

# **CHAPTER 1**

## **REPRODUCTIVE AND PERINATAL HEALTH, ARIZONA, 1998-2008**

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





## 1A.

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

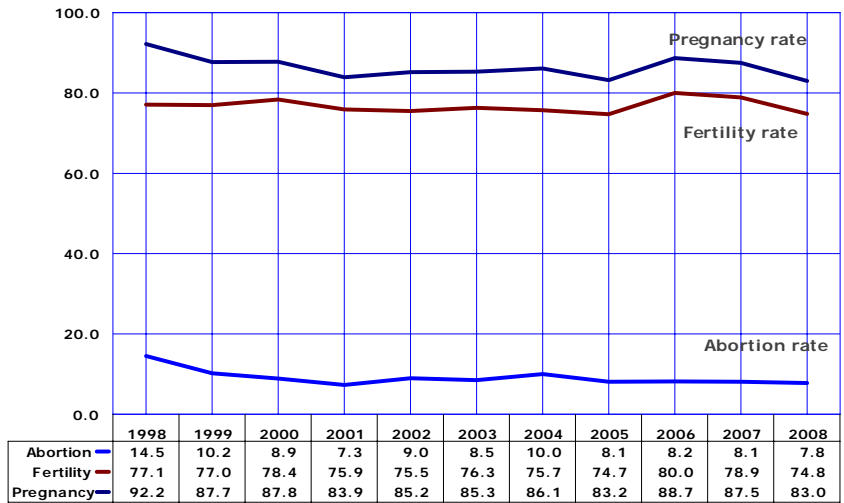
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The expression “reproductive and perinatal health” refers to a variety of health and sociodemographic characteristics of women who became pregnant, factors related to the course of their pregnancies, and the status of pregnancy outcomes. In this report, 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 **induced terminations of pregnancy** (or abortions; Section 1D).

There were 110,155 pregnancies in Arizona in 2008 compared to 113,756 in 2007, a decrease of 3.2 percent. Among the three pregnancy outcomes, the number of resident live births also decreased by 3.4 percent from 102,687 in 2007 to 99,215 in 2008 (**Table 1A-1**). The number of reported abortions only slightly declined (10,486 in 2007 vs. 10,396 in 2008). The number of reportable spontaneous fetal losses decreased by 6.7 percent from 583 reported in 2007 to 544 in 2008.

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

**Figure 1A-1**  
Pregnancy Rates by Outcome and Year among Females of all Ages, Arizona, 1998-2008



The pregnancy rates declined for the second consecutive year from 88.7 pregnancies per 1,000 females 15-44 years old in 2006 to 83.0/1,000 in 2008 **Figure 1A-1, Table 1A-1**).

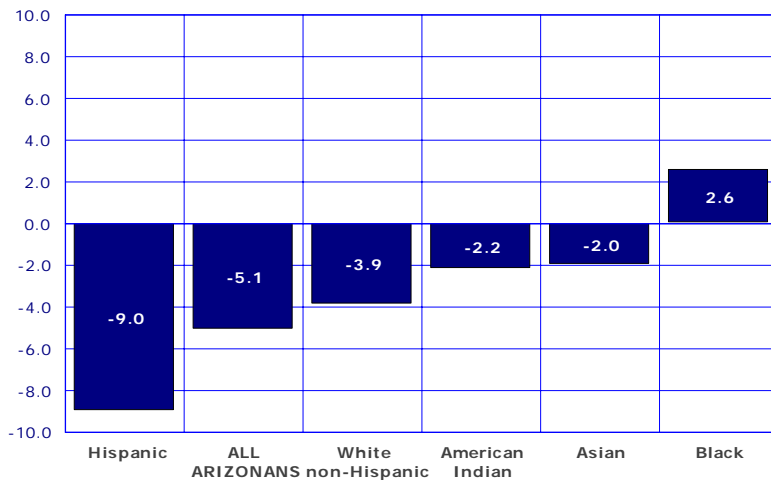
The fertility rate (the number of births per 1,000 women of childbearing age) also declined by 6.4 percent from 80.0/1,000 in 2006 to 74.8/1,000 in 2008.

The abortion rate (the number of abortions per 1,000 women of childbearing age) decreased by 4.9 percent from 8.2 abortions per 1,000 women aged 15-44 years in 2006 to 7.8/1,000 in 2008.

County-level information about pregnancies and pregnancy rates by pregnancy outcome is provided in **Table 5A-1**.

Note: All rates are per 1,000 females 15-44 years old. The fertility rate is the number of births per 1,000 females aged 15-44 years.

**Figure 1A-2**  
Percent Change from 2007 to 2008 in Arizona Pregnancy Rates by Woman's Race/Ethnicity, Arizona



The changes in the pregnancy rates from 2007 to 2008 varied by woman's race/ethnicity. The pregnancy rate rose by 2.6 percent for Black or African American women. Asian or Pacific Islander experienced a 2 percent decline in their pregnancy rate (**Figure 1A-2**). The pregnancy rates among American Indian and White non-Hispanic women declined by 2.2 and 3.9 percent, respectively. In contrast, Hispanic or Latino women experienced a substantial decrease of 9.0 percent, 1.8 times greater than the overall decline of 5.1 percent for all Arizona women.

The pregnancy rate for White non-Hispanics of 63.8 per 1,000 was the lowest of all groups. Whereas the highest was for Hispanics at 111.7 (**Table 1A-1**). In 2008, Black or African American females had the second highest rate among subgroups (94.4/1,000) followed by Arizona's Asians (87.1/1,000) and American Indians (81.2/1,000).

An unprecedented decline in the number of births to Hispanic or Latino mothers (discussed in **Section 1B**) accounted for 81.4 percent of the decrease in the pregnancy rate for this group.

Pregnancy rate = the number of pregnancies per 1,000 females aged 15-44 years in specified race/ethnicity group.

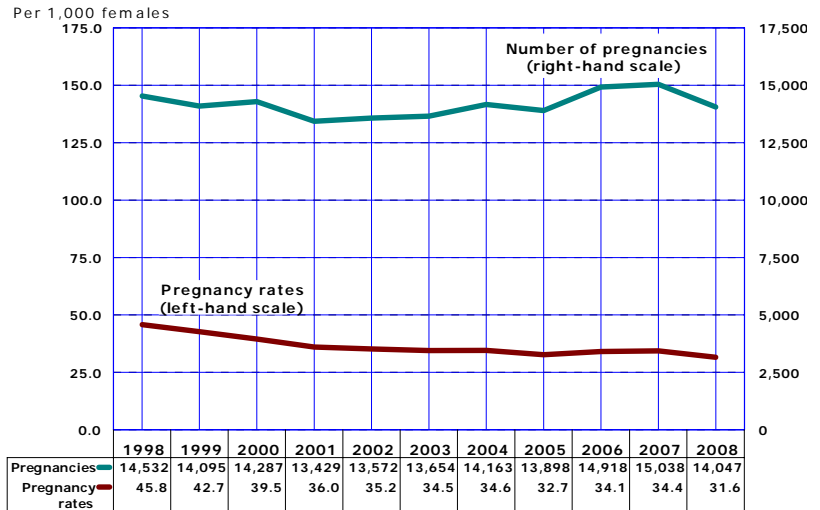
1A. PREGNANCIES BY PREGNANCY OUTCOME, ETHNICITY AND AGE GROUP

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.

While the number of teen pregnancies increased by 12.0 percent from 13,429 in 2001 to 15,038 in 2007, the pregnancy rate decreased by 4.4 percent from 36.0 in 2001 to 34.4 in 2007 (Figure 1A-3). The drop in the rate has not been enough to offset the growth in the female teenage population (from 2001 to 2007 the number of females 19 years old or younger increased by 17.1 percent).

In 2008, both the number of teen pregnancies and the pregnancy rate were lower than they were in 2007. From 2007 to 2008 the number of teen pregnancies decreased by 6.6 percent and the pregnancy rate by 8.1 percent.

Figure 1A-3  
Trends in the Number of Pregnancies and Pregnancy Rates among Females 19 or Younger, Arizona, 1998-2008

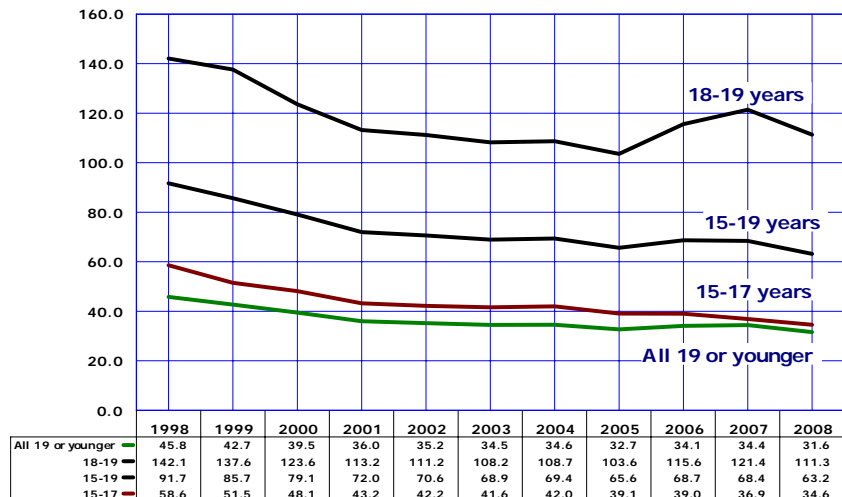


Pregnancy rate = the number of pregnancies per 1,000 females aged 19 years or younger.

The pregnancy rate for Arizona teenagers 15-19 years old in 2008 was 63.2 pregnancies per 1,000 females (Figure 1A-4, Table 5A-2), 7.6 percent lower than in 2007. The pregnancy rate for younger teenagers 15-17 years old declined by 6.2 percent (Table 1A-3) from 36.9/1,000 in 2007 to 34.6/1,000 in 2008. The pregnancy rate for older teenagers 18-19 years old declined even more steeply by 8.7 percent from 121.4/1,000 in 2007 to 111.3/1,000 in 2008 (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 and the information in Table 9A is limited to the number of births to mothers 19 years or younger by community.

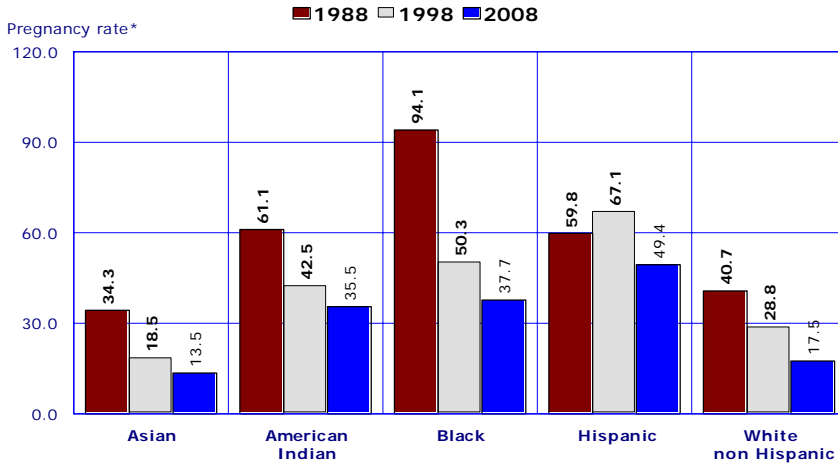
Figure 1A-4  
Pregnancy Rates by Age Group and Year among Females 19 or Younger, Arizona, 1998-2008



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

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

**Figure 1A-5**  
Comparison of Pregnancy Rates by Race/Ethnicity and Year among Females 19 or Younger in Arizona, 1988, 1998 and 2008



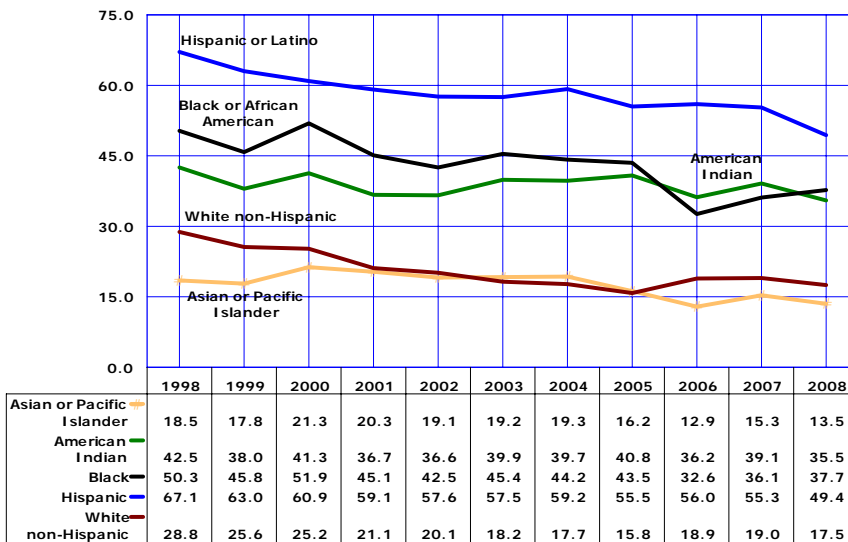
\* Number of pregnancies per 1,000 females 10-19 years old in specified group.

Teen pregnancy rates differ sharply by race/ethnicity.

Between 1988 and 1998, pregnancy rates among females aged 19 and younger declined for all race/ethnicity groups except Hispanics or Latinos. (Figure 1A-6). The steepest decline in pregnancy rates was recorded for Blacks or African Americans. The teen pregnancy rate for this group decreased by 46.5 percent from 94.1 in 1988 to 50.3 in 1998.

The changes in annual teen pregnancy rates from 1998 to 2008 are shown in detail below.

**Figure 1A-6**  
Pregnancy Rates by Race/Ethnicity and Year among Females 19 or Younger, Arizona, 1998-2008



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

The teen pregnancy rates for all race and ethnic groups were lower in 2008 than in 1998 (Figure 1A-6). However, the temporal trends in annual teen pregnancy rates differed considerably by race/ethnicity.

After a substantial decrease of 45.1 percent between 1998 and 2005, the pregnancy rate for White non-Hispanic increased by 20.3 percent from 15.8/1,000 in 2005 to 19.0/1,000 in 2007. The pregnancy rate for this group declined again in 2008 to 17.5/1,000. In contrast, the pregnancy rate increased for the second consecutive year for Blacks or African Americans from 32.6/1,000 in 2006 to 37.7/1,000 in 2008

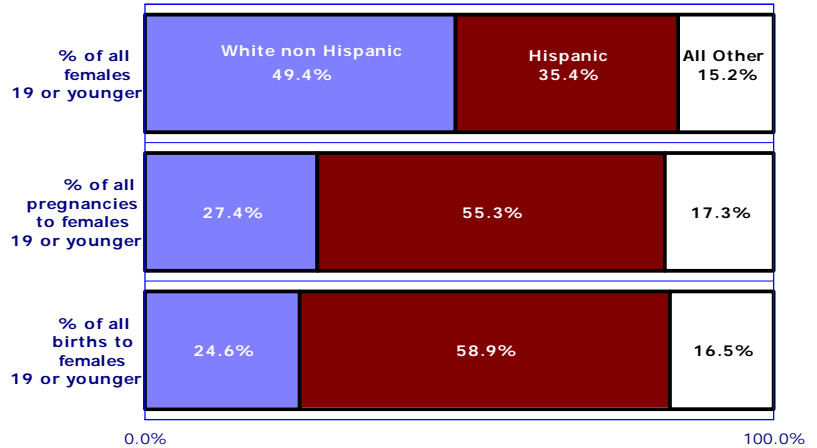
The pregnancy rate for Hispanic or Latino females 19 years old or younger decreased from 56.0/1,000 in 2006 to 55.3/1,000 in 2007, and 49.4/1,000 in 2008.

The pregnancy rates for 1997-1999 were revised in 2007 using the population denominators that are consistent with the 2000 census. The populations estimated previously from the 1990 census underestimated the growth of the Hispanic population during the 1990s. According to the 2000 census, there were 118,490 Hispanic females 19 years or younger in Arizona, 37.5 percent more than the estimated number of 86,203 in 1999.

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

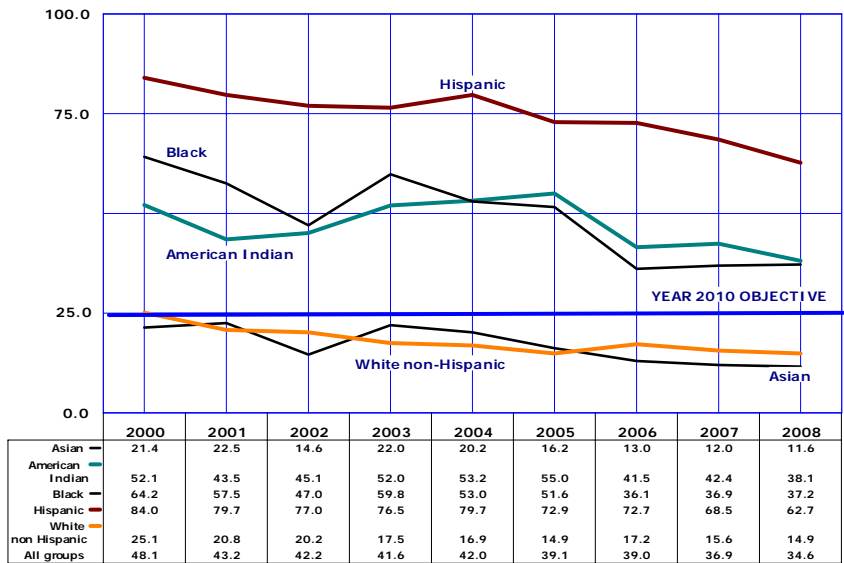
**Figure 1A-7**  
Proportional Contribution by Race/Ethnicity to Pregnancies and Live Births among Females 19 or Younger, Arizona, 2008

In 2008, Hispanic females accounted for approximately 35.4 percent of all females 10-19 years old in Arizona. As in the past, they made a significantly higher proportional contribution to teen pregnancies (55.3 percent) and live births (58.9 percent; **Figure 1A-7**). In contrast, White non-Hispanic females had a lower proportional contribution to teen pregnancies (27.4 percent) and live births (24.6 percent). Note: percentages are based on the number of pregnancies and births in **Table 1A-5**.



**Figure 1A-8**  
Pregnancy Rates by Race/Ethnicity and Year among Females 15-17 Years: 2000-2008 and the "Healthy Arizona 2010" Objective

In 2008, the pregnancy rate of 34.6 pregnancies per 1,000 adolescent girls 15-17 years old in Arizona was 38.4 percent greater than the **Healthy Arizona 2010** objective of 25.0/1,000 (**Figure 1A-8, Table 1A-3**). The 2008 pregnancy rate among Asians ages 15-17 was 53.6 percent lower, and among White non-Hispanics 40.4 percent lower than the objective. In contrast, the 2006 pregnancy rate among Hispanics 15-17 years old exceeded the target rate by 150.8 percent, or 2.5 times.



Note: All rates are per 1,000 females 15-17 years old in specified race/ethnicity group.

**TABLE 1A-1  
NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME,  
RACE/ETHNICITY AND YEAR WITH RATES<sup>2</sup>, ARIZONA, 1998-2008**

Race/ethnicity Pregnancy outcome	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Rates
<b>WHITE<sup>3</sup> NON-HISPANIC, total:</b>	46,679	44,078	44,900	43,116	44,038	43,928	45,236	44,296	48,329	47,633	46,860	<b>63.8</b>
Births	38,611	38,711	39,850	38,934	38,819	38,842	39,271	39,657	43,013	42,216	41,925	<b>57.1</b>
Abortions	7,559	4,868	4,786	3,917	4,909	4,887	5,726	4,431	5,106	5,202	4,737	<b>6.5</b>
Fetal deaths	509	499	264	265	310	199	239	208	210	215	198	<b>0.3</b>
<b>HISPANIC OR LATINO, total:</b>	32,854	33,688	37,162	38,118	39,989	42,788	45,534	45,500	48,266	49,717	45,997	<b>111.7</b>
Births	28,824	30,784	33,893	35,103	36,089	39,101	40,822	42,156	44,862	45,731	42,639	<b>103.6</b>
Abortions	4,030	2,904	2,955	2,737	3,566	3,441	4,485	3,112	3,160	3,719	3,124	<b>7.6</b>
Fetal deaths	NA	NA	274	278	334	246	227	232	244	267	234	<b>0.6</b>
<b>BLACK OR AFRICAN AMERICAN, total:</b>	3,376	3,204	3,326	3,218	3,364	3,558	3,972	4,068	4,484	4,884	5,089	<b>94.4</b>
Births	2,629	2,699	2,760	2,736	2,753	3,022	3,216	3,450	3,864	4,165	4,301	<b>79.8</b>
Abortions	710	465	531	450	556	495	723	585	581	675	744	<b>13.8</b>
Fetal deaths	37	40	35	32	55	41	33	33	39	44	44	<b>0.8</b>
<b>AMERICAN INDIAN OR ALASKA NATIVE, total:</b>	5,861	5,596	5,902	5,622	5,883	6,279	6,497	6,691	6,744	6,757	6,706	<b>81.2</b>
Births	5,460	5,295	5,602	5,340	5,545	5,881	6,120	6,293	6,364	6,408	6,362	<b>77.1</b>
Abortions	357	253	253	220	285	357	341	353	342	310	297	<b>3.6</b>
Fetal deaths	44	48	47	62	53	41	36	45	38	39	47	<b>0.6</b>
<b>ASIAN OR PACIFIC ISLANDER, total:</b>	2,157	2,081	2,304	2,326	2,568	2,804	3,075	3,195	3,537	3,883	3,856	<b>87.1</b>
Births	1,747	1,875	2,041	2,104	2,281	2,524	2,614	2,805	3,136	3,412	3,425	<b>77.4</b>
Abortions	400	201	250	207	273	272	444	379	391	454	412	<b>9.3</b>
Fetal deaths	10	5	13	15	14	8	17	11	10	17	19	<b>0.4</b>
<b>ALL RACE/ETHNIC GROUPS<sup>3</sup>, total:</b>	93,148	91,761	95,268	94,142	98,548	101,476	106,252	106,776	113,091	113,756	110,155	<b>83.0</b>
Births	77,940	80,505	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215	<b>74.8</b>
Abortions	14,606	10,656	9,631	8,226	10,397	10,154	12,301	10,446	10,506	10,486	10,396	<b>7.8</b>
Fetal deaths	602	600	652	703	772	539	505	532	543	583	544	<b>0.4</b>
<b>Pregnancy rate, total:</b>	<b>92.2</b>	<b>87.7</b>	<b>87.8</b>	<b>83.9</b>	<b>85.2</b>	<b>85.3</b>	<b>86.1</b>	<b>83.2</b>	<b>88.7</b>	<b>87.5</b>	<b>83.0</b>	
<b>Fertility rate<sup>4</sup></b>	<b>77.1</b>	<b>77.0</b>	<b>78.4</b>	<b>75.9</b>	<b>75.5</b>	<b>76.3</b>	<b>75.7</b>	<b>74.7</b>	<b>80.0</b>	<b>78.9</b>	<b>74.8</b>	
<b>Abortion rate</b>	<b>14.5</b>	<b>10.2</b>	<b>8.9</b>	<b>7.3</b>	<b>9.0</b>	<b>8.5</b>	<b>10.0</b>	<b>8.1</b>	<b>8.2</b>	<b>8.1</b>	<b>7.8</b>	

<sup>1</sup>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).

<sup>2</sup>All rates per 1,000 females of childbearing age (15-44 years).

<sup>3</sup>Includes other and unspecified ethnicity.

<sup>4</sup>Number of births per 1,000 females of childbearing age.



**TABLE 1A-2**  
**NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME, RACE/ETHNICITY AND YEAR**  
**AMONG FEMALES AGED 17 AND YOUNGER WITH RATES<sup>2</sup>, ARIZONA, 1998-2008**

Race/ethnicity Pregnancy outcome	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Rates
<b>WHITE<sup>3</sup> NON-HISPANIC,</b> total:	1,918	1,566	1,462	1,250	1,245	1,131	1,129	1,028	1,204	1,165	1,074	<b>6.1</b>
Births	1,299	1,146	1,078	960	847	805	764	728	871	805	784	<b>4.4</b>
Abortions	601	395	367	278	387	322	360	293	324	353	287	<b>1.6</b>
<b>HISPANIC OR LATINO,</b> total:	2,882	2,763	2,991	2,930	2,926	2,993	3,198	3,043	3,281	3,286	3,057	<b>23.4</b>
Births	2,561	2,564	2,711	2,684	2,654	2,746	2,916	2,858	3,046	3,007	2,835	<b>21.7</b>
Abortions	321	199	250	221	250	224	267	172	217	254	207	<b>1.6</b>
<b>BLACK OR AFRICAN AMERICAN,</b> total:	263	275	227	240	207	256	241	247	255	268	266	<b>14.8</b>
Births	239	236	210	206	164	207	192	207	194	207	215	<b>11.9</b>
Abortions	55	34	47	31	34	46	47	37	57	55	48	<b>2.7</b>
<b>AMERICAN INDIAN OR ALASKA NATIVE,</b> total:	530	450	476	384	409	501	495	530	477	504	452	<b>16.0</b>
Births	460	427	425	365	392	471	473	499	449	471	430	<b>15.3</b>
Abortions	22	20	15	10	15	28	18	25	25	30	19	<b>0.7</b>
<b>ASIAN OR PACIFIC ISLANDER,</b> total:	43	40	41	44	30	47	46	39	43	43	41	<b>4.5</b>
Births	18	29	30	29	20	39	26	29	29	31	27	<b>3.0</b>
Abortions	20	11	11	15	10	8	20	10	14	12	14	<b>1.6</b>
<b>ALL RACE/ETHNIC GROUPS<sup>4</sup>,</b> total:	5,798	5,296	5,294	4,914	4,951	5,027	5,188	5,029	5,347	5,300	4,970	<b>13.7</b>
Births	4,631	4,474	4,500	4,278	4,158	4,321	4,415	4,364	4,620	4,541	4,312	<b>11.9</b>
Abortions	1,124	787	741	586	749	674	747	636	693	718	634	<b>1.7</b>
<b>Pregnancy rate, total:</b>	<b>22.7</b>	<b>19.9</b>	<b>18.4</b>	<b>16.5</b>	<b>16.1</b>	<b>15.9</b>	<b>15.9</b>	<b>14.8</b>	<b>15.1</b>	<b>14.8</b>	<b>13.7</b>	
<b>Fertility rate<sup>5</sup></b>	<b>18.1</b>	<b>16.8</b>	<b>15.6</b>	<b>14.3</b>	<b>13.5</b>	<b>13.7</b>	<b>13.5</b>	<b>12.9</b>	<b>13.0</b>	<b>12.7</b>	<b>11.9</b>	
<b>Abortion rate</b>	<b>4.4</b>	<b>3.0</b>	<b>2.6</b>	<b>2.0</b>	<b>2.4</b>	<b>2.1</b>	<b>2.3</b>	<b>1.9</b>	<b>2.0</b>	<b>2.0</b>	<b>1.7</b>	

<sup>1</sup>Fetal deaths are included in the total counts of pregnancies.

<sup>2</sup>All rates per 1,000 females 10-17 years old.

<sup>3</sup>Not of Hispanic origin.

<sup>4</sup>Includes other and unspecified ethnicity.

<sup>5</sup>Number of births per 1,000 females 10-17 years old.

**TABLE 1A-3  
NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME, RACE/ETHNICITY AND YEAR  
AMONG FEMALES 15-17 YEARS OLD WITH RATES<sup>2</sup>, ARIZONA, 1998-2008**

Race/ethnicity Pregnancy outcome	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Rates
<b>WHITE<sup>3</sup> NON-HISPANIC, total:</b>	1,841	1,505	1,397	1,197	1,202	1,090	1,093	996	1,157	1,067	1,038	<b>14.9</b>
Births	1,261	1,115	1,040	926	824	782	747	711	852	779	769	<b>11.1</b>
Abortions	563	369	342	262	367	304	341	278	296	282	266	<b>3.8</b>
<b>HISPANIC OR LATINO, total:</b>	2,711	2,598	2,823	2,771	2,761	2,819	3,040	2,885	3,131	3,126	2,911	<b>62.7</b>
Births	2,419	2,415	2,567	2,552	2,507	2,600	2,779	2,721	2,923	2,892	2,724	<b>58.7</b>
Abortions	292	183	228	199	235	197	247	151	193	210	173	<b>3.7</b>
<b>BLACK OR AFRICAN AMERICAN, total:</b>	276	254	242	224	189	247	228	234	239	242	248	<b>37.2</b>
Births	223	222	198	193	152	204	180	199	187	195	203	<b>30.5</b>
Abortions	51	27	42	28	30	40	46	32	48	42	43	<b>6.5</b>
<b>AMERICAN INDIAN OR ALASKA NATIVE, total:</b>	464	408	421	363	388	461	473	505	457	470	428	<b>38.1</b>
Births	429	389	405	348	374	434	452	478	430	445	408	<b>36.3</b>
Abortions	22	17	13	7	12	25	17	21	24	22	17	<b>1.5</b>
<b>ASIAN OR PACIFIC ISLANDER, total:</b>	42	38	40	44	29	45	44	38	39	39	38	<b>11.6</b>
Births	17	28	29	29	19	38	25	28	28	31	26	<b>7.9</b>
Abortions	20	10	11	15	10	7	19	10	11	8	12	<b>3.7</b>
<b>ALL RACE/ETHNIC GROUPS<sup>4</sup>, total:</b>	5,482	4,993	5,016	4,661	4,696	4,755	4,955	4,790	5,105	4,975	4,740	<b>34.6</b>
Births	4,397	4,236	4,284	4,080	3,952	4,110	4,227	4,179	4,450	4,361	4,151	<b>30.3</b>
Abortions	1,046	727	684	540	705	614	703	582	624	576	567	<b>4.1</b>
<b>Pregnancy rate, total:</b>	<b>58.6</b>	<b>51.5</b>	<b>48.1</b>	<b>43.2</b>	<b>42.2</b>	<b>41.6</b>	<b>42.0</b>	<b>39.1</b>	<b>39.0</b>	<b>36.9</b>	<b>34.6</b>	
<b>Fertility rate<sup>5</sup></b>	<b>47.0</b>	<b>43.7</b>	<b>41.1</b>	<b>37.8</b>	<b>35.5</b>	<b>35.9</b>	<b>35.8</b>	<b>34.1</b>	<b>34.0</b>	<b>32.3</b>	<b>30.3</b>	
<b>Abortion rate</b>	<b>11.2</b>	<b>7.5</b>	<b>6.6</b>	<b>5.0</b>	<b>6.3</b>	<b>5.4</b>	<b>6.0</b>	<b>4.8</b>	<b>4.8</b>	<b>4.3</b>	<b>4.1</b>	

<sup>1</sup>Fetal deaths are included in the total counts of pregnancies.

<sup>2</sup>All rates per 1,000 females 15-17 years old.

<sup>3</sup>Not of Hispanic origin.

<sup>4</sup>Includes other and unspecified ethnicity.

<sup>5</sup>Number of births per 1,000 females 15-17 years old.

**TABLE 1A-4  
NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME, RACE/ETHNICITY AND YEAR  
AMONG FEMALES 18-19 YEARS OLD WITH RATES<sup>2</sup>, ARIZONA, 1998-2008**

Race/ethnicity Pregnancy outcome	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Rates
<b>WHITE<sup>3</sup> NON-HISPANIC, total:</b>	3,457	3,349	3,352	2,925	2,857	2,772	2,795	2,603	2,944	2,936	2,778	<b>65.3</b>
Births	2,544	2,723	2,681	2,436	2,217	2,165	2,042	2,016	2,338	2,295	2,209	<b>51.9</b>
Abortions	879	586	653	468	623	592	735	574	593	629	554	<b>13.0</b>
<b>HISPANIC OR LATINO, total:</b>	3,816	3,938	4,222	4,309	4,361	4,483	4,767	4,705	5,115	5,259	4,707	<b>177.2</b>
Births	3,390	3,597	3,837	3,964	3,931	4,046	4,222	4,330	4,692	4,775	4,333	<b>163.1</b>
Abortions	426	341	360	313	400	406	517	350	392	456	354	<b>13.3</b>
<b>BLACK OR AFRICAN AMERICAN, total:</b>	442	434	433	382	398	408	430	441	476	498	546	<b>155.7</b>
Births	347	367	362	339	304	342	348	362	407	414	441	<b>125.8</b>
Abortions	92	62	68	40	84	61	78	77	67	81	95	<b>27.1</b>
<b>AMERICAN INDIAN OR ALASKA NATIVE, total:</b>	710	665	700	669	673	714	720	759	800	849	794	<b>115.2</b>
Births	662	623	664	648	647	670	669	705	767	814	755	<b>109.6</b>
Abortions	31	36	28	19	25	40	47	51	30	33	35	<b>5.1</b>
<b>ASIAN OR PACIFIC ISLANDER, total:</b>	86	96	96	90	100	87	102	93	89	124	108	<b>53.5</b>
Births	55	79	70	75	76	68	66	67	63	72	86	<b>42.6</b>
Abortions	31	17	26	15	24	19	36	25	26	51	22	<b>10.9</b>
<b>ALL RACE/ETHNIC GROUPS<sup>4</sup>, total:</b>	8,734	8,799	8,993	8,515	8,621	8,627	8,975	8,869	9,571	9,738	9,077	<b>111.3</b>
Births	7,064	7,489	7,689	7,512	7,316	7,379	7,448	7,569	8,296	8,431	7,849	<b>96.3</b>
Abortions	1,611	1,259	1,247	942	1,246	1,193	1,473	1,256	1,226	1,261	1,179	<b>14.5</b>
<b>Pregnancy rate, total:</b>	<b>142.1</b>	<b>137.6</b>	<b>123.6</b>	<b>113.2</b>	<b>111.2</b>	<b>108.2</b>	<b>108.7</b>	<b>103.6</b>	<b>115.6</b>	<b>121.4</b>	<b>111.3</b>	
<b>Fertility rate<sup>5</sup></b>	<b>114.9</b>	<b>117.1</b>	<b>105.7</b>	<b>99.9</b>	<b>94.3</b>	<b>92.5</b>	<b>90.2</b>	<b>88.4</b>	<b>100.2</b>	<b>105.1</b>	<b>96.3</b>	
<b>Abortion rate</b>	<b>26.2</b>	<b>19.7</b>	<b>17.1</b>	<b>12.5</b>	<b>16.1</b>	<b>15.0</b>	<b>17.8</b>	<b>14.7</b>	<b>14.8</b>	<b>15.7</b>	<b>14.5</b>	

<sup>1</sup>Fetal deaths are included in the total count of pregnancies.

<sup>2</sup>All rates per 1,000 females 18-19 years old.

<sup>3</sup>Not of Hispanic origin.

<sup>4</sup>Includes other and unspecified ethnicity.

<sup>5</sup>Number of births per 1,000 females 18-19 years old.

**TABLE 1A-5  
NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME, RACE/ETHNICITY AND YEAR  
AMONG FEMALES 19 AND YOUNGER, WITH RATES<sup>2</sup>, ARIZONA, 1998-2008**

Race/ethnicity Pregnancy outcome	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2008 Rates
<b>WHITE<sup>3</sup> NON-HISPANIC, total:</b>	5,375	4,915	4,814	4,175	4,102	3,903	3,924	3,631	4,148	4,101	3,852	<b>17.5</b>
Births	3,843	3,869	3,759	3,396	3,064	2,970	2,806	2,744	3,209	3,100	2,993	<b>13.6</b>
Abortions	1,480	981	1,020	746	1,010	914	1,095	867	917	982	841	<b>3.8</b>
<b>HISPANIC OR LATINO, total:</b>	6,698	6,701	7,213	7,239	7,287	7,476	7,965	7,748	8,396	8,545	7,764	<b>49.4</b>
Births	5,951	6,161	6,548	6,648	6,585	6,792	7,138	7,188	7,738	7,782	7,168	<b>45.6</b>
Abortions	747	540	610	534	650	630	784	522	609	710	561	<b>3.6</b>
<b>BLACK OR AFRICAN AMERICAN, total:</b>	644	669	620	622	605	664	671	688	731	766	812	<b>37.7</b>
Births	586	603	572	545	468	549	540	569	601	621	656	<b>30.5</b>
Abortions	147	96	115	71	118	107	125	114	124	136	143	<b>6.6</b>
<b>AMERICAN INDIAN OR ALASKA NATIVE, total:</b>	1,301	1,155	1,216	1,053	1,082	1,215	1,215	1,289	1,277	1,353	1,246	<b>35.5</b>
Births	1,122	1,050	1,089	1,013	1,039	1,141	1,142	1,204	1,216	1,285	1,185	<b>33.8</b>
Abortions	53	56	43	29	40	68	65	76	55	63	54	<b>1.5</b>
<b>ASIAN OR PACIFIC ISLANDER, total:</b>	129	136	137	134	130	134	148	132	132	167	149	<b>13.5</b>
Births	73	108	100	104	96	107	92	96	92	103	113	<b>10.2</b>
Abortions	51	28	37	30	34	27	56	35	40	63	36	<b>3.3</b>
<b>ALL RACE/ETHNIC GROUPS<sup>4</sup>, total:</b>	14,532	14,095	14,287	13,429	13,572	13,654	14,163	13,898	14,918	15,038	14,047	<b>31.6</b>
Births	11,695	11,963	12,189	11,790	11,474	11,700	11,863	11,933	12,916	12,972	12,161	<b>27.4</b>
Abortions	2,735	2,046	1,988	1,528	1,995	1,867	2,220	1,892	1,919	1,979	1,813	<b>4.1</b>
<b>Pregnancy rate, total:</b>	<b>45.8</b>	<b>42.7</b>	<b>39.5</b>	<b>36.0</b>	<b>35.2</b>	<b>34.5</b>	<b>34.6</b>	<b>32.7</b>	<b>34.1</b>	<b>34.4</b>	<b>31.6</b>	
<b>Fertility rate<sup>5</sup></b>	<b>36.9</b>	<b>36.2</b>	<b>33.7</b>	<b>31.6</b>	<b>29.8</b>	<b>29.5</b>	<b>29.0</b>	<b>28.1</b>	<b>29.6</b>	<b>29.7</b>	<b>27.4</b>	
<b>Abortion rate</b>	<b>8.6</b>	<b>6.2</b>	<b>5.5</b>	<b>4.1</b>	<b>5.2</b>	<b>4.7</b>	<b>5.4</b>	<b>4.5</b>	<b>4.4</b>	<b>4.5</b>	<b>4.1</b>	

<sup>1</sup>Fetal deaths are included in the total counts of pregnancies.

