1B.

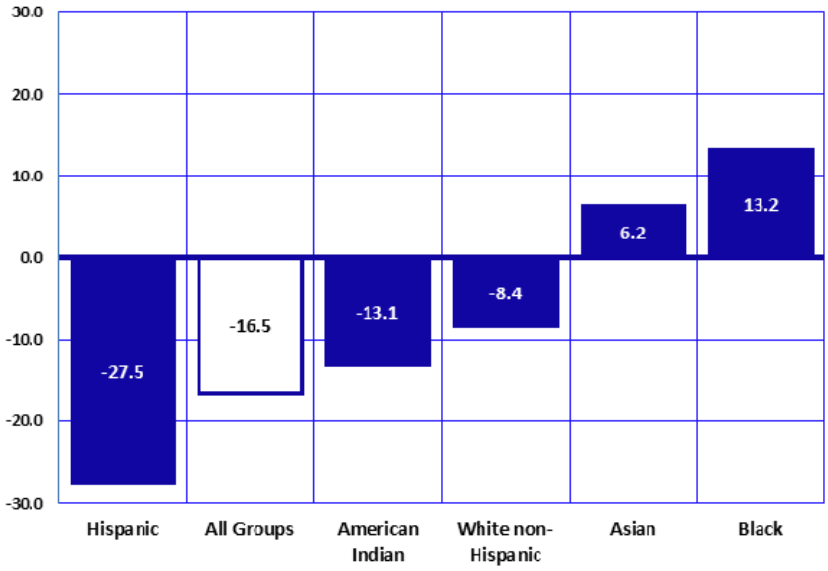
NATALITY:
MATERNAL CHARACTERISTICS AND NEWBORN'S HEALTH

The number of resident births reached its recent peak in 2007 at 102,687 (**Table 1B-2**). In 2008, the number of resident births declined to 99,215; the first annual decline since 1991 (which, like 2008, also was an economic downturn year). Since 2008, the number of births declined until 2011, reaching a low of 85,190 births. In 2012, the number of resident births slightly increased to 85,725.

There were striking differences in how the number of births changed from 2007 to 2012 by mother's race/ethnicity. The number of births rose by 13.2 percent for Black or African American mothers. Compared to 2007, the number of births for all race/ethnic groups combined was 16.5 percent lower in 2012. Hispanic or Latino women experienced a decrease of 27.5 percent during this period (**Figure 1B-1**).

Since the 2008 edition of this report, we have been pointing out that Hispanics, unlike any other race/ethnic group in the State, faced not only the economic recession (shared by all), but also additional challenges such as the employer-sanction law (a penalty on employers hiring undocumented workers), and a widespread practice of e-verify (checking the legal-residence status of those seeking employment). Considering these factors, the decrease in births to Hispanic or Latino mothers is likely correlated with the social and economic conditions this particular group has been facing, especially considering the estimated number of Hispanic women of childbearing age (15 – 44 years) has actually increased from 405,306 in 2007 to 442,868 in 2012.

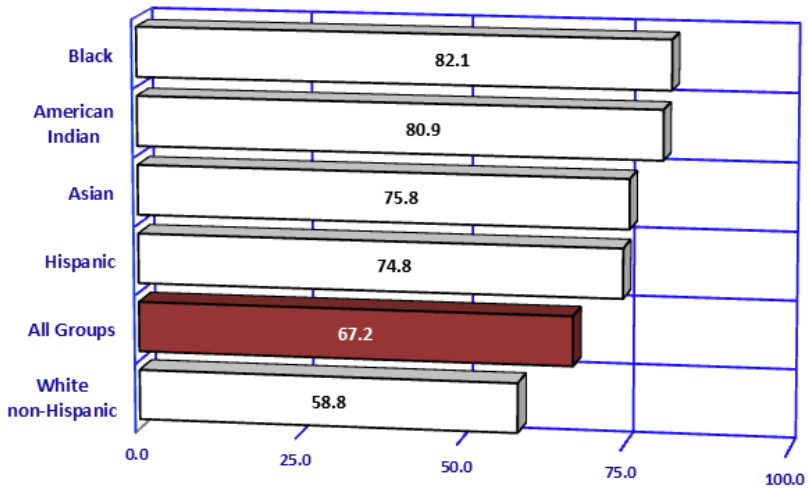
Figure 1B-1
Percent Change from 2007 to 2012 in the Number of Resident Live Births by Mother's Race/Ethnicity, Arizona



From 2007 to 2012, the number of resident live births declined by 16.5 percent (**Figure 1B-1**). The magnitude of the reduction in the number of births was the largest among Hispanics or Latinos (-27.5 percent) and American Indians (-13.1 percent).

Racial/ethnic groups that represent a relatively small proportion of Arizona's population have seen increases in the number of live births from 2007 to 2012. Both black (13.2 percent) and Asian (6.2 percent) resident mothers had a greater number of live births in 2012 than in 2007.

Figure 1B-2
General Fertility Rates[a] by Race/Ethnicity among Females of all Ages, Arizona, 2012



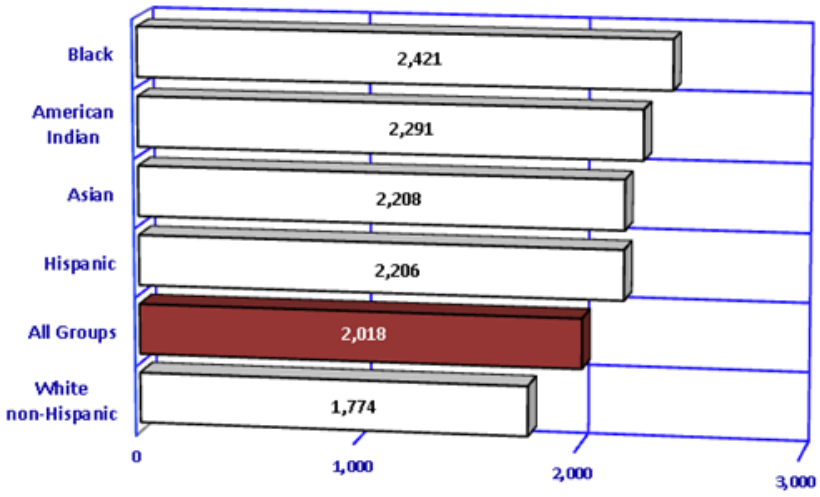
From among 1,274,871 women of childbearing age (15-44 years), 6.7 percent gave birth in 2012. The *general fertility rate* (the number of births per 1,000 women 15-44 years old; GFR) was the highest for Black or African American females, followed by American Indian, Asian, and Hispanic females. The GFR for White non-Hispanic females was the lowest of all racial/ethnic groups.

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

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

The *total fertility rate* (TFR) indicates the average number of births to a hypothetical cohort of 1,000 women, if they experienced the age-specific birth rates observed in a given year throughout their childbearing years. From 2000 to 2008, Arizona's TFRs 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. The TFR was 2,058 births per 1,000 women of childbearing age in 2009 and 2010, and decreased to 2,001 in 2011. In 2012, the TFR for all groups increased to 2,018. The 2012 TFR of 2,421 for Black or African American women exceeded the generation replacement rate by 14.7 percent. The rate for White non-Hispanic women (1,774) was 15.9 percent lower than the replacement rate.

