

PURPOSE

This report is the annual update of information about pregnancies among females under age 20. The data for 2010 is placed in a temporal context by comparing it with the data from the preceding years. Earlier reports are available online at <http://www.azdhs.gov/plan/report/tp/index.htm> .

METHODS AND SOURCES

In this report, pregnancies are measured as the sum of three components: live births, fetal deaths (or stillbirths) and reported abortions to Arizona resident women, unless otherwise specified. Not included are spontaneous fetal losses that occur at less than 20 weeks of gestation. Induced terminations of pregnancy do not include those performed out-of-state to Arizona residents, since they are not reported in Arizona. Pregnancy statistics for Arizona are not available on a sub-county level.

Teens are defined as 10-14 year old preadolescents and adolescents 15-19 years of age. Where possible, the data presented distinguishes 18-19 year old teenagers from those aged 15-17 and girls less than 15 years of age.

The primary source documents for the data are the certificates of live births, certificates of fetal deaths and reports of induced terminations of pregnancy filed with the Arizona Department of Health Services.

The population denominators for Arizona's resident females, used to calculate rates for 2000 and 2010 are the actual census enumerations from the U.S. Census Bureau. The denominators for 2001-2009 are population estimates of Arizona resident females aged 10-19 years. Detailed information about the assumptions and specific data sources is available online at <http://www.azdhs.gov/plan/menu/info/pd.htm> .

The population denominators used to compute the rates for 2007 – 2009 will most likely be revised in the future. It is not only because they are based on the quite outdated 2000 Census, but they have not been adjusted for the effects of the economic downturn or changes in the law penalizing the illegal immigration. According to the 2010 Census enumerations there were 6,392,017 residents of the State in 2010, 203,761 fewer than the Census Bureau estimate of 6,595,778 for 2009, and fewer than the estimated number of Arizonans in 2007.

DATA ORGANIZATION

Tables 1-16 present annual numbers and rates of pregnancy, fertility, and abortion by year from 2000 to 2010, age group, and race/ethnicity for Arizona teens. Temporal trends and changes may be assessed from this data. Proportional contribution of teen births to all births is shown in Table 10 by area of residence and race/ethnic group in Arizona from 2000 to 2010. Table 11 compares birth rates in Arizona to those in the United States. The annual numbers of repeat pregnancies among teenage mothers are shown by age and year from 2000 to 2010 in Table 12.

Table 14 presents teen pregnancy rates by race/ethnicity and age group by year from 2000 to 2010. Table 15 provides information about the incidence of sexually transmitted infections among females 10-14 and 15-19 years old in Arizona in 2000-2010. Table 16 shows the incidence rates by year from 2000 to 2010.

Frequency counts, proportions and rates in Tables 17-32 all apply to the 2010 data. Tables 17-18 and 20-22 provide data by county of residence. Table 19 presents pregnancy rates by single year of age among females 19 and younger. Live births to teenage mothers are also reported in Tables 23-30 by marital status, education, previous pregnancies, trimester of entry into prenatal care, source of payment for labor and delivery and tobacco and alcohol use during pregnancy. The 2010 population denominators for Arizona resident females by age group and race/ethnicity, as well as by age group and county of residence are presented in Table 31 and Table 32. The *Appendix* demonstrates "How to compute the rates of first and repeat childbearing" using the annual data for 2000-2010.