<sup>2</sup>All rates per 1,000 females 19 or less years old.

<sup>3</sup>Not of Hispanic origin.

<sup>4</sup>Includes other and unspecified ethnicity.

<sup>5</sup>Number of births per 1,000 females 19 or less years old.

**TABLE 1A-6  
NUMBER OF PREGNANCIES<sup>1</sup> BY PREGNANCY OUTCOME, AGE GROUP AND RACE/ETHNICITY, ARIZONA, 2008  
PREGNANCIES BY OUTCOME:**

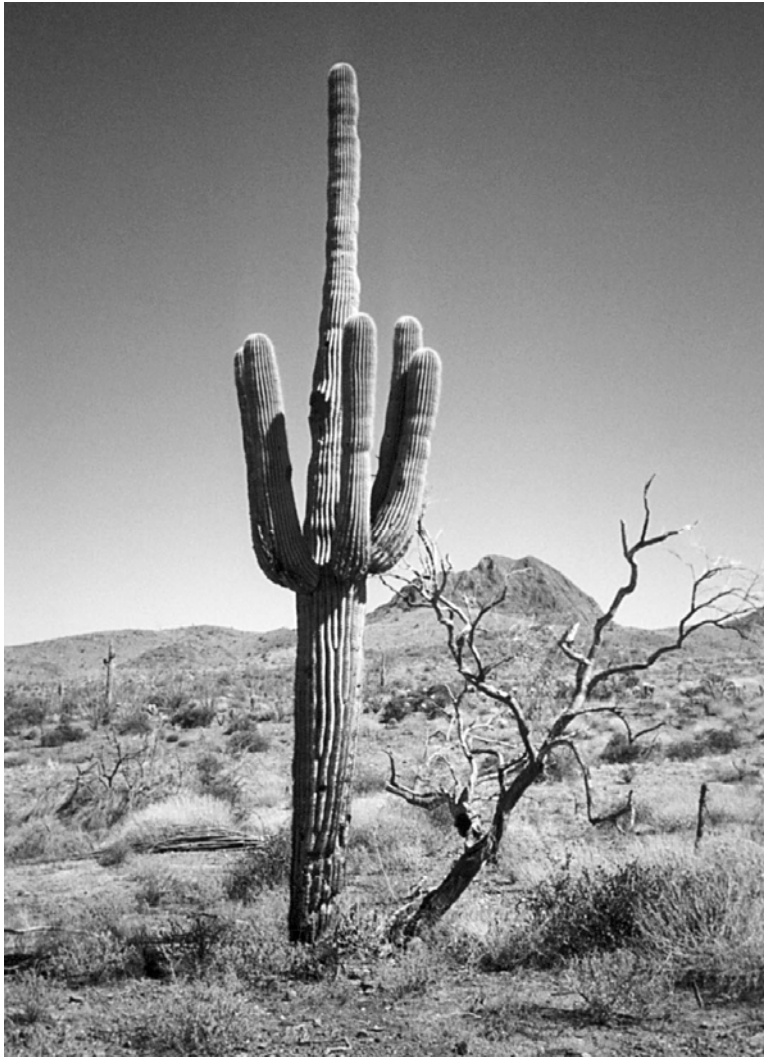
	All ages	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un- known
<b>All groups</b>											
Total pregnancies	110,155	230	4,740	9,077	29,776	30,601	22,031	10,915	2,301	151	333
Births	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5
Abortions	10,396	67	567	1,179	3,533	2,321	1,270	833	284	16	326
Fetal deaths	544	2	22	49	132	141	113	63	18	2	2
<b>White non Hispanic</b>											
Total pregnancies	46,860	36	1,038	2,778	11,383	14,131	10,692	5,449	1,126	82	145
Births	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1
Abortions	4,737	21	266	554	1,617	1,073	548	365	139	11	143
Fetal deaths	198	0	3	15	42	59	48	22	8	0	1
<b>Hispanic or Latino</b>											
Total pregnancies	45,997	146	2,911	4,707	13,651	11,981	7,975	3,722	773	32	99
Births	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1
Abortions	3,124	34	173	354	1,089	681	379	243	72	1	98
Fetal deaths	234	1	14	20	57	62	47	25	7	1	0
<b>Black or African American</b>											
Total pregnancies	5,089	18	248	546	1,582	1,350	802	422	91	9	21
Births	4,301	12	203	441	1,309	1,187	705	364	72	8	0
Abortions	744	5	43	95	258	158	93	52	18	1	21
Fetal deaths	44	1	2	10	15	5	4	6	1	0	0
<b>American Indian or Alaska Native</b>											
Total pregnancies	6,706	24	428	794	2,164	1,669	1,029	467	120	7	4
Births	6,362	22	408	755	2,064	1,583	974	437	113	6	0
Abortions	297	2	17	35	87	75	46	24	7	0	4
Fetal deaths	47	0	3	4	13	11	9	6	0	1	0
<b>Asian or Pacific Islander</b>											
Total pregnancies	3,856	3	38	108	517	1,092	1,265	688	126	8	11
Births	3,425	1	26	86	409	986	1,189	619	101	7	1
Abortions	412	2	12	22	104	102	71	65	23	1	10
Fetal deaths	19	0	0	0	4	4	5	4	2	0	0
<b>Other or unknown</b>											
Total pregnancies	1,647	3	77	144	479	378	268	167	65	13	53
Births	563	0	21	25	100	146	135	83	40	11	2
Abortions	1,082	3	56	119	378	232	133	84	25	2	50
Fetal deaths	2	0	0	0	1	0	0	0	0	0	1

<sup>1</sup>The sum of recorded live births, spontaneous fetal losses and induced terminations of pregnancy (or abortions).

**TABLE 1A-7  
PREGNANCY RATES<sup>1</sup> AND NUMBER OF LIVE BIRTHS, FETAL DEATHS AND  
ABORTIONS TO TEENS BY INDIVIDUAL AGE, ARIZONA, 2008**

Age	Population	PREGNANCIES BY OUTCOME			TOTAL PREGNANCIES	
		Live births	Induced terminations of pregnancy (or abortions)	Spontaneous fetal losses	Number	Rate
<b>10</b>	44,782	0	0	0	0	<b>0.0</b>
<b>11</b>	44,905	1	1	0	2	<b>0.0</b>
<b>12</b>	44,965	3	0	0	3	<b>0.1</b>
<b>13</b>	45,457	16	22	0	38	<b>0.8</b>
<b>14</b>	45,541	141	44	2	187	<b>4.1</b>
<b>10-14</b>	225,650	161	67	2	230	<b>1.0</b>
<b>15</b>	46,028	570	102	2	674	<b>14.6</b>
<b>16</b>	46,516	1,250	178	11	1,439	<b>30.9</b>
<b>17</b>	44,478	2,331	287	9	2,627	<b>59.1</b>
<b>15-17</b>	137,022	4,151	567	22	4,740	<b>34.6</b>
<b>18</b>	41,277	3,376	526	21	3,923	<b>95.0</b>
<b>19</b>	40,246	4,473	653	28	5,154	<b>128.1</b>
<b>18-19</b>	81,523	7,849	1,179	49	9,077	<b>111.3</b>
<b>Total 10-19</b>	444,195	12,161	1,813	73	14,047	<b>31.6</b>

<sup>1</sup>Rates per 1,000 female population in specific group.



**1B.**

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

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The number of resident births exceeded 100,000 in 2006, the first time in the State's history. The number more than doubled from 50,049 in 1980 (**Table 8A-1**) to 102,042 in 2006, and 102,687 in 2007 (**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).

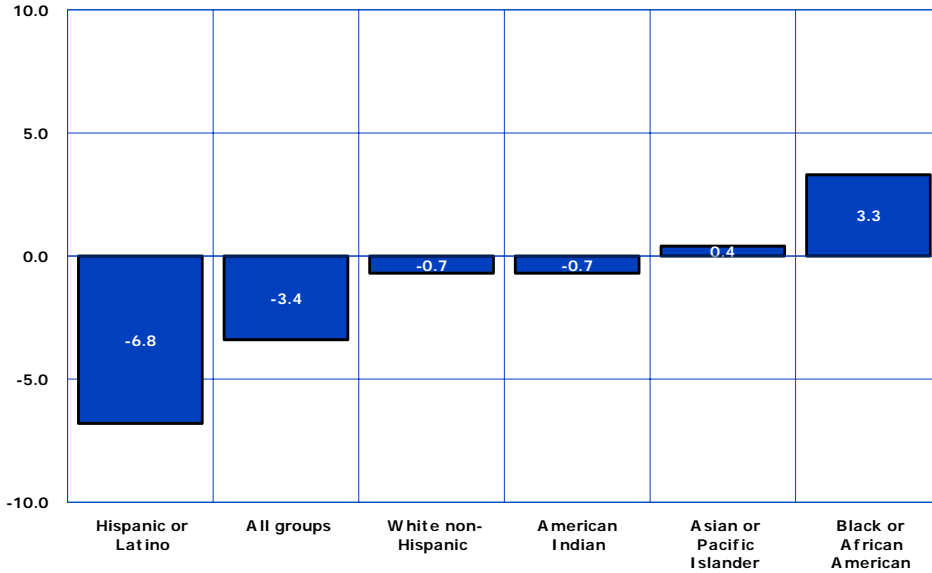
There were striking differences in how the number of births changed from 2007 to 2008 by mother's race/ethnicity. Births rose by 3.3 percent for Black or African American mothers and by 0.4 percent for Asian or Pacific Islander mothers. The number of births to American Indian or Alaska Native and White non-Hispanic mothers decreased by a mere 0.7 percent. In contrast, Hispanic or Latino mothers experienced a major decrease of 6.8 percent, twice the magnitude of the overall decline of 3.4 percent (**Figure 1B-1**). It is important to note that Hispanics, unlike any other race/ethnic group in the State, faced in 2008 not only the economic recession (shared by all), but also additional challenges such as the employer-sanction law (a penalty on employers hiring illegal immigrants), and a widespread practice of e-verify (checking the legal-residence status of those seeking employment). Considering all these factors, there is a reason to believe that there were fewer births among Hispanic or Latinos in 2008, because there were fewer Hispanic or Latino residents of Arizona in 2008, than there were in 2007. In fact, using the past birth rates (the number of births per 1,000 Hispanic population), one can estimate that the number of Hispanics who left the state in late 2007 and throughout 2008 ranges between 121,583 and 260,679.\*Among the specified Hispanic groups, births decreased by 8.2 percent for Mexican women (**Table 1B-22**), while they more than doubled for "Other Hispanic" origin women.

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\*Interestingly, the estimated drop in Arizona's illegal immigrant populations is estimated at 180,000-250,000. Daniel Gonzales: "Illegal immigrant population populace in Arizona drops by a third, study says". *The Arizona Republic*; July 30, 2009.

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

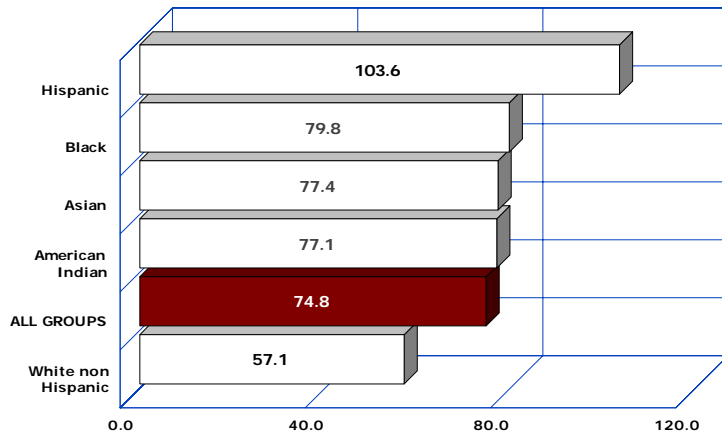
**Figure 1B-1**  
**Percent Change from 2007 to 2008 in the Number of Resident Live Births by**  
**Mother's Race/Ethnicity, Arizona**



In 2004, there were 40,822 births among Arizona's Hispanic 1,472,023 residents, corresponding to a birth rate of 27.7 births per 1,000 residents. In 2007, the number of births increased to 45,731 and so did the estimated number of Hispanic or Latino residents of the state (1,798,222). The number of births among Hispanics declined to 42,639 in 2008. If we were to reproduce the 2004 rate of birth for 2008 using the 42,639 births as the numerator, we could estimate the number of resident Hispanics in the State in 2008 at 1,537,543  $((42,639/1,537,543)*1,000=27.7)$ , 260,679 fewer than in 2007. Similar exercise, this time using the 2007 rate of births, would measure the number of Hispanics who left Arizona since 2007 at 121,583  $((42,639/1,676,639)*1,000=25.4)$ .

Under the circumstances, it is important to treat the 2008 fertility and birth rates for Hispanics (shown in this section) with caution. Perhaps, these rates have not declined; rather, the denominators used to calculate them, did.

**Figure 1B-2**  
**General Fertility Rates by Race/Ethnicity among Females of all Ages,**  
**Arizona, 2008**



From among 1,326,554 women of childbearing age (15-44 years), 7.5 percent gave birth in 2008. The *general fertility rate* (the number of births per 1,000 women 15-44 years old) continued to be the highest for Hispanic women (103.6 births per 1,000 or 10.4 percent). Fertility rates for Black or African American (79.8), Asian or Pacific Islander (77.4 births per 1,000), and American Indian women (77.1 per 1,000) were higher than the average for all groups (**Figure 1B-2, Table 1A-1**).

The 2008 fertility rates for all race/ethnic groups except Black or African American were below the 2007 levels.

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

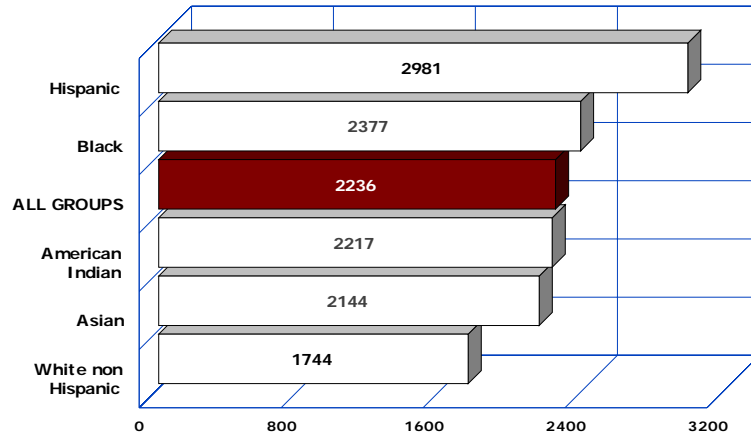
Number of births per 1,000 females 15-44 years old in specified group.



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

**Figure 1B-3**  
Total Fertility Rates by Race/Ethnicity, Arizona, 2008

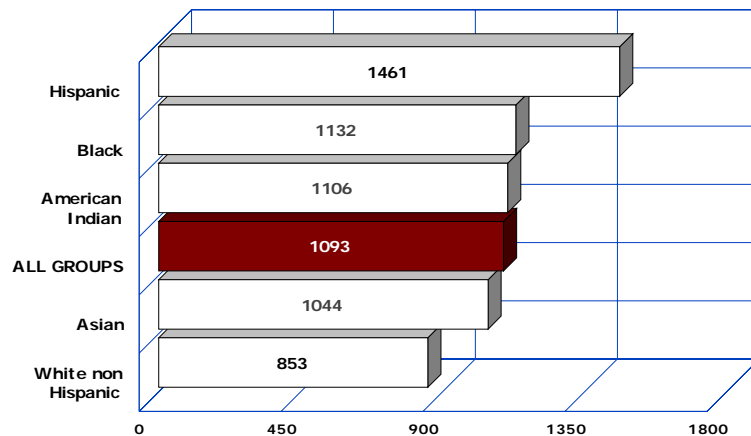
The *total fertility rate* indicates the average number of births to a hypothetical cohort of 1,000 women, if they experienced throughout their childbearing years the age-specific birth rates observed in a given year. From 1998 to 2008, the Arizona total fertility rates always exceeded the rate of "replacement" (2,110 births per 1,000 women, **Table 1B-1**). The "replacement" rate is considered the value at which a given generation can exactly replace itself. In 2008, the total fertility rates differed substantially by race/ethnicity (**Figure 1B-3**). The 2008 total fertility rate of 2,981 for Hispanic women exceeded the generation replacement rate by 41.3 percent. The rate for White non-Hispanic women (1,744) was 17.3 percent lower than the replacement rate.



The sum of age group-specific birth rates multiplied by five (the number of years in the age group). The rate of 2,236 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 2008, they would have a total of 2,236 children (or 2.2 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 by Race/Ethnicity, Arizona, 2008

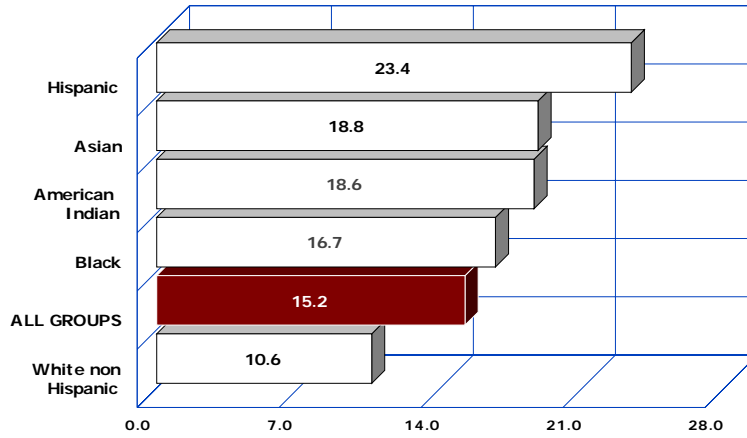
Another measure used to summarize reproduction patterns is the *gross reproduction rate*. It represents the average number of daughters born to a hypothetical cohort of 1,000 women if they experienced the age-specific birth rates observed in a given year throughout their childbearing years. This measure 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 2008, the gross reproduction rates in Arizona ranged from 853 for White non-Hispanic women to 1,461 for Hispanic women (**Figure 1B-4**, **Table 1B-1**).



The sum 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.

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

**Figure 1B-5**  
Birth Rates per 1,000 Population by Race/Ethnicity, Arizona, 2008



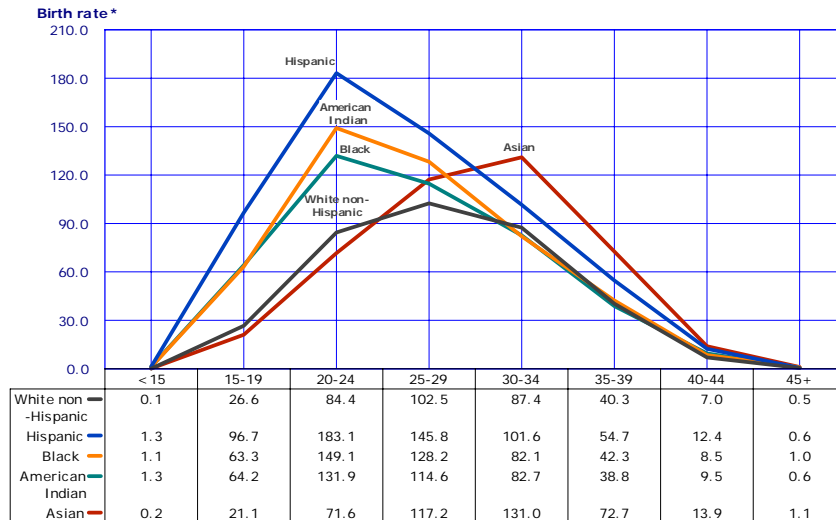
The crude birth rate, often simply called the birth rate, relates the number of births to the total population in a specified group. The birth rate is expressed as the total number of births per 1,000 persons, without regard to the age or sex distribution of the population.

The birth rate for Arizona decreased from 16.0 births per 1,000 population in 2007 to 15.2/1,000 in 2008.

In 2008 the crude birth rates by mother's race/ethnicity ranged from 10.6 births per 1,000 White non-Hispanics to 23.4 per 1,000 Hispanics or Latinos (**Figure 1B-5**).

Number of births per 1,000 population in specified group.

**Figure 1B-6**  
Birth Rates by Mother's Age Group and Race/Ethnicity, Arizona, 2008



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 2008, Hispanic or Latino women had the highest birth rates for women in age groups up to 29 years. In contrast, the birth rates for women aged 30 years or older were the highest among Asian or Pacific Islander women.

The birth rate for Asian or Pacific Islander women aged 35-39 years reached a new high of 72.7 births per 1,000 women up from the rate of 68.8/1,000 in 2007.

\*Number of births per 1,000 females in specified group.

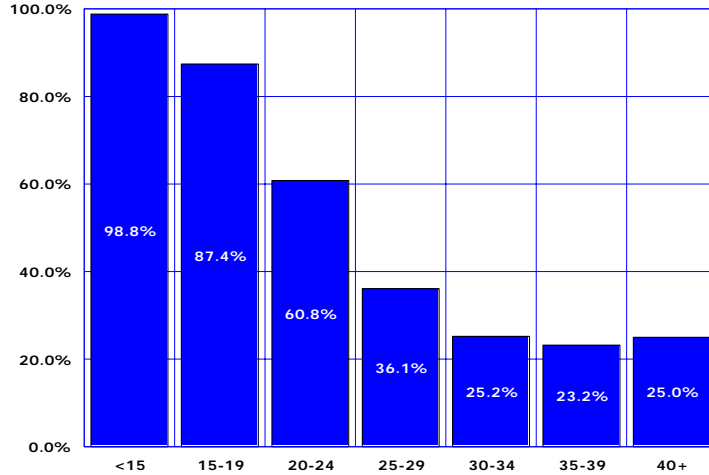
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

**Figure 1B-7**  
Percent Births to Unmarried Mothers by Age Group, Arizona, 2008

Unmarried mothers have accounted for an increasing annual proportion of births throughout the 1980s and 1990s, with 45.1 percent in 2008 marking a new historical high. In 2008, 44,728 infants were born to unmarried mothers compared to 29,924 in 1998.

A decade ago, the proportion of births among unmarried women aged 20-24 years was 51.1 percent. This proportion continued to rise by a percentage point on average per year between 1998 and 2008. In 2008, six out of ten (60.8 percent) 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-23**. County-level information is provided in **Table 5B-14** and **5B-15**. Community-level information is in **Table 9A**.

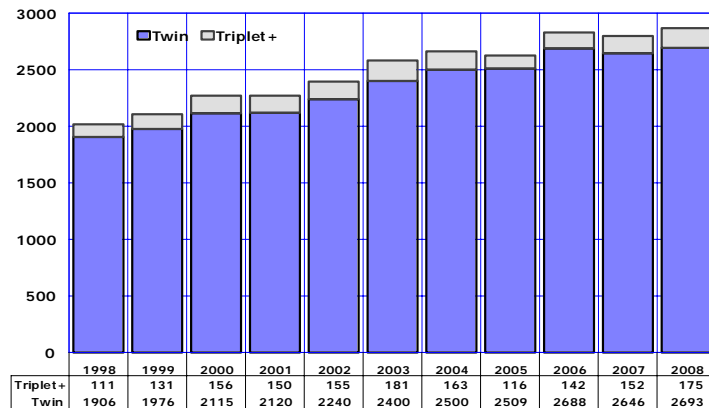


**Figure 1B-8**  
Number of Births in Twin and Triplet+ Deliveries by Year, Arizona, 1998-2008

There were 2,868 multiple birth events in Arizona in 2008, the highest number ever recorded (**Figure 1B-8**). The number of babies born in twin deliveries increased from 2,646 in 2007 to 2,693 in 2008 (**Figure 1B-8**). The number of triplet and higher order multiple birth events increased from 152 in 2007 to 175 in 2008.

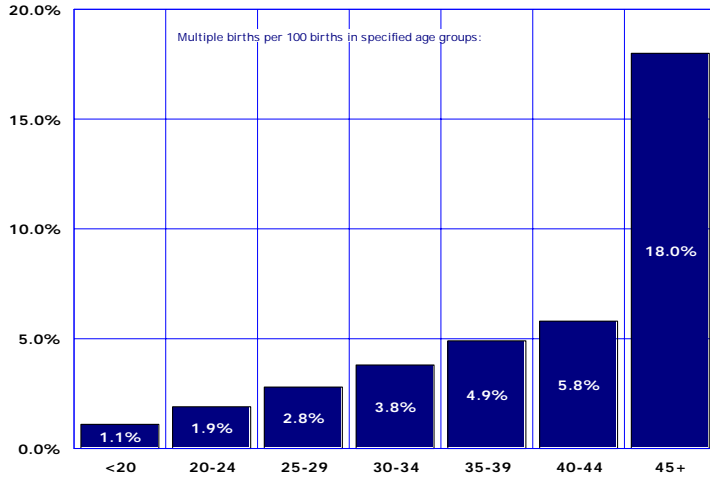
The number of singleton births increased by 27.5 percent, from 75,856 in 1998 to 96,347 in 2008 (**Table 1B-16**). In contrast, the number of babies born in twin or higher order multiple deliveries increased by 42.2 percent from 2,017 in 1998 to 2,868 in 2008.

The number of multiple birth events, as a proportion of total births, has increased from 2.7 percent in 2007, to 2.9 percent in 2008 (**Table 1B-2**).



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

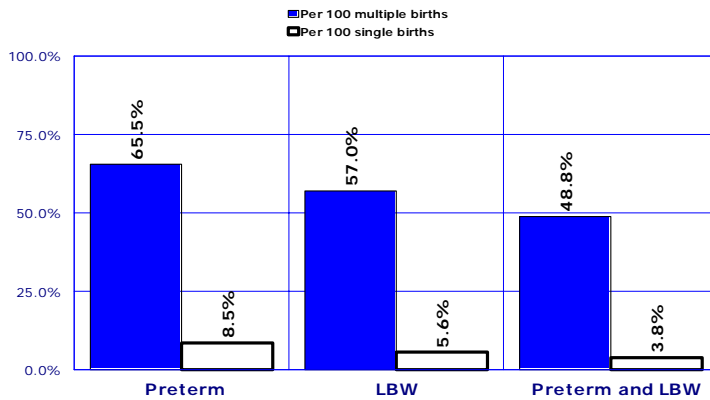
**Figure 1B-9**  
**Risk for Multiple Births by Mother's Age Group, Arizona, 2008**



The rise in multiple births has been associated with two related trends: 1) advances in, and greater access to, assisted reproductive technology (ART), and 2) the older age of childbearing (women in their thirties and forties are more likely to have a multiple birth than younger women even without the use of fertility therapies).

In 2008, the proportion of multiple births increased with maternal age, with a precipitous rise at age 45 years and over. Among women aged 45 years and over 18.0 percent of all births were twins, triplets, or quadruplets (**Figure 1B-9**).

**Figure 1B-10**  
**Infants Born too Early (Preterm) and Infants Born too Small (LBW) Among Multiple and Single Births, Arizona, 2008**



Infants born in multiple deliveries tend to be born at shorter gestations and smaller than those born in singleton deliveries (**Figure 1B-10**). In 2008, infants born in multiple deliveries were 7.7 times more likely (65.5 vs. 8.5 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 almost two-thirds of infant deaths (**Figure 2C-4** in section 2C on Age-Specific Mortality). The weight of the newborn also is an important predictor of future morbidity and mortality. For LBW infants, the risk of dying in the first year of life is more than 22 times that of normal weight infants (54.4 deaths per 1,000 births vs. 2.4/1,000; **Figure 2C-3**).

Preterm = < 37 weeks of gestation;  
 LBW = low birthweight (less than 2,500 grams or 5 pounds 8 ounces).

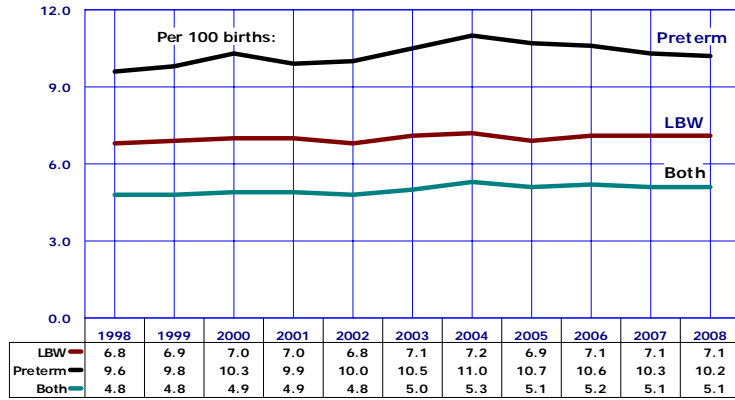
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

**Figure 1B-11**  
Preterm and Low Birthweight (LBW) Births by Year, Arizona, 1998-2008

The proportion of preterm births decreased slightly for the 4th consecutive year from 11.0 percent in 2004 to 10.2 percent in 2008.

The proportion of infants born earlier than expected and smaller (at less than 2,500 grams) remained unchanged from 5.1 percent in 2007 to 5.1 percent in 2008 (Figure 1B-11).

Detailed characteristics of births by birthweight and gestational age are provided in Table 1B-33. Comparative data by county of residence are available in Table 5B-16 – Table 5B-24.



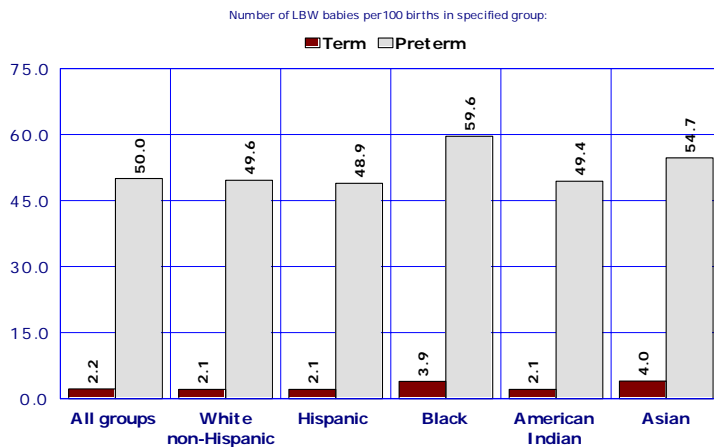
Preterm = < 37 weeks of gestation;  
LBW = low birthweight (less than 2,500 grams or 5 pounds 8 ounces).

Note: 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, 2008

In 2006, 2007, and 2008, 7.1 percent of all babies were born at low birthweight (LBW), or at less than 2,500 grams (5 pounds 8 ounces). Preterm delivery is the strongest risk factor for LBW. Infants born at less than 37 completed weeks of gestation are 22.7 times (50.0 vs. 2.2 percent) more likely to be LBW than infants born at term (Figure 1B-12). Seven out of ten (71.7 percent) LBW babies born in 2008 were preterm (Table 1B-3).

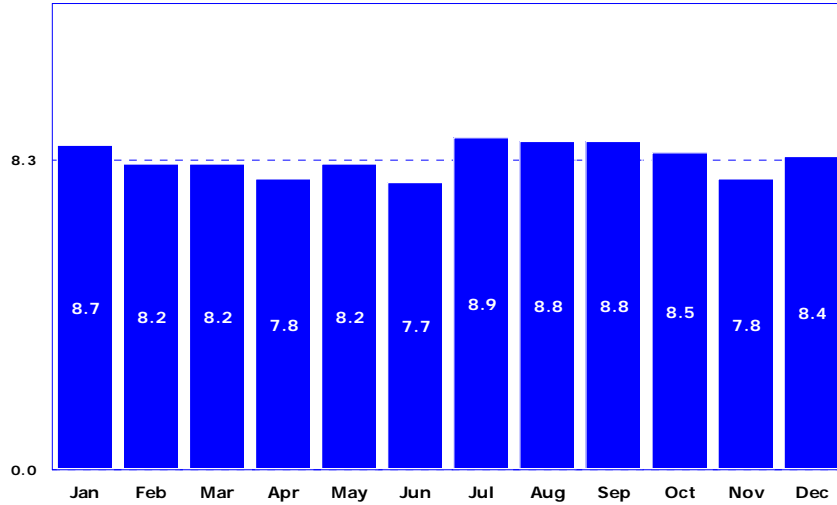
County-level data for LBW newborns are available in Tables 5B-16 – 5B-23. Community-level information is in Table 9A.



Preterm = < 37 weeks of gestation;  
LBW = low birthweight (less than 2,500 grams or 5 pounds 8 ounces).

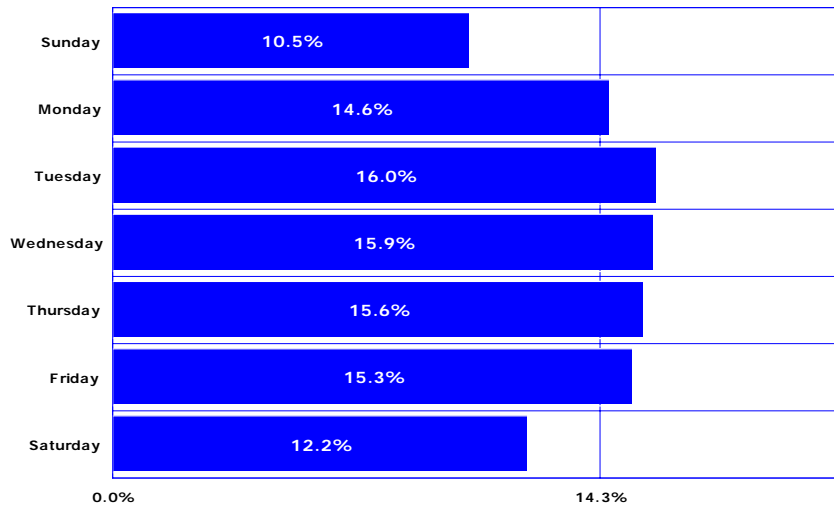
1B. NATALITY: MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

**Figure 1B-13**  
Percent of Resident Births by Month, Arizona, 2008



If there was no monthly variation in proportional contribution to the annual birth total, 8.3 percent of births would occur monthly. However, seasonal fluctuations in births have been observed in virtually all historical and contemporary human populations. The American pattern is characterized by a trough in April - June, and a peak in July-October (**Figure 1B-13**).

**Figure 1B-14**  
Percent of Resident Births by Day of the Week, Arizona, 2008



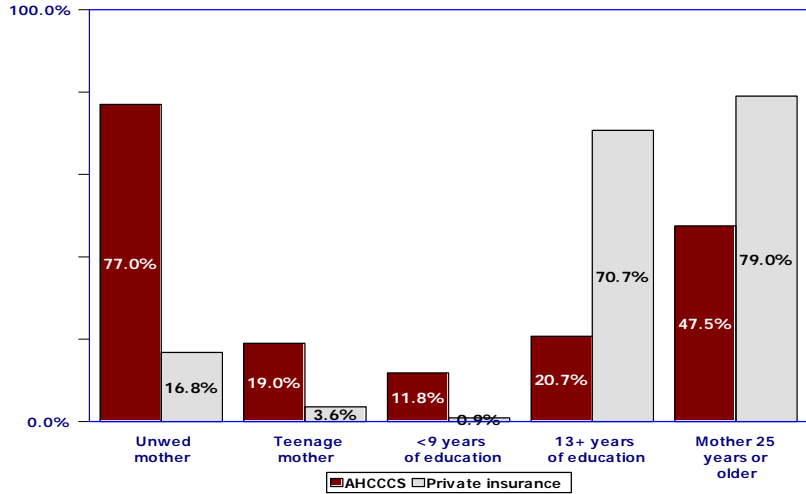
On average 272 infants were born per day in 2008 to Arizona residents. The daily average of resident live births in 2008 was substantially lower on weekends than on weekdays (**Figure 1B-14**). Many studies suggest that weekly, daily and hourly variations observed in hospitals and clinics are not due 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 2008, only 5.1 percent of repeat cesarean deliveries occurred on Sundays, compared to 18.2 percent on Fridays. The rate of induction of labor was substantially lower on Sundays (8.7 percent) than it was on Tuesdays (17.7 percent).

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The number of years of maternal education was the only possible index 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. The payee's SES indicator is strongly related to the maternal education indicator. PHI mothers were 3.4 times more likely to have some college education than were AHCCCS mothers (70.7 and 20.7 percent respectively, **Figure 1B-15**). Almost twelve percent of AHCCCS mothers had 0-8 years of education, thirteen times the proportion of PHI mothers. Only 16.8 percent of mothers with PHI were unmarried compared to 77.0 percent of AHCCCS mothers. Eight out of ten (79.0 percent) mothers with PHI were at least 25 years old compared to 47.5 percent of AHCCCS mothers.