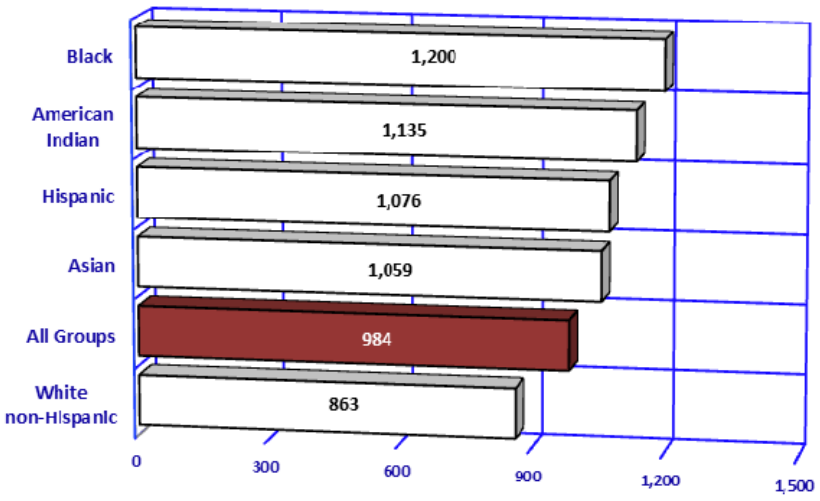
Figure 1B-3
Total Fertility Rates[a] by Race/Ethnicity, Arizona, 2012



Note: [a] The sum of age group-specific birth rates multiplied by five (the number of years in the age group). The rate of 2,018 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 2012, they would have a total of 2,018 children (or 2.0 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.

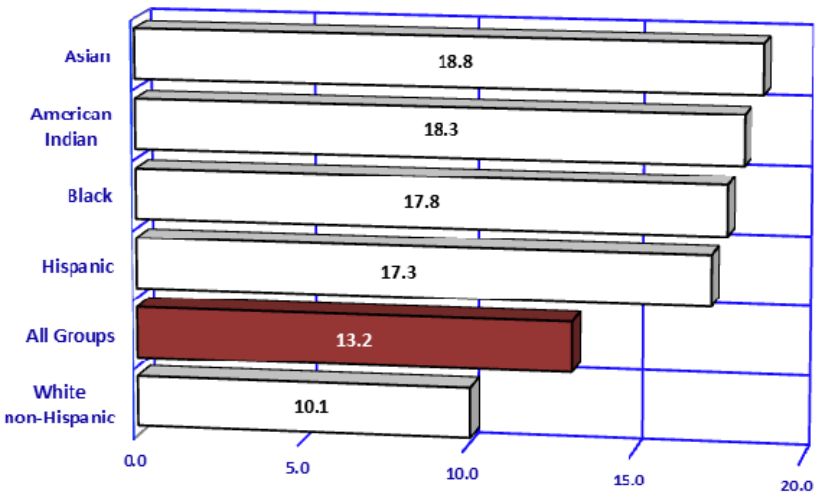
Another measure used to summarize reproduction patterns is the *gross reproduction rate* (GRR). It represents the average number of daughters born to a hypothetical cohort of 1,000 women if they experienced the age-specific birth rates observed in a given year throughout their childbearing years. This measure is similar to the total fertility rate except that it measures only female births, since reproduction is largely dependent on the number of females in a given population. In 2012, the gross reproduction rates in Arizona ranged from 863 for White non-Hispanic women to 1,200 for Black women (**Figure 1B-4**, **Table 1B-1**).

Figure 1B-4
Gross Reproduction Rates[a] by Race/Ethnicity, Arizona, 2012



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

Figure 1B-5
Birth Rates by Race/Ethnicity, Arizona, 2012



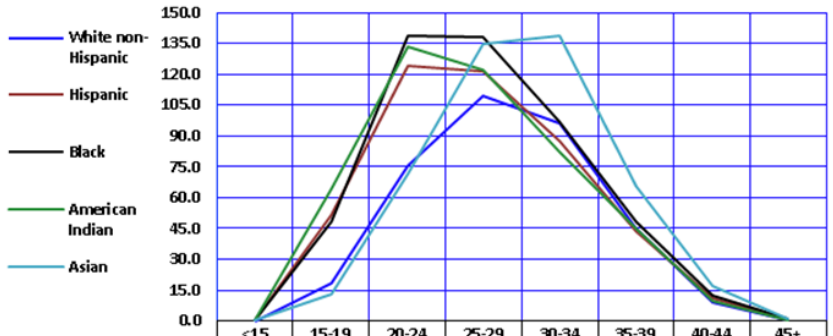
Note: [a] Number of births per 1,000 population in specified group.

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 remained stable at 13.2/1,000 in both 2011 and 2012.

In 2012 the crude birth rates by mother's race/ethnicity ranged from 10.1 births per 1,000 White non-Hispanics to 18.8 per 1,000 Asians (**Figure 1B-5**).

Figure 1B-6
Birth Rates[a] by Mother's Age Group and Race/Ethnicity, Arizona, 2012



	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
White non-Hispanic	0.1	18.2	75.6	109.3	96.5	45.3	9.3	0.6
Hispanic	0.5	51.7	124.3	121.7	87.6	43.9	10.9	0.5
Black	0.5	48.5	139.0	137.8	96.9	48.2	12.4	1.0
American Indian	0.5	64.6	133.4	121.9	82.2	45.1	9.9	0.7
Asian	0.2	13.1	71.6	134.7	138.4	65.7	17.0	1.1

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

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**).

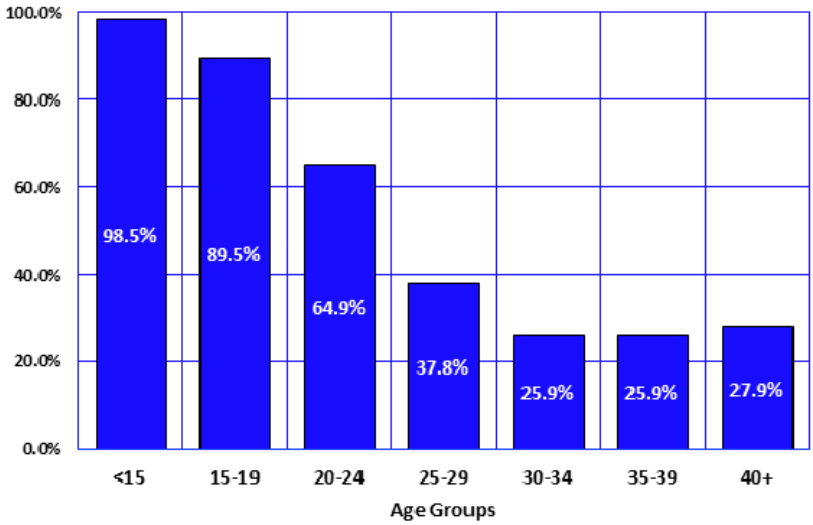
In 2012, Black, American Indian, and Hispanic women had the highest birth rates for women in age groups up to 29 years. The birth rates for women aged 30 years or older were the highest among Asian women. In general, Hispanic, Black, and American Indian women tend to give birth at younger ages than Asian and non-Hispanic White women.