COMPARATIVE NATIONAL AND STATE DATA

Timely, comparable, and reliable teen pregnancy statistics for other States and the Nation are not easily available. **"Health, United States, 2010"**, the premier annual publication of The Department of Health and Human Services, contains no information about pregnancies. The latest available (preliminary) national teenage birth rates for 2008 were published in May, 2010. No national abortion or fetal death data have been available since the 2006 calendar data year. The report, **"U.S. Teenage Pregnancies, Births and Abortions: National and State Trends and Trends by Race and Ethnicity"*** was published by the Alan Guttmacher Institute in January 2010. The authors combine the complete count of births provided by every state to the NCHS with the estimated numbers of abortions, early miscarriages, and fetal deaths. The number of abortions is estimated from surveys the Alan Guttmacher Institute conducts of known abortion providers (i.e. these data are by the place of occurrence and not by the woman's place of residence). The fetal loss estimates – including early miscarriages before 20 weeks of gestation (and estimated as 20% of live births plus 10% of abortions) – are from pregnancy history information collected by the National Survey of Family Growth (NSFG). Unlike vital statistics reports of fetal losses occurring at gestations of 20 weeks or more, NSFG include all gestations. Since the majority of fetal losses occur early in pregnancy before the reporting requirements for fetal deaths are in effect, their inclusion dramatically raises both the fetal loss rate and the pregnancy rate. The National Survey of Family Growth data are not state-specific. The pregnancy rates for Arizona teens cannot be compared with the rates for their peers nationally.

No comparable state-by-state teen pregnancy data for 2000 – 2010 are available at this time.

KEY FINDINGS

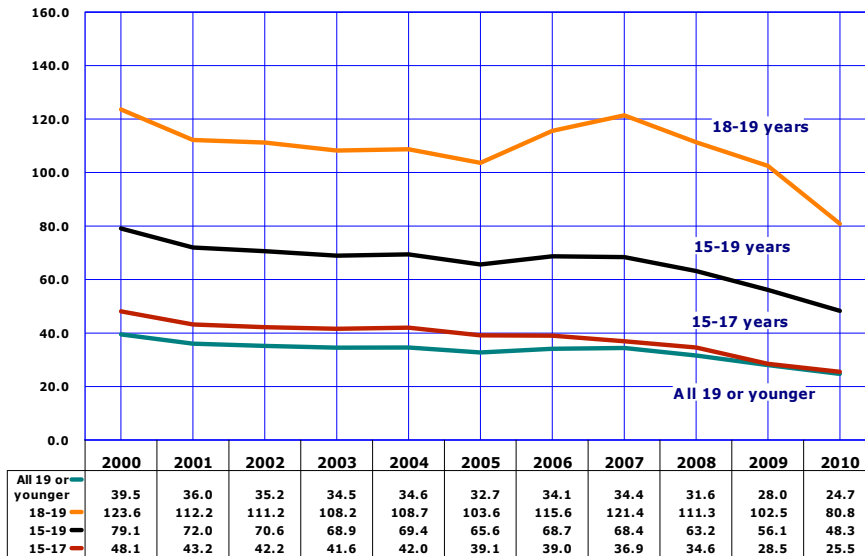
The following section presents some illustrative findings contained in the figures and tables of the report. It is not intended to be an exhaustive analysis of the tabulated data.