**Figure 1B-15**  
Comparison of Selected Sociodemographic Characteristics by the Payee for Delivery, Arizona, 2008

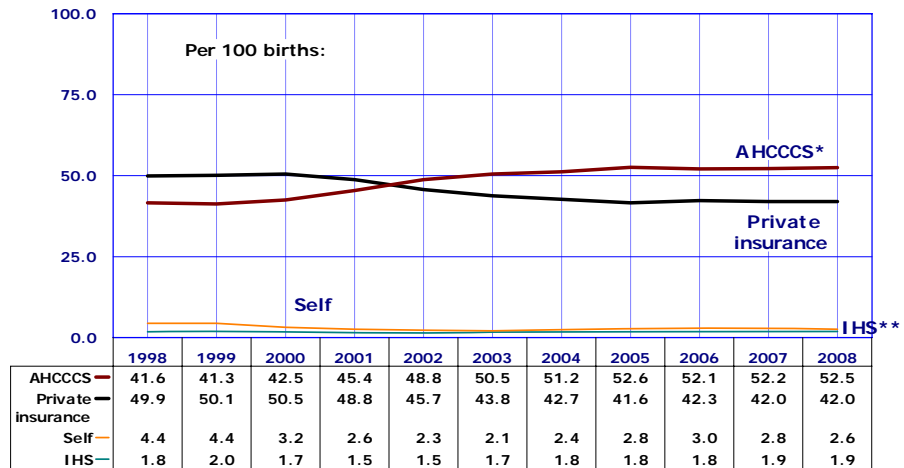


Note: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

Since 2002, the share of resident births paid for by AHCCCS continues to exceed the share paid by private health insurance (**Figure 1B-16**). In 1989, private insurance paid for a slight majority (50.6 percent) of all deliveries and AHCCCS was the payee for the next largest share of deliveries at 26.5 percent, followed by the payment by the women themselves at 12.1 percent.

The AHCCCS share was essentially unchanged between 2005 and 2008. The share of private health insurance remained stable at 42 percent in 2007 and 2008. The payment source was the mothers themselves and/or their families (i.e., self-pay) in 2.6 percent of the deliveries. The Indian Health Service paid for 1.9 percent of the births in 2008, with 94 percent of those births to American Indian mothers (**Table 1B-28**; see also **Table 1B-25**).

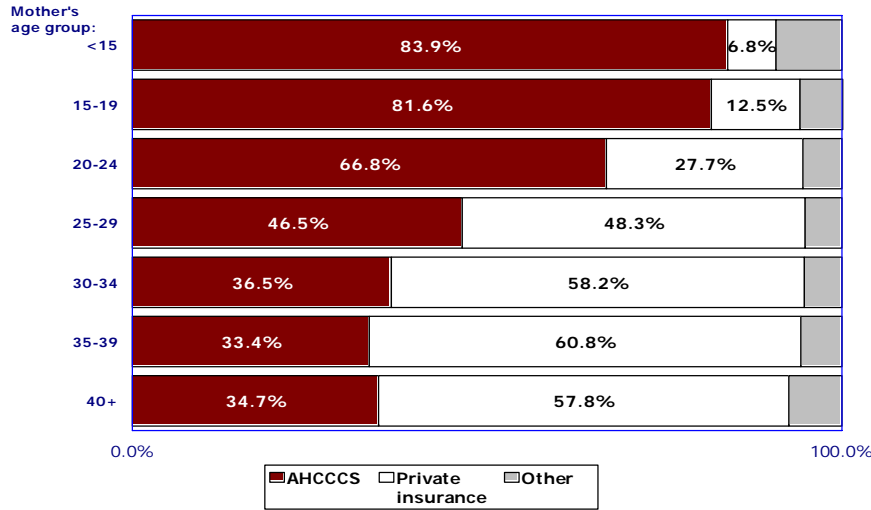
**Figure 1B-16**  
Births by Payer and Year, Arizona, 1998-2008



\* The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.  
\*\* The Indian Health Service.

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

**Figure 1B-17**  
Payee for Delivery by Mother's Age Group, Arizona, 2008



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

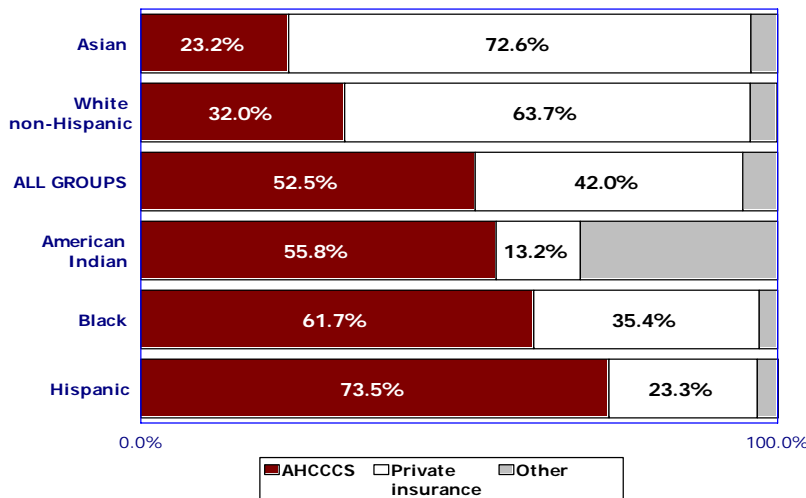
In 2008, the Arizona Health Care Cost Containment System paid for the absolute majority of the deliveries to mothers 24 years or younger (**Figure 1B-17**). In contrast, private insurance was the largest payer for the deliveries of women giving birth who were 25 years old or older in 2008 (based on data 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 the 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 2008, the AHCCCS share more than doubled among mothers 25 years old or older.

**Figure 1B-18**  
Payee for Delivery by Mother's Race/Ethnicity, Arizona, 2008



Note: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program. Other = Indian Health Service, self, or unknown.

In 2008, private insurance was the largest payer for deliveries of Asian (at 72.6 percent) and White non-Hispanic infants (at 63.7 percent). In contrast, the Arizona Health Care Cost Containment System was the largest payer for deliveries of Hispanic or Latino (73.5 percent), Black or African American (61.7 percent) and American Indian women (55.8 percent).

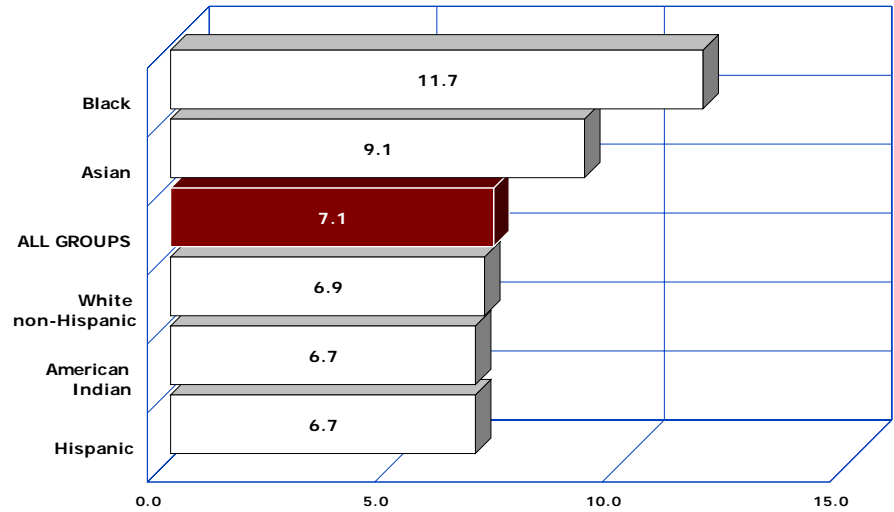
The Indian Health Service as a payer accounted for a 27.8 percent share of deliveries of American Indian or Alaska Native infants in the State (**Figure 1B-18**, based on data in **Table 1B-28**).

Hispanics or Latino accounted for 60.2 percent of the 52,081 deliveries paid for by the AHCCCS. Twenty-six percent of all AHCCCS births were to White non-Hispanic women. All other race/ethnic groups combined accounted for 14 percent of the AHCCCS deliveries (based on data in **Table 1B-28**).



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

**Figure 1B-19**  
**Percent Low Birthweight\* by Mother's Race/Ethnicity,**  
**Arizona Residents, 2008**

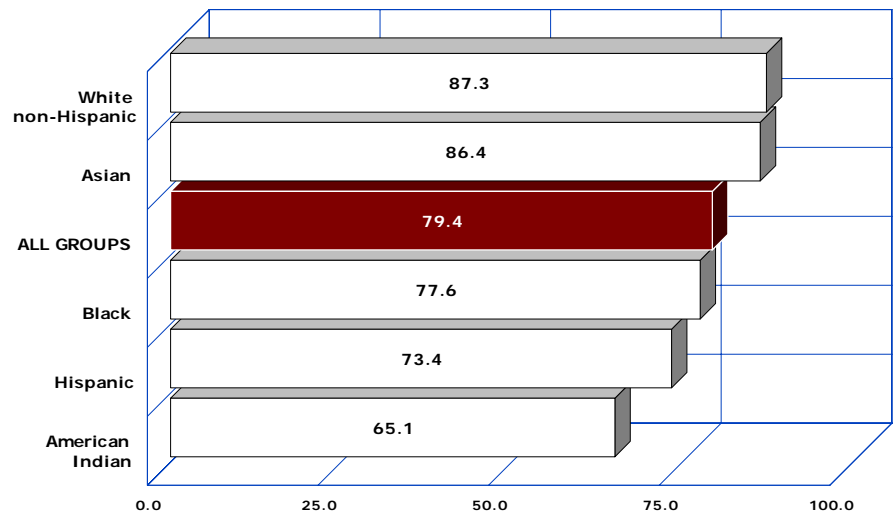


In 2008, 7.1 percent of all Arizona infants were born at a low birthweight (LBW), or at less than 2,500 grams (5 pounds 8 ounces), unchanged from the previous year.

In Arizona, LBW rates differed by mother's race/ethnic group. LBW rates were highest for newborns of Black or African American mothers (11.7 percent) and Asian or Pacific Islander mothers (9.1 percent). Newborns of American Indian and Hispanic or Latino mothers had the lowest LBW rate (6.7 percent; based on data in **Table 1B-28**).

Low birthweight is less than 2,500 grams (less than 5 pounds 8 ounces).  
 Note: The latest available U.S. ratio is for 2005.

**Figure 1B-20**  
**First Trimester Prenatal Care by Mother's Race/Ethnicity,**  
**Arizona Residents, 2008**

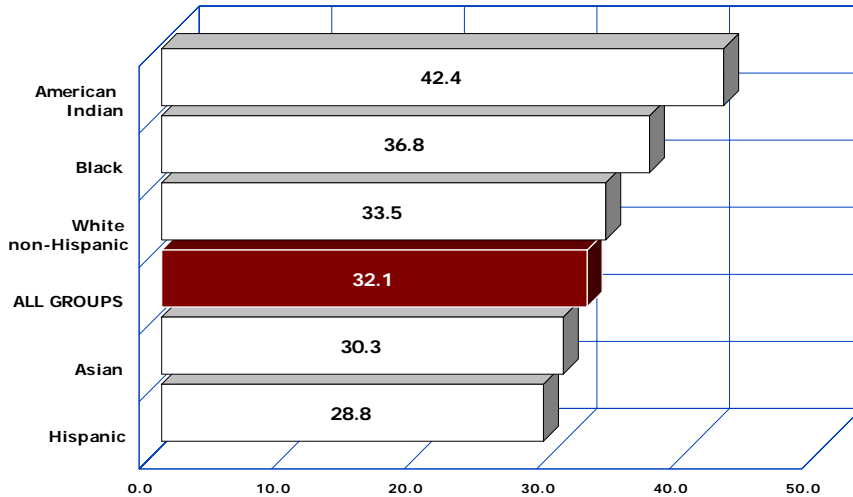


The percent of Arizona mothers giving birth who received early prenatal care (i.e., in the first trimester) increased from 77.6 percent in 2007 to 79.4 percent in 2008 (**Table 1B-2**).

In Arizona, American Indian, Hispanic or Latino, and Black or African American mothers were least likely to begin prenatal care in the first trimester (**Figure 1B-20**). The highest rates of utilization of early prenatal care were among White non-Hispanic and Asian or Pacific Islander mothers (based on data in **Table 1B-28**).

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

**Figure 1B-21**  
**Maternal Medical Risk Factors per 100 Births by Mother's Race/Ethnicity, Arizona, 2008**

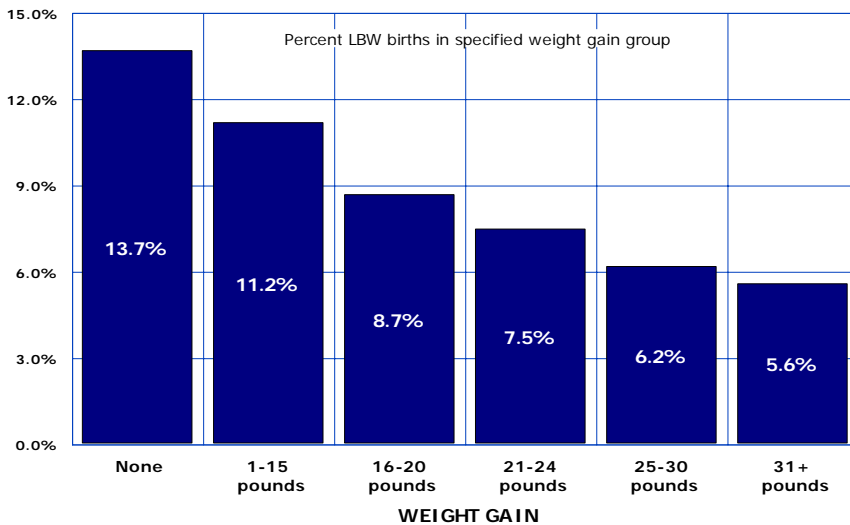


Births with medical risk factors reported per 100 births in specified group.

Maternal medical risk factors (such as anemia, diabetes, hypertension or kidney disease) can contribute to serious pregnancy complications and infant deaths, if not treated properly. In 2008, American Indian or Alaska Native women giving birth had the highest proportion of medical risk factors (42.4 percent, **Figure 1B-21**), followed by Black or African American, and White non-Hispanic women.

Not surprisingly, IHS mothers had the highest rate of noted medical risk factors at 46.3 percent, followed by PHI mothers at 32.3 percent, AHCCCS mothers at 31.7 percent, and self-pay mothers at 27.1 percent (**Table 1B-27**).

**Figure 1B-22**  
**Risk for Low-Birthweight by Maternal Weight Gain during Pregnancy, Arizona, 2008**



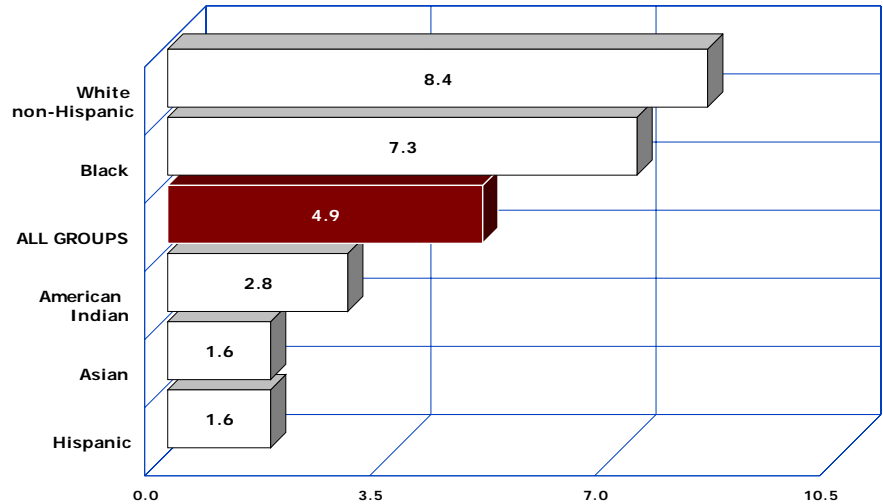
Maternal weight gain during pregnancy is a determinant of both fetal growth and birthweight. Insufficient or excessive weight gain during pregnancy can negatively affect both maternal and pregnancy outcome (see **Figure 2C-4.3**). Women who are of normal weight (average body mass index or BMI) should gain 21-35 pounds during pregnancy. Women who are underweight should gain more (28-40 pounds), and women who are overweight should gain less (15 to 25 pounds). Unfortunately, it is not possible to determine whether weight gain is within the recommendations for the mother's BMI because the mother's pre-pregnancy weight and height is not reported on the birth certificate.

Maternal weight gain has been shown to be correlated with infant birthweight. In 2008, as in previous years, the percent of infants with low birthweight decreased with increasing maternal weight gain (**Figure 1B-22**).

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

**Figure 1B-23**  
Self-reported Tobacco Use during Pregnancy by Race/Ethnicity, Arizona, 2008

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 4.9 percent of women giving birth in 2008 (Table 1B-26, 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 when they use. White non-Hispanic and Black mothers continued to be more likely to report smoking than American Indian, Asian and Hispanic (Figure 1B-23).

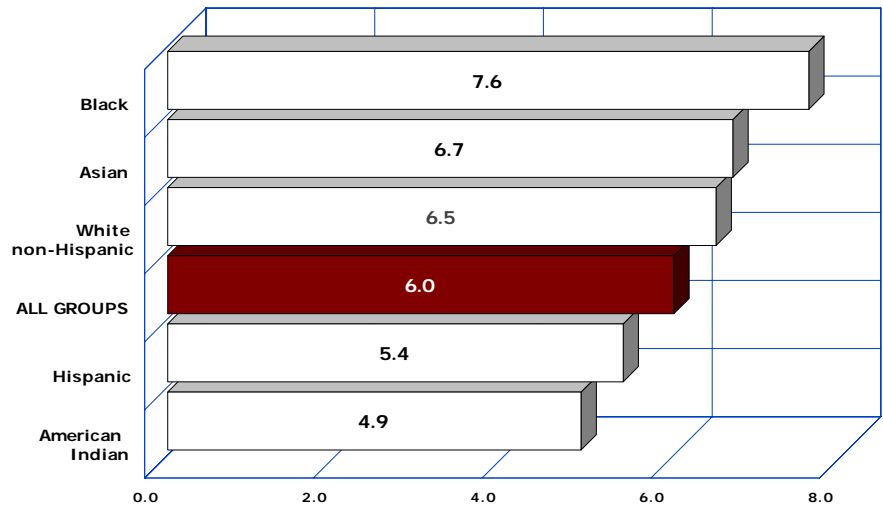


Mothers giving birth who reported tobacco use per 100 births in specified group.

**Figure 1B-24**  
Rates of Admission to Newborn Intensive Care Units per 100 Births, Arizona, 2008

More than 5,900 or 6.0 percent of newborns in 2008 were admitted to newborn intensive care units (NICUs). Surprisingly, only 48.3 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 59.1 admissions being premature (based on data in Table 1B-33). The proportion of NICU admissions differed among race/ethnic groups. In 2008, the rate of NICU admissions for Black or African American (7.6 percent) was the highest among race/ethnic groups.

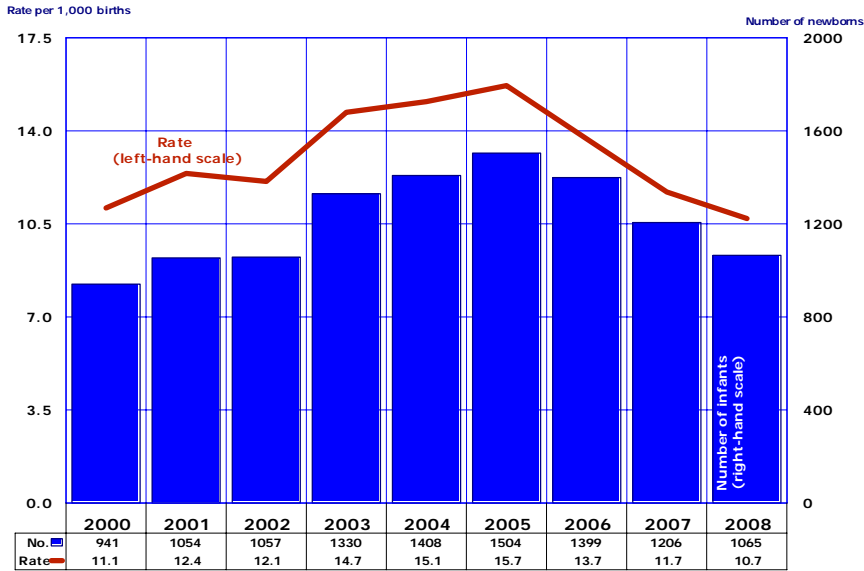
Newborns of IHS mothers were admitted to NICUs at the lowest rate (3.4 percent). Newborns of PHI mothers and AHCCCS mothers had admission rates of 6.6 percent and 5.6 percent respectively (Table 1B-27).



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

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

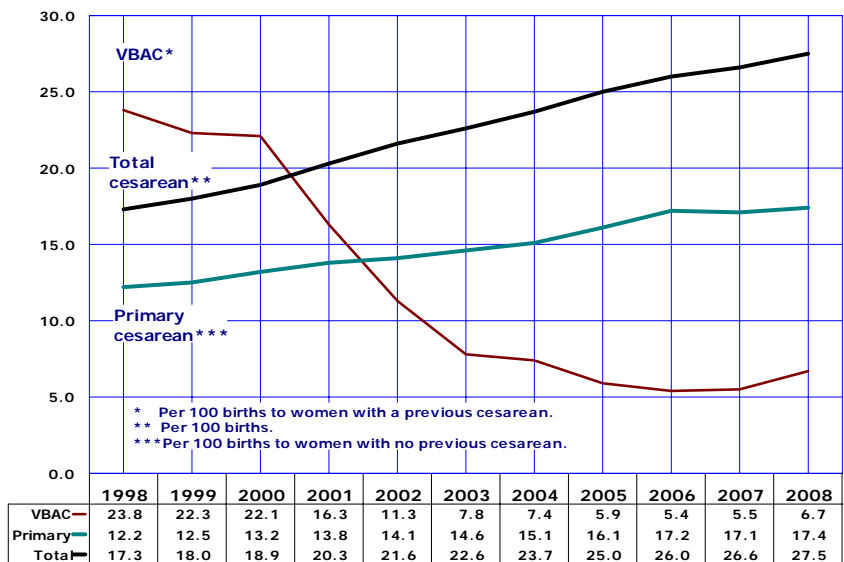
**Figure 1B-25**  
**Newborns Who Were Hospitalized After Birth because They Were Affected by Maternal Use of Drugs during Pregnancy, Arizona, 2000-2008**



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 agent or cocaine) transmitted via placenta or breast milk. The number of newborns hospitalized after birth due to maternal drug use during pregnancy decreased from 1,504 in 2005 to 1,065 in 2008. Sixteen percent or 170 of the 1,065 babies born to drug dependent mothers were also diagnosed with drug withdrawal syndrome.

The diagnostic codes and additional information about hospitalizations related to noxious influences affecting the fetus are available online on the Health Status and Vital Statistics website at <http://www.azdhs.gov/plan/hip/for/substance/index.htm>

**Figure 1B-26**  
**Total and Primary Cesarean Deliveries and Vaginal Births after Previous Cesarean (VBAC), Arizona, 1998-2008**



The rate of cesarean delivery increased to an all time high of 27.5 percent of all resident births in 2008 (Figure 1B-26, Table 1B-2). The rise in the total rate is due to both an increase in the primary cesarean rate and a decrease in the rate of vaginal birth after cesarean delivery (VBAC).

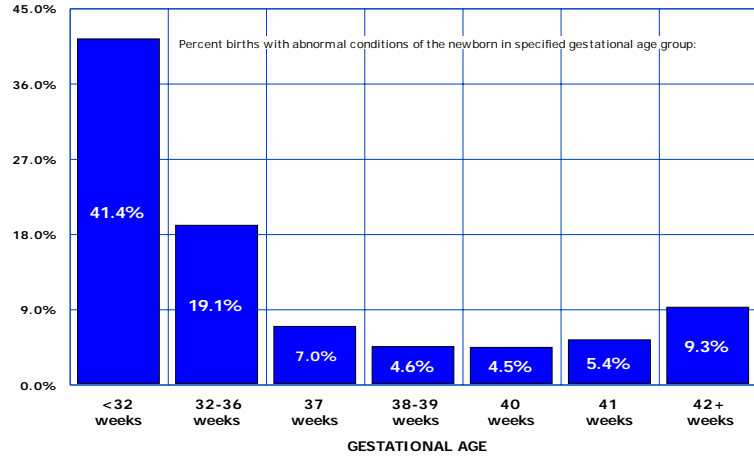
The primary cesarean rate in 2008 (17.4 per 100 live births to women who had no previous cesarean) was 42.6 percent higher than in 1998 (12.2 per 100 live births). The rate of repeat cesarean deliveries doubled from 5.1 percent in 1998 to 10.1 percent in 2008.

The rate of vaginal birth after previous cesarean delivery (VBAC) declined 77.3 percent from a high of 23.8 in 1998 to 5.4 in 2006. However, the VBAC rates slightly increased to 5.5 percent in 2007 and to 6.7 percent in 2008.

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

**Figure 1B-27**  
**Abnormal Conditions of the Newborn by Gestational Age, Arizona, 2008**

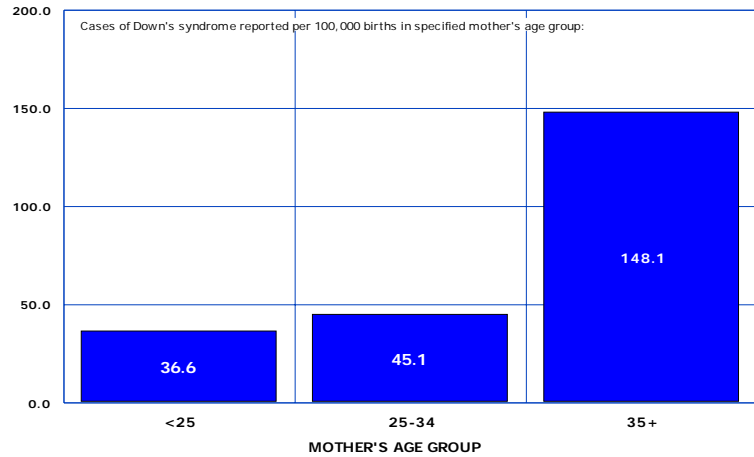
Since the first year these data were collected, three of the eight specific abnormal conditions listed on the birth certificate have been reported most frequently: *assisted ventilation less than 30 minutes, assisted ventilation of 30 minutes or longer, and hyaline membrane disease/ respiratory distress syndrome (RDS)*. *Hyaline membrane disease/RDS* is a common cause of morbidity in preterm infants. The rates of abnormal conditions are the highest among very preterm (less than 32 weeks of gestation), moderately preterm (32-36 weeks of gestation) and post-term (42+ weeks) infants (**Figure 1B-27**).



**Figure 1B-28**  
**The Incidence of Downs Syndrome by Mother's Age Group, Arizona, 2008**

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 2008 as in prior years, the rate of Down's Syndrome, the most frequently recognized cause of mental retardation, was substantially higher for births to mothers aged 35 years and over (**Figure 1B-28, Table 1B-34**). The incidence rate of 148.1 cases of Down's Syndrome per 100,000 births to women 35 years or older was 3 times greater than the incidence rate of 46.4 for women of all ages.



**TABLE 1B-1  
BIRTH RATE<sup>1</sup>, GENERAL FERTILITY RATE<sup>2</sup>, TOTAL FERTILITY RATE<sup>3</sup>,  
GROSS REPRODUCTION RATE AND AGE-SPECIFIC BIRTH RATES<sup>4</sup> BY YEAR,  
ARIZONA AND UNITED STATES, 1998-2008**

Year	Area	Birth rate	General fertility rate	Total fertility rate <sup>5</sup>	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 years and over
1998	AZ	16.0	74.1	2,251	1,098	1.4	73.9	134.5	119.2	83.6	37.7	8.3	0.6
	U.S.	14.6	65.1	2,059	976	1.0	51.1	111.2	116.0	87.5	37.4	7.3	0.4
1999	AZ	16.0	75.1	2,326	1,135	1.4	72.9	134.7	122.8	87.3	37.9	7.8	0.4
	U.S.	14.5	65.8	2,075	980	0.9	49.6	111.0	117.8	89.6	38.3	7.4	0.4
2000	AZ	16.6	78.4	2,395	1,176	1.2	67.6	139.1	129.2	92.4	40.5	8.4	0.5
	U.S.	14.7	65.7	2,130	1,004	0.9	48.5	112.3	121.4	94.1	40.4	7.9	0.5
2001	AZ	16.1	75.9	2,300	1,150	1.0	63.3	136.2	123.4	88.5	38.7	8.5	0.5
	U.S.	14.1	65.3	2,034	994	0.8	45.9	106.2	113.4	91.9	40.6	8.1	0.5
2002	AZ	16.0	75.5	2,309	1,124	1.1	59.7	136.8	122.9	93.8	38.6	8.3	0.5
	U.S.	13.9	64.8	2,012	983	0.7	42.9	103.5	113.6	91.6	41.4	8.3	0.5
2003	AZ	16.1	76.3	2,330	1,141	1.0	59.2	135.7	126.2	95.6	39.0	8.6	0.6
	U.S.	14.1	66.1	2,043	NA	0.6	41.7	102.6	115.7	95.2	43.8	8.7	0.5
2004	AZ	16.0	75.7	2,309	1,127	0.9	58.2	131.4	125.7	95.7	40.0	9.2	0.6
	U.S.	14.0	66.4	2,049	NA	0.7	41.2	101.8	115.5	95.5	45.4	9.0	0.6
2005	AZ	15.8	74.7	2,278	1,111	0.9	56.5	129.8	125.3	94.5	39.3	8.6	0.6
	U.S.	14.0	66.7	2,054	NA	0.7	40.4	102.2	115.6	95.9	46.3	9.1	0.6
2006	AZ	16.4	80.0	2,392	1,167	0.8	59.6	131.8	132.5	95.6	48.5	9.3	0.3
	U.S.	14.2	68.5	2,101	NA	0.6	41.9	105.9	116.8	97.7	47.3	9.4	0.6
2007	AZ	16.0	78.9	2,364	1,154	0.8	59.5	132.2	124.7	98.6	46.8	9.5	0.7
	U.S.	14.3	68.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
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.	14.2	68.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>1</sup>The number of births per 1,000 population.

<sup>2</sup>The number of births per 1,000 women of childbearing age (15-44 years old).

<sup>3</sup>The sum of age group specific birth rates multiplied by the number of years in the age group (five years in this case). In Table 1B-1 rate of 2,326 in 1998 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 1998, they would have a total of 2,326 children 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.

<sup>4</sup>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 1998-2008.

<sup>5</sup>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.

Note: The rates for 1998-1999 were revised using the population denominators that are consistent with the 2000 census.

**TABLE 1B-2**  
**LIVE BIRTHS ACCORDING TO SELECTED MATERNAL, PRENATAL CARE**  
**AND DELIVERY CHARACTERISTICS, BIRTHWEIGHT, PLURALITY, CHILD'S SEX,**  
**BIRTH ORDER AND BIRTH COMPLICATIONS, ARIZONA, 1998-2008**  
**(ALL RACE/ETHNIC GROUPS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	77,940	80,505	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215
<b>Age of mother</b>											
≤19 years	15.0	14.9	14.3	13.8	13.1	12.9	12.7	12.5	12.7	12.6	12.3
≥30 years	30.4	30.1	30.4	31.0	31.4	31.6	32.3	32.2	31.6	32.3	33.1
<b>Marital status</b>											
Unmarried	38.4	38.8	39.3	39.4	40.2	41.2	41.9	42.8	43.9	45.0	45.1
<b>Mother's education</b>											
<9 years	8.8	9.0	9.2	9.3	9.1	9.4	9.3	8.7	8.2	7.8	6.9
<b>Mother's race/ethnicity</b>											
White <sup>1</sup>	49.5	48.1	46.9	45.7	44.4	42.8	42.0	41.4	42.2	41.1	42.3
Hispanic	37.0	38.2	39.9	41.2	41.3	43.1	43.7	44.0	44.0	44.5	43.0
Black	3.4	3.4	3.2	3.2	3.2	3.3	3.4	3.6	3.8	4.1	4.3
American Indian	7.0	6.6	6.6	6.3	6.3	6.5	6.6	6.6	6.2	6.2	6.4
Other	3.1	3.7	3.4	3.7	4.8	4.4	4.2	4.4	3.9	4.0	4.1
<b>Prenatal care begin</b>											
1 <sup>st</sup> Trimester	73.6	74.1	75.0	75.5	75.7	75.6	76.3	77.7	77.7	77.6	79.4
3 <sup>rd</sup> Trimester	4.9	4.6	4.5	4.3	4.4	4.3	4.4	3.8	3.7	3.7	3.6
No Care	2.1	2.2	2.1	1.9	2.2	2.9	2.8	2.3	2.4	2.2	1.8
<b>Prenatal visits</b>											
1-4	5.0	4.7	4.6	4.5	4.5	4.3	4.6	4.2	4.0	3.9	3.6
≥5	89.4	88.4	88.9	90.6	91.5	90.2	91.7	93.3	93.5	93.9	94.5
≥9	74.4	73.4	73.7	75.9	75.9	74.6	75.5	76.6	76.4	76.7	77.8
≥13	29.2	29.9	31.1	33.0	31.7	29.8	27.6	25.9	27.5	29.4	29.9
<b>Medical risk/ Complications<sup>2</sup></b>	45.9	43.2	44.9	45.1	45.6	44.2	44.6	44.7	44.3	45.3	46.5
<b>Gestational age<sup>3</sup></b>											
Preterm (<37 weeks)	9.6	9.8	10.3	9.9	10.0	10.5	11.0	10.7	10.6	10.3	10.2
<b>Birth weight</b>											
<2,500 grams	6.8	6.9	7.0	7.0	6.8	7.1	7.2	6.9	7.1	7.1	7.1
<1,500 grams	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
<b>Child's sex</b>											
Male	51.2	51.2	51.1	50.9	51.3	51.0	51.2	51.2	51.2	51.2	51.1
Female	48.8	48.8	48.9	49.1	48.7	49.0	48.8	48.8	48.8	48.8	48.9
<b>Plurality</b>											
Multiple births	2.6	2.6	2.7	2.7	2.7	2.8	2.9	2.7	2.8	2.7	2.9
<b>Caesarean delivery</b>	17.3	18.0	18.9	20.3	21.6	22.6	23.7	25.0	26.0	26.6	27.5
<b>Place of delivery</b>											
Hospital <sup>4</sup>	99.2	99.4	99.4	98.9	98.9	98.8	98.8	98.9	98.9	99.0	99.0
<b>Attendant at birth</b>											
Midwife <sup>5</sup>	9.1	8.7	8.4	7.6	7.0	6.5	6.7	6.1	5.6	5.7	6.1
<b>Previous live births</b>											
1 or more	61.3	61.4	61.4	62.3	62.4	62.2	62.9	63.0	62.5	63.1	63.3

<sup>1</sup>Non-Hispanic.

<sup>2</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>3</sup>Physician's estimate.

<sup>4</sup>Hospital, clinic, medical center or maternity home.

<sup>5</sup>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, ARIZONA, 1998-2008**  
**(ALL RACE/ETHNIC GROUPS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	5,317	5,536	5,975	5,943	5,926	6,427	6,704	6,640	7,266	7,285	7,026
<b>Age of mother</b>											
≤19 years	17.1	16.9	17.0	16.1	14.9	14.9	14.3	14.2	14.5	14.2	13.2
≥30 years	31.7	31.7	32.6	33.1	34.3	34.7	34.3	33.5	34.3	34.7	35.8
<b>Marital status</b>											
Unmarried	45.6	44.1	45.6	44.5	45.3	45.7	46.5	48.3	48.3	49.2	48.6
<b>Mother's education</b>											
<9 years	10.1	8.7	9.2	9.7	8.8	9.5	8.7	8.3	7.8	7.7	6.3
<b>Mother's race/ethnicity</b>											
White <sup>1</sup>	48.1	45.8	46.7	44.0	43.9	41.6	42.3	41.1	39.8	40.9	41.0
Hispanic	35.9	37.6	37.9	39.5	39.2	41.8	41.2	40.8	42.3	41.5	40.8
Black	6.1	5.7	5.7	6.3	5.5	5.5	5.6	6.6	6.7	7.3	7.2
American Indian	6.8	7.1	6.3	6.6	6.1	6.3	6.6	6.9	6.5	5.8	6.1
Other	3.1	3.7	3.4	3.6	5.3	4.8	4.4	4.7	4.7	4.5	5.0
<b>Prenatal care began</b>											
1st Trimester	70.0	69.6	71.3	73.6	74.2	73.8	75.4	77.4	77.2	77.4	79.5
3rd Trimester	4.1	4.4	4.0	3.3	3.5	3.5	2.9	2.7	2.8	3.1	2.9
No Care	4.8	4.2	4.5	4.1	4.6	5.1	4.5	4.7	4.9	4.5	3.8
<b>Prenatal visits</b>											
1-4	9.7	8.5	8.6	8.4	9.0	8.0	9.3	9.4	8.5	8.2	7.7
≥5	78.3	78.3	78.2	82.0	82.9	82.9	84.7	85.6	86.3	87.1	88.2
≥9	55.3	58.2	57.6	60.4	57.7	58.7	59.8	60.3	60.1	61.2	63.0
≥13	22.3	24.7	25.7	27.3	25.0	26.5	23.9	22.1	21.9	25.1	25.6
<b>Medical risks/ Complications<sup>2</sup></b>	70.4	69.2	69.7	68.0	68.9	64.0	63.8	67.2	65.1	65.9	68.7
<b>Gestational age<sup>3</sup></b>											
Preterm (<37 weeks)	70.8	70.3	71.3	70.7	70.9	70.9	73.3	73.7	72.7	72.3	71.7
<b>Birth weight</b>											
<1,500 grams	16.8	16.0	16.6	15.5	16.6	15.9	16.4	16.9	16.9	16.8	16.5
<1,000 grams	8.4	7.9	7.3	7.4	8.8	7.9	7.9	8.7	7.7	8.1	7.7
<b>Child's sex</b>											
Male	48.2	50.0	49.7	47.4	48.3	48.6	48.0	47.1	47.5	47.9	48.1
Female	51.8	50.0	50.3	52.5	51.7	51.4	52.0	52.9	52.5	52.1	51.9
<b>Plurality</b>											
Multiple births	21.9	21.3	22.1	22.5	23.2	23.4	23.7	22.2	22.5	23.1	23.3
<b>Caesarean delivery</b>	35.6	35.2	38.0	37.6	39.7	41.2	40.8	42.5	43.2	44.2	46.7
<b>Place of delivery</b>											
Hospital <sup>4</sup>	99.4	99.7	99.7	99.6	99.7	99.6	99.6	99.6	99.7	99.6	99.7
<b>Attendant at birth</b>											
Midwife <sup>5</sup>	3.3	3.9	3.6	3.7	3.1	2.8	3.1	2.5	1.9	2.5	2.6
<b>Previous live births</b>											
1 or more	57.8	58.3	58.6	58.1	58.0	58.7	58.1	58.3	59.6	60.5	60.5

<sup>1</sup>Non-Hispanic.