Unmarried mothers have accounted for an increasing annual proportion of births throughout the 1980s and 1990s, with 45.2 percent in 2012 (**Table 1B-2**). In 2012, 38,770 infants were born to unmarried mothers compared to 35,116 in 2002 (**Table 1B-26**).

A decade ago, the proportion of births among unmarried women aged 20-24 years was 52.5 percent. This proportion has continued to rise from 2001 to 2012. In 2012, nearly 7 out of ten (64.9 percent) mothers 20-24 years old were unmarried (**Figure 1B-7**).

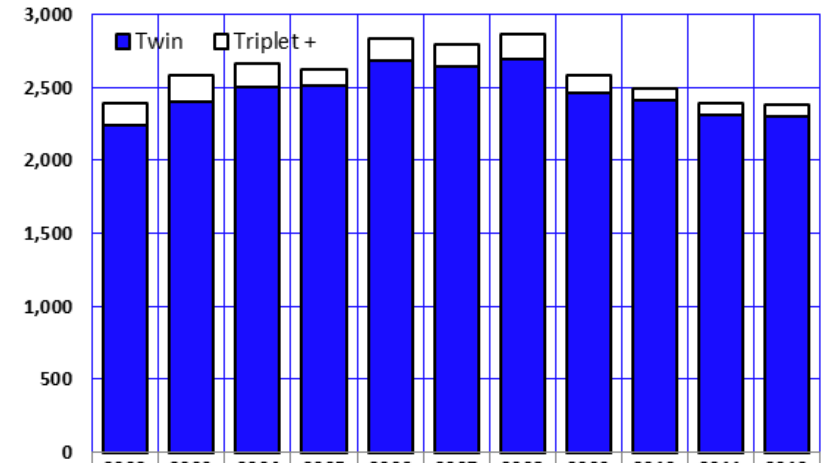
Births and birth ratios by mother's marital status, age group, and race/ethnicity are given in **Table 1B-23**. County-level information is provided in Table **5B-14** and **5B-15**.

Figure 1B-7
Percent Births to Unmarried Mothers by Age Group, Arizona, 2012



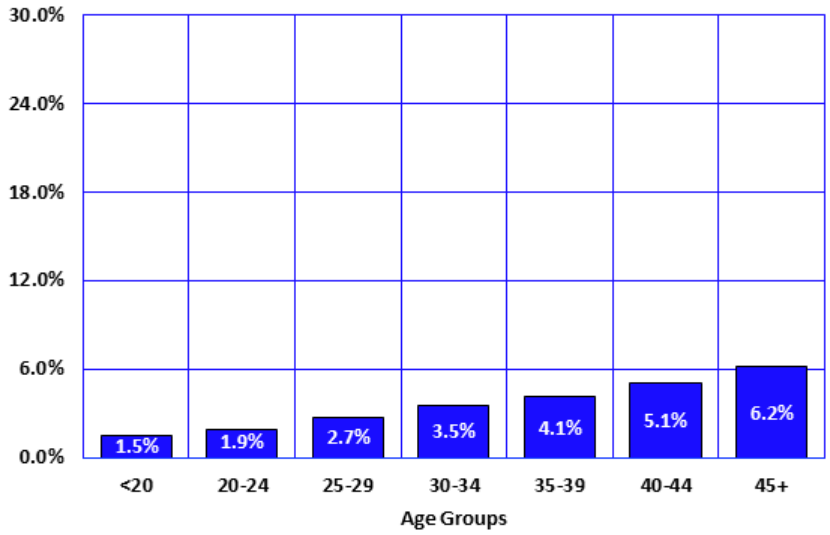
The number of multiple birth events in Arizona declined from 2,868 in 2008, (the highest number ever recorded) to 2,382 in 2012 (**Figure 1B-8**). The number of babies born in twin deliveries decreased from 2,693 in 2008 to 2,301 in 2012 (**Figure 1B-8**). The number of triplet and higher order multiple birth events decreased by 53.7 percent from 175 in 2008 to 81 in 2012.

Figure 1B-8
Number of Births in Twin and Triplet+ Deliveries by Year, Arizona, 2002-2012



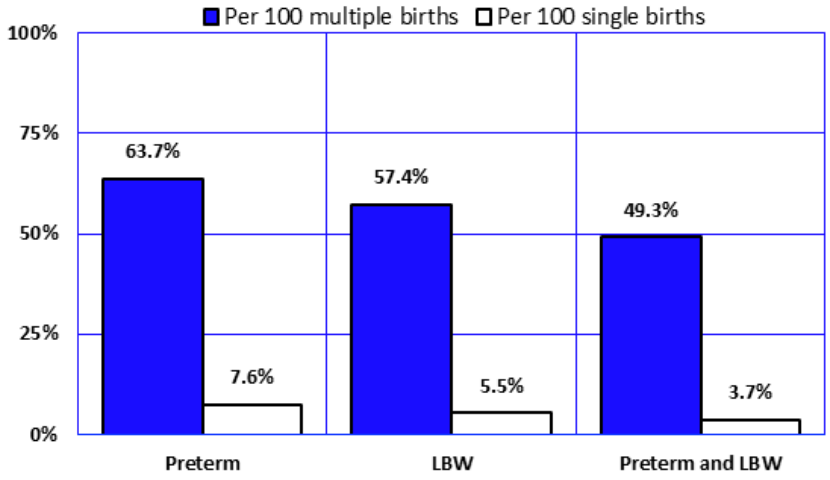
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Triplet +	155	181	163	116	142	152	175	122	80	85	81
Twin	2,240	2,400	2,500	2,509	2,688	2,646	2,693	2,460	2,409	2,312	2,301

Figure 1B-9
Risk for Multiple Births by Mother's Age Group, Arizona, 2012



In 2012, the proportion of multiple births gradually increased with maternal age. Among women aged 45 years and older, 6.2 percent of all births were twins, triplets, or quadruplets (**Figure 1B-9**). The percent of all births that were multiple births to women age 45 and over decreased from 25 percent in 2010, to 16.8 percent in 2011, to 6.2 percent in 2012. Possible explanations of the decrease in plural births among women age 45 and above include increased awareness of risks associated with births at later ages, in turn reducing the number of women seeking fertility treatments.

Figure 1B-10
Infants Born too Early (Preterm)[a] and Infants Born too Small (LBW)[b] among Multiple and Single Births, Arizona, 2012



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

Infants born in multiple deliveries tend to be born at shorter gestations and smaller than those born in singleton deliveries (**Figure 1B-10**). In 2012, infants born in multiple deliveries were 13.3 times more likely (49.3 vs. 3.7 percent) to be born earlier than expected (at less than 37 completed weeks of gestation) and smaller (at less than 2,500 grams) than singleton births.