- In 2010, the pregnancy rate of 24.7 pregnancies per 1,000 females 19 years or younger was 37.5 percent lower than the rate of 39.5/1,000 in 2000.
- It is only since 2007 that the reduction in the number of teen pregnancies was accompanied by an equally impressive decline in pregnancy rates.
- The declines in teenage pregnancy have been much steeper for younger than for older teenagers. The rate for teenagers 15-17 years dropped steeply by 47.0 percent from 48.1 per 1,000 in 2000 to 25.5 in 2010. The rate for older teenagers (aged 18-19 years) fell as well, by 34.6 percent beginning in 2000, from 123.6 to 80.8.
- The 2010 teen pregnancy rate of 24.7/1,000 was based on 10,980 pregnancies occurring among 443,971 females aged 10-19 years. The number of 10,980 teen pregnancies in 2010 was the lowest since 1984.
- From 2007 to 2009, the number of teen pregnancies declined particularly steeply for Asian (-29.9 percent), and Hispanic or Latino females (-30.8 percent).
- In 2010, Hispanic or Latino females accounted for 53.9 percent of all pregnancies in this age group, followed by White non-Hispanics (28.1 percent).
- In each year from 2000 to 2010, the pregnancy rates of Hispanic or Latino females were consistently greater than the average rates for all females 19 years or younger in Arizona. In 2010, the Hispanic rate exceeded the average rate for all groups by 33.8 percent.
- If the 2010 "risk for pregnancy" of Asian teens (i.e., their pregnancy rate) applied to all Arizona females 19 years or younger, the number of teen pregnancies in the State would have been reduced from 10,980 to approximately 4,395.
- The first birth rate for childless teenagers has dropped 37.5 percent from 57.1 first-time births per 1,000 females 15-19 years old in 2000, to 35.7/1,000 in 2010.
- The repeat birth rates for teenagers who had already had a child decreased by 36.9 percent from 181.3 in 2000 to 114.4 per 1,000 females 15-19 years old in 2010 who had a previous birth.
- The total number of births to mothers 19 years or younger decreased by 22.7 percent from 12,189 in 2000 to 9,416 in 2010 (Table 1). In contrast, the proportional share of births paid for by the Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) increased by 21.1 from 69.1 percent in 2000 to 83.7 percent in 2010.
- Unwed mothers have accounted for an increasing annual proportion of births throughout the 1980s and 1990s. In 2010, nonmarital births accounted for 88.1 percent of births to mothers 19 years or younger.
- The proportion of non-surgical abortions to females 19 years or younger decreased from 44.3 percent in 2009 to 40.6 percent in 2010.

* Available at www.guttmacher.org/pubs/USTrends.pdf

KEY FINDINGS

Figure 1
Pregnancy Rates by Age Group and Year among
Females 19 or Younger, Arizona, 2000-2010

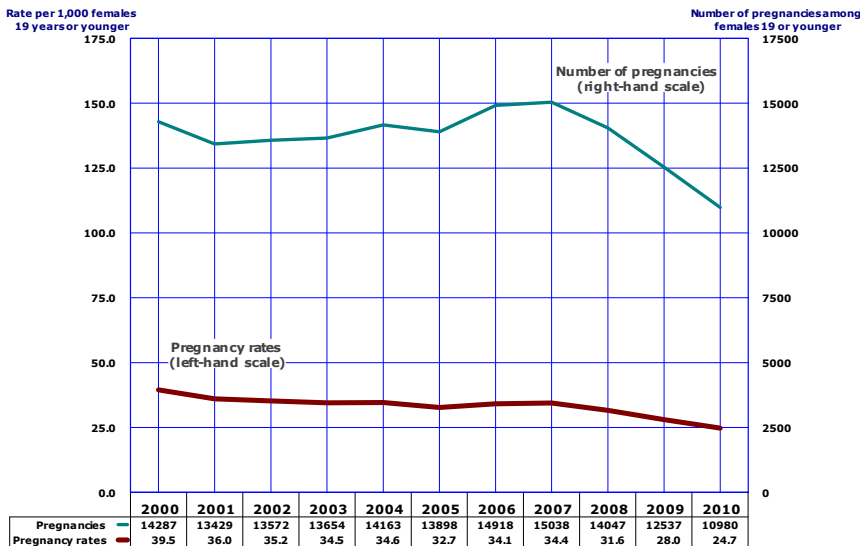


Note: All rates are per 1,000 females in specified group.

Teenage pregnancy rates dropped 37.5 percent overall from 2000 to 2010. **Figure 1, Table 2**). The declines in teenage pregnancy have been much steeper for younger than for older teenagers. The rate for teenagers 15-17 years dropped steeply by 47.0 percent from 48.1 per 1,000 in 2000 to 25.5 in 2010 (**Figure 1, Table 2**). The rate for older teenagers (aged 18-19 years) fell as well, by 34.6 percent beginning in 2000, from 123.6 to 80.8.

All components of the pregnancy rates for teenagers 19 years old or younger (births, abortions, and fetal losses) declined from 2007 to 2010 (**Table 1**).