<sup>2</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>3</sup>Physician's estimate.

<sup>4</sup>Hospital, clinic, medical center or maternity home.

<sup>5</sup>Licensed Midwife or Certified Nurse Midwife.



**TABLE 1B-4**  
**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, ARIZONA, 1998-2008**  
**(URBAN REGIONS)\***

Characteristic		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>		65,825	68,611	72,596	73,319	74,851	77,905	79,951	82,141	87,910	88,266	85,263
<b>Age of mother</b>	≤19 years	14.6	14.4	13.9	13.5	12.7	12.4	12.2	12.0	12.3	12.1	11.7
	≥30 years	30.7	30.6	30.9	31.5	32.0	32.2	33.1	32.9	32.5	33.3	34.1
<b>Marital status</b>	Unmarried	37.6	38.1	38.5	38.8	39.5	40.4	41.1	41.9	43.0	44.3	44.1
<b>Mother's education</b>	<9 years	9.5	9.6	9.9	10.0	9.7	10.1	9.9	9.3	8.8	8.3	7.4
<b>Mother's race/ethnicity</b>	White <sup>1</sup>	49.8	48.1	46.8	45.3	44.1	42.3	41.4	40.8	41.5	40.2	41.5
	Hispanic	39.7	40.9	42.6	43.9	44.1	46.0	46.7	46.9	46.7	47.5	45.8
	Black	3.8	3.7	3.6	3.5	3.5	3.7	3.8	4.0	4.2	4.5	4.8
	American Indian	3.4	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.5	3.5	3.5
	Other	3.4	3.9	3.6	3.9	5.0	4.6	4.6	4.8	4.1	4.3	4.3
<b>Prenatal care began</b>	1st Trimester	74.9	74.6	75.4	76.1	76.5	76.5	77.1	78.4	78.4	78.2	80.4
	3rd Trimester	4.5	4.4	4.4	4.2	4.2	4.2	4.3	3.6	3.5	3.5	3.3
	No care	2.1	2.2	2.2	1.9	2.2	3.1	2.9	2.4	2.4	2.2	1.7
<b>Prenatal visits</b>	1-4	4.5	4.3	4.2	4.2	4.0	3.9	4.3	3.9	3.7	3.5	3.1
	≥5	89.4	88.4	89.0	90.9	92.0	90.5	92.0	93.7	93.7	94.2	95.1
	≥9	75.4	74.3	74.9	77.3	77.6	76.0	76.6	77.4	77.2	77.5	79.1
	≥13	29.9	30.7	32.2	34.4	32.8	30.5	27.7	25.5	27.5	29.6	30.1
<b>Medical risks/complications<sup>2</sup></b>		45.2	42.2	44.6	43.9	44.1	42.2	42.6	42.4	42.8	44.4	46.3
<b>Gestational age<sup>3</sup></b>	Preterm (<37 weeks)	9.7	9.9	10.4	10.0	10.1	10.6	11.0	10.8	10.7	10.3	10.2
<b>Birth weight</b>	<2,500 grams	6.7	6.8	7.0	6.9	6.8	7.0	7.1	6.9	7.0	7.0	7.0
	<1,500 grams	1.2	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
<b>Child's sex</b>	Male	51.2	51.3	51.1	50.8	51.4	51.1	51.1	51.1	51.2	51.3	51.0
	Female	48.8	48.7	48.9	49.2	48.6	48.9	48.9	48.9	48.8	48.7	49.0
<b>Plurality</b>	Multiple births	2.6	2.6	2.8	2.8	2.8	2.9	3.0	2.8	2.8	2.8	3.0
<b>Caesarean delivery</b>		17.3	18.0	19.1	20.5	21.8	22.8	23.8	25.4	26.0	26.8	27.8
<b>Place of delivery</b>	Hospital <sup>4</sup>	99.4	99.5	99.6	99.0	99.1	99.1	99.1	99.2	99.2	99.3	99.3
<b>Attendant at birth</b>	Midwife <sup>5</sup>	8.0	7.6	7.4	6.7	6.1	5.5	5.7	5.0	4.5	4.6	5.1
<b>Previous live births</b>	1 or more	60.9	61.0	60.9	61.8	65.0	61.9	62.7	62.9	62.3	62.9	63.1
<b>Number of LBW births</b>		4,428	4,653	5,100	5,081	5,079	5,479	5,666	5,630	6,175	6,205	5,974
<b>Age of mother</b>	≤19 years	17.4	16.7	16.7	16.1	16.2	14.9	13.6	13.7	14.3	13.7	12.6
	≥30 years	31.9	32.1	33.0	33.7	35.0	34.9	35.5	33.9	35.3	35.9	37.0
<b>Marital status</b>	Unmarried	45.1	43.7	44.7	44.6	44.8	45.0	45.5	47.2	47.2	48.6	47.4
<b>Mother's education</b>	<9 years	10.8	9.3	10.0	10.5	9.3	10.1	9.2	8.9	8.2	8.2	6.7
<b>Mother's race/ethnicity</b>	White <sup>1</sup>	47.5	45.7	46.8	43.2	43.3	40.9	42.0	40.5	39.1	39.6	39.8
	Hispanic	38.8	40.5	40.3	42.3	42.0	44.6	43.6	43.7	44.6	44.2	43.6
	Black	7.0	6.3	6.4	6.9	6.2	6.1	6.3	7.4	7.6	8.3	8.0
	American Indian	3.3	3.5	2.9	3.5	3.0	3.2	3.3	3.5	3.8	3.1	3.2
	Other	3.4	4.0	3.5	4.1	5.6	5.2	4.9	4.9	4.9	4.8	5.5
<b>Prenatal care began</b>	1st Trimester	70.9	69.9	71.7	73.9	71.0	74.7	75.9	78.0	78.1	77.6	80.2
	3rd Trimester	3.9	4.1	3.6	3.3	3.8	3.4	2.9	2.4	2.6	2.9	2.6
	No care	4.9	4.4	4.6	4.3	4.9	5.4	4.7	4.7	4.9	4.5	3.9
<b>Prenatal visits</b>	1-4	9.4	8.3	8.1	8.1	8.8	7.7	9.1	9.3	8.4	8.1	7.3
	≥5	78.2	78.1	78.7	81.7	83.0	83.1	84.8	85.8	86.5	87.3	88.6
	≥9	58.1	58.7	58.8	61.4	58.4	59.3	60.5	60.9	60.6	61.7	63.7
	≥13	23.1	25.0	27.2	28.5	25.3	27.0	24.6	22.1	22.4	25.6	25.7
<b>Medical risks/complications<sup>2</sup></b>		69.9	68.0	69.6	67.2	68.1	62.8	62.7	65.7	64.4	66.0	69.6
<b>Gestational age<sup>3</sup></b>	Preterm (<37 weeks)	72.2	71.1	72.3	71.2	71.8	71.8	74.1	75.0	73.5	72.9	72.7
<b>Birth weight</b>	<1,500 grams	17.5	16.3	16.4	15.9	17.2	16.1	16.6	17.2	17.1	17.1	16.8
	<1,000 grams	9.0	8.1	7.3	7.7	9.1	8.0	8.1	9.0	8.0	8.3	8.0
<b>Child's sex</b>	Male	48.1	50.3	49.2	47.7	48.6	48.3	47.7	46.8	47.1	48.2	47.9
	Female	51.9	49.7	50.8	52.3	51.4	51.7	52.2	53.2	52.9	51.8	52.1
<b>Plurality</b>	Multiple births	22.0	21.6	23.0	23.7	24.0	24.4	25.3	22.9	23.2	24.4	23.9
<b>Caesarean delivery</b>		35.5	35.0	38.5	37.9	40.8	41.7	41.1	43.1	43.4	45.1	47.4
<b>Place of delivery</b>	Hospital <sup>4</sup>	99.5	99.7	99.8	99.7	99.8	99.7	99.7	99.7	99.8	99.7	99.8
<b>Attendant at birth</b>	Midwife <sup>5</sup>	2.7	3.4	3.4	3.0	2.6	2.2	2.4	1.8	1.4	1.9	2.2
<b>Previous live births</b>	1 or more	57.3	57.9	58.2	57.9	57.3	58.6	58.4	58.1	58.9	60.1	59.8

\* Urban = Maricopa, Pima, Pinal and Yuma counties. The remaining counties comprise Arizona's rural areas.

See Technical Notes for more information.

<sup>1</sup>Non-Hispanic.

<sup>2</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>3</sup>Physician's estimate.

<sup>4</sup>Hospital, clinic, medical center or maternity home.

<sup>5</sup>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, ARIZONA, 1998-2008  
(RURAL REGIONS)\***

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	12,115	11,877	12,333	11,851	12,498	12,848	13,409	13,603	14,083	14,413	13,952
<b>Age of mother</b>											
≤19 years	17.0	17.4	16.9	15.9	15.7	15.7	15.5	15.5	14.9	15.8	15.4
≥30 years	28.7	27.3	27.6	27.7	27.4	27.9	27.3	27.9	26.6	26.2	26.8
<b>Marital status</b>											
Unmarried	42.9	42.9	44.2	43.3	44.5	46.0	46.8	48.4	49.2	49.4	51.1
<b>Mother's education</b>											
<9 years	5.2	5.3	5.2	5.1	5.2	5.2	5.6	5.4	4.9	4.5	4.0
<b>Mother's race/ethnicity</b>											
White <sup>1</sup>	48.0	48.0	47.5	47.9	46.5	45.8	45.7	45.0	46.5	46.6	46.7
Hispanic	22.5	22.7	23.9	24.3	24.4	25.5	26.1	26.3	26.7	26.6	25.7
Black	1.1	1.1	1.0	1.2	1.1	1.2	1.1	1.0	1.1	1.1	1.3
American Indian	26.7	25.4	25.7	24.6	24.3	25.0	25.2	25.4	23.5	23.2	24.4
Other	1.7	2.9	1.9	2.0	3.7	2.6	1.9	2.2	2.2	2.6	2.0
<b>Prenatal care began</b>											
1st Trimester	66.7	70.8	72.2	71.9	70.8	70.0	71.4	73.9	73.5	73.7	72.7
3rd Trimester	7.0	5.7	5.4	5.0	5.1	4.9	4.8	4.7	4.9	4.8	5.2
No care	2.0	1.9	1.7	1.6	1.7	1.7	2.1	2.1	1.9	1.9	1.9
<b>Prenatal visits</b>											
1-4	7.4	7.0	7.3	6.8	7.2	6.8	6.5	6.1	6.2	6.0	6.8
≥5	88.6	88.7	88.0	89.2	88.5	88.0	90.1	91.5	91.7	91.9	91.1
≥9	66.3	67.0	66.5	67.1	66.0	66.6	68.9	72.4	71.1	71.4	69.7
≥13	25.1	25.6	24.4	24.5	25.2	25.5	26.7	28.0	27.6	27.9	28.8
<b>Medical risks/complications<sup>2</sup></b>	49.9	48.7	47.0	52.1	54.7	56.3	56.6	58.3	53.5	50.7	48.2
<b>Gestational age<sup>3</sup></b>											
Preterm (<37 weeks)	9.2	9.2	9.3	9.3	9.4	10.0	10.9	10.0	10.0	10.0	9.7
<b>Birth weight</b>											
<2,500 grams	7.3	7.4	7.0	7.2	6.8	7.3	7.7	7.4	7.7	7.5	7.5
<1,500 grams	1.0	1.1	1.2	1.0	0.9	0.8	1.2	1.1	1.2	1.1	1.1
<b>Child's sex</b>											
Male	51.1	50.4	51.6	51.1	51.1	50.6	51.5	51.7	51.0	50.0	51.3
Female	48.9	49.6	48.4	48.9	48.9	49.4	48.5	48.3	49.0	50.0	48.7
<b>Plurality</b>											
Multiple births	2.5	2.5	2.0	1.8	2.4	2.3	2.0	2.3	2.4	2.2	2.4
<b>Caesarean delivery</b>	17.2	18.1	17.9	19.3	20.6	21.4	22.9	23.1	25.8	25.3	26.0
<b>Place of delivery</b>											
Hospital <sup>4</sup>	98.0	98.7	98.6	97.9	97.5	97.2	96.8	96.9	97.2	97.3	97.1
<b>Attendant at birth</b>											
Midwife <sup>5</sup>	15.4	15.0	14.7	13.5	12.2	12.4	12.6	12.9	12.4	12.5	12.7
<b>Previous live births</b>	1 or more	63.5	64.0	64.0	65.6	65.0	64.3	64.4	64.1	64.3	64.4
<b>Number of LBW births</b>	889	883	863	857	844	940	1,030	1,003	1,080	1,080	1,052
<b>Age of mother</b>											
≤19 years	15.6	17.7	18.7	16.6	16.2	17.8	17.8	17.5	16.0	17.2	16.4
≥30 years	30.6	29.5	30.2	29.9	29.7	33.9	27.6	31.5	28.8	28.1	29.4
<b>Marital status</b>											
Unmarried	47.8	46.2	51.5	43.5	48.3	50.3	52.1	54.0	54.9	53.1	55.2
<b>Mother's education</b>											
<9 years	6.6	5.5	4.2	5.5	5.8	6.4	6.2	5.4	5.4	4.8	3.9
<b>Mother's race/ethnicity</b>											
White <sup>1</sup>	51.3	47.0	46.6	48.8	47.5	45.6	43.8	44.8	43.5	48.0	47.6
Hispanic	21.7	22.3	22.7	22.6	22.6	26.0	28.2	24.7	29.5	25.8	24.9
Black	1.5	2.4	1.8	2.8	1.7	2.0	1.7	1.8	1.8	1.8	2.6
American Indian	24.1	25.9	26.5	24.5	24.3	23.8	24.5	26.2	21.9	21.4	22.7
Other	1.5	2.5	2.3	1.3	3.9	2.6	1.9	2.5	3.3	3.1	2.2
<b>Prenatal care began</b>											
1st Trimester	65.1	68.5	68.1	71.6	71.0	68.7	72.5	74.1	72.0	76.0	75.7
3rd Trimester	5.1	6.0	5.9	3.3	3.8	3.9	2.4	4.7	4.3	4.2	4.1
No care	4.3	3.2	4.0	2.9	2.8	3.8	3.5	4.4	5.2	4.5	3.5
<b>Prenatal visits</b>											
1-4	11.2	9.6	12.1	9.7	10.0	10.0	10.6	9.9	9.4	9.4	10.2
≥5	79.2	80.0	74.7	83.3	82.8	81.6	83.7	85.0	84.9	85.9	85.8
≥9	53.9	55.6	50.7	54.6	53.8	55.3	55.9	57.3	56.8	58.1	59.0
≥13	18.8	22.7	16.8	20.4	23.3	23.6	20.1	22.1	19.3	22.0	24.9
<b>Medical risks/complications<sup>2</sup></b>	73.1	75.7	69.7	73.0	73.6	71.1	69.3	75.3	69.2	65.1	63.9
<b>Gestational age<sup>3</sup></b>											
Preterm (<37 weeks)	63.7	65.6	65.5	67.6	65.6	65.0	69.5	66.1	68.0	68.9	65.9
<b>Birth weight</b>											
<1,500 grams	13.6	14.4	17.6	13.4	12.8	14.7	15.2	14.8	15.7	15.3	14.5
<1,000 grams	5.7	6.6	7.8	5.4	6.8	6.5	6.7	7.1	6.2	7.1	5.7
<b>Child's sex</b>											
Male	48.9	48.6	53.5	46.3	46.7	49.8	49.2	48.5	49.8	46.1	49.1
Female	51.1	51.2	46.5	53.7	53.3	50.1	50.8	51.5	50.2	53.9	50.8
<b>Plurality</b>											
Multiple births	20.6	19.7	16.5	15.6	18.2	17.8	15.0	17.8	18.2	15.9	19.8
<b>Caesarean delivery</b>	36.1	36.5	35.2	35.6	33.3	38.2	39.0	38.6	41.6	39.2	42.7
<b>Place of delivery</b>											
Hospital <sup>4</sup>	98.7	99.7	99.2	99.2	98.9	99.1	99.1	98.8	99.4	99.3	99.1
<b>Attendant at birth</b>											
Midwife <sup>5</sup>	6.2	6.4	5.0	7.6	6.4	6.2	6.5	6.1	5.3	5.6	5.1
<b>Previous live births</b>	1 or more	63.2	60.4	61.0	59.3	62.1	59.3	56.6	59.5	63.1	62.2

\* 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.

<sup>1</sup>Non-Hispanic.

<sup>2</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>3</sup>Physician's estimate.

<sup>4</sup>Hospital, clinic, medical center or maternity home.

<sup>5</sup>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, ARIZONA, 1998-2008**  
**(WHITE NON-HISPANIC MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	38,611	38,711	39,850	38,934	38,819	38,842	39,271	39,657	43,013	42,216	41,925
<b>Age of mother</b>											
≤19 Years	10.0	10.0	9.4	8.7	7.9	7.6	7.1	6.9	7.5	7.3	7.1
≥30 Years	37.3	37.4	38.1	39.1	39.3	39.9	40.3	39.3	37.9	38.5	38.7
<b>Marital status</b>											
Unmarried	25.0	24.8	24.8	24.5	25.0	25.1	24.8	26.1	27.7	28.4	29.5
<b>Mother's education</b>											
<9 years	1.6	1.5	1.5	1.5	1.3	1.5	1.4	1.3	1.2	1.2	1.1
<b>Prenatal care began</b>											
1st Trimester	83.5	84.7	86.0	86.2	86.5	86.8	87.3	87.7	86.9	86.5	87.3
3rd Trimester	2.5	2.2	2.0	1.9	1.9	1.9	1.9	1.8	2.0	2.1	1.9
No Care	0.8	0.8	0.7	0.6	0.7	0.6	0.7	0.8	0.9	0.9	0.7
<b>Prenatal visits</b>											
1-4	2.2	2.1	2.1	2.0	2.2	2.3	2.1	2.0	2.0	2.1	2.0
≥5	94.2	93.3	93.6	94.9	95.4	94.0	96.1	97.1	96.9	97.0	97.2
≥9	83.4	82.5	82.6	84.7	84.1	82.8	85.2	85.7	84.9	84.6	85.0
≥13	33.0	34.2	34.2	35.2	33.4	32.1	30.6	29.9	32.4	34.6	34.8
<b>Medical risks/ Complications<sup>1</sup></b>	47.6	44.2	45.7	46.7	47.9	49.2	58.7	48.1	45.4	47.5	47.7
<b>Gestational Age<sup>2</sup></b>											
Preterm (<37 weeks)	9.7	9.8	10.5	10.1	10.5	11.0	11.4	10.9	10.5	10.4	10.1
<b>Birth weight</b>											
<2,500 grams	6.6	6.5	7.0	6.7	6.7	6.9	7.2	6.9	6.7	7.1	6.9
<1,500 grams	1.1	1.0	1.1	1.0	1.2	1.1	1.1	1.1	1.1	1.1	1.1
<b>Child's sex</b>											
Male	51.4	51.3	51.5	51.2	51.7	51.2	51.0	51.5	51.3	50.8	51.1
Female	48.6	48.7	48.5	48.8	48.3	48.8	49.0	48.5	48.7	49.2	48.9
<b>Plurality</b>											
Multiple births	3.0	3.0	3.4	3.3	3.5	3.5	3.8	3.4	3.2	3.5	3.6
<b>Caesarean delivery</b>	18.6	19.6	20.6	22.2	23.8	24.2	25.9	27.1	27.9	28.6	29.5
<b>Place of delivery</b>											
Hospital <sup>3</sup>	98.7	99.0	99.0	98.0	98.2	97.9	97.6	97.8	97.9	97.9	97.9
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	5.3	5.0	5.1	5.0	4.0	3.9	3.6	3.1	3.8	3.6	4.0
<b>Previous live births</b>											
1 or more	59.0	58.8	58.6	59.7	59.3	58.9	59.8	59.2	58.9	59.7	59.5

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(WHITE NON-HISPANIC MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of LBW births</b>	2,559	2,516	2,772	2,615	2,600	2,672	2,836	2,729	2,891	2,978	2,878
<b>Age of mother</b>											
≤19 years	12.4	10.7	11.4	9.7	9.3	9.5	9.3	8.6	8.6	8.8	7.6
≥30 years	38.1	39.6	40.1	42.9	42.7	44.5	41.9	40.5	41.8	40.9	41.8
<b>Marital status</b>											
Unmarried	33.0	29.2	30.8	27.8	31.7	30.3	30.3	32.7	33.0	34.6	34.1
<b>Mother's education</b>											
<9 years	2.5	2.2	1.7	2.3	2.1	2.0	1.6	1.8	1.8	1.6	1.4
<b>Prenatal care began</b>											
1st Trimester	78.1	79.3	81.4	83.6	83.5	83.4	84.8	86.9	85.6	86.2	86.5
3rd Trimester	2.2	2.5	2.2	1.7	2.0	2.4	1.7	1.6	1.7	1.8	1.7
No Care	2.7	2.0	2.0	1.6	2.1	2.1	1.9	2.1	3.0	2.4	2.1
<b>Prenatal visits</b>											
1-4	5.5	5.0	4.8	4.5	6.2	5.2	5.7	5.8	5.2	5.5	4.7
≥5	94.4	82.6	83.3	87.9	87.5	87.9	90.4	92.0	91.6	92.0	92.9
≥9	65.0	65.0	65.6	68.8	64.7	66.8	69.6	69.7	68.6	70.1	69.8
≥13	25.9	28.5	30.1	31.8	28.5	31.8	29.4	28.1	27.1	31.0	29.9
<b>Medical risks/ Complications<sup>1</sup></b>											
	71.3	70.5	70.9	70.6	72.6	69.6	66.2	70.9	66.5	68.6	71.5
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	72.4	71.5	73.2	73.2	74.4	72.4	76.8	74.3	74.6	74.0	72.9
<b>Birth weight</b>											
<1,500 grams	16.1	15.9	15.5	15.4	17.3	16.5	14.9	15.8	16.1	15.0	15.7
<1,000 grams	8.0	7.6	6.7	6.9	8.5	7.7	7.1	8.4	7.1	6.2	6.8
<b>Child's sex</b>											
Male	47.7	48.9	49.3	47.5	48.0	49.5	47.2	46.2	47.4	46.9	47.0
Female	52.3	51.1	50.7	52.5	52.0	50.5	52.8	53.8	52.6	53.1	53.0
<b>Plurality</b>											
Multiple births	26.1	25.0	28.7	28.1	29.1	29.6	30.3	28.8	28.7	29.6	30.1
<b>Caesarean delivery</b>											
	39.0	39.5	43.0	44.0	45.8	48.1	46.8	47.9	48.4	49.6	53.2
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.3	99.4	99.8	99.5	99.8	99.5	99.5	99.6	99.5	99.5	99.4
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	1.5	1.9	2.2	2.2	1.7	1.2	1.4	0.9	0.9	1.2	1.3
<b>Previous live births</b>											
1 or more	56.5	56.0	56.0	55.8	55.2	54.7	54.6	54.3	56.9	57.5	58.3

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(HISPANIC OR LATINO MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	28,824	30,784	33,893	35,103	36,089	39,101	40,822	42,156	44,862	45,731	42,639
<b>Age of mother</b>											
≤19 years	20.7	20.0	19.3	18.9	18.2	17.4	17.5	17.1	17.2	17.0	16.8
≥30 years	21.0	21.4	21.4	22.4	22.9	23.6	24.7	25.6	25.5	26.5	27.5
<b>Marital status</b>											
Unmarried	49.7	50.3	51.4	51.0	52.2	52.7	53.9	54.3	55.4	56.7	56.5
<b>Mother's education</b>											
<9 years	20.2	20.0	20.0	19.7	19.0	19.2	18.8	17.5	16.4	15.4	13.9
<b>Prenatal care began</b>											
1st Trimester	62.6	62.7	63.5	65.3	65.6	65.8	67.0	69.5	70.1	70.5	73.4
3rd Trimester	7.4	7.1	7.2	6.8	6.6	6.2	6.3	5.2	5.1	4.9	4.5
No Care	3.8	3.9	3.6	3.2	3.8	4.8	4.5	3.6	3.6	3.2	2.5
<b>Prenatal visits</b>											
1-4	7.5	7.1	6.9	6.7	6.2	5.7	6.4	5.5	5.2	4.9	4.4
≥5	84.1	83.4	84.3	86.8	88.2	87.4	88.4	90.8	91.0	91.8	93.0
≥9	65.5	64.9	65.3	68.4	69.4	68.5	67.9	70.0	70.3	71.2	73.3
≥13	26.5	27.0	29.3	32.7	32.6	28.9	25.8	22.9	23.9	25.7	26.7
<b>Medical risks/ Complications<sup>1</sup></b>	42.0	39.7	42.1	41.6	41.0	38.1	39.3	40.5	41.5	41.4	43.7
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	9.3	9.5	9.8	9.4	9.4	9.8	10.3	10.1	10.1	9.8	9.9
<b>Birth weight</b>											
<2,500 grams	6.6	6.8	6.7	6.7	6.4	6.9	6.8	6.4	6.9	6.6	6.7
<1,500 grams	1.1	1.0	1.1	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.1
<b>Child's sex</b>											
Male	50.8	51.1	50.9	50.8	51.2	51.0	51.2	51.1	51.2	51.4	51.0
Female	49.2	48.9	49.1	49.2	48.8	49.0	48.8	48.9	48.8	48.6	49.0
<b>Plurality</b>											
Multiple births	2.2	2.3	2.0	2.1	2.1	2.3	2.2	2.3	2.4	2.2	2.2
<b>Caesarean delivery</b>	15.8	16.2	17.4	18.6	19.5	21.1	21.9	23.5	24.0	24.6	25.7
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.7	99.8	99.8	99.8	99.8	99.8	99.7	99.7	99.8	99.7	99.8
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	9.6	9.2	8.5	7.3	7.0	5.6	5.9	5.2	4.6	4.9	5.6
<b>Previous live births</b>											
1 or more	63.3	64.0	63.6	64.9	65.5	65.5	65.9	66.7	66.0	66.4	67.4

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(HISPANIC OR LATINO MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of LBW births</b>	1,911	2,090	2,270	2,345	2,325	2,687	2,759	2,710	3,074	3,021	2,866
<b>Age of mother</b>											
≤19 years	20.7	20.0	23.4	23.2	21.4	21.1	18.9	19.6	20.5	19.4	18.7
≥30 years	21.0	21.4	23.7	22.4	23.8	24.4	26.7	26.6	27.0	28.5	29.0
<b>Marital status</b>											
Unmarried	56.1	55.8	58.1	56.6	56.3	57.0	58.0	59.2	58.6	60.2	58.6
<b>Mother's education</b>											
<9 years	22.6	18.9	20.4	20.8	18.8	19.1	18.2	16.8	15.0	15.7	12.2
<b>Prenatal care began</b>											
1st Trimester	60.6	59.9	60.5	64.1	64.9	65.8	67.2	69.5	71.1	69.7	74.8
3rd Trimester	6.3	6.4	6.3	5.4	5.2	4.0	3.9	3.4	3.6	4.0	3.2
No Care	7.5	7.0	6.8	6.6	6.7	7.5	6.5	6.7	6.4	6.0	4.7
<b>Prenatal visits</b>											
1-4	13.7	12.0	12.4	11.3	12.0	10.0	12.5	12.5	11.0	10.7	9.6
≥5	72.5	74.3	73.8	77.3	79.0	79.3	79.9	80.6	82.3	83.1	85.5
≥9	50.4	52.0	50.6	53.4	51.3	52.5	50.9	52.7	53.5	54.4	58.5
≥13	20.5	21.6	22.3	24.0	23.1	22.2	19.9	16.9	18.6	20.7	22.5
<b>Medical risks</b>											
<b>Complications<sup>1</sup></b>	67.6	66.0	67.0	63.9	64.0	58.5	61.1	63.5	62.4	62.2	67.1
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	69.4	69.4	69.8	69.1	68.4	69.7	71.7	74.3	71.5	71.6	72.0
<b>Birth weight</b>											
<1,500 grams	16.9	15.5	17.0	15.4	16.2	15.7	18.2	18.0	18.2	18.2	16.3
<1,000 grams	8.6	7.7	7.5	7.3	8.8	8.2	9.0	9.4	8.6	9.8	7.4
<b>Child's sex</b>											
Male	47.9	51.2	50.6	48.2	48.3	47.7	48.1	47.1	47.2	49.3	48.9
Female	52.1	48.8	49.4	51.8	51.7	52.3	51.9	52.9	52.8	50.7	51.1
<b>Plurality</b>											
Multiple births	18.9	18.8	16.3	18.8	19.1	18.7	19.5	18.9	19.1	19.5	18.3
<b>Caesarean delivery</b>											
Caesarean delivery	31.9	31.2	33.1	31.9	33.5	35.3	36.5	38.3	39.8	40.1	41.4
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.5	99.8	99.7	99.8	99.9	99.8	99.7	99.6	99.9	99.7	99.9
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	3.8	4.3	4.2	3.8	3.4	2.7	2.8	2.5	1.5	2.4	2.9
<b>Previous live births</b>											
1 or more	59.3	60.1	59.7	58.8	60.6	61.4	60.7	60.8	61.2	63.8	62.2

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(BLACK OR AFRICAN AMERICAN MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	2,629	2,699	2,760	2,736	2,753	3,022	3,216	3,450	3,864	4,165	4,301
<b>Age of mother</b>											
≤19 years	22.4	22.3	20.7	19.9	17.0	18.2	16.8	16.5	15.6	14.9	15.3
≥30 years	22.5	22.2	23.9	21.5	25.1	23.9	25.7	25.3	26.2	27.0	26.7
<b>Marital status</b>											
Unmarried	63.1	64.0	62.2	64.2	61.8	62.7	62.0	61.9	62.3	61.9	62.6
<b>Mother's education</b>											
<9 years	3.0	2.2	2.7	2.7	2.5	2.6	3.0	4.8	4.6	4.4	5.0
<b>Prenatal care began</b>											
1st Trimester	71.4	71.1	71.1	73.8	75.2	75.7	75.8	76.6	77.4	76.8	77.6
3rd Trimester	4.6	4.5	3.4	4.1	3.6	4.4	4.4	3.4	2.8	3.7	3.7
No Care	3.8	1.9	2.4	1.6	1.7	3.5	3.3	2.6	2.3	2.7	2.1
<b>Prenatal visits</b>											
1-4	5.6	4.9	4.2	4.5	4.3	4.1	4.6	4.5	4.1	4.4	3.7
≥5	85.1	83.3	85.5	88.2	91.3	89.3	91.0	92.7	93.3	92.8	93.9
≥9	71.4	68.2	70.4	73.1	75.0	74.7	75.2	74.4	74.6	75.0	75.4
≥13	27.7	26.7	30.0	34.7	31.3	31.7	28.5	24.6	26.9	28.2	28.5
<b>Medical risks</b>											
<b>Complications<sup>1</sup></b>	49.2	46.4	47.9	46.1	48.5	46.6	44.1	44.4	44.4	46.4	50.3
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	12.9	14.5	14.9	14.8	14.0	14.4	14.4	16.4	14.5	14.9	14.0
<b>Birth weight</b>											
<2,500 grams	12.2	12.3	13.0	13.7	11.9	11.7	11.6	12.6	12.7	12.8	11.7
<1,500 grams	2.6	2.8	2.6	2.7	2.5	2.2	2.5	2.5	2.3	2.6	2.6
<b>Child's sex</b>											
Male	52.0	53.7	50.7	49.0	52.0	51.8	51.3	50.5	50.8	51.8	52.4
Female	48.0	46.3	49.3	51.0	48.0	48.2	48.7	49.5	49.2	48.2	47.6
<b>Plurality</b>											
Multiple births	2.2	2.9	3.7	4.7	3.3	3.8	3.4	3.1	3.8	3.6	4.1
<b>Caesarean delivery</b>											
Caesarean delivery	20.3	19.3	20.6	22.4	24.2	25.5	25.8	27.4	29.1	30.3	30.5
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.4	99.7	99.7	99.0	99.6	99.2	99.3	99.5	99.3	99.6	99.4
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	5.1	5.2	5.1	5.0	3.8	3.4	3.5	3.0	2.6	2.4	3.4
<b>Previous live births</b>											
1 or more	61.8	61.0	62.7	62.8	62.3	61.4	63.5	62.3	61.4	63.2	62.7

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(BLACK OR AFRICAN AMERICAN MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of LBW births</b>	322	332	358	392	327	354	373	435	489	532	503
<b>Age of mother</b>											
≤19 years	26.7	22.9	23.7	17.9	18.0	16.9	18.0	16.8	17.0	15.8	16.7
≥30 years	23.6	24.8	24.9	28.0	29.1	24.6	26.8	26.7	29.2	28.2	31.8
<b>Marital status</b>											
Unmarried	67.7	64.4	68.0	68.3	67.0	68.1	68.4	65.7	66.1	66.4	65.2
<b>Mother's education</b>											
<9 years	3.7	2.2	3.7	2.4	1.8	2.5	2.1	6.2	4.3	5.5	4.4
<b>Prenatal care began</b>											
1st Trimester	66.8	68.1	67.1	69.9	74.0	74.0	72.1	75.6	75.9	77.4	77.7
3rd Trimester	3.4	4.3	2.3	2.4	2.8	5.4	3.5	2.3	1.6	3.4	3.4
No Care	7.5	2.5	6.3	4.5	4.6	5.9	6.7	4.4	3.5	3.6	4.4
<b>Prenatal visits</b>											
1-4	12.1	8.4	6.9	9.3	6.7	9.3	9.4	9.0	9.4	9.0	6.8
≥5	71.8	74.6	76.6	76.8	84.7	79.7	82.3	85.5	86.7	87.4	88.5
≥9	51.9	55.7	52.3	57.6	56.9	56.8	59.5	57.7	60.9	60.0	62.0
≥13	19.9	25.1	25.7	29.1	22.3	28.8	24.1	23.4	21.3	22.9	21.3
<b>Medical risks</b>											
<b>Complications<sup>1</sup></b>	75.2	70.0	69.7	67.2	65.1	59.3	61.7	64.1	63.0	67.7	68.4
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	68.0	72.6	70.1	69.1	68.5	70.1	71.6	74.3	70.6	70.1	71.6
<b>Birth weight</b>											
<1,500 grams	21.5	22.9	19.8	19.4	21.4	18.4	21.7	20.0	18.2	20.3	22.1
<1,000 grams	13.7	14.5	10.9	12.5	12.8	11.6	10.5	11.0	9.8	10.2	13.1
<b>Child's sex</b>											
Male	47.2	50.2	47.4	43.5	48.9	49.4	47.5	47.1	45.2	47.9	49.7
Female	52.8	49.8	52.6	56.5	51.1	50.6	52.5	52.9	54.6	52.1	50.3
<b>Plurality</b>											
Multiple births	16.5	17.3	20.9	25.1	18.7	19.5	20.1	14.5	18.2	18.6	19.1
<b>Caesarean delivery</b>											
Caesarean delivery	32.3	31.3	33.4	34.4	38.5	34.7	36.2	39.3	37.4	43.0	44.9
<b>Place of delivery</b>											
Hospital <sup>3</sup>	98.4	100.0	99.7	99.7	100.0	99.7	98.7	100.0	99.6	100.0	99.8
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	1.9	3.1	2.3	2.1	1.8	2.3	1.6	1.1	1.0	1.1	2.0
<b>Previous live births</b>											
1 or more	57.5	61.5	65.4	66.4	64.8	64.7	63.5	59.8	62.8	64.5	62.8

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(AMERICAN INDIAN OR ALASKA NATIVE MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	5,460	5,295	5,602	5,340	5,545	5,881	6,120	6,293	6,364	6,408	6,362
<b>Age of mother</b>											
≤19 years	20.3	19.8	19.4	19.0	18.7	19.4	18.7	19.1	19.1	20.1	18.6
≥30 years	26.6	25.4	25.9	24.3	25.8	23.8	24.9	25.4	23.6	24.0	24.0
<b>Marital status</b>											
Unmarried	68.2	69.2	68.5	70.1	69.7	72.4	73.1	72.9	74.8	75.9	75.8
<b>Mother's education</b>											
<9 years	4.6	4.9	4.7	4.1	3.9	3.8	3.9	3.5	3.5	3.0	3.2
<b>Prenatal care began</b>											
1st Trimester	61.2	64.1	65.8	64.6	64.4	68.8	69	67.9	65.9	65.9	65.1
3rd Trimester	8.8	7.4	7.4	6.8	7.1	6.0	5.6	6.6	7.0	6.6	7.8
No Care	2.3	2.4	2.4	1.9	2.6	2.4	3.0	3.0	3.5	3.2	3.1
<b>Prenatal visits</b>											
1-4	11.0	9.7	10.2	9.7	9.8	9.3	9.0	9.6	9.7	8.8	9.3
≥5	84.8	84.5	84.2	85.5	85.6	85.7	87.0	87.3	86.5	87.7	87.4
≥9	58.2	59.4	59.6	60.3	61.2	60.9	62.5	63.3	60.5	61.2	59.9
≥13	18.6	19.6	20.0	20.3	19.0	20.4	20.6	19.5	18.3	19.4	18.7
<b>Medical risks/</b>											
<b>    Complications<sup>1</sup></b>											
Complications <sup>1</sup>	56.2	54.8	55.1	54.4	55.4	51.4	55.7	55.1	56.5	57.2	54.8
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	9.1	9.9	9.4	10.1	9.6	9.8	10.9	10.6	11.7	10.4	9.8
<b>Birth weight</b>											
<2,500 grams	6.6	7.4	6.7	7.3	6.5	6.8	7.2	7.3	7.4	6.6	6.7
<1,500 grams	1.2	1.2	1.4	1.0	0.9	0.9	0.9	1.1	1.1	1.0	1.1
<b>Child's sex</b>											
Male	51.2	50.0	50.9	50.0	50.4	49.5	51.2	50.9	50.0	50.2	50.1
Female	48.8	50.0	49.1	50.0	49.6	50.5	48.8	49.1	50.0	49.8	49.9
<b>Plurality</b>											
Multiple births	1.5	1.8	1.5	1.5	1.8	1.7	1.7	1.9	1.8	1.4	1.5
<b>Caesarean delivery</b>											
Caesarean delivery	13.8	15.1	15.8	16.7	18.4	19.2	19.4	20.6	22.4	22.9	23.1
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.6	99.7	99.6	99.4	99.6	99.5	99.6	99.5	99.6	99.7	99.7
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	37.2	34.7	34.4	31.4	33.0	31.5	32.3	31.6	28.8	29.3	28.0
<b>Previous live births</b>											
1 or more	68.2	68.3	70.1	68.1	67.9	66.8	67.2	67.5	68.1	66.5	66.9