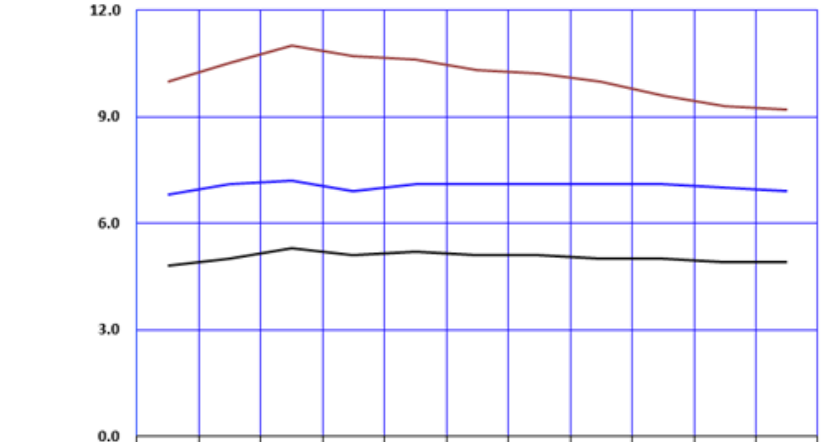
Preterm birth is a leading cause of infant morbidity and mortality, accounting for almost two-thirds of infant deaths (61.8 percent; **Figure 2C-4** in section 2C on Age-Specific Mortality). The weight of the newborn also is an important predictor of future morbidity and mortality. Infants born at low birth weight (< 1,500 grams) account for 48.4 percent of all infant deaths (**Figure 2C-3**).

The proportion of preterm births decreased from 9.6 percent of all births in 2010 to 9.2 percent in 2012.

The proportion of infants born earlier than expected who were also low birth weight (LBW; at less than 2,500 grams) was 4.9/100 births in 2012 (**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**.

Figure 1B-11
Preterm[a] and Low Birthweight (LBW)[b] Births by Year, Arizona, 2002-2012



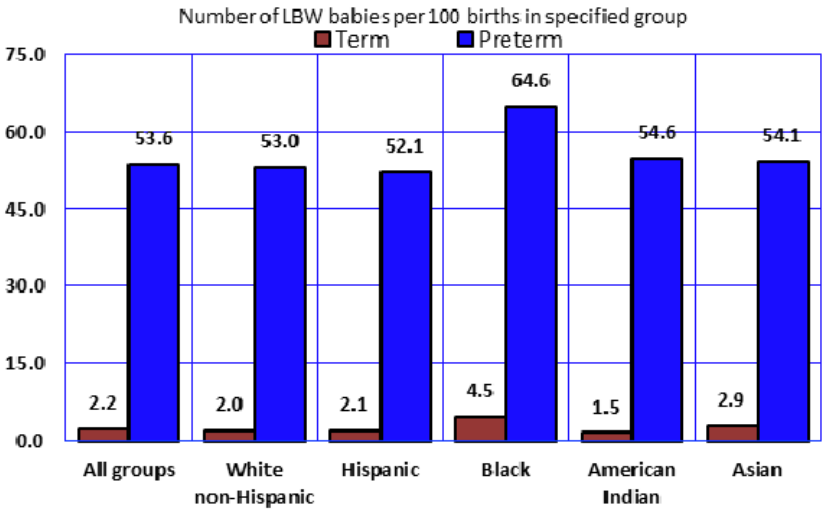
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
LBW	6.8	7.1	7.2	6.9	7.1	7.1	7.1	7.1	7.1	7.0	6.9
Preterm	10.0	10.5	11.0	10.7	10.6	10.3	10.2	10.0	9.6	9.3	9.2
Both	4.8	5.0	5.3	5.1	5.2	5.1	5.1	5.0	5.0	4.9	4.9

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

From 2003 to 2012, between 6.8 and 7.2 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 were 24.4 times (53.6 vs. 2.2 percent) more likely to be LBW than infants born at term (**Figure 1B-12**). Seven out of ten (71.2 percent) LBW babies born in 2012 were preterm (**Table 1B-3**).

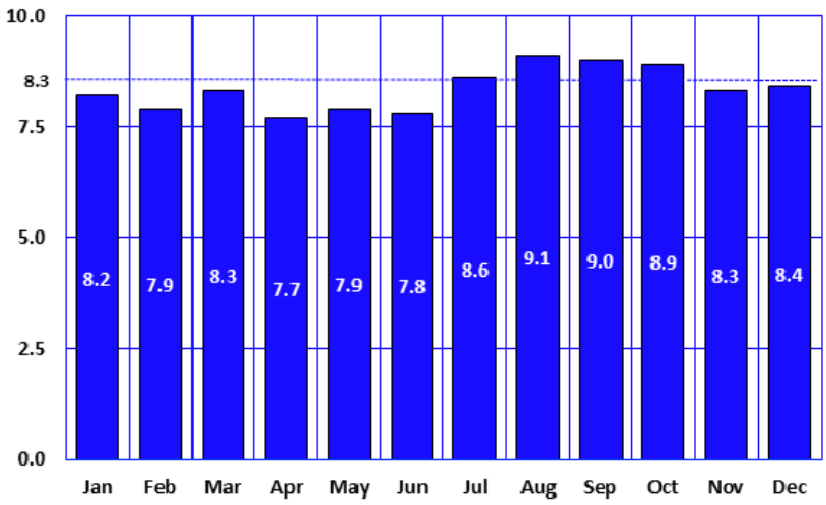
County-level data for LBW newborns are available in **Tables 5B-16 – 5B-23**. Community-level information is in **Table 9A**

Figure 1B-12
Low-Birthweight (LBW) Births by Length of Gestation and Mother's Race/Ethnicity, Arizona, 2012



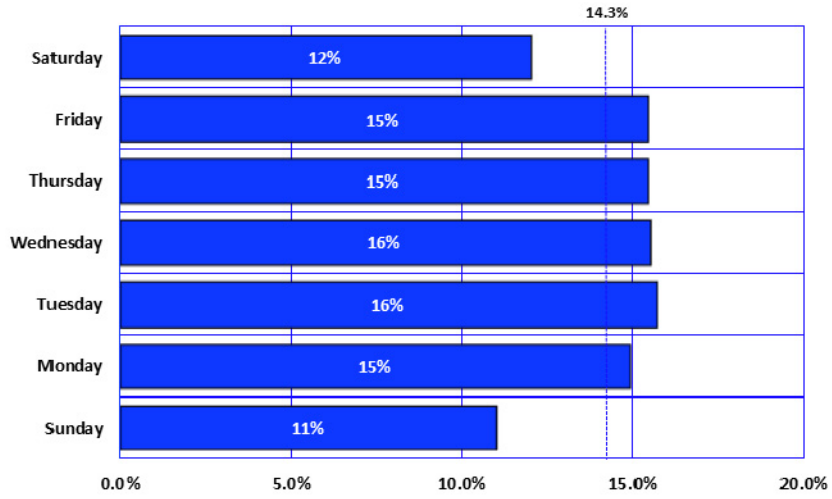
Notes: Number of LBW babies per 100 births in specified group; Preterm: < 37 weeks of gestation; Low birthweight (less than 2,500 grams or 5 pounds 8 ounces).

Figure 1B-13
Percent of Resident Births by Month, Arizona, 2012



Historically, births in Arizona have peaked during August and September, with a monthly average around 8.3 percent. (**Figure 1B-13**).

