1,643	2,301	2,108	2,283	2,213	2,220	2,613	2,307	2,302
NONSURGICAL ABORTIONS											
	3,993	5,018	4,983	5,108	4,198	3,731	3,550	3,996	4,412	4,529	4,973
ABORTION RATIO^b	104.8	108.5	127.0	159.7	153.2	156.0	147.1	146.8	156.0	151.1	153.5
ABORTION RATE^c	7.8	7.5	8.8	10.7	10.2	10.3	9.8	9.5	10.0	9.2	9.1

Notes: * Cell suppressed due to count less than 6; ^a Multiple race data was not available for previous years (2007-2010); ^b Number of abortions per 1,000 women giving birth; ^c Number of abortions per 1,000 women of childbearing age (15 - 44 years old); ^d Outpatient Surgical Centers in 2010.

**TABLE 1D-2
PROPORTION, RATES, AND RATIOS^a OF ABORTIONS BY RACE/ETHNICITY PER YEAR, ARIZONA, 2008-2018**

Race and Ethnicity	Year										
	2008	2009	2010	2011 ^e	2012	2013	2014	2015	2016	2017	2018
Percent of Abortions^b											
White non-Hispanic	45.6	47.4	47.4	17.5	14.5	19.0	43.6	43.1	40.4	38.6	38.9
Hispanic or Latino	30.1	32.9	30.9	31.4	25.8	31.6	35.3	34.9	36.6	37.6	37.8
Black or African American	7.2	7.3	4.3	1.1	0.9	1.4	7.7	8.6	9.5	9.7	9.9
American Indian or Alaska Native	2.9	3.0	2.0	0.4	0.3	0.5	2.3	2.7	2.6	2.8	2.5
Asian or Pacific Islander	4.0	3.9	2.3	0.3	0.6	0.8	4.2	4.3	4.6	4.8	4.5
Multiple races	NA	NA	NA	32.6	22.7	32.1	2.8	1.4	1.9	1.8	2.1
Refused/Unknown	10.4	5.5	13.1	16.6	35.2	14.6	4.1	5.1	4.4	4.7	4.2
Abortion Rates^c											
White non-Hispanic	6.5	6.4	8.2	3.7	2.9	3.8	8.6	8.3	8.3	7.4	7.5
Hispanic or Latino	7.6	8.0	8.0	9.9	7.7	9.3	10.6	9.1	9.9	9.3	9.2
Black or African American	13.8	13.3	8.5	2.5	2.0	3.2	12.8	16.3	18.4	17.0	16.8
American Indian or Alaska Native	3.6	3.6	3.2	0.6	0.6	0.9	3.4	5.1	5.2	5.2	4.7
Asian or Pacific Islander	9.3	8.7	5.2	0.9	1.6	2.3	8.5	9.2	10.1	9.9	8.8
Multiple races	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Refused/Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Abortion Ratio^d											
White non-Hispanic	113	120	135	62	49	66	139	141	141	133	138
Hispanic or Latino	73	86	100	132	102	127	133	127	142	140	142
Black or African American	173	168	110	33	25	40	217	246	286	260	264
American Indian or Alaska Native	47	49	37	8	7	11	57	65	68	72	67
Asian or Pacific Islander	120	115	77	13	21	32	169	164	181	180	169
Multiple races	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Refused/Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: ^a Number of resident abortions performed in Arizona per 1,000 resident live births in specified race/ethnicity group; ^b Proportion of total abortions by ethnicity and/or race represented as a percentage. Percentages are calculated using the total number of reported abortions as the denominator and the number of reported abortions for a specific ethnicity and/or race as the numerator. Percents do not add up to a 100 due to rounding errors, multiple race and unknown ethnicity/race categories; ^c Calculated using the number of abortions obtained by women, ages 15-44 in a given race and/or ethnic group per 1,000 women in the same group; ^d Calculated using the number of abortions per 1,000 live births; ^e Beginning 2011, rates and ratios should be interpreted with caution due to the addition of the Multiple Race and Unknown categories. Single race selections are the best estimates for rates and ratios.

**TABLE 1D-3
ABORTIONS BY WEEK OF GESTATION AND AGE GROUP, ARIZONA, 2018**

Age	Gestational Age					
	≤13 weeks		14 to 20 weeks		≥21 or more weeks	
	Count	Percent	Count	Percent	Count	Percent
<15 yrs	25	89.3	*	**	0	0.0
15-19 yrs	989	88.5	108	9.7	21	1.9
20-24 yrs	3,414	90.7	310	8.2	39	1.0
25-29 yrs	3,164	91.7	253	7.3	32	0.9
30-34 yrs	1,977	91.4	163	7.5	24	1.1
35-39 yrs	1,253	91.1	108	7.8	15	1.1
≥40 yrs	422	90.9	38	8.2	*	**
Totals	11,244	91.0	980†	8.0	140†	1.1

Notes: * Cell suppressed due to count less than 6; ** Cell suppressed due to rate/ratio/percent based on non-zero count less than 6; † Sum rounded to nearest tens unit due to addend less than 6.

**TABLE 1D-4
ABORTIONS BY WEEK OF GESTATION AND RACE/ETHNICITY, ARIZONA, 2018**

Week of gestation	Total	Race/ethnicity							Multiple race	Refused / Unknown race
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Multiple race	Refused / Unknown race		
Total	12,362	4,807	4,679	1,229	320†	550†	260†	520†		
6 weeks or less	3,655	1,569	1,299	261	71	210	74	171		
7	2,573	1,018	990	235	52	124	40	114		
8	1,742	660	708	173	46	50	41	64		
9	1,362	508	536	163	32	41	28	54		
10	675	215	259	94	24	28	17	38		
11	653	216	268	84	25	22	11	27		
12	264	91	92	40	11	10	8	12		
13	320†	122	109	47	11	13	*	13		
14	237	81	93	32	8	10	6	7		
15	230†	88	83	26	13	10	*	*		
16	130†	47	50	16	*	8	6	0		
17	120†	47	52	13	*	*	*	*		
18	100†	34	35	13	*	*	*	*		
19	90†	34	36	9	*	7	*	*		
20	80†	33	17	12	*	*	*	*		
21+	135	44	52	11	9	8	6	*		

Notes: * Cell suppressed due to count less than 6; † Sum rounded to nearest tens unit due to addend less than 6.