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(AMERICAN INDIAN OR ALASKA NATIVE MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of LBW births</b>	362	391	376	392	359	402	441	460	473	426	428
<b>Age of mother</b>											
≤19 years	17.3	21.9	17.7	20.4	16.2	15.2	18.6	19.6	19.2	22.8	16.8
≤30 years	28.5	27.2	30.6	28.6	33.4	31.6	28.3	29.8	28.5	28.4	26.6
<b>Marital status</b>											
Unmarried	69.3	72.1	69.9	71.7	70.5	72.9	74.6	73.3	76.5	75.8	80.1
<b>Mother's education</b>											
<9 years	6.7	4.2	4.2	4.3	4.2	6.0	4.5	3.9	4.2	2.1	4.4
<b>Prenatal care began</b>											
1st Trimester	62.2	61.1	61.3	63.3	61.6	65.2	67.1	67.0	63.0	67.4	66.8
3rd Trimester	6.4	6.5	5.2	3.8	4.7	5.7	3.2	4.8	7.0	5.4	6.8
No Care	7.5	5.7	7.5	4.8	9.2	7.5	5.9	8.5	9.5	8.5	7.5
<b>Prenatal visits</b>											
1-4	17.7	13.2	16.1	16.8	14.2	13.2	13.8	13.0	15.0	11.5	16.4
≥5	70.4	72.6	66.2	72.2	71.9	76.6	78.9	77.4	74.8	79.6	75.7
≥9	43.3	47.4	44.2	43.9	44.0	45.5	50.8	50.2	44.4	46.2	44.6
≥13	10.2	16.7	15.3	17.3	14.8	17.4	16.3	15.4	11.4	15.7	16.6
<b>Medical risks/ Complications<sup>1</sup></b>											
78.5	81.3	78.4	79.8	77.4	72.9	71.7	72.8	74.8	69.7	66.1	
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	71.5	70.6	72.9	71.2	70.5	69.7	68.5	70.2	74.2	71.8	71.7
<b>Birth weight</b>											
<1,500 grams	17.4	15.9	20.7	14.1	14.2	13.2	12.7	15.2	15.4	15.3	16.8
<1,000 grams	7.7	6.6	9.0	6.4	7.8	6.2	5.2	6.5	5.5	7.5	7.9
<b>Child's sex</b>											
Male	52.5	50.9	49.1	46.2	51.8	49.0	53.7	51.3	52.0	46.0	45.6
Female	47.5	48.9	50.9	53.8	48.2	51.0	46.3	48.7	48.0	54.0	54.4
<b>Plurality</b>											
Multiple births	12.4	15.5	13.5	9.7	11.7	15.2	13.2	11.7	13.5	11.3	13.3
<b>Caesarean delivery</b>											
37.5	32.7	40.5	33.9	39.3	38.3	36.5	36.5	39.3	40.1	39.3	
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.4	100.0	98.7	99.2	99.2	99.3	99.8	98.9	99.8	99.8	99.8
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	15.5	13.2	11.9	15.8	14.8	15.9	16.1	13.3	11.8	14.3	10.7
<b>Previous live births</b>											
1 or more	68.5	61.6	70.1	67.1	62.7	64.4	62.4	66.5	68.1	59.9	66.4

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(ASIAN OR PACIFIC ISLANDER MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of births</b>	1,747	1,875	2,041	2,104	2,281	2,524	2,614	2,805	3,136	3,412	3,425
<b>Age of mother</b>											
≤19 years	4.2	5.8	4.9	4.9	4.2	4.2	3.5	3.4	2.9	3.0	3.3
≥30 years	47.8	46.6	47.4	48.3	49.5	51.6	52.8	52.7	53.7	53.9	55.9
<b>Marital status</b>											
Unmarried	16.4	18.1	15.1	17.0	15.5	16.3	15.8	17.0	16.2	17.6	17.4
<b>Mother's education</b>											
<9 years	2.7	3.7	2.4	2.6	1.5	2.2	2.4	1.8	2.4	1.6	2.3
<b>Prenatal care began</b>											
1st Trimester	82.6	81.5	85.0	82.7	84.3	84.2	84.7	86.3	86.1	86.5	86.4
3rd Trimester	3.4	2.9	1.9	2.4	2.0	2.6	3.1	1.9	2.1	2.1	3.1
No Care	0.6	0.9	0.9	1.1	1.1	1.6	1.5	1.0	1.2	1.5	1.3
<b>Prenatal visits</b>											
1-4	3.1	2.5	2.4	2.4	2.2	2.9	2.9	2.5	2.0	1.8	2.4
≥5	93.0	92.6	92.6	94.6	94.4	92.5	94.9	96.4	96.5	96.6	96.2
≥9	79.5	79.8	82.6	82.1	81.9	80.5	82.3	84.1	82.7	83.9	83.2
≥13	28.2	27.2	31.3	29.6	27.8	26.2	24.6	25.8	30.3	35.3	33.5
<b>Medical risks/ Complications<sup>1</sup></b>	42.6	40.9	44.1	45.0	44.7	44.8	47.1	45.0	43.5	45.4	46.4
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	9.3	10.2	9.3	9.8	11.0	10.8	11.0	10.2	10.4	9.6	10.0
<b>Birth weight</b>											
<2,500 grams	7.3	8.0	7.4	7.7	8.6	8.5	8.0	8.0	8.5	8.0	9.1
<1,500 grams	1.2	0.9	1.0	0.9	1.2	1.5	1.1	1.2	1.1	1.0	1.5
<b>Child's sex</b>											
Male	51.7	50.2	50.4	49.9	50.4	50.8	52.5	50.7	52.2	53.2	51.3
Female	48.3	49.8	49.6	50.1	49.6	49.2	47.5	49.3	47.8	46.8	48.7
<b>Plurality</b>											
Multiple births	2.5	2.9	1.9	1.7	3.9	3.2	2.4	2.0	2.7	2.3	3.6
<b>Caesarean delivery</b>	15.1	20.7	19.7	23.8	16.2	25.6	26.5	28.1	30.5	30.0	32.0
<b>Place of delivery</b>											
Hospital <sup>3</sup>	99.6	99.0	99.5	99.4	99.1	99.2	99.3	99.5	99.4	99.5	99.4
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	5.1	3.8	4.0	4.0	2.8	2.9	2.8	2.3	2.1	1.7	2.7
<b>Previous live births</b>											
1 or more	54.4	55.2	51.3	53.0	52.4	53.0	53.8	54.4	53.3	54.5	52.9

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>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, ARIZONA, 1998-2008**  
**(ASIAN OR PACIFIC ISLANDER MOTHERS)**

Characteristic	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Number of LBW births</b>	128	150	151	163	197	215	210	223	268	272	311
<b>Age of mother</b>											
≤19 years	5.5	10.0	7.9	6.1	6.6	1.4	6.2	3.6	1.1	2.2	3.5
≤30 years	50.0	46.7	41.7	48.5	52.3	60.5	51.9	50.2	53.7	55.5	59.5
<b>Marital status</b>											
Unmarried	18.0	22.0	20.5	18.4	21.8	14.4	20.0	22.4	18.7	16.9	21.5
<b>Mother's education</b>											
<9 years	3.1	4.0	3.3	1.8	1.5	2.3	1.9	1.3	3.0	1.1	2.6
<b>Prenatal care began</b>											
1st Trimester	79.7	76	76.2	82.8	86.8	83.7	87.6	83.9	87.7	83.8	82.6
3rd Trimester	4.7	1.3	3.3	0.6	1.0	1.9	2.4	3.6	1.5	1.5	3.5
No Care	2.3	2.0	4.0	3.1	4.6	3.3	1.9	2.7	3.0	3.7	4.2
<b>Prenatal visits</b>											
1-4	5.5	4.7	7.9	6.1	3.0	5.6	6.7	7.2	3.7	4.0	7.7
≥5	83.6	88.0	81.5	89.0	86.3	87.0	90.0	89.7	92.9	92.3	88.1
≥9	60.2	65.3	58.3	71.8	65.3	66.5	67.1	67.3	68.7	67.6	69.8
≥13	21.9	22.7	20.5	23.9	29.4	31.2	19.0	22.4	22.8	29.4	34.1
<b>Medical risks/</b>											
<b>Complications<sup>1</sup></b>											
62.5	60.0	64.2	65.0	63.5	55.8	59.5	67.7	67.9	66.5	61.1	
<b>Gestational age<sup>2</sup></b>											
Preterm (<37 weeks)	68.0	74.7	80.1	73.6	82.7	69.3	60.0	65.9	67.2	68.0	60.5
<b>Birth weight</b>											
<1,500 grams	16.4	10.7	13.2	11.7	13.7	18.1	13.8	15.7	13.4	12.9	16.1
<1,000 grams	4.7	4.7	5.3	4.3	6.6	7.4	9.0	5.8	5.2	4.8	9.3
<b>Child's sex</b>											
Male	45.3	48.0	49.7	50.9	49.2	46.0	45.7	47.1	49.3	47.4	51.8
Female	54.7	52.0	50.3	49.1	50.8	54.0	54.3	52.9	50.7	52.6	48.2
<b>Plurality</b>											
Multiple births	25.0	18.7	13.2	12.9	30.5	28.4	21.4	19.7	19.0	21.7	26.7
<b>Caesarean delivery</b>											
27.3	32.0	25.8	35.6	40.1	47.9	38.1	46.6	44.4	40.4	49.8	
<b>Place of delivery</b>											
Hospital <sup>3</sup>	100.0	99.3	100.0	100.0	99.5	100.0	100.0	100.0	100.0	100.0	99.7
<b>Attendant at birth</b>											
Midwife <sup>4</sup>	0.8	1.3	1.3	1.2	0.5	0.5	1.4	0.4	1.9	1.1	2.6
<b>Previous live births</b>											
1 or more	51.6	54.7	43.7	47.2	44.2	47.9	51.4	55.6	50.0	47.1	51.8

<sup>1</sup>Reported medical risks for this pregnancy and/or complications of labor and delivery.

<sup>2</sup>Physician's estimate.

<sup>3</sup>Hospital, clinic, medical center or maternity home.

<sup>4</sup>Licensed Midwife or Certified Nurse Midwife.

**TABLE 1B-16  
SINGLE AND PLURAL LIVE BIRTHS BY BIRTHWEIGHT, ARIZONA RESIDENTS, 1998-2008**

Weight in grams	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Under 1000, total</b>	448	437	438	437	520	510	531	579	559	589	538
<b>Single</b>	353	346	350	346	396	393	434	452	413	450	419
<b>Plural</b>	95	91	88	91	124	117	97	127	146	139	119
<b>1,000-1,499, total</b>	446	448	552	486	462	514	569	540	670	634	618
<b>Single</b>	333	335	392	362	334	369	426	404	469	452	431
<b>Plural</b>	113	113	160	124	128	144	143	136	201	182	187
<b>1,500-1,999, total</b>	1,055	1,096	1,143	1,179	1,151	1,295	1,309	1,254	1,425	1,362	1,360
<b>Single</b>	735	779	799	796	808	913	882	909	979	935	944
<b>Plural</b>	320	317	344	383	343	382	427	345	446	427	416
<b>2,000-2,499, total</b>	3,369	3,555	3,843	3,841	3,793	4,108	4,295	4,267	4,612	4,700	4,510
<b>Single</b>	2,730	2,854	3,082	3,099	3,014	3,243	3,370	3,397	3,771	3,762	3,598
<b>Plural</b>	638	701	761	742	779	863	925	870	841	938	912
<b>2,500-3,999, total</b>	65,647	67,569	71,466	71,936	74,047	76,777	79,390	81,676	86,943	87,739	84,904
<b>Single</b>	64,808	66,690	70,550	71,009	73,035	75,685	78,324	80,530	85,755	86,631	83,674
<b>Plural</b>	839	879	916	927	1,012	1,063	1,066	1,146	1,188	1,108	1,230
<b>4,000 and over, total</b>	6,900	7,316	7,503	7,297	7,364	7,439	7,269	7,463	7,821	7,635	7,268
<b>Single</b>	6,897	7,313	7,501	7,295	7,363	7,434	7,266	7,462	7,817	7,634	7,267
<b>Plural</b>	3	3	2	2	1	2	3	1	4	1	1
<b>All weights, total <sup>1</sup></b>	77,940	80,505	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215
<b>Single</b>	75,856	78,397	82,714	82,943	84,984	88,167	90,732	93,173	99,216	99,889	96,347
<b>Plural</b>	2,017	2,107	2,271	2,270	2,395	2,581	2,663	2,625	2,830	2,798	2,868

<sup>1</sup> Includes records with unknown weight.

**TABLE 1B-17  
RESIDENT BIRTHS BY MONTH OF OCCURRENCE, ARIZONA, 1998-2008**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
<b>1998</b>	6,524	5,761	6,390	6,103	6,107	6,052	6,629	7,127	6,944	6,895	6,624	6,774	77,940
<b>Percent</b>	8.4	7.4	8.2	7.8	7.8	7.8	8.5	9.2	8.9	8.8	8.5	8.7	100.0
<b>1999</b>	6,577	6,118	6,860	6,370	6,334	6,426	7,004	7,079	7,331	6,935	6,532	6,939	80,505
<b>Percent</b>	8.2	7.6	8.5	7.9	7.9	8.0	8.7	8.8	9.1	8.6	8.1	8.6	100.0
<b>2000</b>	7,051	6,498	6,987	6,431	6,799	6,867	7,273	7,608	7,666	7,345	7,172	7,288	84,985
<b>Percent</b>	8.3	7.6	8.2	7.6	8.0	8.1	8.6	9.0	9.0	8.6	8.4	8.6	100.0
<b>2001</b>	7,232	6,481	7,132	6,516	6,792	6,660	7,367	7,807	7,458	7,377	7,083	7,308	85,213
<b>Percent</b>	8.5	7.6	8.4	7.6	8.0	7.8	8.6	9.2	8.8	8.7	8.3	8.6	100.0
<b>2002</b>	7,194	6,499	7,123	6,739	7,076	6,960	7,506	7,908	7,962	7,778	7,088	7,546	87,379
<b>Percent</b>	8.2	7.4	8.2	7.7	8.1	8.0	8.6	9.1	9.1	8.9	8.1	8.6	100.0
<b>2003</b>	7,526	6,842	7,285	7,105	7,375	7,096	7,932	8,209	8,207	8,068	7,221	7,917	90,783
<b>Percent</b>	8.3	7.5	8.0	7.8	8.1	7.8	8.7	9.0	9.0	8.9	8.0	8.7	100.0
<b>2004</b>	7,570	7,191	7,742	7,196	7,231	7,305	8,005	8,174	8,585	8,346	8,014	8,037	93,396
<b>Percent</b>	8.1	7.7	8.3	7.7	7.7	7.8	8.6	8.8	9.2	8.9	8.6	8.6	100.0
<b>2005</b>	7,700	7,146	7,946	7,515	7,583	7,802	8,286	8,746	8,712	8,058	7,926	8,378	95,798
<b>Percent</b>	8.0	7.5	8.3	7.8	7.9	8.1	8.6	9.1	9.1	8.4	8.3	8.7	100.0
<b>2006</b>	8,089	7,614	8,371	7,724	8,088	8,311	8,897	9,265	9,166	9,140	8,618	8,759	102,042
<b>Percent</b>	7.9	7.5	8.2	7.6	7.9	8.1	8.7	9.1	9.0	9.0	8.4	8.6	100.0
<b>2007</b>	8,659	7,721	8,324	7,885	8,207	8,341	9,011	9,396	9,077	9,101	8,388	8,577	102,687
<b>Percent</b>	8.4	7.5	8.1	7.7	8.0	8.1	8.8	9.2	8.8	8.9	8.2	8.4	100.0
<b>2008</b>	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
<b>Percent</b>	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

**TABLE 1B-18  
BIRTHS BY DAY AND MONTH OF OCCURRENCE, ARIZONA RESIDENTS, 2008**

TOTAL	Month of birth											
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>TOTAL</b>	99,215	8,158	8,094	7,694	8,124	7,677	8,783	8,779	8,760	8,411	7,740	8,339
<b>Day of birth</b>												
1	3,140	303	256	272	308	174	313	302	201	317	228	275
2	3,232	261	197	286	284	271	327	248	331	293	209	304
3	3,353	196	288	291	228	272	326	197	364	299	295	282
4	3,421	314	309	297	172	280	243	302	349	242	323	298
5	3,252	279	305	278	282	278	209	288	320	218	298	284
6	3,154	215	271	202	279	287	197	302	262	267	323	248
7	3,316	284	342	281	287	209	286	294	211	323	325	201
8	3,374	321	311	194	287	176	325	347	308	313	224	266
9	3,190	303	221	193	285	256	314	254	326	263	189	288
10	3,316	305	198	288	254	302	297	216	335	287	276	280
11	3,369	312	293	300	171	292	276	302	335	244	293	281
12	3,273	255	306	282	281	272	243	314	324	180	268	322
13	3,134	190	317	298	303	274	209	317	253	258	297	235
14	3,314	305	327	282	298	210	277	310	233	306	287	204
15	3,330	282	311	225	302	201	308	307	318	306	220	277
16	3,270	299	253	229	289	268	310	260	334	288	191	314
17	3,283	289	206	288	211	280	303	207	323	288	255	334
18	3,368	335	283	277	184	270	283	283	332	233	290	316
19	3,288	239	313	290	274	295	240	326	314	184	291	322
20	3,075	231	310	286	273	265	201	313	234	281	283	212
21	3,309	268	342	257	298	226	296	319	238	300	280	209
22	3,317	307	304	201	300	185	320	294	292	291	240	313
23	3,204	296	264	185	278	275	306	259	312	277	205	282
24	3,196	292	196	249	228	289	311	220	324	298	297	223
25	3,310	299	282	293	188	305	324	289	308	263	314	184
26	3,140	264	312	317	199	275	268	297	306	182	274	241
27	3,005	207	293	312	271	279	223	322	224	281	184	203
28	3,215	302	313	288	301	237	272	335	208	300	207	198
29	3,202	286	256	224	269	197	344	320	250	281	193	311
30	2,953	314	195	276	301	277	301	219	291	281	181	317
31	1,912	296	248	248	239	277	331	216	267	267	267	315

**TABLE 1B-19  
LIVE BIRTHS BY MOTHER'S AGE AND FATHER'S AGE, ARIZONA, 2008**

Father's age group	Mother's age group										TOTAL
	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known	
<15	7	11	0	0	0	0	0	0	0	0	18
15-17	31	748	287	61	4	0	0	0	0	0	1,131
18-19	19	980	1,598	726	71	10	3	0	0	0	3,407
20-24	6	838	3,256	10,089	2,026	371	107	20	0	0	16,713
25-29	1	109	698	7,882	12,120	2,593	461	46	2	0	23,912
30-34	0	16	139	1,993	7,865	9,106	1,656	155	10	0	20,940
35-39	0	8	42	619	2,196	5,076	4,092	417	18	1	12,469
40-44	0	2	15	190	662	1,365	2,078	679	23	0	5,014
45-49	0	1	11	62	194	383	605	348	42	1	1,647
50-54	0	1	2	21	63	118	175	104	22	1	507
55+	0	1	1	12	22	48	70	45	8	1	208
Unknown	97	1,436	1,800	4,456	2,916	1,578	772	185	8	1	13,249
<b>TOTAL</b>	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5	99,215

**TABLE 1B-20  
LIVE BIRTHS BY MOTHER'S RACE/ETHNICITY AND FATHER'S RACE/ETHNICITY, ARIZONA, 2008**

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	Un-known	
White non-Hispanic	31,720	3,801	366	337	864	116	37,204
Hispanic or Latino	4,008	28,127	210	667	204	52	33,268
Black or African American	1,169	809	2,410	151	119	21	4,679
American Indian or Alaska Native	325	320	26	3,626	24	24	4,345
Asian or Pacific Islander	459	203	22	40	1,894	4	2,622
Unknown	4,244	9,379	1,267	1,541	320	346	17,097
<b>TOTAL</b>	41,925	42,639	4,301	6,362	3,425	563	99,215

**TABLE 1B-21  
LIVE BIRTHS BY MOTHER'S AND FATHER'S EDUCATION, ARIZONA, 2008**

Father's education	Mother's education							TOTAL
	<8	8	9-11	12	13-16	17+	Unknown	
<8	1,974	248	1,400	729	220	22	23	4,616
8	206	357	478	438	129	24	3	1,635
9-11	927	510	6,564	3,865	1,368	108	44	13,386
12	529	390	4,409	14,574	7,438	847	112	28,299
13-16	153	101	1,080	5,064	18,517	3,185	52	28,152
17+	20	8	83	635	3,874	3,971	11	8,602
Unknown	780	681	4,957	4,805	2,442	187	673	14,525
<b>TOTAL</b>	4,589	2,295	18,971	30,110	33,988	8,344	918	99,215



**TABLE 1B-22  
RESIDENT BIRTHS BY MOTHER'S RACE AND HISPANIC OR LATINO ORIGIN BY YEAR, ARIZONA, 1998-2008**

Mother's race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Total resident births, all groups</b>	77,940	80,505	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215
<b>White non-Hispanic or Latino</b>	38,611	38,711	39,850	38,934	38,819	38,842	39,271	39,657	43,013	42,216	41,925
<b>Hispanic or Latino, total</b>	28,824	30,784	33,893	35,103	36,089	39,101	40,822	42,156	44,862	45,731	42,639
<b>Mexican</b>	27,531	29,802	32,771	33,929	34,886	37,322	38,823	39,946	42,870	43,587	40,004
<b>Puerto Rican</b>	209	215	239	259	251	273	297	321	254	388	327
<b>Cuban</b>	39	43	56	57	68	63	53	66	65	93	80
<b>Other Central or South American</b>	566	552	639	697	725	784	875	1,013	1,212	1,204	1,124
<b>Other Hispanic</b>	479	172	188	161	159	659	774	810	461	459	1,104
<b>Black or African American</b>	2,629	2,699	2,760	2,736	2,753	3,022	3,216	3,450	3,864	4,165	4,301
<b>American Indian or Alaska Native</b>	5,460	5,295	5,602	5,340	5,545	5,881	6,120	6,293	6,364	6,408	6,362
<b>Asian and Pacific Islander, total</b>	1,747	1,875	2,041	2,104	2,281	2,524	2,614	2,805	3,136	3,412	3,425
<b>Chinese</b>	124	142	172	140	155	156	165	170	198	188	192
<b>Japanese</b>	41	58	56	64	67	71	50	68	75	65	52
<b>Hawaiian</b>	25	38	44	34	46	63	61	59	53	67	68
<b>Filipino</b>	235	197	260	264	288	327	318	348	354	429	372
<b>Other Asian and Pacific Islander</b>	1,322	1,440	1,509	1,602	1,725	1,907	2,020	2,160	2,456	2,663	2,741
<b>Unknown</b>	669	1,141	839	996	1,892	1,413	1,353	1,437	803	755	563

**TABLE 1B-23  
TOTAL BIRTHS, BIRTHS AND RATIOS OF BIRTH BY MOTHER'S MARITAL STATUS,  
AGE GROUP AND RACE/ETHNICITY, ARIZONA, 2008**

			TOTAL	Mother's age group									
				<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
<b>All race/ethnic groups*</b>	<b>Married</b>	Count	53,567	2	243	1,241	10,015	17,661	15,243	7,585	1,464	109	4
		Percent	54.0%	1.2%	5.9%	15.8%	38.4%	62.8%	73.8%	75.7%	73.2%	82.0%	80.0%
	<b>Unmarried</b>	Count	44,728	159	3,903	6,590	15,864	10,155	5,196	2,326	510	24	1
		Percent	45.1%	98.8%	94.0%	84.0%	60.8%	36.1%	25.2%	23.2%	25.5%	18.0%	20.0%
	<b>Other**</b>	Count	920	0	5	18	232	323	209	108	25	0	0
		Percent	0.9%	0.0%	0.1%	0.2%	0.9%	1.1%	1.0%	1.1%	1.3%	0.0%	0.0%
<b>TOTAL</b>	Count	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
<b>White non-Hispanic</b>	<b>Married</b>	Count	29,197	0	60	407	4,895	9,925	8,683	4,375	795	56	1
		Percent	69.6%	0.0%	7.8%	18.4%	50.3%	76.4%	86.0%	86.4%	81.2%	78.9%	100.0%
	<b>Unmarried</b>	Count	12,356	15	708	1,790	4,720	2,939	1,342	652	175	15	0
		Percent	29.5%	100.0%	92.1%	81.0%	48.5%	22.6%	13.3%	12.9%	17.9%	21.1%	0.0%
	<b>Other</b>	Count	372	0	1	12	109	135	71	35	9	0	0
		Percent	0.9%	0.0%	0.1%	0.5%	1.1%	1.0%	0.7%	0.7%	0.9%	0.0%	0.0%
<b>TOTAL</b>	Count	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
<b>Hispanic or Latino</b>	<b>Married</b>	Count	18,144	2	169	718	4,186	5,835	4,573	2,178	455	28	0
		Percent	42.6%	1.8%	6.2%	16.6%	33.5%	51.9%	60.6%	63.1%	65.6%	93.3%	0.0%
	<b>Unmarried</b>	Count	24,085	109	2,552	3,612	8,219	5,262	2,878	1,220	230	2	1
		Percent	56.5%	98.2%	93.7%	83.4%	65.7%	46.8%	38.1%	35.3%	33.1%	6.7%	100.0%
	<b>Other</b>	Count	410	0	3	3	100	141	98	56	9	0	0
		Percent	1.0%	0.0%	0.1%	0.1%	0.8%	1.3%	1.3%	1.6%	1.3%	0.0%	0.0%
<b>TOTAL</b>	Count	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
<b>Black or African American</b>	<b>Married</b>	Count	1,565	0	6	34	305	511	424	235	43	7	0
		Percent	36.4%	0.0%	3.0%	7.7%	23.3%	43.0%	60.1%	64.6%	59.7%	87.5%	0.0%
	<b>Unmarried</b>	Count	2,694	12	196	405	995	660	272	124	29	1	0
		Percent	62.6%	100.0%	96.6%	91.8%	76.0%	55.6%	38.6%	34.1%	40.3%	12.5%	0.0%
	<b>Other</b>	Count	42	0	1	2	9	16	9	5	0	0	0
		Percent	1.0%	0.0%	0.5%	0.5%	0.7%	1.3%	1.3%	1.4%	0.0%	0.0%	0.0%
<b>TOTAL</b>	Count	4,301	12	203	441	1,309	1,187	705	364	72	8	0	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
<b>American Indian or Alaska Native</b>	<b>Married</b>	Count	1,460	0	6	49	346	461	385	169	43	1	0
		Percent	22.9%	0.0%	1.5%	6.5%	16.8%	29.1%	39.5%	38.7%	38.1%	16.7%	0.0%
	<b>Unmarried</b>	Count	4,820	22	402	705	1,707	1,096	562	257	64	5	0
		Percent	75.8%	100.0%	98.5%	93.4%	82.7%	69.2%	57.7%	58.8%	56.6%	83.3%	0.0%
	<b>Other</b>	Count	82	0	0	1	11	26	27	11	6	0	0
		Percent	1.3%	0.0%	0.0%	0.1%	0.5%	1.6%	2.8%	2.5%	5.3%	0.0%	0.0%
<b>TOTAL</b>	Count	6,362	22	408	755	2,064	1,583	974	437	113	6	0	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	
<b>Asian or Pacific Islander</b>	<b>Married</b>	Count	2,821	0	0	25	239	828	1,072	557	92	7	1
		Percent	82.4%	0.0%	0.0%	29.1%	58.4%	84.0%	90.2%	90.0%	91.1%	100.0%	100.0%
	<b>Unmarried</b>	Count	595	1	26	61	170	154	114	61	8	0	0
		Percent	17.4%	100.0%	100.0%	70.9%	41.6%	15.6%	9.6%	9.9%	7.9%	0.0%	0.0%
	<b>Other</b>	Count	9	0	0	0	0	4	3	1	1	0	0
		Percent	0.3%	0.0%	0.0%	0.0%	0.0%	0.4%	0.3%	0.2%	1.0%	0.0%	0.0%
<b>TOTAL</b>	Count	3,425	1	26	86	409	986	1,189	619	101	7	1	
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
<b>Other or Unknown</b>	<b>Married</b>	Count	380	0	2	8	44	101	106	71	36	10	2
		Percent	67.5%	0.0%	9.5%	32.0%	44.0%	69.2%	78.5%	85.5%	90.0%	90.9%	100.0%
	<b>Unmarried</b>	Count	178	0	19	17	53	44	28	12	4	1	0
		Percent	31.6%	0.0%	90.5%	68.0%	53.0%	30.1%	20.7%	14.5%	10.0%	9.1%	0.0%
	<b>Other</b>	Count	5	0	0	0	3	1	1	0	0	0	0
		Percent	0.9%	0.0%	0.0%	0.0%	3.0%	0.7%	0.7%	0.0%	0.0%	0.0%	0.0%
<b>TOTAL</b>	Count	563	0	21	25	100	146	135	83	40	11	2	
	Percent	100.0%	0.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

\* Includes records with unknown race/ethnicity.

\*\* May include the following: "Refused", "Yes, divorced" and "Unknown".

**TABLE 1B-24  
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY AND NUMBER OF PREVIOUS LIVE BIRTHS,  
ARIZONA, 2008**

	TOTAL	Mother's age group										
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known	
<b>All race/ ethnic groups</b>	<b>TOTAL</b>	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5
	<b>None</b>	36,397	158	3,687	5,655	11,597	8,300	4,672	1,948	356	23	1
	<b>1</b>	29,823	3	428	1,839	9,191	8,990	6,105	2,768	474	24	1
	<b>2</b>	18,075	0	31	309	3,849	6,346	4,879	2,239	395	25	2
	<b>3</b>	8,633	0	4	44	1,126	2,855	2,788	1,483	304	28	1
	<b>4 or more</b>	6,272	0	1	2	343	1,644	2,203	1,577	469	33	0
	<b>Unknown</b>	15	0	0	0	5	4	1	4	1	0	0
<b>White non- Hispanic</b>	<b>TOTAL</b>	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1
	<b>None</b>	16,990	14	715	1,767	5,187	4,883	2,902	1,276	227	18	1
	<b>1</b>	13,171	1	52	392	3,104	4,300	3,366	1,666	276	14	0
	<b>2</b>	6,831	0	1	45	1,098	2,405	2,044	1,029	192	17	0
	<b>3</b>	2,975	0	1	5	276	965	1,041	558	117	12	0
	<b>4 or more</b>	1,952	0	0	0	57	445	742	531	167	10	0
	<b>Unknown</b>	6	0	0	0	2	1	1	2	0	0	0
<b>Hispanic or Latino</b>	<b>TOTAL</b>	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1
	<b>None</b>	13,899	109	2,407	2,977	4,719	2,265	967	382	71	2	0
	<b>1</b>	12,544	2	296	1,127	4,768	3,628	1,907	688	124	4	0
	<b>2</b>	8,863	0	19	196	2,161	3,114	2,312	909	148	3	1
	<b>3</b>	4,350	0	2	31	637	1,416	1,387	731	138	8	0
	<b>4 or more</b>	2,980	0	0	2	219	814	976	743	213	13	0
	<b>Unknown</b>	3	0	0	0	1	1	0	1	0	0	0
<b>Black or African American</b>	<b>TOTAL</b>	4,301	12	203	441	1,309	1,187	705	364	72	8	0
	<b>None</b>	1,603	12	176	318	586	277	169	56	9	0	0
	<b>1</b>	1,187	0	23	106	459	347	151	86	15	0	0
	<b>2</b>	730	0	4	16	189	278	147	77	17	2	0
	<b>3</b>	382	0	0	1	52	155	107	52	12	3	0
	<b>4 or more</b>	398	0	0	0	22	130	131	93	19	3	0
	<b>Unknown</b>	1	0	0	0	1	0	0	0	0	0	0
<b>American Indian or Alaska Native</b>	<b>TOTAL</b>	6,362	22	408	755	2,064	1,583	974	437	113	6	0
	<b>None</b>	2,102	22	346	504	811	261	112	38	8	0	0
	<b>1</b>	1,600	0	53	193	719	397	158	69	10	1	0
	<b>2</b>	1,138	0	7	51	347	429	204	84	16	0	0
	<b>3</b>	716	0	1	7	147	262	195	83	21	0	0
	<b>4 or more</b>	803	0	1	0	40	232	305	162	58	5	0
	<b>Unknown</b>	3	0	0	0	0	2	0	1	0	0	0
<b>Asian or Pacific Islander</b>	<b>TOTAL</b>	3,425	1	26	86	409	986	1,189	619	101	7	1
	<b>None</b>	1,614	1	23	70	244	570	495	175	34	2	0
	<b>1</b>	1,161	0	3	15	112	273	478	239	38	2	1
	<b>2</b>	400	0	0	1	41	85	142	120	11	0	0
	<b>3</b>	163	0	0	0	12	42	46	50	11	2	0
	<b>4 or more</b>	87	0	0	0	0	16	28	35	7	1	0
	<b>Unknown</b>	0	0	0	0	0	0	0	0	0	0	0
<b>Unknown</b>	<b>TOTAL</b>	563	0	21	25	100	146	135	83	40	11	2
	<b>None</b>	189	0	20	19	50	44	27	21	7	1	0
	<b>1</b>	160	0	1	6	29	45	45	20	11	3	0
	<b>2</b>	113	0	0	0	13	35	30	20	11	3	1
	<b>3</b>	47	0	0	0	2	15	12	9	5	3	1
	<b>4 or more</b>	52	0	0	0	5	7	21	13	5	1	0
	<b>Unknown</b>	2	0	0	0	1	0	0	0	1	0	0

Note: Totals include records with unknown number of previous live births.