Figure 1B-14
Percent of Resident Births by Day of the Week, Arizona, 2012

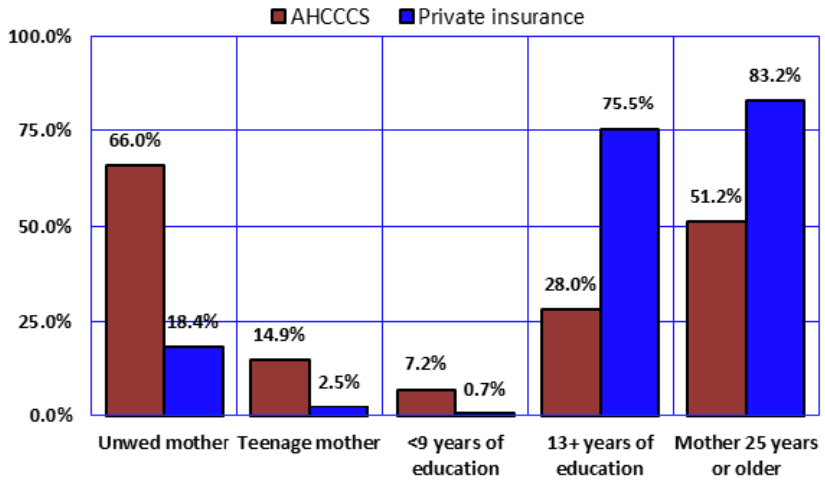


On average 235 infants were born per day in 2012 to Arizona residents. The daily average of resident live births in 2012 was substantially lower on weekends than on weekdays (**Figure 1B-14**). Many studies suggest that weekly, daily, and hourly variations observed in hospitals and clinics are not due 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 2012, only 11.0 percent of repeat cesarean deliveries occurred on Sundays, compared to 14.9 percent on Mondays. The average rate of induction of labor was substantially lower on weekend days (10.4 percent) than it was on week days (15.8 percent).

The number of years of maternal education was the only possible proxy of socioeconomic status (SES) on the birth certificate prior to 1989. Paying party for the delivery became another SES indicator in 1989. The Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid Program) versus private health insurance (PHI) compares mothers of lower and higher SES respectively. The payee's SES indicator is strongly related to the maternal education indicator. PHI mothers were 2.7 times more likely to have some college education than were AHCCCS mothers (75.5 and 28.0 percent respectively, **Figure 1B-15**). Around 7 percent of AHCCCS mothers had 0-8 years of education, 10.3 times the proportion of PHI mothers. Only 18.4 percent of mothers with PHI were unmarried compared to 66.0 percent of AHCCCS mothers. Eight out of ten mothers with PHI were at least 25 years old compared to 5 out of 10 AHCCCS mothers.

Figure 1B-15
Comparison of Selected Sociodemographic Characteristics by the Payee for Delivery, Arizona, 2012

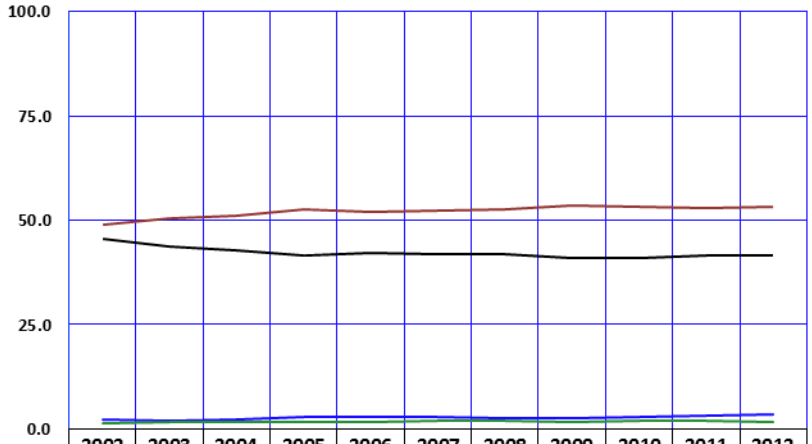


Notes: The Arizona Health Care Cost Containment System (AHCCCS) is the State's Medicaid program.

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 2002, private insurance funded 45.7 percent of births and AHCCCS paid for 48.8 percent of births. Compared to 2002, AHCCCS paid for 4.3 percent more births, and private insurance paid for 4.2 percent fewer births, than in 2012, respectively.

The share of AHCCCS funded births varied little from 2005 to 2012. The share of private health insurance also remained stable during this time period. In 2012, the payment source was the mothers themselves and/or their families (i.e., self-pay) in 3.4 percent of the deliveries. The Indian Health Service (IHS) paid for 1.7 percent of the births in 2012 (**Table 1B-28**; see also **Table 1B-25**).

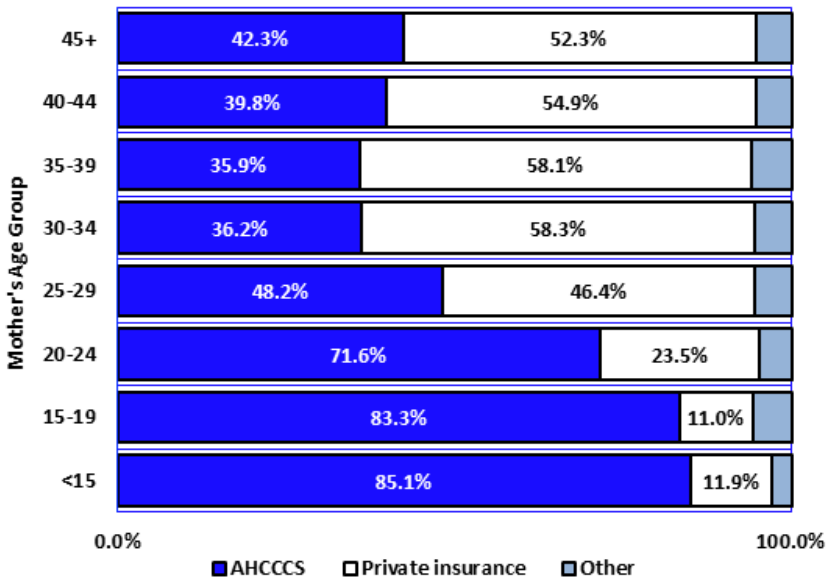
Figure 1B-16
Births by Payer and Year, Arizona, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
AHCCCS	48.8	50.5	51.2	52.6	52.1	52.2	52.5	53.5	53.3	53.0	53.1
Private insurance	45.7	43.8	42.7	41.6	42.3	42.0	42.0	41.0	41.0	41.5	41.5
Self-pay	2.3	2.1	2.4	2.8	3.0	2.8	2.6	2.7	3.0	3.1	3.4
IHS	1.5	1.7	1.8	1.8	1.8	1.9	1.9	1.8	2.0	2.0	1.7