**TABLE 1B-25  
CHANGES FROM 1998 TO 2008 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH  
BY AREA AND RACE/ETHNICITY**

Characteristics <sup>1</sup>	Urban <sup>2</sup>		Rural		White non-Hispanic		Hispanic or Latino		Black or African American		American Indian or Alaska Native		Asian or Pacific Islander	
	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008	1998	2008
		% Change		% Change		% Change		% Change		% Change		% Change		% Change
<b>Number of births</b>	65,825	29.5	12,115	15.2	38,611	8.6	28,824	47.9	2,629	63.6	5,460	16.5	1,747	96.1
<b>Per 100 births:</b>														
<b>Teenage mother<sup>3</sup></b>	12.3	-4.9	14.1	9.2	8.2	-13.4	17.5	-4.0	18.8	-18.6	16.9	10.1	4.2	-21.4
<b>Unwed mother</b>	37.6	17.3	42.9	19.1	25.0	18.0	49.7	13.7	63.1	-0.8	68.2	11.1	16.4	6.1
<b>Early prenatal care<sup>4</sup></b>	74.9	7.3	66.7	9.0	83.5	4.6	62.6	17.3	71.4	8.7	61.2	6.4	82.6	4.6
<b>0-4 prenatal visits</b>	6.6	-27.3	9.4	-7.4	3.0	-10.0	11.3	-38.9	8.1	-28.4	13.3	-6.8	3.7	0.0
<b>Births with risk factors reported</b>	26.7	19.1	30.9	9.1	29.3	14.3	22.5	28.8	31.6	16.5	39.2	8.2	24.1	25.7
<b>Births with complications reported</b>	29.4	-7.8	32.4	-10.5	29.8	-5.7	29.0	-10.3	31.6	-11.1	35.4	-16.1	27.6	6.2
<b>Primary and repeat C-Section</b>	17.3	60.7	17.2	51.2	18.6	58.6	15.8	62.7	20.3	50.2	13.9	66.2	17.3	85.0
<b>Births with abnormal conditions reported</b>	10.5	-42.9	8.3	28.9	10.8	-32.4	9.2	-32.6	13.0	-48.5	9.2	-37.0	9.8	-42.9
<b>LBW rate</b>	6.7	4.5	7.3	2.7	6.6	4.5	6.6	1.5	12.2	-4.1	6.6	1.5	7.3	24.7
<b>Newborn intensive care</b>	7.2	-13.9	4.3	7.0	6.7	-3.0	7.0	-22.9	9.6	-20.8	4.7	4.3	6.1	9.8
<b>Births with congenital anomalies reported</b>	1.4	-50.0	3.5	-54.3	1.9	-52.6	1.4	-35.7	1.5	-46.7	2.5	-64.0	1.6	-56.3
<b>Preterm births (&lt; 37 weeks)</b>	9.7	5.2	9.2	5.4	9.7	4.1	9.3	6.5	12.9	8.5	9.1	7.7	9.3	7.5
<b>Births paid for by the AHCCCS<sup>5</sup></b>	40.5	28.6	47.6	15.3	26.4	21.2	59.9	22.7	54.2	13.8	52.0	7.3	19.1	21.5

<sup>1</sup> Per 100 live births.  
<sup>2</sup> Urban = Maricopa, Pima, Pinal and Yuma counties. The remaining counties comprise Arizona's rural areas. See **Technical Notes** for more information.  
<sup>3</sup> Less than 20 years old.  
<sup>4</sup> Entered care in first trimester of pregnancy.  
<sup>5</sup> The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

**TABLE 1B-26  
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,  
ARIZONA, 2008**

	TOTAL	Urban**	Rural	Mother's race/ethnicity					Other/ Unknown
				White non- Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	
<b>TOTAL</b>	99,215	85,263	13,952	41,925	42,639	4,301	6,362	3,425	563
<b>Mother's age group</b>									
<15	161	132	29	15	111	12	22	1	0
15-17	4,151	3,456	695	769	2,724	203	408	26	21
18-19	7,849	6,425	1,424	2,209	4,333	441	755	86	25
20-24	26,111	21,761	4,350	9,724	12,505	1,309	2,064	409	100
25-29	28,139	24,423	3,716	12,999	11,238	1,187	1,583	986	146
30-34	20,648	18,317	2,331	10,096	7,549	705	974	1,189	135
35-39	10,019	8,913	1,106	5,062	3,454	364	437	619	83
40-44	1,999	1,718	281	979	694	72	113	101	40
45+	133	114	19	71	30	8	6	7	11
Unknown	5	4	1	1	1	0	0	1	2
<b>Payee for birth</b>									
AHCCCS	52,081	44,423	7,658	13,435	31,327	2,654	3,553	795	317
IHS	1,884	489	1,395	58	30	9	1,768	7	12
Private insurance	41,688	37,755	3,933	26,722	9,920	1,524	839	2,487	196
Self	2,614	2,160	454	1,164	1,186	81	48	113	22
Unknown	948	436	512	546	176	33	154	23	16
<b>Mother's education</b>									
<8	4,589	4,289	300	137	4,187	152	50	52	11
8	2,295	2,031	264	318	1,724	65	154	28	6
9-11	18,971	16,063	2,908	3,638	12,720	696	1,724	133	60
12	30,110	24,933	5,177	11,366	13,957	1,555	2,425	680	127
13-16	33,988	29,598	4,390	20,613	8,319	1,510	1,784	1,612	150
17+	8,344	7,653	691	5,578	1,411	262	175	885	33
Unknown	918	696	222	275	321	61	50	35	176
<b>Marital status</b>									
Married	53,567	46,903	6,664	29,197	18,144	1,565	1,460	2,821	380
Unmarried	44,728	37,603	7,125	12,356	24,085	2,694	4,820	595	178
Other/Unknown*	920	757	163	372	410	42	82	9	5
<b>Weight gain</b>									
None	1,522	1,339	183	523	708	115	123	40	13
1-15 pounds	11,326	9,306	2,020	3,509	5,854	515	1,116	280	52
16-20 pounds	12,862	11,263	1,599	3,782	7,230	542	854	375	79
21-24 pounds	6,920	6,019	901	2,818	3,021	294	435	314	38
25-30 pounds	25,377	22,039	3,338	10,547	11,098	1,037	1,577	973	145
31+ pounds	40,712	34,944	5,768	20,595	14,542	1,764	2,161	1,424	226
Unknown	496	353	143	151	186	34	96	19	10
<b>Substance use</b>									
Drinker, nonsmoker	339	279	60	201	65	10	52	8	3
Smoker, nondrinker	4,664	3,578	1,086	3,434	660	303	150	52	65
Smoker and drinker	195	149	46	107	36	12	31	4	5
Nonsmoker and nondrinker	94,017	81,257	12,760	38,183	41,878	3,976	6,129	3,361	490

TABLE 1B-26  
 SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,  
 ARIZONA, 2008

	TOTAL	Urban**	Rural	Mother's race/ethnicity					Other/ Unknown	
				White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander		
<b>Length of gestation</b>										
<37 weeks	10,073	8,721	1,352	4,228	4,222	604	621	344	54	
37-41 weeks	88,772	76,289	12,483	37,557	38,275	3,675	5,688	3,074	503	
42+ weeks	343	236	107	130	134	22	46	7	4	
Unknown	27	17	10	10	8	0	7	0	2	
<b>Weight at birth</b>										
<1,000 grams	538	478	60	197	212	66	34	29	0	
1,000-1,499	618	525	93	256	255	45	38	21	3	
1,500-2,499	5,870	4,971	899	2,425	2,399	392	356	261	37	
2,500-3,999	84,904	72,813	12,091	35,749	36,714	3,620	5,370	2,963	488	
4000+ grams	7,268	6,463	805	3,292	3,054	178	559	151	34	
Unknown	17	13	4	6	5	0	5	0	1	
<b>Prenatal care</b>										
No care	1,755	1,484	271	303	1,080	90	199	45	38	
1st trimester	78,738	68,594	10,144	36,619	31,301	3,336	4,141	2,958	383	
2nd trimester	15,084	12,300	2,784	4,142	8,316	705	1,510	317	94	
3rd trimester	3,531	2,804	727	814	1,912	161	495	105	44	
Unknown	107	81	26	47	30	9	17	0	4	
<b>Prenatal visits</b>										
No visits	1,755	1,484	271	303	1,080	90	199	45	38	
1-4 visits	3,563	2,620	943	828	1,873	158	589	83	32	
5-8 visits	16,571	13,585	2,986	5,097	8,392	795	1,745	445	97	
9-12 visits	47,506	41,800	5,706	21,044	19,879	2,018	2,626	1,702	237	
13+ visits	29,701	25,682	4,019	14,598	11,384	1,226	1,187	1,149	157	
Unknown	119	92	27	55	31	14	16	1	2	
<b>Newborn intensive care</b>										
Yes	5,931	5,290	641	2,719	2,317	326	309	229	31	
No	93,263	79,962	13,301	39,197	40,315	3,975	6,049	3,195	532	
Unknown	21	11	10	9	7	0	4	1	0	
<b>Obstetric procedures</b>										
Amniocentesis	494	436	58	326	83	19	45	19	2	
Electro. Fetal Monit.	93,863	83,461	10,402	39,437	40,699	4,122	5,793	3,298	514	
Induction of labor	20,907	18,052	2,855	11,163	6,853	893	1,182	703	113	
Stimulation of labor	16,499	14,539	1,960	6,761	6,982	850	1,257	559	90	
Tocolysis	592	399	193	331	148	35	48	26	4	
Ultrasound	72,779	62,291	10,488	31,984	30,766	3,136	3,978	2,506	409	
Other	5,261	4,236	1,025	2,213	2,098	277	486	162	25	
<b>Method of delivery</b>										
Vaginal	71,075	60,875	10,200	29,288	31,316	2,963	4,780	2,304	424	
Vaginal after C-Section	818	693	125	278	371	27	114	26	2	
Primary C-Section	15,170	13,230	1,940	7,229	5,631	737	812	689	72	
Repeat C-Section	12,151	10,464	1,687	5,130	5,321	574	656	406	64	
Forceps	456	377	79	205	188	10	24	24	5	
Vacuum	3,085	2,582	503	1,448	1,226	117	101	174	19	

**TABLE 1B-26  
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,  
ARIZONA, 2008**

	TOTAL	Urban**	Rural	Mother's race/ethnicity					Other/ Unknown	
				White non- Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander		
<b>Births with medical risk factors</b>										
Total	31,841	27,144	4,697	14,042	12,261	1,584	2,695	1,037	222	
Anemia	3,918	3,621	297	1,821	1,217	273	461	118	28	
Cardiac disease	218	171	47	137	51	9	18	3	0	
Lung disease	743	473	270	437	142	54	87	14	9	
Diabetes	3,861	3,400	461	1,227	1,732	123	522	233	24	
Genital herpes	1,008	908	100	645	228	54	56	19	6	
Hydramnios	1,138	1,019	119	476	401	68	141	50	2	
Hemoglobinopathy	14	11	3	8	3	2	1	0	0	
Chronic hypertension	769	605	164	333	254	71	91	15	5	
Pregnancy associated hypertension	3,502	3,027	475	1,670	1,151	193	375	103	10	
Eclampsia	724	634	90	259	333	42	72	16	2	
Previous infant 4000+g	428	303	125	221	116	9	71	5	6	
Previous SGA infant	702	544	158	372	193	33	78	22	4	
Renal disease	232	43	189	146	41	5	35	3	2	
RH sensitization	145	138	7	123	15	3	3	0	1	
Uterine bleeding	454	337	117	265	124	18	30	13	4	
Incompetent cervix	177	164	13	100	41	20	7	9	0	
Other	21,712	18,551	3,161	9,414	8,703	1,109	1,641	681	164	
<b>Abnormal conditions of the newborn</b>										
Total	6,593	5,098	1,495	3,053	2,653	289	366	192	40	
Anemia	25	14	11	5	9	1	9	1	0	
Birth injury	154	29	125	96	19	1	33	3	2	
Fetal Alcohol Syndrome	1	1	0	1	0	0	0	0	0	
Membrane disease	534	482	52	301	174	17	22	19	1	
Meconium aspiration	46	34	12	25	11	4	5	1	0	
Assisted vent <30 min	1,084	835	249	627	347	41	40	22	7	
Assisted vent >30 min	391	291	100	181	165	10	21	11	3	
Newborn seizures	119	100	19	47	50	5	14	1	2	
Other	5,273	4,117	1,156	2,330	2,229	238	288	157	31	
<b>Births with congenital anomalies</b>										
Total	847	629	218	359	365	35	58	23	7	
Anencephalus	6	6	0	3	3	0	0	0	0	
Spina Bifida	8	7	1	2	3	0	2	1	0	
Hydrocephalus	15	8	7	7	5	1	1	1	0	
Microcephalus	0	0	0	0	0	0	0	0	0	
Other CNS Anomaly	12	9	3	4	4	1	2	1	0	
Heart Malformations	64	53	11	30	24	2	5	2	1	
Other Resp./Circulatory	141	92	49	41	81	9	7	3	0	
Rectal Atresia	5	5	0	2	3	0	0	0	0	
Fistula/Esoph. Atresia	3	3	0	1	2	0	0	0	0	

TABLE 1B-26  
 SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY REGION AND RACE/ETHNICITY,  
 ARIZONA, 2008

	TOTAL	Urban**	Rural	Mother's race/ethnicity					Other/ Unknown
				White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	
Omphalocele	32	26	6	13	13	2	3	1	0
Other Gastrointestinal	20	18	2	7	10	2	1	0	0
Malformed Genitalia	9	6	3	5	3	0	1	0	0
Renal Agenesis	4	4	0	1	1	0	1	1	0
Other Urogenital	26	21	5	15	8	1	1	1	0
Cleft Lip/Palate	70	52	18	29	25	4	9	0	3
Polydactyly	25	12	13	8	11	2	4	0	0
Club Foot	49	35	14	24	19	2	3	1	0
Diaphragmatic Hernia	9	7	2	4	5	0	0	0	0
Other Musculoskeletal	27	19	8	11	11	2	3	0	0
Down Syndrome	46	39	7	19	24	0	2	1	0
Other Chromosomal	31	22	9	17	11	1	1	1	0
Other	361	266	95	163	151	12	22	9	4
<b>Births with complications of labor</b>	<b>27,173</b>	<b>23,125</b>	<b>4,048</b>	<b>11,796</b>	<b>11,104</b>	<b>1,207</b>	<b>1,888</b>	<b>1,004</b>	<b>174</b>
Febrile	1,496	1,393	103	598	600	68	130	93	7
Meconium	4,501	4,153	348	1,603	2,219	229	274	147	29
Rupture of membrane	1,838	1,572	266	758	659	78	244	85	14
Abruption placenta	480	394	86	217	195	20	27	19	2
Placenta previa	313	271	42	154	111	17	14	15	2
Other bleeding	414	290	124	186	96	8	107	13	4
Seizures	30	24	6	9	13	1	7	0	0
Precipitous labor	1,224	810	414	567	463	52	92	40	10
Prolonged labor	874	755	119	424	279	38	99	31	3
Dysfunctional labor	1,400	1,071	329	581	477	76	210	47	9
Breech malpresentation	3,095	2,632	463	1,598	1,057	112	190	118	20
Cephalopelvic disp.	563	466	97	268	199	23	30	38	5
Cord prolapse	271	249	22	82	144	16	13	13	3
Anesthetic Complic.	52	49	3	26	22	3	1	0	0
Fetal distress	4,451	3,979	472	2,136	1,576	266	236	210	27
Other	13,192	10,876	2,316	5,638	5,582	541	881	450	100

\* "Refused", "Yes, divorced", " Unknown".

\*\* Urban = Maricopa, Pima, Pinal and Yuma counties. The remaining counties comprise Arizona's rural areas. See **Technical Notes** for mor information.



**TABLE 1B-27**  
**CHANGES FROM 1998 TO 2008 IN SELECTED CHARACTERISTICS OF NEWBORNS AND ARIZONA WOMEN GIVING BIRTH**  
**WHICH DIFFER BY PAYEE FOR THE DELIVERY**

Characteristics <sup>1</sup>	AHCCCS <sup>2</sup>			Indian Health Service			Private Health Insurance			Self		
	1998	2008	% Change	1998	2008	% Change	1998	2008	% Change	1998	2008	% Change
Number of births	32,392	52,081	60.8	1,436	1,884	31.2	38,884	41,688	7.2	3,412	2,614	-23.4
Per 100 births:												
Teenage mother <sup>3</sup>	21.0	19.0	-9.3	17.3	20.2	16.6	5.3	3.6	-31.7	12.1	9.5	-21.3
Unwed mother	62.8	66.1	5.3	67.5	77.5	14.8	16.3	18.0	10.3	41.0	35.7	-12.9
Early prenatal care <sup>4</sup>	60.2	71.4	18.6	60.0	58.9	-1.8	87.9	91.5	4.1	53.9	66.6	23.5
0-4 prenatal visits	10.6	7.3	-30.9	18.0	15.2	-15.7	1.9	1.5	-20.8	22.6	17.3	-23.7
Births with risk factors reported	24.9	31.7	27.2	43.0	46.3	7.6	28.7	32.3	12.5	26.2	27.1	3.5
Births with complications reported	29.5	26.9	-8.9	36.1	36.3	0.4	29.7	27.4	-7.8	29.6	23.8	-19.7
Primary and repeat C-Section	15.6	25.1	61.1	12.2	22.4	83.6	19.4	31.4	61.6	10.5	19.7	87.3
Births with abnormal conditions reported	9.8	6.6	-33.1	8.4	8.4	-0.2	10.4	6.5	-37.2	9.9	7.1	-28.1
LBW rate	7.7	7.2	-6.7	5.4	5.2	-3.7	6.0	6.9	15.1	7.0	7.7	9.3
Newborn intensive care	7.3	5.6	-22.6	2.8	3.4	21.3	6.2	6.6	6.9	8.5	5.5	-35.6
Births with congenital anomalies reported	1.6	0.9	-43.5	2.1	1.2	-44.4	1.5	0.8	-48.2	2.1	1.0	-54.5
Preterm birth < 37 weeks	10.3	10.2	-1.2	6.2	6.7	7.9	9.0	10.2	12.8	9.7	10.0	2.9

<sup>1</sup>Per 100 live births.

<sup>2</sup>The Arizona Health Care Cost Containment System is the State's Medicaid program.

<sup>3</sup>Less than 20 years old.

<sup>4</sup>Entered care in first trimester of pregnancy.

**TABLE 1B-28  
PAYEE FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2008**

	TOTAL	Payee for birth				
		AHCCCS	IHS	Private Insurance	Self	Unknown
<b>TOTAL</b>	99,215	52,081	1,884	41,688	2,614	948
<b>Mother's age group</b>						
<15	161	135	7	11	7	1
15-17	4,151	3,384	140	492	106	29
18-19	7,849	6,402	233	1,007	136	71
20-24	26,111	17,435	617	7,240	563	256
25-29	28,139	13,097	433	13,592	758	259
30-34	20,648	7,535	288	12,022	633	170
35-39	10,019	3,351	119	6,090	325	134
40-44	1,999	701	46	1,147	80	25
45+	133	39	1	85	5	3
Unknown	5	2	0	2	1	0
<b>Mother's race/ethnicity</b>						
White non-Hispanic	41,925	13,435	58	26,722	1,164	546
Hispanic or Latino	42,639	31,327	30	9,920	1,186	176
Black or African American	4,301	2,654	9	1,524	81	33
American Indian or Alaska Native	6,362	3,553	1,768	839	48	154
Asian or Pacific Islander	3,425	795	7	2,487	113	23
Unknown	563	317	12	196	22	16
<b>Mother's education</b>						
<8	4,589	4,179	15	244	126	25
8	2,295	1,968	44	136	82	65
9-11	18,971	15,972	539	1,830	428	202
12	30,110	18,612	691	9,769	703	335
13-16	33,988	9,896	508	22,360	971	253
17+	8,344	859	58	7,112	270	45
Unknown	918	595	29	237	34	23
<b>Marital status</b>						
Married	53,567	16,953	409	33,990	1,671	544
Unmarried	44,728	34,440	1,460	7,498	933	397
Other/Unknown*	920	688	15	200	10	7
<b>Weight gain</b>						
None	1,522	914	39	442	53	74
1-15 pounds	11,326	6,868	405	3,601	278	174
16-20 pounds	12,862	8,038	277	4,054	387	106
21-24 pounds	6,920	3,336	134	3,181	186	83
25-30 pounds	25,377	12,958	372	11,269	625	153
31+ pounds	40,712	19,686	622	19,052	1,047	305
Unknown	496	281	35	89	38	53
<b>Substance use</b>						
Drinker, nonsmoker	339	112	16	201	10	0
Smoker, nondrinker	4,664	3,455	46	986	123	54
Smoker and drinker	195	120	10	52	9	4
Nonsmoker and nondrinker	94,017	48,394	1,812	40,449	2,472	890

TABLE 1B-28  
PAYEE FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2008

	TOTAL	Payee for birth				
		AHCCCS	IHS	Private Insurance	Self	Unknown
Length of gestation	<37 weeks	5,300	126	4,232	261	154
	37-41 weeks	46,588	1,730	37,350	2,322	782
	42+ weeks	185	26	103	25	4
	Unknown	8	2	3	6	8
Weight at birth	<1,000 grams	274	4	231	19	10
	1,000-1,499	335	5	256	12	10
	1,500-2,499	3,134	89	2,392	169	86
	2,500-3,999	44,829	1,617	35,475	2,194	789
	4000+ grams	3,502	169	3,328	218	51
	Unknown	7	0	6	2	2
Prenatal care	No care	1,232	56	128	276	63
	1st trimester	37,200	1,110	38,150	1,740	538
	2nd trimester	11,064	550	2,830	438	202
	3rd trimester	2,543	162	555	151	120
Unknown	42	6	25	9	25	
Prenatal visits	No visits	1,232	56	128	276	63
	1-4 visits	2,583	230	499	175	76
	5-8 visits	10,947	608	4,305	471	240
	9-12 visits	24,051	729	21,381	974	371
	13+ visits	13,224	256	15,346	708	167
	Unknown	44	5	29	10	31
	Yes	2,942	64	2,763	143	19
Newborn intensive care	No	49,129	1,819	38,920	2,470	925
	Unknown	10	1	5	1	4
	Amniocentesis	142	18	311	16	7
	Electro. Fetal Monit	49,786	1,741	39,834	2,034	468
Obstetric procedures	Induction of labor	9,710	367	10,337	381	112
	Stimulation of labor	8,700	397	6,981	305	116
	Tocolysis	267	24	268	11	22
	Ultrasound	37,400	1,090	31,859	1,895	535
	Other	2,754	159	2,233	83	32
	Vaginal	38,545	1,413	28,350	2,071	696
	Vaginal after C-Section	449	49	265	29	26
Method of delivery	Primary C-Section	6,898	211	7,610	292	159
	Repeat C-Section	6,189	211	5,463	222	66
	Forceps	227	10	207	11	1
	Vacuum	1,495	38	1,470	62	20
	TOTAL	3,085	38	1,470	62	20

TABLE 1B-28  
PAYEE FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2008

	TOTAL	Payee for birth				
		AHCCCS	IHS	Private Insurance	Self	Unknown
<b>Births with medical risk factors</b>						
Total	31,841	16,490	872	13,457	709	313
Anemia	3,918	1,813	136	1,881	63	25
Cardiac disease	218	115	5	95	1	2
Lung disease	743	375	18	345	2	3
Diabetes	3,861	1,922	148	1,715	54	22
Genital herpes	1,008	368	17	602	17	4
Hydramnios	1,138	501	57	564	11	5
Hemoglobinopathy	14	6	0	6	0	2
Chronic hypertension	769	333	33	388	9	6
Pregnancy associated hypertension	3,502	1,555	131	1,742	48	26
Eclampsia	724	418	16	279	9	2
Previous infant 4000+g	428	171	30	194	16	17
Previous SGA infant	702	293	44	321	25	19
Renal disease	232	121	25	73	8	5
RH sensitization	145	49	2	92	0	2
Uterine bleeding	454	205	14	207	10	18
Incompetent cervix	177	52	1	122	0	2
Other	21,712	11,923	512	8,508	530	239
<b>Abnormal conditions of the newborn</b>						
Total	6,593	3,416	158	2,723	186	110
Anemia	25	13	6	6	0	0
Birth injury	154	72	26	50	5	1
Fetal Alcohol Syndrome	1	1	0	0	0	0
Membrane disease	534	232	7	278	3	14
Meconium aspiration	46	25	2	16	2	1
Assisted vent < 30 min	1,084	423	22	589	32	18
Assisted vent > 30 min	391	194	11	166	16	4
Newborn seizures	119	62	7	43	7	0
Other	5,273	2,851	111	2,075	144	92
<b>Births with congenital anomalies</b>						
Total	847	471	22	324	25	5
Anencephalus	6	3	0	3	0	0
Spina Bifida	8	6	0	2	0	0
Hydrocephalus	15	11	0	4	0	0
Microcephalus	0	0	0	0	0	0
Other CNS Anomaly	12	6	1	3	1	1
Heart Malformations	64	25	3	30	3	3
Other Resp./Circulatory	141	98	0	40	3	0
Rectal Atresia	5	4	0	1	0	0

**TABLE 1B-28  
PAYEE FOR DELIVERY AND SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH, ARIZONA, 2008**

	TOTAL	Payee for birth				
		AHCCCS	IHS	Private Insurance	Self	Unknown
Fistula/Esoph. Atresia	3	2	0	1	0	0
Omphalocele	32	21	1	9	1	0
Other Gastrointestinal	20	8	1	10	1	0
Malformed Genitalia	9	5	1	3	0	0
Renal Agenesis	4	1	1	2	0	0
Other Urogenital	26	12	1	12	0	1
Cleft Lip/Palate	70	41	4	24	1	0
Polydactyly	25	17	3	4	1	0
Club Foot	49	29	1	18	1	0
Diaphragmatic Hernia	9	4	0	3	2	0
Other Muscoskeletal	27	18	3	6	0	0
Down Syndrome	46	22	1	21	2	0
Other Chromosomal	31	14	1	12	3	1
Other	361	195	5	145	14	2
<b>Total</b>	<b>27,173</b>	<b>13,992</b>	<b>683</b>	<b>11,415</b>	<b>621</b>	<b>462</b>
<b>Births with complications of labor and/or delivery</b>						
Febrile	1,496	708	46	714	19	9
Meconium	4,501	2,555	98	1,693	126	29
Rupture of membrane	1,838	871	118	791	29	29
Abruption placenta	480	258	11	186	11	14
Placenta previa	313	140	1	166	5	1
Other bleeding	414	170	59	170	8	7
Seizures	30	21	1	7	0	1
Precipitous labor	1,224	580	38	310	49	247
Prolonged labor	874	392	48	407	19	8
Dysfunctional labor	1,400	707	126	538	20	9
Breech malpresentation	3,095	1,391	57	1,544	67	36
Cephalopelvic disp.	563	243	14	286	7	13
Cord prolapse	271	186	2	77	4	2
Anesthetic Complic.	52	16	0	33	0	3
Fetal distress	4,451	2,117	86	2,162	73	13
<b>Other</b>	<b>13,192</b>	<b>7,223</b>	<b>290</b>	<b>5,151</b>	<b>323</b>	<b>205</b>

\* "Refused", "Yes, divorced", "Unknown"

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

**TABLE 1B-29  
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY AND PARTY PAYING FOR THE DELIVERY,  
ARIZONA, 2008**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
All race/ ethnic groups	AHCCCS	52,081	135	3,384	6,402	17,435	13,097	7,535	3,351	701	39	2
	IHS	1,884	7	140	233	617	433	288	119	46	1	0
	Private insurance	41,688	11	492	1,007	7,240	13,592	12,022	6,090	1,147	85	2
	Self	2,614	7	106	136	563	758	633	325	80	5	1
	Unknown	948	1	29	71	256	259	170	134	25	3	0
	TOTAL	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5
White non- Hispanic	AHCCCS	13,435	13	547	1,669	5,097	3,554	1,661	723	163	8	0
	IHS	58	0	3	4	17	17	12	3	2	0	0
	Private insurance	26,722	2	184	491	4,255	8,897	8,008	4,075	748	61	1
	Self	1,164	0	20	20	203	372	322	180	46	1	0
	Unknown	546	0	15	25	152	159	93	81	20	1	0
	TOTAL	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1
Hispanic or Latino	AHCCCS	31,327	98	2,399	3,821	9,923	7,688	4,844	2,127	413	13	1
	IHS	30	0	2	5	10	5	5	3	0	0	0
	Private insurance	9,920	8	242	388	2,214	3,183	2,425	1,195	250	15	0
	Self	1,186	5	75	102	309	315	239	109	30	2	0
	Unknown	176	0	6	17	49	47	36	20	1	0	0
	TOTAL	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1
Black or African American	AHCCCS	2,654	10	159	368	936	671	328	149	31	2	0
	IHS	9	0	0	1	5	2	1	0	0	0	0
	Private insurance	1,524	1	37	64	338	484	356	201	39	4	0
	Self	81	1	7	7	20	19	15	9	1	2	0
	Unknown	33	0	0	1	10	11	5	5	1	0	0
	TOTAL	4,301	12	203	441	1,309	1,187	705	364	72	8	0
American Indian or Alaska Native	AHCCCS	3,553	13	247	464	1,215	889	464	202	55	4	0
	IHS	1,768	7	134	223	583	402	267	108	43	1	0
	Private insurance	839	0	18	38	213	242	214	100	13	1	0
	Self	48	1	3	6	12	15	5	6	0	0	0
	Unknown	154	1	6	24	41	35	24	21	2	0	0
	TOTAL	6,362	22	408	755	2,064	1,583	974	437	113	6	0
Asian or Pacific Islander	AHCCCS	795	1	17	59	196	226	172	105	17	1	1
	IHS	7	0	0	0	1	2	2	2	0	0	0
	Private insurance	2,487	0	8	25	193	722	965	488	82	4	0
	Self	113	0	1	1	17	32	42	18	2	0	0
	Unknown	23	0	0	1	2	4	8	6	0	2	0
	TOTAL	3,425	1	26	86	409	986	1,189	619	101	7	1
Unknown	AHCCCS	317	0	15	21	68	69	66	45	22	11	0
	IHS	12	0	1	0	1	5	1	3	1	0	0
	Private insurance	196	0	3	1	27	64	54	31	15	0	1
	Self	22	0	0	0	2	5	10	3	1	0	1
	Unknown	16	0	2	3	2	3	4	1	1	0	0
	TOTAL	563	0	21	25	100	146	135	83	40	11	2

**TABLE 1B-30  
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY AND TRIMESTER  
OF PREGNANCY PRENATAL CARE BEGAN, ARIZONA, 2008**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un- known
All race/ ethnic groups	No care	1,755	7	133	174	528	444	279	133	49	8	0
	1st trimester	78,738	76	2,636	5,471	19,606	23,202	17,547	8,455	1,633	109	3
	2nd trimester	15,084	54	1,124	1,769	4,820	3,632	2,269	1,146	258	10	2
	3rd trimester	3,531	24	252	430	1,131	832	532	268	56	6	0
	Unknown	107	0	6	5	26	29	21	17	3	0	0
	TOTAL	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5
White non- Hispanic	No care	303	0	18	22	78	101	49	24	10	1	0
	1st trimester	36,619	8	539	1,674	8,026	11,571	9,252	4,619	862	67	1
	2nd trimester	4,142	7	178	432	1,342	1,082	655	354	89	3	0
	3rd trimester	814	0	33	79	271	229	129	57	16	0	0
	Unknown	47	0	1	2	7	16	11	8	2	0	0
	TOTAL	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1
Hispanic or Latino	No care	1,080	5	84	114	348	256	174	71	27	1	0
	1st trimester	31,301	55	1,719	2,950	8,921	8,613	5,850	2,645	524	24	0
	2nd trimester	8,316	36	752	1,011	2,630	1,939	1,236	589	119	3	1
	3rd trimester	1,912	15	165	258	595	426	283	144	24	2	0
	Unknown	30	0	4	0	11	4	6	5	0	0	0
	TOTAL	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1
Black or African American	No care	90	1	10	13	28	23	10	4	1	0	0
	1st trimester	3,336	7	131	308	983	974	570	298	58	7	0
	2nd trimester	705	3	52	96	241	155	97	49	11	1	0
	3rd trimester	161	1	10	22	55	34	28	9	2	0	0
	Unknown	9	0	0	2	2	1	0	4	0	0	0
	TOTAL	4,301	12	203	441	1,309	1,187	705	364	72	8	0
American Indian or Alaska Native	No care	199	1	20	22	62	42	26	18	6	2	0
	1st trimester	4,141	6	219	459	1,291	1,090	713	291	71	1	0
	2nd trimester	1,510	8	131	209	527	335	172	97	30	1	0
	3rd trimester	495	7	37	64	178	108	62	31	6	2	0
	Unknown	17	0	1	1	6	8	1	0	0	0	0
	TOTAL	6,362	22	408	755	2,064	1,583	974	437	113	6	0
Asian or Pacific Islander	No care	45	0	1	2	8	13	11	8	2	0	0
	1st trimester	2,958	0	11	60	311	854	1,068	555	92	6	1
	2nd trimester	317	0	9	19	68	89	88	39	4	1	0
	3rd trimester	105	1	5	5	22	30	22	17	3	0	0
	Unknown	0	0	0	0	0	0	0	0	0	0	0
	TOTAL	3,425	1	26	86	409	986	1,189	619	101	7	1
Unknown	No care	38	0	0	1	4	9	9	8	3	4	0
	1st trimester	383	0	17	20	74	100	94	47	26	4	1
	2nd trimester	94	0	2	2	12	32	21	18	5	1	1
	3rd trimester	44	0	2	2	10	5	8	10	5	2	0
	Unknown	4	0	0	0	0	0	3	0	1	0	0
	TOTAL	563	0	21	25	100	146	135	83	40	11	2

**TABLE 1B-31  
BIRTHS BY MOTHER'S AGE GROUP, RACE/ETHNICITY AND NUMBER OF PRENATAL VISITS,  
ARIZONA, 2008**

		TOTAL	Mother's age group									
			<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Un-known
All race/ ethnic groups	No visits	1,755	7	133	174	528	444	279	133	49	8	0
	1-4 visits	3,563	19	245	430	1,172	859	525	241	66	5	1
	5-8 visits	16,571	52	1,039	1,709	5,022	4,208	2,817	1,413	299	11	1
	9-12 visits	47,506	49	1,826	3,768	12,249	13,657	10,153	4,830	922	50	2
	13+ visits	29,701	34	901	1,759	7,112	8,942	6,854	3,380	659	59	1
	Unknown	119	0	7	9	28	29	20	22	4	0	0
	TOTAL	99,215	161	4,151	7,849	26,111	28,139	20,648	10,019	1,999	133	5
White non- Hispanic	No visits	303	0	18	22	78	101	49	24	10	1	0
	1-4 visits	828	0	29	87	275	226	140	53	18	0	0
	5-8 visits	5,097	4	169	394	1,480	1,396	985	536	129	4	0
	9-12 visits	21,044	9	363	1,129	4,819	6,536	5,133	2,538	489	28	0
	13+ visits	14,598	2	188	574	3,065	4,723	3,776	1,900	331	38	1
	Unknown	55	0	2	3	7	17	13	11	2	0	0
	TOTAL	41,925	15	769	2,209	9,724	12,999	10,096	5,062	979	71	1
Hispanic or Latino	No visits	1,080	5	84	114	348	256	174	71	27	1	0
	1-4 visits	1,873	12	162	236	599	434	277	119	34	0	0
	5-8 visits	8,392	35	665	990	2,575	2,083	1,307	623	109	5	0
	9-12 visits	19,879	33	1,206	2,046	5,775	5,315	3,592	1,589	306	16	1
	13+ visits	11,384	26	602	946	3,198	3,146	2,193	1,047	218	8	0
	Unknown	31	0	5	1	10	4	6	5	0	0	0
	TOTAL	42,639	111	2,724	4,333	12,505	11,238	7,549	3,454	694	30	1
Black or African American	No visits	90	1	10	13	28	23	10	4	1	0	0
	1-4 visits	158	0	10	20	56	32	23	16	1	0	0
	5-8 visits	795	4	51	85	282	183	123	53	14	0	0
	9-12 visits	2,018	3	79	228	592	574	325	178	36	3	0
	13+ visits	1,226	4	53	92	347	374	224	108	19	5	0
	Unknown	14	0	0	3	4	1	0	5	1	0	0
	TOTAL	4,301	12	203	441	1,309	1,187	705	364	72	8	0
American Indian or Alaska Native	No visits	199	1	20	22	62	42	26	18	6	2	0
	1-4 visits	589	7	39	83	217	140	60	32	9	2	0
	5-8 visits	1,745	8	144	210	602	407	236	111	26	1	0
	9-12 visits	2,626	4	160	321	830	668	417	183	42	1	0
	13+ visits	1,187	2	45	117	346	319	235	93	30	0	0
	Unknown	16	0	0	2	7	7	0	0	0	0	0
	TOTAL	6,362	22	408	755	2,064	1,583	974	437	113	6	0
Asian or Pacific Islander	No visits	45	0	1	2	8	13	11	8	2	0	0
	1-4 visits	83	0	4	4	18	23	17	15	1	1	0
	5-8 visits	445	1	6	22	71	116	149	67	11	1	1
	9-12 visits	1,702	0	9	36	192	501	619	308	36	1	0
	13+ visits	1,149	0	6	22	120	333	393	220	51	4	0
	Unknown	1	0	0	0	0	0	0	1	0	0	0
	TOTAL	3,425	1	26	86	409	986	1,189	619	101	7	1
Unknown	No visits	38	0	0	1	4	9	9	8	3	4	0
	1-4 visits	32	0	1	0	7	4	8	6	3	2	1
	5-8 visits	97	0	4	8	12	23	17	23	10	0	0
	9-12 visits	237	0	9	8	41	63	67	34	13	1	1
	13+ visits	157	0	7	8	36	47	33	12	10	4	0
	Unknown	2	0	0	0	0	0	1	0	1	0	0
	TOTAL	563	0	21	25	100	146	135	83	40	11	2





**TABLE 1B-32  
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2008**

	TOTAL	Prenatal care				Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Unknown	Less than 5	5 or more	Unknown
<b>Substance use</b>									
Drinker, nonsmoker	339	11	263	47	17	1	35	304	0
Smoker, nondrinker	4,664	228	3,162	972	298	4	540	4,120	4
Smoker and drinker	195	26	111	39	17	2	46	147	2
Nonsmoker and nondrinker	94,017	1,490	75,202	14,026	3,199	100	4,697	89,207	113
<b>Length of gestation</b>									
<37 weeks	10,073	440	7,959	1,359	292	23	1,190	8,856	27
37-41 weeks	88,772	1,285	70,553	13,648	3,211	75	4,075	84,615	82
42+ weeks	343	19	223	75	26	0	41	302	0
Unknown	27	11	3	2	2	9	12	5	10
<b>Weight at birth</b>									
<1,000 grams	538	49	435	51	1	2	192	344	2
1,000-1,499	618	27	506	81	3	1	89	528	1
1,500-2,499	5,870	193	4,648	819	197	13	531	5,323	16
2,500-3,999	84,904	1,380	67,141	13,195	3,106	82	4,234	80,580	90
4000+ grams	7,268	104	5,998	936	224	6	261	7,000	7
Unknown	17	2	10	2	0	3	11	3	3
<b>Newborn intensive care</b>									
Yes	5,931	223	4,773	756	170	9	620	5,300	11
No	93,263	1,532	73,948	14,327	3,359	97	4,697	88,459	107
Unknown	21	0	17	1	2	1	1	19	1
<b>Obstetric procedures</b>									
Amniocentesis	494	3	443	38	10	0	14	480	0
Electro. Fetal Monit.	93,863	1,586	74,803	14,154	3,252	68	4,784	89,004	75
Induction of labor	20,907	96	17,279	2,886	637	9	578	20,314	15
Stimulation of labor	16,499	263	12,972	2,683	568	13	857	15,629	13
Tocolysis	592	11	488	76	17	0	31	561	0
Ultrasound	72,779	954	58,058	11,136	2,573	58	3,497	69,214	68
Other	5,261	85	4,099	878	195	4	422	4,833	6
<b>Method of delivery</b>									
Vaginal	71,075	1,344	55,602	11,393	2,658	78	4,003	66,988	84
Vaginal after C-Section	818	42	595	141	39	1	86	730	2
Primary C-Section	15,170	191	12,679	1,847	439	14	615	14,538	17
Repeat C-Section	12,151	178	9,862	1,703	395	13	614	11,522	15
Forceps	456	7	373	63	13	0	19	437	0
Vacuum	3,085	40	2,478	465	102	0	126	2,958	1