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

Figure 1B-17
Payee for Delivery by Mother's Age Group, Arizona, 2012



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

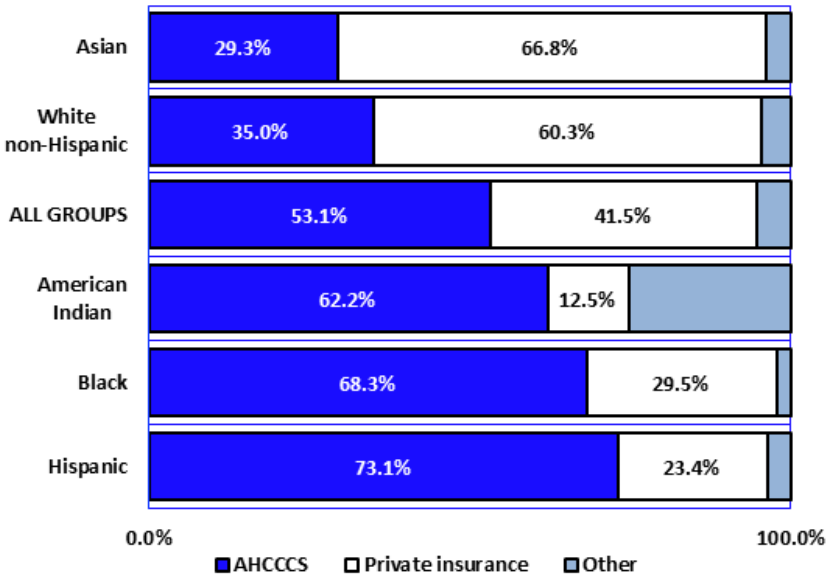
In 2012, the Arizona Health Care Cost Containment System (AHCCCS) paid for the majority of the deliveries to mothers 29 years or younger (**Figure 1B-17**). In contrast, private insurance was the largest payer for the deliveries of women giving birth who were 30 years old or older in 2012 (based on data in **Table 1B-28**).

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

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

From 1989 to 2012, the AHCCCS share more than doubled among mothers 20 years old or older.

Figure 1B-18
Payee for Delivery by Mother's Race/Ethnicity, Arizona, 2012



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

In 2012, private insurance was the largest payer for deliveries of Asian (at 66.8 percent) and White non-Hispanic infants (at 60.3 percent). In contrast, the Arizona Health Care Cost Containment System was the largest payer for deliveries of Hispanic or Latino (73.1 percent), Black or African American (68.3 percent) and American Indian women (62.2 percent).

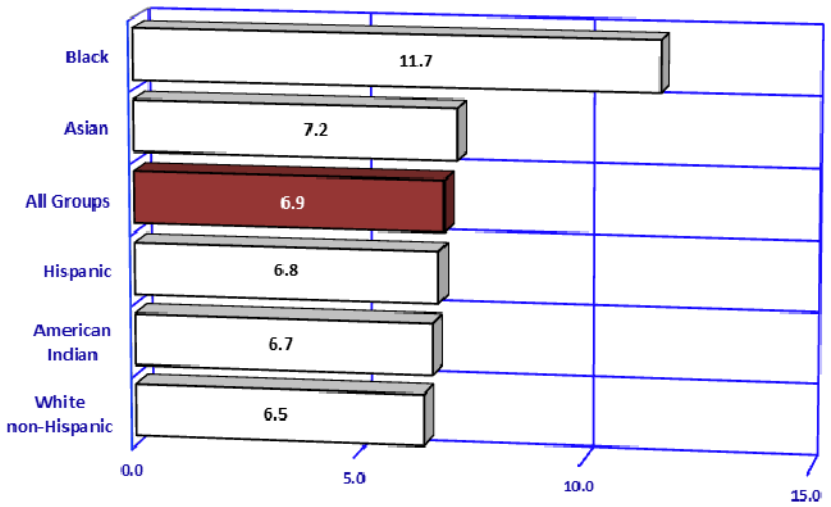
The Indian Health Service as a payer accounted for 24.2 percent of deliveries of American Indian or Alaska Native infants in the State (**Figure 1B-18,** based on data in **Table 1B-28**).

Hispanics or Latinos accounted for 53.2 percent of the 45,511 deliveries paid for by AHCCCS. Thirty percent of all AHCCCS births were to White non-Hispanic women (based on data in **Table 1B-28**).

Figure 1B-19
Percent Low Birthweight[a] by Mother's Race/Ethnicity, Arizona Residents, 2012

In 2012, 6.9 percent of all Arizona infants were born at a low birthweight (LBW), or at less than 2,500 grams (5 pounds 8 ounces).

In Arizona, LBW rates differed by mother's race/ethnic group. LBW rates were highest for newborns of Black or African American mothers (11.7 percent) and Asian or Pacific Islander mothers (7.2 percent) mothers. Newborns of Hispanic or Latino, American Indian, and White non-Hispanic mothers had the lowest LBW rates (6.8, 6.7, and 6.5 percent respectively; based on data in **Table 1B-26**).



Notes: [a] Low birthweight is less than 2,500 grams (less than 5 pounds 8 ounces).

Figure 1B-20
First Trimester Prenatal Care by Mother's Race/Ethnicity, Arizona Residents, 2012

The percent of Arizona mothers giving birth who received early prenatal care (i.e., in the first trimester) has increased from 80.3 in 2009 to 82.6 in 2012 (**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-26**).

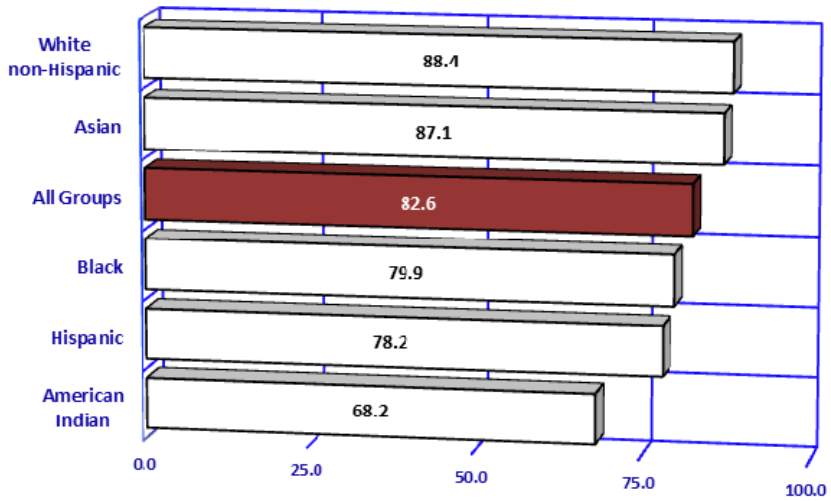
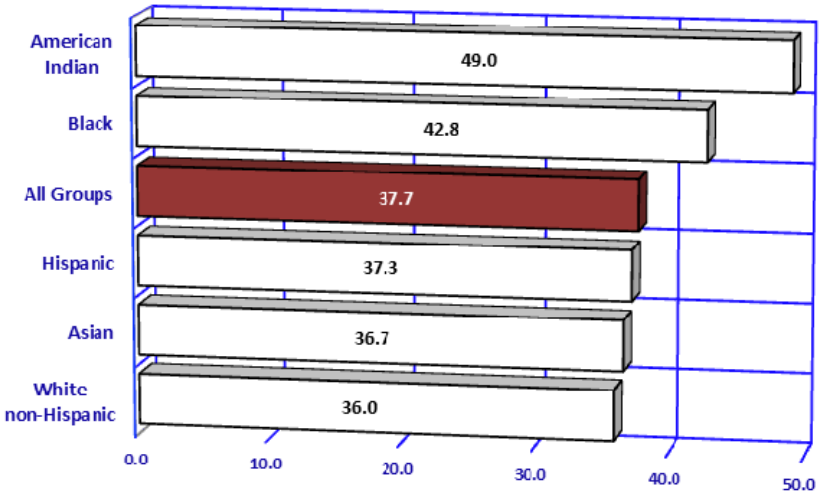


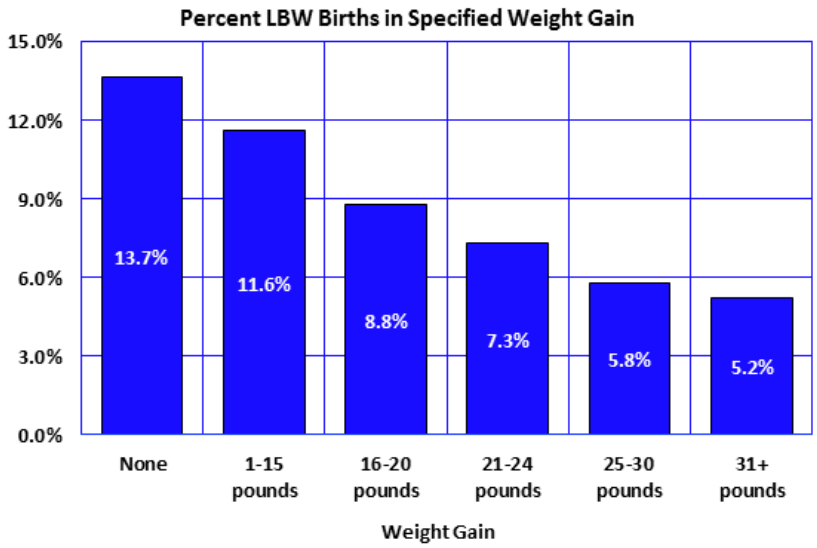
Figure 1B-21
Maternal Medical Risk Factors[a] by Mother's Race/Ethnicity, Arizona, 2012



Notes: [a] 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 2012, American Indian or Alaskan Native and Black or African American women giving birth had the highest proportion of medical risk factors (49.0 and 42.8 percent respectively; **Figure 1B-21**).

Figure 1B-22
Risk for Low-Birthweight by Maternal Weight Gain during Pregnancy, Arizona, 2012

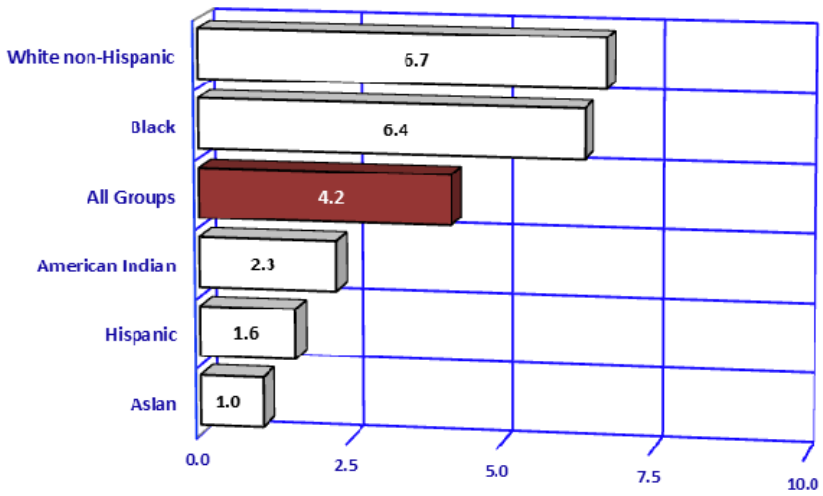


Maternal weight gain during pregnancy is a determinant of both fetal growth and birthweight. Insufficient or excessive weight gain during pregnancy can negatively influence both maternal and pregnancy outcome (see **Figure 2C-4.3**). Women who are of normal weight (average body mass index or BMI) should 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 2012, as in previous years, the percent of infants with low birthweight decreased with increasing maternal weight gain (**Figure 1B-22**).

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 4.2 percent of women giving birth in 2012 (**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 if they use. White non-Hispanic and Black mothers continued to be more likely to report smoking than American Indian, Hispanic, and Asian mothers (**Figure 1B-23**).

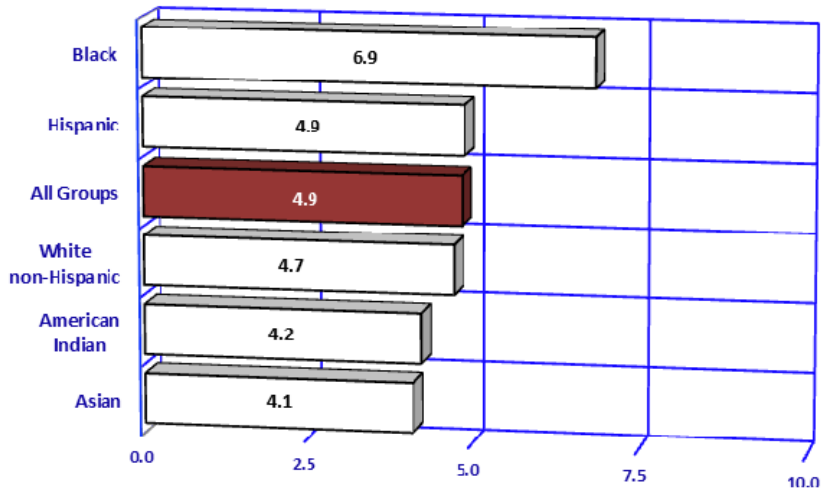
Figure 1B-23
Self-reported Tobacco Use during Pregnancy[a] by Race/Ethnicity, Arizona, 2012



Notes: [a] Mothers giving birth who reported tobacco use per 100 births in specified group.

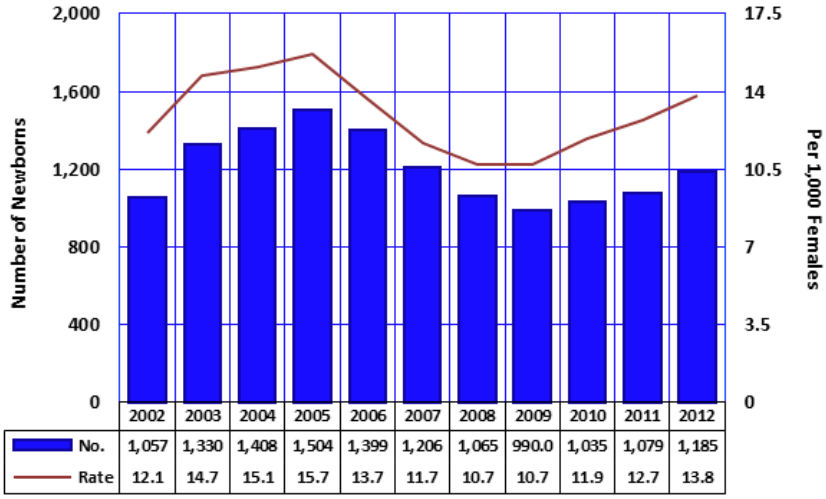
In 2012, 4,158, or 4.9 percent of newborns were admitted to newborn intensive care units (NICUs). Around 51 percent of the NICU admissions were low birthweight (LBW) babies. Prematurity, i.e., gestational age before 37 weeks captured more NICU admissions than did LBW, with 57.2 percent of NICU admissions being premature (based on data in **Table 1B-33**). The proportion of NICU admissions differed among race/ethnic groups. In 2012, the rate of NICU admissions for Black or African American (6.9 percent) was the highest among racial/ethnic groups (**Table 1B-26**).