TABLE 1B-32  
 SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2008

	TOTAL	Prenatal care					Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Unknown	Less than 5	5 or more	Unknown	
<b>Births with medical risk factors</b>										
Total	31,841	1,011	23,876	5,285	1,635	34	2,748	29,058	35	
Anemia	3,918	87	3,043	633	151	4	267	3,646	5	
Cardiac disease	218	4	182	26	6	0	10	208	0	
Lung disease	743	7	631	88	16	1	27	715	1	
Diabetes	3,861	36	3,154	547	123	1	127	3,734	0	
Genital herpes	1,008	6	870	104	27	1	33	974	1	
Hydramnios	1,138	30	902	154	52	0	89	1,049	0	
Hemoglobinopathy	14	1	11	1	1	0	1	13	0	
Chronic hypertension	769	9	635	103	22	0	42	727	0	
Pregnancy associated hypertension	3,502	49	2,888	455	108	2	142	3,358	2	
Eclampsia	724	18	552	128	25	1	46	677	1	
Previous infant 4000+g	428	5	349	65	9	0	15	413	0	
Previous SGA infant	702	16	545	115	26	0	57	645	0	
Renal disease	232	2	179	40	11	0	12	220	0	
RH sensitization	145	1	130	10	2	2	3	140	2	
Uterine bleeding	454	9	390	49	6	0	30	424	0	
Incompetent cervix	177	0	165	11	1	0	4	173	0	
Other	21,712	919	15,470	3,908	1,390	25	2,408	19,278	26	
<b>Abnormal conditions of the newborn</b>										
Total	6,593	253	4,856	1,181	294	9	689	5,894	10	
Anemia	25	0	18	6	1	0	3	22	0	
Birth injury	154	0	120	28	6	0	6	148	0	
Fetal Alcohol Syndrome	1	1	0	0	0	0	1	0	0	
Membrane disease	534	13	473	43	4	1	48	484	2	
Meconium aspiration	46	3	33	7	3	0	6	40	0	
Assisted vent <30 min	1,084	24	780	211	68	1	77	1,005	2	
Assisted vent >30 min	391	15	289	64	20	3	50	338	3	
Newborn seizures	119	4	86	22	7	0	13	106	0	
Other	5,273	225	3,810	979	252	7	591	4,674	8	
<b>Births with congenital anomalies</b>										
Total	847	31	647	131	37	1	82	764	1	
Anencephalus	6	0	6	0	0	0	0	6	0	
Spina Bifida	8	0	8	0	0	0	1	7	0	
Hydrocephalus	15	1	12	2	0	0	1	14	0	
Microcephalus	0	0	0	0	0	0	0	0	0	
Other CNS Anomaly	12	1	8	2	1	0	2	10	0	

**TABLE 1B-32  
SELECTED CHARACTERISTICS OF NEWBORNS AND WOMEN GIVING BIRTH BY LEVEL OF PRENATAL CARE, ARIZONA, 2008**

	TOTAL	Prenatal care				Visits			
		No care	1st trimester	2nd trimester	3rd trimester	Unknown	Less than 5	5 or more	Unknown
Heart Malformations	64	1	55	6	2	0	3	61	0
Other Resp./Circulatory	141	8	105	25	3	0	20	121	0
Rectal Atresia	5	0	5	0	0	0	0	5	0
Fistula/Esoph. Atresia	3	0	3	0	0	0	0	3	0
Omphalocele	32	1	25	4	2	0	3	29	0
Other Gastrointestinal	20	1	17	1	1	0	2	18	0
Malformed Genitalia	9	0	8	1	0	0	0	9	0
Renal Agenesis	4	1	2	0	1	0	2	2	0
Other Urogenital	26	0	22	3	1	0	2	24	0
Cleft Lip/Palate	70	5	53	10	2	0	8	62	0
Polydactyly	25	2	14	8	1	0	4	21	0
Club Foot	49	1	42	4	2	0	3	46	0
Diaphragmatic Hernia	9	0	8	1	0	0	0	9	0
Other Musculoskeletal	27	1	20	5	1	0	2	25	0
Down Syndrome	46	2	31	11	2	0	4	42	0
Other Chromosomal	31	0	22	5	4	0	2	29	0
Other	361	12	268	58	22	1	37	323	1
<b>Births with complications</b>	<b>27,173</b>	<b>621</b>	<b>21,096</b>	<b>4,344</b>	<b>1,077</b>	<b>35</b>	<b>1,837</b>	<b>25,297</b>	<b>39</b>
Febrile	1,496	15	1,239	211	30	1	51	1,444	1
Meconium	4,501	163	3,326	783	226	3	361	4,136	4
Rupture of membrane	1,838	50	1,445	273	69	1	188	1,648	2
Abruption placenta	480	16	360	88	15	1	57	422	1
Placenta previa	313	7	272	25	9	0	22	290	1
Other bleeding	414	8	331	64	11	0	28	386	0
Seizures	30	3	21	6	0	0	4	26	0
Precipitous labor	1,224	69	811	271	67	6	148	1,068	8
Prolonged labor	874	8	705	136	23	2	31	842	1
Dysfunctional labor	1,400	18	1,125	206	50	1	55	1,344	1
Breech malpresentation	3,095	70	2,580	353	90	2	191	2,902	2
Cephalopelvic disp.	563	6	480	65	12	0	20	543	0
Cord prolapse	271	0	176	78	17	0	13	258	0
Anesthetic complications	52	0	48	2	1	1	0	51	1
Fetal distress	4,451	86	3,701	528	134	2	260	4,187	4
Other	13,192	286	9,899	2,369	617	21	964	12,206	22

\* "Refused", "Yes, divorced", "Unknown"

TABLE 1B-33  
 SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2008

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
<b>TOTAL</b>	99,215	7,026	92,172	17	10,073	88,772	343	27
<b>Mother's age group</b>								
<15	161	28	133	0	28	133	0	0
15-17	4,151	363	3,788	0	445	3,688	16	2
18-19	7,849	534	7,314	1	722	7,097	27	3
20-24	26,111	1,759	24,349	3	2,521	23,498	86	6
25-29	28,139	1,823	26,312	4	2,661	25,381	90	7
30-34	20,648	1,400	19,243	5	2,092	18,476	78	2
35-39	10,019	874	9,143	2	1,237	8,739	40	3
40-44	1,999	225	1,772	2	334	1,657	5	3
45+	133	19	114	0	33	98	1	1
Unknown	5	1	4	0	0	5	0	0
<b>Payee for birth</b>								
AHCCCS	52,081	3,743	48,331	7	5,300	46,588	185	8
IHS	1,884	98	1,786	0	126	1,730	26	2
Private insurance	41,688	2,879	38,803	6	4,232	37,350	103	3
Self	2,614	200	2,412	2	261	2,322	25	6
Unknown	948	106	840	2	154	782	4	8
<b>Mother's education</b>								
<8	4,589	288	4,298	3	445	4,114	27	3
8	2,295	153	2,142	0	242	2,043	8	2
9-11	18,971	1,450	17,520	1	2,050	16,838	76	7
12	30,110	2,210	27,895	5	3,113	26,913	75	9
13-16	33,988	2,298	31,687	3	3,312	30,554	120	2
17+	8,344	568	7,773	3	832	7,478	33	1
Unknown	918	59	857	2	79	832	4	3
<b>Marital status</b>								
Married	53,567	3,517	50,039	11	5,191	48,197	169	10
Unmarried	44,728	3,412	41,310	6	4,747	39,794	171	16
Other/Unknown*	920	97	823	0	135	781	3	1
None	1,522	209	1,312	1	269	1,245	6	2
1-15 pounds	11,326	1,266	10,054	6	1,626	9,667	29	4
16-20 pounds	12,862	1,123	11,737	2	1,582	11,217	59	4
21-24 pounds	6,920	517	6,403	0	726	6,180	14	0
25-30 pounds	25,377	1,570	23,807	0	2,229	23,066	80	2
31+ pounds	40,712	2,287	38,424	1	3,542	37,012	154	4
Unknown	496	54	435	7	99	385	1	11

TABLE 1B-33  
 SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2008

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
<b>Substance use</b>								
Drinker, nonsmoker	339	29	310	0	29	310	0	0
Smoker, nondrinker	4,664	531	4,133	0	661	3,986	14	3
Smoker and drinker	195	30	164	1	36	154	3	2
Nonsmoker and nondrinker	94,017	6,436	87,565	16	9,347	84,322	326	22
<b>Prenatal care</b>								
No care	1,755	269	1,484	2	440	1,285	19	11
1st trimester	78,738	5,589	73,139	10	7,959	70,553	223	3
2nd trimester	15,084	951	14,131	2	1,359	13,648	75	2
3rd trimester	3,531	201	3,330	0	292	3,211	26	2
Unknown	107	16	88	3	23	75	0	9
<b>Prenatal visits</b>								
No visits	1,755	269	1,484	2	440	1,285	19	11
1-4 visits	3,563	543	3,011	9	750	2,790	22	1
5-8 visits	16,571	1,770	14,799	2	2,566	13,953	51	1
9-12 visits	47,506	2,629	44,877	0	3,759	43,636	110	1
13+ visits	29,701	1,796	27,904	1	2,531	27,026	141	3
Unknown	119	19	97	3	27	82	0	10
<b>Newborn intensive care</b>								
Yes	5,931	2,863	3,065	3	3,508	2,407	14	2
No	93,263	4,159	89,090	14	6,559	86,350	329	25
Unknown	21	4	17	0	6	15	0	0
<b>Obstetric procedures</b>								
Amniocentesis	494	72	422	0	121	373	0	0
Electro. Fetal Monit.	93,863	6,713	87,139	11	9,666	83,877	309	11
Induction of labor	20,907	1,019	19,888	0	1,189	19,619	97	2
Stimulation of labor	16,499	914	15,584	1	1,459	14,981	59	0
Tocolysis	592	147	445	0	187	403	2	0
Ultrasound	72,779	5,406	67,362	11	7,471	65,063	238	7
Other	5,261	374	4,886	1	599	4,641	20	1
<b>Method of delivery</b>								
Vaginal	71,075	3,679	67,381	15	5,569	65,232	248	26
Vaginal after C-Section	818	66	752	0	109	707	2	0
Primary C-Section	15,170	2,455	12,714	1	2,936	12,154	80	0
Repeat C-Section	12,151	826	11,325	0	1,459	10,679	13	0
Forceps	456	18	438	0	19	431	6	0
Vacuum	3,085	103	2,981	1	172	2,903	9	1

TABLE 1B-33  
 SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2008

	TOTAL	Weight at birth			Length of gestation			
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	Unknown
<b>Births with medical risk factors</b>								
Total	31,841	3,626	28,205	10	5,087	26,628	113	13
Anemia	3,918	342	3,575	1	512	3,399	6	1
Cardiac disease	218	20	198	0	28	187	3	0
Lung disease	743	59	684	0	94	645	4	0
Diabetes	3,861	369	3,492	0	717	3,135	9	0
Genital herpes	1,008	75	933	0	111	893	4	0
Hydramnios	1,138	253	885	0	287	845	6	0
Hemoglobinopathy	14	3	11	0	6	8	0	0
Chronic hypertension	769	142	627	0	203	564	1	1
hypertension	3,502	667	2,835	0	886	2,614	2	0
Eclampsia	724	242	482	0	301	423	0	0
Previous infant 4000+g	428	8	419	1	31	395	2	0
Previous SGA infant	702	155	545	2	219	481	2	0
Renal disease	232	14	218	0	23	206	3	0
RH sensitization	145	7	138	0	8	135	1	1
Uterine bleeding	454	73	380	1	96	357	1	0
Incompetent cervix	177	50	127	0	73	104	0	0
Other	21,712	2,571	19,134	7	3,569	18,045	87	11
<b>Abnormal conditions of the newborn</b>								
Total	6,593	1,782	4,807	4	2,227	4,330	32	4
Anemia	25	7	18	0	7	18	0	0
Birth injury	154	5	149	0	7	145	2	0
Fetal Alcohol Syndrome	1	0	1	0	0	1	0	0
Membrane disease	534	270	264	0	334	198	2	0
Meconium aspiration	46	1	44	1	3	41	2	0
Assisted vent < 30 min	1,084	121	963	0	175	902	7	0
Assisted vent > 30 min	391	152	237	2	192	196	2	1
Newborn seizures	119	12	107	0	13	104	2	0
Other	5,273	1,497	3,774	2	1,859	3,389	21	4
<b>Births with congenital anomalies</b>								
Total	847	182	664	1	222	619	5	1
Anencephalus	6	4	1	1	5	1	0	0
Spina Bifida	8	2	6	0	1	7	0	0
Hydrocephalus	15	2	13	0	7	8	0	0
Microcephalus	0	0	0	0	0	0	0	0
Other CNS Anomaly	12	3	9	0	4	8	0	0
Heart Malformations	64	10	54	0	19	45	0	0

TABLE 1B-33  
SELECTED CHARACTERISTICS OF BIRTHS BY BIRTHWEIGHT AND GESTATIONAL AGE, ARIZONA, 2008

	TOTAL	Weight at birth			Length of gestation			Unknown
		<2,500 grams	2,500+ grams	Unknown	<37 weeks	37-41 weeks	42+ weeks	
Other Resp./Circulatory	141	51	90	0	57	83	1	0
Rectal Atresia	5	2	3	0	2	3	0	0
Fistula/Esoph. Atresia	3	0	3	0	1	2	0	0
Omphalocele	32	20	12	0	22	10	0	0
Other Gastrointestinal	20	10	10	0	8	12	0	0
Malformed Genitalia	9	2	7	0	3	6	0	0
Renal Agenesis	4	0	4	0	0	4	0	0
Other Urogenital	26	5	21	0	4	22	0	0
Cleft Lip/Palate	70	7	63	0	10	60	0	0
Polydactyly	25	3	22	0	1	24	0	0
Club Foot	49	5	44	0	9	37	2	1
Diaphragmatic Hernia	9	2	7	0	1	8	0	0
Other Musculoskeletal	27	4	23	0	2	24	1	0
Down Syndrome	46	9	37	0	9	37	0	0
Other Chromosomal	31	15	16	0	12	18	0	1
Other	361	64	297	0	81	279	1	0
<b>Births with complications</b>	<b>27,173</b>	<b>3,114</b>	<b>24,049</b>	<b>10</b>	<b>4,171</b>	<b>22,867</b>	<b>127</b>	<b>8</b>
Febrile	1,496	67	1,429	0	113	1,378	5	0
Meconium	4,501	131	4,369	1	158	4,313	30	0
Rupture of membrane	1,838	556	1,280	2	856	976	6	0
Abruption placenta	480	185	293	2	237	242	1	0
Placenta previa	313	85	228	0	122	191	0	0
Other bleeding	414	33	380	1	48	363	3	0
Seizures	30	14	16	0	13	17	0	0
Precipitous labor	1,224	106	1,117	1	134	1,081	5	4
Prolonged labor	874	57	817	0	74	792	8	0
Dysfunctional labor	1,400	53	1,347	0	86	1,297	17	0
Breech malpresentation	3,095	754	2,339	2	961	2,127	7	0
Cephalopelvic disp.	563	9	554	0	19	537	6	1
Cord prolapse	271	18	252	1	22	248	1	0
Anesthetic complications	52	3	49	0	5	47	0	0
Fetal distress	4,451	657	3,791	3	738	3,694	19	0
Other	13,192	1,348	11,838	6	1,840	11,283	64	5

\* "Refused", "Yes, divorced", "Unknown"





TABLE 1B-34  
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2008

	TOTAL	Mother's age group										Un- known		
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+				
<b>Weight at birth</b>														
<1,000 grams	538	3	25	43	103	143	124	80	17	0				
1,000-1,499	618	1	29	47	146	165	129	79	22	0				
1,500-2,499	5,870	24	309	444	1,510	1,515	1,147	715	186	19				
2,500-3,999	84,904	123	3,620	6,953	22,760	24,182	17,373	8,176	1,607	106				
4000+ grams	7,268	10	168	361	1,589	2,130	1,870	967	165	8				
Unknown	17	0	0	1	3	4	5	2	2	0				
<b>Prenatal care</b>														
No care	1,755	7	133	174	528	444	279	133	49	8				
1st trimester	78,738	76	2,636	5,471	19,606	23,202	17,547	8,455	1,633	109				
2nd trimester	15,084	54	1,124	1,769	4,820	3,632	2,269	1,146	258	10				
3rd trimester	3,531	24	252	430	1,131	832	532	268	56	6				
Unknown	107	0	6	5	26	29	21	17	3	0				
<b>Prenatal visits</b>														
No visits	1,755	7	133	174	528	444	279	133	49	8				
1-4 visits	3,563	19	245	430	1,172	859	525	241	66	5				
5-8 visits	16,571	52	1,039	1,709	5,022	4,208	2,817	1,413	299	11				
9-12 visits	47,506	49	1,826	3,768	12,249	13,657	10,153	4,830	922	50				
13+ visits	29,701	34	901	1,759	7,112	8,942	6,854	3,380	659	59				
Unknown	119	0	7	9	28	29	20	22	4	0				
<b>Newborn intensive care</b>														
Yes	5,931	13	219	423	1,460	1,578	1,264	776	172	26				
No	93,263	148	3,931	7,424	24,646	26,552	19,381	9,242	1,827	107				
Unknown	21	0	1	2	5	9	3	1	0	0				
<b>Obstetric procedures</b>														
Amniocentesis	494	0	8	14	77	113	104	142	35	1				
Electro. Fetal Monit	93,863	149	3,914	7,418	24,674	26,560	19,603	9,516	1,897	127				
Induction of labor	20,907	19	765	1,594	5,621	6,160	4,338	1,990	389	30				
Stimulation of labor	16,499	36	812	1,481	4,507	4,624	3,229	1,471	316	23				
Tocolysis	592	1	20	58	160	154	123	69	7	0				
Ultrasound	72,779	109	2,951	5,620	18,968	20,667	15,357	7,490	1,515	98				
Other	5,261	11	239	448	1,468	1,427	1,096	463	104	5				
Vaginal	71,075	133	3,431	6,342	19,868	20,281	13,816	6,027	1,104	68				
Vaginal after C-Section	818	0	6	23	141	258	248	112	30	0				
Primary C-Section	15,170	28	655	1,198	3,703	3,975	3,254	1,874	442	41				
Repeat C-Section	12,151	0	59	286	2,399	3,625	3,330	2,006	422	24				
Forceps	456	0	25	41	118	111	97	55	9	0				
Vacuum	3,085	13	187	281	815	838	565	302	84	0				
Total	31,841	73	1,710	2,438	7,766	8,358	6,593	3,936	898	67				
<b>Births with medical risk factors</b>														
Anemia	3,918	6	169	333	1,121	1,032	759	408	88	2				
Cardiac disease	218	0	6	14	41	59	52	35	11	0				
Lung disease	743	0	27	64	213	217	128	78	15	0				
Diabetes	3,861	2	45	89	547	1,052	1,156	762	195	13				

TABLE 1B-34  
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2008

	TOTAL	Mother's age group										Un- known
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+		
Genital herpes	1,008	0	17	36	192	281	277	169	33	3	0	
Hydramnios	1,138	5	40	98	258	313	237	150	33	4	0	
Hemoglobinopathy	14	0	0	0	1	4	3	6	0	0	0	
Chronic hypertension	769	2	11	25	134	192	198	160	43	4	0	
Pregnancy associated hypertension	3,502	6	168	271	862	951	709	430	89	16	0	
Eclampsia	724	2	38	66	192	184	139	77	24	2	0	
Previous infant 4000+g	428	0	1	6	64	117	150	70	19	1	0	
Previous SGA infant	702	1	10	17	161	192	196	110	15	0	0	
Renal disease	232	0	11	26	84	55	38	15	2	1	0	
RH sensitization	145	0	4	4	28	46	43	18	2	0	0	
Uterine bleeding	454	0	15	17	121	138	92	59	12	0	0	
Incompetent cervix	177	0	1	2	34	51	44	33	11	1	0	
Other	21,712	65	1,440	1,834	5,444	5,470	4,166	2,640	609	43	1	
<b>Total</b>	<b>6,593</b>	<b>16</b>	<b>280</b>	<b>550</b>	<b>1,752</b>	<b>1,774</b>	<b>1,330</b>	<b>704</b>	<b>168</b>	<b>19</b>	<b>0</b>	
Anemia	25	0	2	4	8	6	3	2	0	0	0	
Birth injury	154	1	7	27	48	37	21	12	1	0	0	
Fetal Alcohol Syndrome	1	0	0	0	0	1	0	0	0	0	0	
Membrane disease	534	1	16	31	121	154	121	69	20	1	0	
Meconium aspiration	46	0	2	5	12	9	11	2	4	1	0	
Assisted vent <30 min	1,084	0	33	75	291	302	227	124	27	5	0	
Assisted vent >30 min	391	1	17	45	107	102	68	36	15	0	0	
Newborn seizures	119	0	7	6	27	44	24	7	4	0	0	
Other	5,273	14	233	457	1,437	1,393	1,049	553	124	13	0	
<b>Total</b>	<b>847</b>	<b>2</b>	<b>36</b>	<b>88</b>	<b>236</b>	<b>207</b>	<b>150</b>	<b>93</b>	<b>32</b>	<b>3</b>	<b>0</b>	
Anencephalus	6	0	0	1	0	4	1	0	0	0	0	
Spina Bifida	8	0	1	0	3	1	2	1	0	0	0	
Hydrocephalus	15	0	1	2	5	4	2	1	0	0	0	
Microcephalus	0	0	0	0	0	0	0	0	0	0	0	
Other CNS Anomaly	12	0	0	1	4	3	2	1	1	0	0	
Heart Malformations	64	0	1	5	14	12	16	14	2	0	0	
Other Resp./Circulatory	141	1	6	10	31	39	32	18	4	0	0	
Rectal Atresia	5	0	0	2	2	1	0	0	0	0	0	
Fistula/Esoph. Atresia	3	0	0	0	2	1	0	0	0	0	0	
Omphalocele	32	0	1	9	13	3	3	2	1	0	0	
Other Gastrointestinal	20	0	0	3	6	4	1	3	2	1	0	
Malformed Genitalia	9	0	1	0	2	2	2	1	1	0	0	
Renal Agenesis	4	0	0	0	0	1	2	1	0	0	0	
Other Urogenital	26	0	1	2	7	6	6	3	1	0	0	

TABLE 1B-34  
SELECTED CHARACTERISTICS OF NEWBORNS AND MOTHERS GIVING BIRTH BY AGE GROUP, ARIZONA, 2008

	TOTAL	Mother's age group										Un- known
		<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+		
Cleft Lip/Palate	70	0	2	11	13	26	11	5	2	0	0	
Polydactyly	25	0	2	0	9	8	5	1	0	0	0	
Club Foot	49	0	4	3	15	11	11	4	1	0	0	
Diaphragmatic Hernia	9	0	0	0	2	1	4	1	1	0	0	
Other Muscoskeletal	27	0	4	6	8	5	3	1	0	0	0	
Down's Syndrome	46	0	3	5	6	6	8	8	10	0	0	
Other Chromosomal	31	0	3	3	5	9	2	4	4	1	0	
Other	361	1	11	34	117	88	60	38	11	1	0	
<b>Total</b>	<b>27,173</b>	<b>48</b>	<b>1,196</b>	<b>2,246</b>	<b>7,084</b>	<b>7,446</b>	<b>5,588</b>	<b>2,857</b>	<b>657</b>	<b>50</b>	<b>1</b>	
<b>Births with complications of labor</b>												
Febrile	1,496	2	89	196	452	408	236	91	20	2	0	
Meconium	4,501	7	217	405	1,246	1,248	915	376	80	7	0	
Rupture of membrane	1,838	1	80	161	497	453	381	207	56	2	0	
Abruption placenta	480	3	14	28	118	125	118	60	14	0	0	
Placenta previa	313	0	2	13	46	79	95	60	15	2	1	
Other bleeding	414	0	24	21	104	106	104	45	10	0	0	
Seizures	30	0	4	2	12	4	6	1	1	0	0	
Precipitous labor	1,224	0	28	58	342	362	263	136	33	2	0	
Prolonged labor	874	1	43	100	253	224	148	90	15	0	0	
Dysfunctional labor	1,400	5	73	157	425	363	221	119	33	4	0	
Breech malpresentation	3,095	3	86	167	685	855	746	434	109	10	0	
Cephalopelvic disp.	563	2	38	51	163	134	115	50	10	0	0	
Cord prolapse	271	1	15	28	56	88	61	19	3	0	0	
Anesthetic complications	52	0	1	2	13	10	12	12	2	0	0	
Fetal distress	4,451	9	233	377	1,107	1,230	868	494	123	10	0	
Other	13,192	27	615	1,177	3,513	3,628	2,576	1,329	305	22	0	

\* "Refused", "Yes, divorced", "Unknown"

**TABLE 1B-35  
BIRTHS WITH CONGENITAL ANOMALIES MENTIONED ON BIRTH CERTIFICATE BY MOTHER'S RACE/ETHNICITY AND  
CHILD'S GENDER, ARIZONA, 2008**

	All groups			White non-Hispanic			Hispanic or Latino			Black or African American			American Indian or Alaska Native			Asian or Pacific Islander			Other or unknown		
	Total*	Male	Female	Total*	Male	Female	Total*	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>Total</b>	847	473	373	359	202	157	365	202	162	35	21	14	58	31	27	23	13	10	7	4	3
Anencephalus	6	5	1	3	2	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0
Spina bifida/meningocele	8	4	4	2	1	1	3	2	1	0	0	0	2	0	2	1	1	0	0	0	0
Hydrocephalus	15	11	4	7	4	3	5	4	1	1	1	0	1	1	0	1	1	0	0	0	0
Microcephalus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other CNS anomaly	12	9	3	4	2	2	4	3	1	1	1	0	2	2	0	1	1	0	0	0	0
Heart malformations	64	35	29	30	14	16	24	14	10	2	2	0	5	4	1	2	1	1	1	0	1
Other respiratory/circulatory anomalies	141	66	75	41	23	18	81	33	48	9	6	3	7	3	4	3	1	2	0	0	0
Rectal atresia/stenosis	5	1	4	2	1	1	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Tracheo-esophageal fistula/esophageal atresia	3	2	1	1	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Omphalocele/gastroschisis	32	17	15	13	7	6	13	7	6	2	1	1	3	2	1	1	0	1	0	0	0
Other gastrointestinal anomalies	20	9	11	7	3	4	10	5	5	2	1	1	1	0	1	0	0	0	0	0	0
Malformed genitalia	9	7	1	5	5	0	3	1	1	0	0	0	1	1	0	0	0	0	0	0	0
Renal agenesis	4	2	2	1	0	1	1	1	0	0	0	0	1	1	0	1	0	1	0	0	0
Other urogenital anomalies	26	18	7	15	12	3	8	4	3	1	1	0	1	1	0	1	0	1	0	0	0
Cleft Lip/palate	70	44	26	29	18	11	25	15	10	4	3	1	9	5	4	0	0	0	3	3	0
Polydactyly/syndactyly/adactyly	25	16	9	8	5	3	11	8	3	2	1	1	4	2	2	0	0	0	0	0	0
Club foot	49	33	16	24	16	8	19	12	7	2	2	0	3	2	1	1	1	0	0	0	0
Diaphragmatic hernia	9	5	4	4	2	2	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0
Other musculoskeletal/integumental anomalies	27	15	12	11	5	6	11	7	4	2	2	0	3	1	2	0	0	0	0	0	0
Down syndrome	46	23	23	19	8	11	24	12	12	0	0	0	2	2	0	1	1	0	0	0	0
Other chromosomal anomalies	31	17	14	17	10	7	11	6	5	1	0	1	1	0	1	1	1	0	0	0	0
Other congenital anomalies	361	206	155	163	91	72	151	90	61	12	6	6	22	12	10	9	5	4	4	2	2
<b>Ratio per 100 births**</b>	0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.9	0.8	0.8	0.9	0.7	0.9	1.0	0.9	0.7	0.7	0.6	NA	NA	NA

\* Total includes one record with unknown.

\*\* For denominators see Table 5B-8.





**1C.**

### **FETAL, PERINATAL AND MATERNAL DEATHS**

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In Arizona, reportable fetal deaths are those after 20 completed weeks of gestation or, if the gestational period is unknown, the fetal death certificate should be filed 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.

The National Center for Health Statistics (NCHS) in *The Revision of Model State Vital Statistics Act and Regulations\** recommended adding clarifiers to the original definition promulgated by the World Health Organization in 1950. In this document, NCHS recommends the following definition: "fetal death" means death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy and which is not an

\*[ftp://ftp.cdc.gov/pub/Health\\_Statistics/NCHS/Dataset\\_Documentation/NVSS/fetal\\_death\\_2003/fet2ar2001.pdf](ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NVSS/fetal_death_2003/fet2ar2001.pdf)

induced termination of pregnancy. The death is indicated by the fact that after such expulsion or extraction, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps."

*The Revision of Model State Vital Statistics Act* also recommended that all induced terminations of pregnancy should be excluded from the fetal death file, except when the fetus was known to be dead before the procedure and when the induction was performed for the sole purpose of removing an already-dead fetus. The term "induced termination" implies a pregnancy in progress, not one in which fetal death has already occurred.

The implementation of a new certificate of fetal death in Arizona in the future is likely to improve the integrity of the fetal death database; excluding those induced terminations where the fetus died during the induction procedure (these will continue to be included in the abortion database but no longer double-counted among both abortions and fetal deaths). Until then, the fetal death data reported in the *Arizona Health Status and Vital Statistics* annual report will be focused on a subset of all records collected, that is **reportable spontaneous fetal losses**: including spontaneous terminations of pregnancy at 20 or more weeks of gestation (or if gestational age is unknown, the death of fetuses of at least 350 grams in weight), and excluding induced terminations of pregnancy performed with the intention other than to remove a dead fetus.

It is only beginning with the year 2000 that information about the gestational age of a fetus became available in the electronic database of fetal deaths in Arizona. For the first time the users of the health statistical information about fetal deaths realized that a rather surprising number of records in the fetal death database also include some stillbirths prior to 20 weeks and of any weight, i.e., events not required to be reported in the State (**Table 1C-3**). In this report, those early stillbirths are excluded from the count of reportable fetal losses.

Beginning in 2003, the data tables in Section 1C and 5C have been revised to include only reportable spontaneous fetal losses.

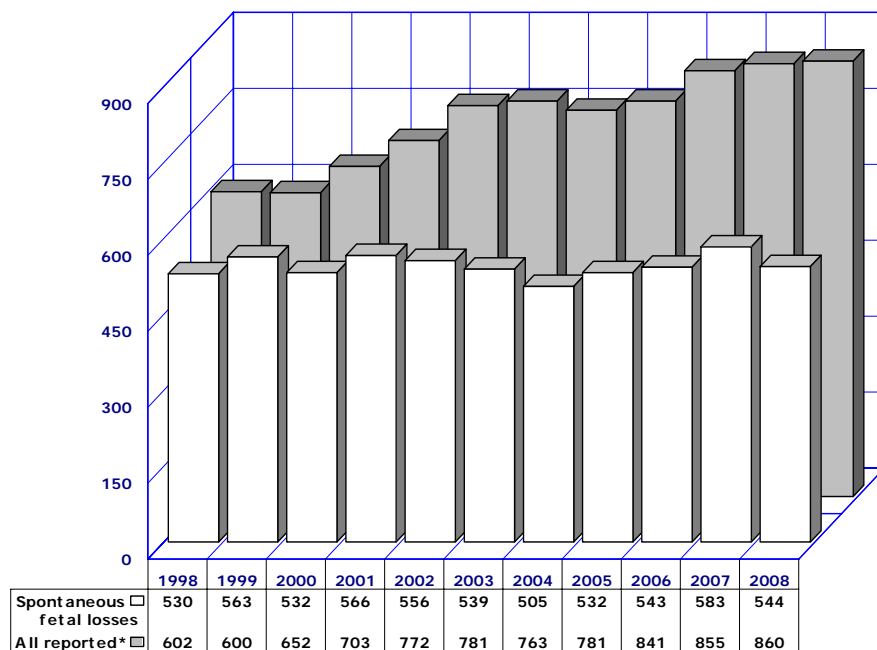
The revision of the U.S. Standard, as well as Arizona Report of Fetal Death certification format introduces substantial changes in how cause of fetal death is collected. The new format has two parts: A. Initiating cause/condition and B. Other significant causes or conditions. The instructions direct the physician to report an initiating condition in part A and all remaining causes in part B. Compared with the previous U.S. Standard Report of Fetal Death (1989 revision), the new format eliminates the reported sequence of conditions resulting in death and assumes that physicians will be able to provide an "initiating cause/condition," which is equivalent to the "reported underlying cause of death." A list of checkboxes and "Specify" lines replace the previous open-ended format. The list is not inclusive nor as detailed as possible. The "Specify" lines allow physicians to report other causes or provide more detail.

A comparison of the current with the proposed Arizona Certificate of Fetal Death is available online at <http://www.azdhs.gov/plan/cert/pdf/fetal.pdf>.



## 1C. FETAL, PERINATAL AND MATERNAL DEATHS

**Figure 1C-1**  
Trends in Fetal Deaths, Arizona, 1998-2008

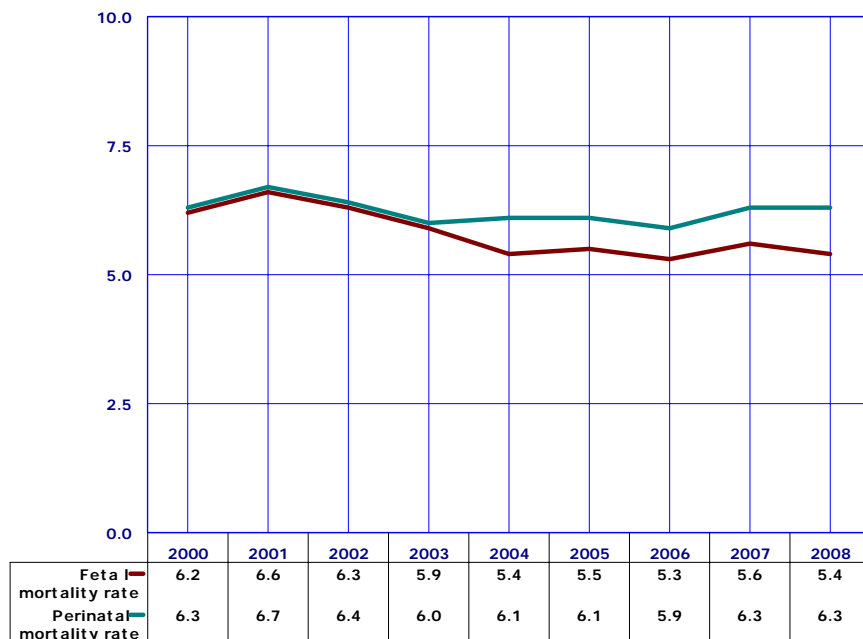


It is not possible to identify the gestational age of fetal deaths prior to 2000. However, the practice of including spontaneous or induced terminations of pregnancy prior to 20 weeks of gestation and/or of any weight had begun in 1997 effecting a rather substantial increase in the number of annually reported fetal deaths in Arizona from 483 in 1996 to 637 in 1997.

The number of all reported fetal deaths in Arizona (including late term abortions) in 2008 was 860 compared to 855 in 2007 (**Figure 1C-1, Table 1C-3**). In contrast, the annual number of reportable spontaneous fetal losses decreased by 6.7 percent from 583 in 2007 to 544 in 2008 (**Figure 1C-1, Table 1C-3**).

\*Includes spontaneous and induced termination 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).

**Figure 1C-2**  
Fetal\* and Perinatal Mortality\*\* Rates, Arizona, 2000-2008



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 and fetal deaths remained unchanged at 6.3 in 2008 (**Figure 1C-2, Table 1C-3**).

Early infant deaths accounted for 339 or 53.6 percent of the 632 perinatal deaths in 2008 (**Figure 1C-2, Table 1C-3**).

The fetal mortality rate in 2008 was 5.4 fetal deaths of 20 weeks of gestation or more per 1,000 live births and fetal deaths.

\*Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

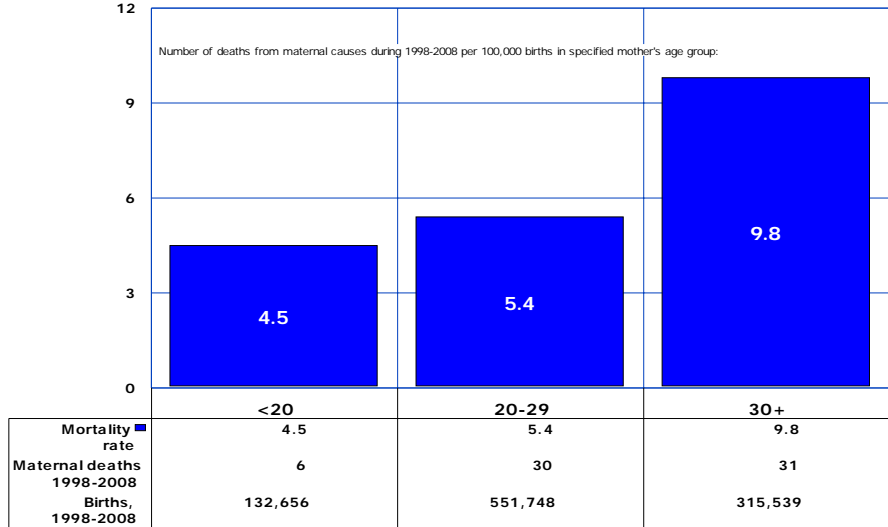
\*\*Infant deaths of less than 7 days and fetal deaths with a period of gestation of 28 weeks or more, per 1,000 live births and fetal deaths.

1C. FETAL, PERINATAL AND MATERNAL DEATHS

**Figure 1C-3**  
Average Annual Maternal Mortality Rates by Mother's Age Group, Arizona, 1998-2008

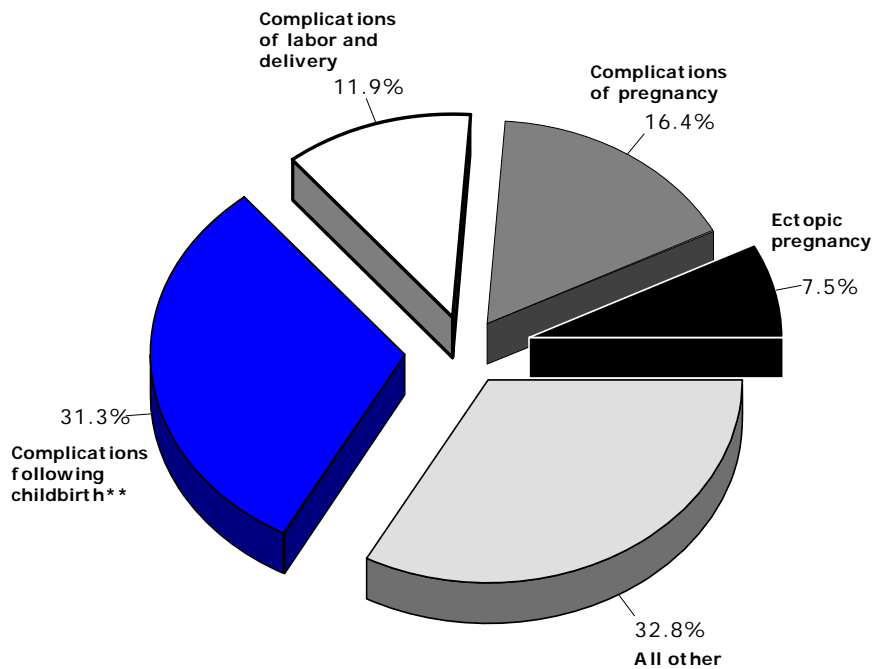
In 2008, as in 2007, eight women were reported to have died from maternal causes (Table 1C-1). The number of maternal deaths does not include all deaths occurring to pregnant women, but only those deaths assigned to causes related to or aggravated by pregnancy or pregnancy management.

Based on the total number of 67 maternal deaths from 1998 to 2008 and 999,943 live births during that period, the average annual maternal mortality rate was 6.7 deaths per 100,000 live births. The average annual maternal mortality rate of 9.8 per 100,000 live births to women age 30 years or older during 1998-2008 was 2.2 times greater than the rate of 4.5/100,00 among women aged 19 years or younger (Figure 1C-3).



**Figure 1C-4**  
Causes of Maternal Mortality\*, Arizona, 1998-2008

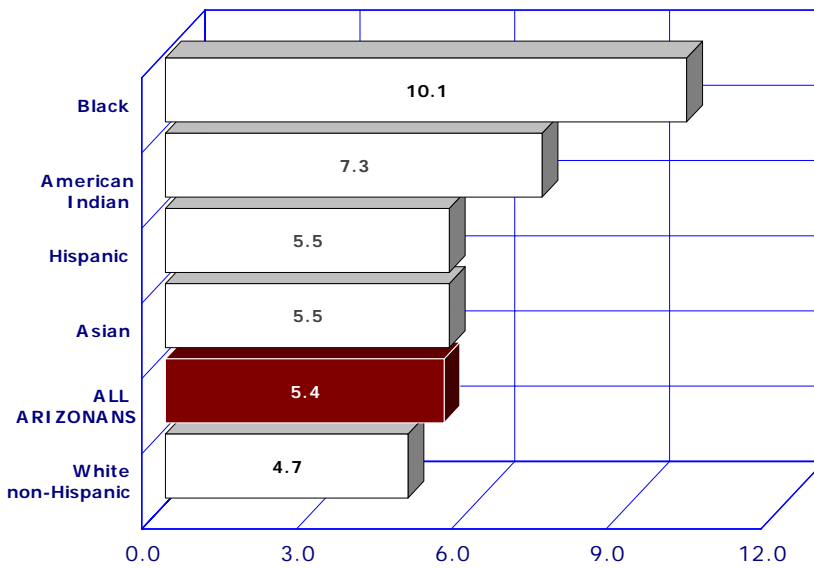
In the eleven-year period from 1998 to 2008, the causes of maternal deaths in the State have included complications following childbirth (i.e. complications of the puerperium, 31.3 percent), complications mainly related to pregnancy (16.4 percent of all maternal deaths) and complications occurring in the course of labor and delivery (11.9 percent). Ectopic pregnancy accounted for 7.5 percent of maternal deaths in 1998-2008 (Figure 1C-4, Table 1C-2).



\*Based on the total number of maternal deaths from 1997 to 2007.  
\*\* Complications of the puerperium.

## 1C. FETAL, PERINATAL AND MATERNAL DEATHS

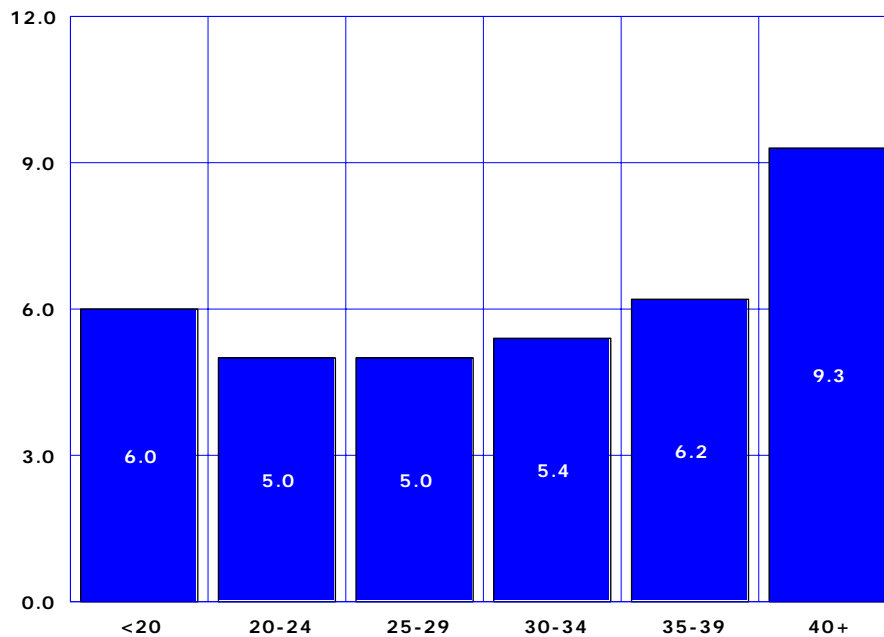
**Figure 1C-5**  
Fetal Mortality Rates\* by Race/Ethnicity, Arizona, 2008



Fetal mortality rates vary by the race/ethnicity of the mother (Figure 1C-5). The fetal mortality for White non-Hispanic women was 4.7, the lowest rate among the groups. In contrast, the fetal mortality rate of 10.1 for Black or African American women was 2.1 times the rate for White non-Hispanic women.

\*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, 2008



Fetal mortality rates also vary considerably by maternal age (Figure 1C-6). In 2008, fetal mortality rates were lowest for women aged 20-34 years and higher for teenage mothers and those aged 35 years and older. The rate for mothers aged 40 years or older was 9.3/1,000, 1.9 times the rate of 5.0 for mothers 20-24 and 25-29 years old.

\*Rate is the number of fetal deaths per 1,000 live births and fetal deaths.

**TABLE 1C-1  
MATERNAL DEATHS<sup>1</sup> BY AGE GROUP AND YEAR, ARIZONA, 1998-2008**

Year	Total maternal deaths	Under <15	15-19	20-24	25-29	30-34	35-39	40-44	45+
1998	2	0	0	0	0	2	0	0	0
1999	3	0	0	0	0	1	2	0	0
2000	7	0	1	1	2	2	0	1	0
2001	8	0	2	2	3	0	0	0	1
2002	6	0	0	1	2	1	2	0	0
2003	5	0	0	0	1	1	3	0	0
2004	2	0	0	1	1	0	0	0	0
2005	9	0	0	3	3	0	2	1	0
2006	9	0	1	2	3	1	1	1	0
2007	8	0	2	0	0	2	3	1	0
2008	8	0	0	1	4	2	1	0	0

<sup>1</sup>For 1998-1999, maternal deaths are those assigned to complications of pregnancy, childbirth and puerperium, category numbers 630-676 of the Ninth Revision, International Classification of Diseases. Beginning in 2000, these are category codes O00-O99 according to the Tenth Revision of the International Classification of Diseases.

**TABLE 1C-2  
MATERNAL DEATHS BY CAUSE AND YEAR, ARIZONA, 1998-2008**

Cause of death (ICD-9/ICD-10 codes)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>PREGNANCY WITH ABORTIVE OUTCOME (630-636/O00-O07)</b>	0	0	0	1	0	0	0	1	2	1	1
Ectopic pregnancy (633/O00)	0	0	0	1	0	0	0	1	1	1	1
<b>COMPLICATIONS MAINLY RELATED TO PREGNANCY (640-648/O10-O16)</b>	1	0	3	1	1	1	0	0	0	1	3
<b>COMPLICATIONS OCCURRING IN THE COURSE OF LABOR AND DELIVERY (660-669/O60-O75)</b>	1	1	1	1	1	0	1	0	2	0	0
<b>COMPLICATIONS OF THE PUERPERIUM* (670-676/O85-O92)</b>	0	2	1	2	2	2	0	4	4	2	2
<b>ALL OTHER</b>	0	0	2	3	2	2	1	4	1	4	2
<b>TOTAL</b>	2	3	7	8	6	5	2	9	9	8	8

\* Complications following childbirth.

Note: In parentheses are category codes from the Ninth Revision/Tenth Revision of the International Classification of Diseases.

**TABLE 1C-3  
FETAL AND PERINATAL DEATHS AND RATES BY YEAR, ARIZONA, 1998-2008**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>NUMBER OF ALL REPORTED FETAL DEATHS</b> Include 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.	602	600	652	703	772	781	763	781	841	855	860
<b>NUMBER OF REPORTABLE FETAL DEATHS</b> Include 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)	NA	NA	535	605	639	628	581	597	690	729	724
<b>NUMBER OF REPORTABLE SPONTANEOUS FETAL LOSSES</b> Include 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), exclude induced terminations of pregnancy	530	563	532	566	556	539	505	532	543	583	544
<b>RATE OF REPORTABLE SPONTANEOUS FETAL LOSSES<sup>1</sup></b>	<b>6.8</b>	<b>6.9</b>	<b>6.2</b>	<b>6.6</b>	<b>6.3</b>	<b>5.9</b>	<b>5.4</b>	<b>5.5</b>	<b>5.3</b>	<b>5.6</b>	<b>5.4</b>
<b>NUMBER OF PERINATAL DEATHS:</b>	NA	NA	536	570	562	550	568	588	599	649	632
Spontaneous fetal losses of 28 or more weeks of gestation	NA	NA	260	274	278	252	271	266	259	290	293
Infant deaths of less than 7 days	288	283	276	296	284	298	319	322	340	359	339
<b>PERINATAL DEATH RATE<sup>2</sup></b>	NA	NA	<b>6.3</b>	<b>6.7</b>	<b>6.4</b>	<b>6.0</b>	<b>6.1</b>	<b>6.1</b>	<b>5.9</b>	<b>6.3</b>	<b>6.3</b>

<sup>1</sup> Per 1,000 live births + reportable spontaneous fetal losses of 20 or more weeks of gestation.

<sup>2</sup> Per 1,000 live births + spontaneous fetal losses of 28 or more weeks of gestation

Note: No information about gestational age was provided in the fetal death database prior to 2000.

TABLE 1C-4  
 SELECTED CHARACTERISTICS OF REPORTABLE SPONTANEOUS<sup>1</sup> FETAL LOSSES BY YEAR, ARIZONA, 2000-2008

Characteristic	Year									
	2000	2001	2002	2003	2004	2005	2006	2007	2008	
<b>Total reportable spontaneous fetal losses</b>	532	566	556	539	505	532	543	583	544	
<b>Gender</b>										
Male	280	275	299	296	231	262	286	300	295	
Female	244	267	253	240	270	268	252	277	246	
Unknown	8	24	4	2	4	1	5	5	3	
<b>Mother's race/ethnicity</b>										
White non-Hispanic	223	234	212	199	210	208	210	215	198	
Hispanic or Latino	231	228	256	246	214	232	244	267	234	
Black or African American	28	33	35	41	30	33	39	44	44	
American Indian or Alaska Native	29	53	37	41	31	45	38	39	47	
Asian or Pacific Islander	9	14	12	8	17	11	10	17	19	
Unknown	12	4	4	4	3	3	2	1	2	
<b>Mother's age group</b>										
<15	2	6	2	1	1	0	3	3	2	
15-17	42	28	24	31	25	29	31	38	22	
18-19	47	51	40	55	50	44	49	46	49	
20-24	125	125	146	134	130	141	117	152	132	
25-29	126	137	129	140	106	125	138	144	141	
30-34	92	115	111	93	105	112	98	99	113	
35-39	64	71	69	62	67	58	73	81	63	
40-44	25	20	27	17	17	17	26	15	18	
45+	2	1	4	1	1	2	5	3	2	
Unknown	7	12	4	5	3	4	3	2	2	
<b>Gestational age<sup>2</sup></b>										
20-27 weeks	271	290	277	285	254	263	284	292	250	
28+ weeks	260	274	278	252	249	266	259	290	293	
Unknown	1	2	1	2	2	3	0	1	1	
<b>Weight in grams</b>										
<350 grams	82	74	98	90	83	95	101	96	93	
350-499	91	94	78	95	83	79	106	83	68	
500-2,500	236	214	221	243	219	225	223	264	256	
2,501-3,999	91	101	115	86	84	102	88	108	104	
4,000+	7	16	15	12	21	13	13	19	9	
Unknown	25	67	29	13	15	18	12	13	14	

<sup>1</sup> Include 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), exclude induced terminations of pregnancy.

<sup>2</sup>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.

### INDUCED TERMINATIONS OF PREGNANCY

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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.

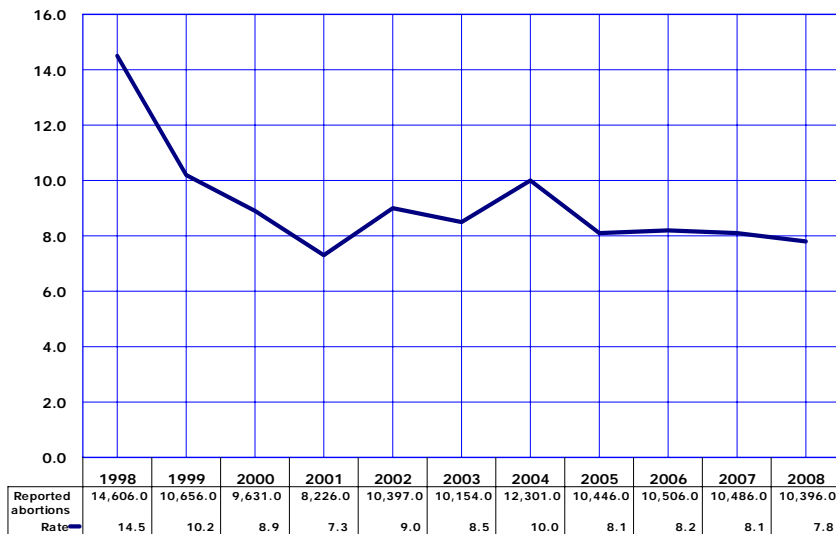
According to the Model State Vital Statistics Act and Regulations\*, "induced termination of pregnancy" or abortion means "the purposeful interruption of pregnancy with the intention other than to produce a live-born infant or to remove a dead fetus which does not result in a live birth." This definition excludes management of prolonged retention of products of conception following fetal death. In this publication, the term "abortion" refers to induced termination of pregnancy in the above sense, and these two terms are used interchangeably.

The data in Sections 1D and 5D represent the number of abortions reported to ADHS not the actual number of abortions which occurred in the State. Although Arizona law requires that all abortions performed in the State be reported to the ADHS, complete reporting is not assured. Also, available data about abortions include only limited and incomplete information about induced terminations of pregnancy performed on Arizona residents in out-of-State facilities.

\*1992 Revision published by the National Center for Health Statistics. Available online at [cdc.gov/nchs/data/misc/mvsact92b.pdf](http://cdc.gov/nchs/data/misc/mvsact92b.pdf)

## 1D. INDUCED TERMINATIONS OF PREGNANCY

**Figure 1D-1**  
**Number of Reported Abortions and Abortion Rates\* by Year,**  
**Arizona Residents, 1998-2008**



In calendar year 2008, the Arizona Department of Health Services received 10,396 reports of abortions obtained by Arizona residents, 90 less than the 10,486 reported in 2007 (**Figure 1-D1, Table 1D-1**).

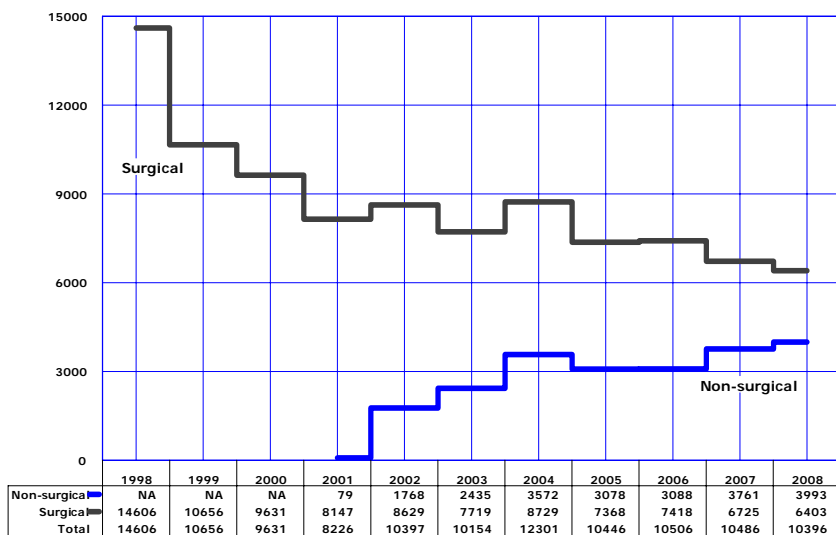
The proportion of induced terminations of pregnancy performed in physicians' offices declined over time from 13.4 percent in 1998 to 0.4 percent in 2005. In 2006 and 2007, all of the reported abortions performed in Arizona were in non-hospital clinics (percentages based on data in **Table 1D-1**). In 2008, 5 abortions were reported as performed in a physician's office.

Six out of ten (61.0 percent) women who reported having an abortion in 2008 had the procedure for the first time. Eighty-eight percent of all reported abortions occurred before 13 weeks of pregnancy. Few reported abortions occurred after 15 weeks of gestation: 3.2 percent at 16-20 weeks and 0.8 percent at  $\geq 21$  weeks (percentages based on data in **Table 1D-3**).

Eighty-seven percent of women who obtained abortions were known to be unmarried (**Table 5D-5**).

Numer of abortions per 1,000 females 15-44 years old.

**Figure 1D-2**  
**Trends in the Number of Surgical and Non-Surgical Abortions by Year,**  
**Arizona Residents, 1998-2008**



The rate of induced terminations of pregnancy per 1,000 female residents aged 15-44 decreased from 8.1 in 2007 to 7.8 in 2008 (**Table 1D-1**). A time series analysis of annual abortion data for 1998-2008 continues to reveal a declining trend (**Figure 1D-2, Table 1D-1**) in surgical terminations of pregnancy in Arizona, while an upward trend applies to non-surgical abortions.

The number of reported non-surgical abortions (i.e., terminations of pregnancy by the administration of a medication such as *methotrexate* or *mifepristone* each used in conjunction with *misoprostol*) increased by 6.2 percent from 3,761 in 2007 to 3,993 in 2008. The number of surgical abortions (performed by curettage or by dilation and evacuation) decreased from 6,725 in 2007 to 6,403 in 2008.

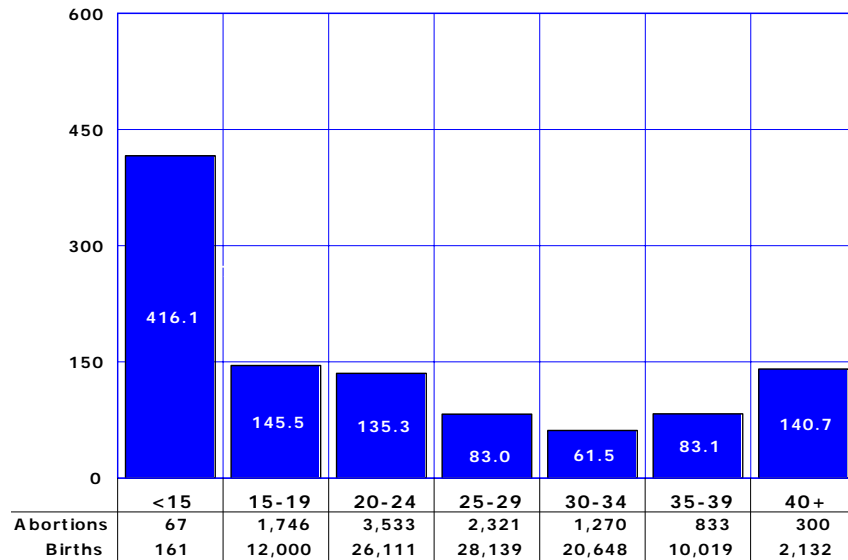


1D. INDUCED TERMINATIONS OF PREGNANCY

Figure 1D-3  
Abortion Ratios\* by Age Group, Arizona Residents, 2008

Abortion ratios (the number of abortions per 1,000 live births in each age group) vary by age of women 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 19 and those aged 40 years or older (Figure 1D-3).

A comparison of age-specific abortion ratios by race/ethnicity is provided in Table 1D-5.

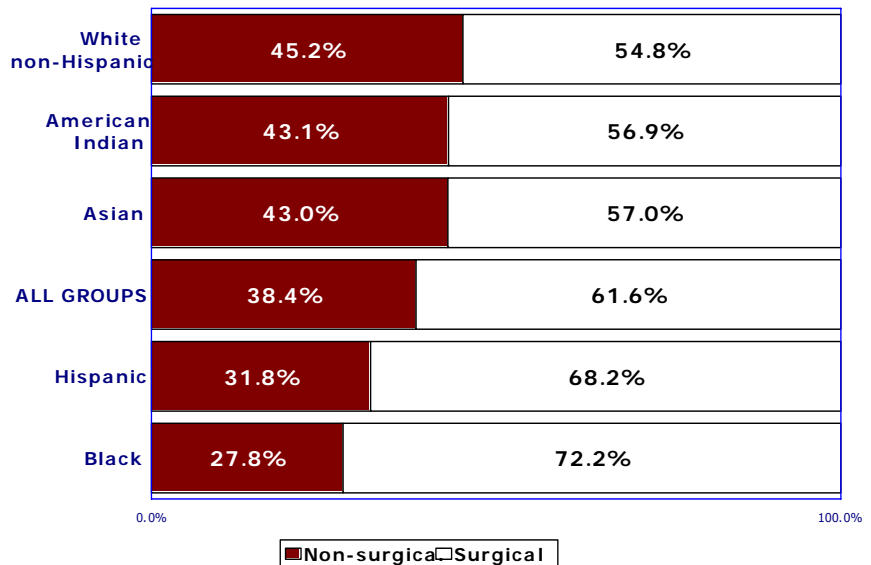


Number of reported abortions per 1,000 live births in specified group.

Figure 1D-4  
Proportional Contribution of Non-Surgical and Surgical Abortions by Race/Ethnicity, Arizona Residents, 2008

In 2008, non-surgical (also called "medical") abortions made up approximately 38.4 percent of all procedures reported in Arizona. Among White non-Hispanics, American Indians, and Asians did the proportion of non-surgical abortions exceed the average for all groups (Figure 1D-4). The ratios of non-surgical abortions among Black and Hispanic women were the lowest among race/ethnic groups.

All abortions performed in Coconino County were non-surgical (Table 5D-3).



Non-surgical: Mifepristone, Methotrexate, RU486, etc.

**TABLE 1D-1  
CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS, ARIZONA, 1998-2008**

Characteristics	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>ABORTIONS PERFORMED IN ARIZONA</b>											
Resided in state	14,747	10,765	10,064	8,302	10,677	10,316	12,690	10,723	10,836	10,759	10,660
Resided out-of-state	14,606	10,656	9,631	8,226	10,397	10,154	12,301	10,391	10,467	10,486	10,358
	141	109	433	76	280	162	389	332	369	273	302
<b>RESIDENT ABORTIONS</b>											
Performed in Arizona	14,606	10,656	9,631	8,226	10,397	10,154	12,301	10,446	10,506	10,486	10,396
Performed out-of-state <sup>1</sup>	14,606	10,656	9,631	8,226	10,397	10,154	12,301	10,391	10,467	10,448	10,358
	NA	NA	NA	NA	NA	NA	NA	55	39	38	38
<b>RACE/ETHNICITY</b>											
White non-Hispanic	7,759	4,868	4,786	3,917	4,909	4,887	5,276	4,431	5,106	5,202	4,737
Hispanic or Latino	4,030	2,904	2,995	2,737	3,566	3,441	4,485	3,112	3,160	3,719	3,124
Black or African American	710	465	531	450	556	495	723	585	581	675	744
American Indian	357	253	253	220	285	357	341	353	342	310	297
Asian or Pacific Islander	400	201	250	207	273	272	444	379	391	454	412
Unknown	1,550	1,965	816	695	808	702	582	1,586	926	126	176
<b>AGE</b>											
19 years and under	2,735	2,046	1,988	1,528	1,995	1,867	2,220	1,892	1,919	1,979	1,813
20-29 years	6,950	5,436	5,029	4,313	5,406	5,531	6,800	5,684	5,770	5,839	5,854
30 years and over	3,206	2,333	2,246	1,926	2,475	2,431	2,939	2,436	2,702	2,652	2,403
Not stated	1,711	841	217	459	521	325	342	434	115	16	326
<b>YEARS OF EDUCATION</b>											
Elementary/secondary (1-12)	5,371	3,680	3,257	2,604	3,029	2,444	3,321	1,435	6,226	9,293	6,964
College (1-4 or 5+)	2,757	1,888	2,537	1,777	2,156	1,889	2,726	1,330	1,415	1,193	2,565
Not stated	6,478	5,088	3,837	3,845	5,212	5,821	6,254	7,681	2,865	0	867
<b>WEEKS OF GESTATION</b>											
12 weeks or under	12,181	8,856	7,637	6,078	8,471	8,093	10,678	8,558	9,470	9,498	9,169
13 weeks or over	1,890	1,443	1,171	996	1,147	998	1,224	1,068	948	974	916
Not stated	535	357	823	1,152	779	1,063	399	820	88	14	305

<sup>1</sup> There are no interstate agreements to exchange abortion reporting forms. Very few states voluntarily send these forms to Arizona.

**TABLE 1D-1 (continued)  
CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS, ARIZONA, 1998-2008**

Characteristics	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>FACILITY</b>											
Clinic	11,703	9,153	8,429	7,334	9,485	9,158	12,281	10,442	10,560	10,486	10,391
Doctor's Office	1,959	1,386	1,202	892	911	995	20	4	0	0	5
Hospital	2	0	0	0	1	1	0	0	0	0	0
Other/Not stated	942	117	0	0	0	0	0	0	0	0	0
<b>REASON FOR TERMINATION</b>											
Elective	14,144	10,390	9,614	8,210	9,910	9,602	10,770	9,987	10,436	10,482	10,377
Medical	12	19	15	10	21	43	207	78	8	2	4
Not stated	450	247	2	6	466	449	1,324	381	62	14	15
<b>PREVIOUS LIVE BIRTHS</b>											
None	6,505	4,623	4,109	3,490	4,508	4,446	5,215	4,593	4,798	4,517	4,441
One or more	8,101	6,033	5,522	4,736	5,889	5,708	7,086	5,853	5,708	5,969	5,955
<b>PREVIOUS INDUCED TERMINATIONS OF PREGNANCY</b>											
None	9,245	6,647	6,160	5,271	6,561	6,606	7,778	6,453	6,390	6,453	6,338
One or more	5,361	4,009	3,471	2,955	3,846	3,548	4,523	3,993	4,116	4,033	4,058
<b>PREVIOUS SPONTANEOUS TERMINATIONS OF PREGNANCY</b>											
None	12,792	9,150	8,474	7,218	9,494	8,780	10,454	8,916	8,864	8,807	8,756
One or more	1,814	1,506	1,157	1,008	903	1,374	1,847	1,530	1,642	1,679	1,640
<b>NONSURGICAL ABORTIONS</b>											
	NA	NA	NA	79	1,768	2,435	3,572	3,078	3,088	3,761	3,993
<b>ABORTION RATIO<sup>1</sup></b>	<b>187.4</b>	<b>132.4</b>	<b>113.3</b>	<b>96.5</b>	<b>119.0</b>	<b>111.9</b>	<b>131.7</b>	<b>109.0</b>	<b>103.0</b>	<b>102.1</b>	<b>104.8</b>
<b>ABORTION RATE<sup>2</sup></b>	<b>14.5</b>	<b>10.2</b>	<b>8.9</b>	<b>7.3</b>	<b>9.0</b>	<b>8.5</b>	<b>10.0</b>	<b>8.1</b>	<b>8.2</b>	<b>8.1</b>	<b>7.8</b>

<sup>1</sup>Number of abortions per 1,000 women giving birth.

<sup>2</sup>Number of abortions per 1,000 women of childbearing age (15 - 44 years old).

Note: Nonsurgical abortions are induced terminations of pregnancy by the administration of a medication such as methotrexate.

**TABLE 1D-2  
NUMBER OF LIVE BIRTHS, ABORTIONS AND RATIOS<sup>1</sup> OF INDUCED TERMINATIONS OF PREGNANCY  
BY RACE/ETHNICITY AND YEAR, ARIZONA, 1998-2008**

Race/ethnicity	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>TOTAL, ALL GROUPS<sup>2</sup></b>											
Births	77,940	80,505	84,985	85,213	87,379	90,783	93,396	95,798	102,042	102,687	99,215
Abortions	14,606	10,656	9,631	8,226	10,397	10,154	12,301	10,446	10,506	10,486	10,396
Abortion ratio	187.5	132.4	113.3	96.5	119.0	111.9	131.7	109.0	103.0	102.1	104.8
<b>WHITE NON-HISPANIC</b>											
Births	38,611	38,711	39,850	38,934	38,819	38,842	39,271	39,657	43,013	42,216	41,925
Abortions	7,759	4,868	4,786	3,917	4,909	4,887	5,276	4,431	5,106	5,202	4,737
Abortion ratio	195.8	125.8	120.1	100.6	126.5	125.8	134.3	111.7	118.7	123.2	113.0
<b>HISPANIC OR LATINO</b>											
Births	28,824	30,784	33,893	35,103	36,089	39,101	40,822	42,156	44,862	45,731	42,639
Abortions	4,030	2,904	2,995	2,737	3,566	3,441	4,485	3,112	3,160	3,719	3,124
Abortion ratio	139.8	94.4	88.4	78.0	98.8	88.0	109.9	73.8	70.4	81.3	73.3
<b>BLACK OR AFRICAN AMERICAN</b>											
Births	2,629	2,699	2,760	2,736	2,753	3,022	3,216	3,450	3,864	4,165	4,301
Abortions	710	465	531	450	556	495	723	585	581	675	744
Abortion ratio	270.1	172.3	192.4	164.5	202.0	163.8	224.8	169.6	150.4	162.1	173.0
<b>AMERICAN INDIAN OR ALASKA NATIVE</b>											
Births	5,460	5,295	5,602	5,340	5,545	5,881	6,120	6,293	6,364	6,408	6,362
Abortions	357	253	253	220	285	357	341	353	342	310	297
Abortion ratio	65.4	47.8	45.2	41.2	51.4	60.7	55.7	56.1	53.7	48.4	46.7
<b>ASIAN OR PACIFIC ISLANDER</b>											
Births	1,747	1,875	2,041	2,104	2,281	2,524	2,614	2,805	3,136	3,412	3,425
Abortions	400	201	250	207	273	272	444	379	391	454	412
Abortion ratio	229	107.2	122.5	98.4	119.7	107.8	169.9	135.1	124.7	133.1	120.3

<sup>1</sup>Number of resident abortions performed in Arizona per 1,000 resident live births in specified race/ethnic group.

<sup>2</sup>Total for all groups may include record with unknown or unspecified race/ethnic group.

**TABLE 1D-3  
ABORTIONS BY WEEK OF GESTATION AND AGE GROUP, ARIZONA, 2008**

	Total	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+	Unknown
<b>Total</b>	10,396	67	567	1,179	3,533	2,321	1,270	833	284	16	326
<b>6 weeks or less</b>	3,304	11	114	313	1,123	773	412	292	107	13	146
<b>7</b>	2,042	10	101	236	676	474	265	175	48	0	57
<b>8</b>	1,507	7	75	183	499	336	186	128	46	0	47
<b>9</b>	873	8	69	109	303	168	110	65	20	1	20
<b>10</b>	607	9	32	79	202	146	73	40	14	0	12
<b>11</b>	476	4	40	62	163	106	52	28	11	1	9
<b>12</b>	366	3	32	38	124	96	42	19	5	0	7
<b>13</b>	258	4	23	37	93	50	27	18	4	0	2
<b>14</b>	126	0	16	18	45	21	9	11	3	0	3
<b>15</b>	117	1	10	15	48	18	11	7	3	0	4
<b>16</b>	90	0	6	16	35	14	11	5	1	0	2
<b>17</b>	71	1	9	12	24	13	6	5	1	0	0
<b>18</b>	62	1	5	13	20	10	6	4	2	0	1
<b>19</b>	58	0	2	10	23	8	6	6	3	0	0
<b>20</b>	52	0	7	3	15	10	8	7	1	0	1
<b>21+</b>	82	4	6	8	36	14	6	3	5	0	0
<b>Unknown</b>	305	4	20	27	104	64	40	20	10	1	15

TABLE 1D-4  
 ABORTIONS BY WEEK OF GESTATION AND RACE/ETHNICITY, ARIZONA, 2008

Week of gestation	Total	Race/ethnicity						Unknown race
		White non-Hispanic	Hispanic or Latino	Black or African American	American Indian or Alaska Native	Asian or Pacific Islander	Other race	
<b>Total</b>	10,396	4,737	3,124	744	297	412	906	176
<b>6 weeks or less</b>	3,304	1,639	942	186	78	147	265	47
<b>7</b>	2,042	1,018	558	131	47	84	179	25
<b>8</b>	1,507	652	456	110	52	64	147	26
<b>9</b>	873	376	267	68	29	26	95	12
<b>10</b>	607	268	182	57	22	8	61	9
<b>11</b>	476	194	156	43	17	18	42	6
<b>12</b>	366	146	112	36	13	9	36	14
<b>13</b>	258	88	106	22	5	10	21	6
<b>14</b>	126	41	41	14	8	12	8	2
<b>15</b>	117	46	36	10	2	5	16	2
<b>16</b>	90	33	31	8	2	2	12	2
<b>17</b>	71	20	33	5	2	2	5	4
<b>18</b>	62	19	28	8	1	2	4	0
<b>19</b>	58	21	20	5	3	5	2	2
<b>20</b>	52	18	19	7	3	4	0	1
<b>21+</b>	82	38	27	7	5	4	0	1
<b>Unknown</b>	305	120	110	27	8	10	13	17

**TABLE 1D-5  
NUMBER OF LIVE BIRTHS, ABORTIONS, AND RATIOS OF INDUCED TERMINATIONS OF PREGNANCY BY AGE GROUP  
AND RACE/ETHNICITY, ARIZONA, 2008**

	All ages*	<15	15-17	18-19	20-24	25-29	30-34	35-39	40-44	45+
<b>White non Hispanic</b>	Births	41,925	15	769	2,209	9,724	10,096	5,062	979	71
	Abortions	4,737	21	266	554	1,617	548	365	139	11
	<b>Abortion ratio**</b>	<b>113.0</b>	<b>1400.0</b>	<b>345.9</b>	<b>250.8</b>	<b>166.3</b>	<b>82.5</b>	<b>54.3</b>	<b>72.1</b>	<b>142.0</b>
<b>Hispanic or Latino</b>	Births	42,639	111	2,724	4,333	12,505	7,549	3,454	694	30
	Abortions	3,124	34	173	354	1,089	681	243	72	1
	<b>Abortion ratio</b>	<b>73.3</b>	<b>306.3</b>	<b>63.5</b>	<b>81.7</b>	<b>87.1</b>	<b>60.6</b>	<b>50.2</b>	<b>70.4</b>	<b>103.7</b>
<b>Black or African American</b>	Births	4,301	12	203	441	1,309	705	364	72	8
	Abortions	744	5	43	95	258	158	52	18	1
	<b>Abortion ratio</b>	<b>173.0</b>	<b>416.7</b>	<b>211.8</b>	<b>215.4</b>	<b>197.1</b>	<b>133.1</b>	<b>131.9</b>	<b>142.9</b>	<b>250.0</b>
<b>American Indian or Alaska Native</b>	Births	6,362	22	408	755	2,064	974	437	113	6
	Abortions	297	2	17	35	87	75	24	7	0
	<b>Abortion ratio</b>	<b>46.7</b>	<b>90.9</b>	<b>41.7</b>	<b>46.4</b>	<b>42.2</b>	<b>47.4</b>	<b>47.2</b>	<b>54.9</b>	<b>61.9</b>
<b>Asian or Pacific Islander</b>	Births	3,425	1	26	86	409	1,189	619	101	7
	Abortions	412	2	12	22	104	71	65	23	1
	<b>Abortion ratio</b>	<b>120.3</b>	<b>NA</b>	<b>461.5</b>	<b>255.8</b>	<b>254.3</b>	<b>103.4</b>	<b>59.7</b>	<b>105.0</b>	<b>227.7</b>

\* Includes records with unknown age.

\*\*The number of abortions per 1,000 live births. The abortion ratio is calculated if at least 10 (ten) births are recorded in specified group.  
Note: Records with unknown race/ethnicity are not shown above.