Figure 1B-24
Rates of Admission to Newborn Intensive Care Units[a] by Mother's Race/Ethnicity, Arizona, 2012



Notes: [a] The number of newborns admitted to Intensive Care Units per 100 births in specified group.

Figure 1B-25
Newborns Who Were Hospitalized after Birth because They Were Affected by Maternal Use of Drugs during Pregnancy, Arizona, 2002-2012



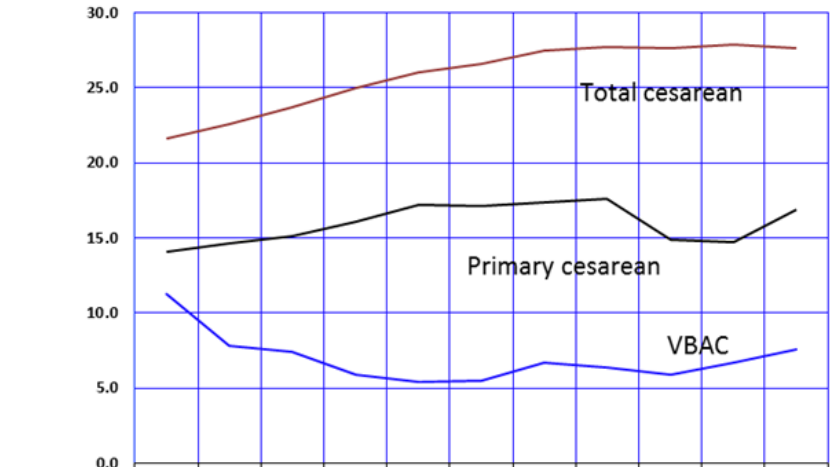
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
No.	1,057	1,330	1,408	1,504	1,399	1,206	1,065	990.0	1,035	1,079	1,185
Rate	12.1	14.7	15.1	15.7	13.7	11.7	10.7	10.7	11.9	12.7	13.8

Notes: [a] Rate is the number of newborns admitted to Intensive Care Units per 100 births in specified group.

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. Following the four years of decline between 2005 and 2009 in the number of newborns hospitalized after birth due to maternal drug use during pregnancy, the rate increased from 10.7/1,000 in 2009 to 13.8/1,000 in 2012, representing an 29.0 percent increase.

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[a] and Vaginal Births after Previous Cesarean (VBAC)[b], Arizona, 2002-2012



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total	21.6	22.6	23.7	25	26	26.6	27.5	27.7	27.6	27.9	27.6
Primary	14.1	14.6	15.1	16.1	17.2	17.1	17.4	17.6	14.9	14.7	16.9
VBAC	11.3	7.8	7.4	5.9	5.4	5.5	6.7	6.4	5.9	6.7	7.6

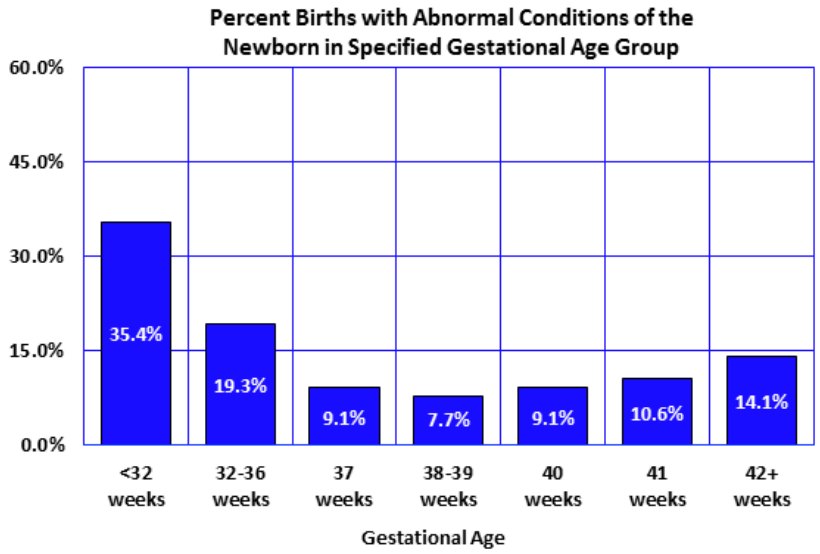
Notes: [a] Primary cesarean rate per 100 births with no previous cesarean; [b] Vaginal birth after cesarean rate per 100 births after previous cesarean.

In 2012, 27.6 percent of all resident births were cesarean deliveries (**Figure 1B-26**, **Table 1B-2**).

The primary cesarean rate in 2012 (16.9 per 100 live births to women who had no previous cesarean) increased by 15.0 percent from 2011 (14.7 per 100 live births).

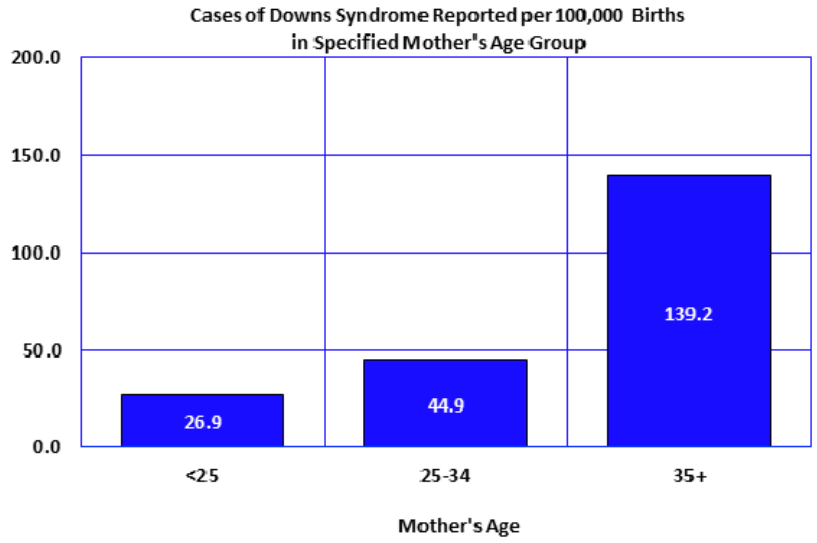
The rate of vaginal birth after previous cesarean delivery (VBAC) was 13.4 percent greater than the 2011 rate.

Figure 1B-27
Abnormal Conditions of the Newborn by Gestational Age, Arizona, 2012



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) and moderately preterm (32-36 weeks of gestation; **Figure 1B-27**).

Figure 1B-28
The Incidence of Downs Syndrome by Mother's Age Group, Arizona, 2012



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 2012 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 139.2 cases of Down's Syndrome per 100,000 births to women 35 years or older was 5.2 times greater than the incidence rate of 26.9 for women aged 24 years or younger.