Figure 2
Trends in the Number of Pregnancies and Pregnancy Rates
among Females 19 or Younger, Arizona, 2000-2010



Pregnancy rate = the number of pregnancies per 1,000 females in specified group.

Trends in the number of pregnancies to teenage women do not always parallel the pregnancy rate. 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, however, also determined by the size of the population "at risk": or in this case by the number of teenage females in the population.

The annual pregnancy rates in 2001 - 2005 were lower than the 2000 rate of 39.5 /1,000. In contrast, the number of pregnancies increased from 13,429 in 2001 to 14,918 in 2006 and 15,038 in 2007. It is only since 2008 that the reduction in the number of teen pregnancies was accompanied by an equally impressive decline in pregnancy rates (**Figure 2, Table 1**).

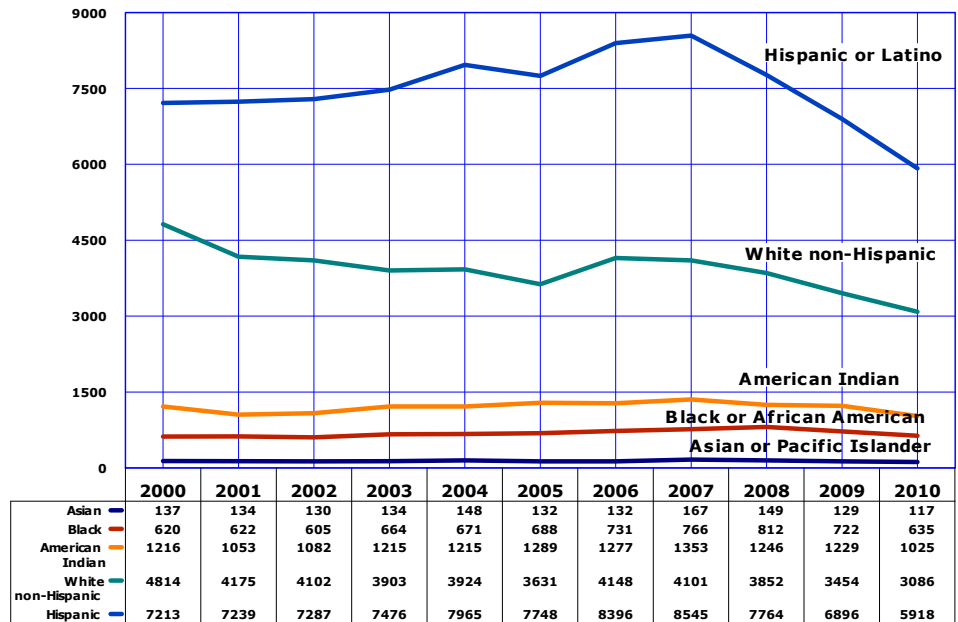
The 2010 teen pregnancy rate of 24.7/1,000 was based on 10,980 pregnancies occurring among 443,971 females aged 10-19 years. The number of 10,980 teen pregnancies in 2010 was the lowest since 1984.

KEY FINDINGS

Figure 3
Trends in the Number of Pregnancies* by Race/Ethnicity among Females 19 or Younger, Arizona, 2000-2010

The number of pregnancies to Hispanic females aged 19 years or younger exceeded the number of pregnancies among white non-Hispanic peers in every year since 1994 (**Figure 3** and **Table 8** in this report show only the data for 2000-2010). In 2010, Hispanic or Latino females accounted for 53.9 percent of all pregnancies in this age group, followed by White non-Hispanics (28.1 percent). Black or African American, Asian or Pacific Islander, American Indian, and females of other race aged 19 years or younger accounted for a larger share of pregnancies in 2010 (16.2 percent) than they did in 2000 (13.8 percent).

From 2007 to 2010, the number of teen pregnancies declined particularly steeply for Asian (-29.9 percent), and Hispanic or Latino females (-30.8 percent).



The sum of live births + induced abortions + spontaneous fetal deaths.

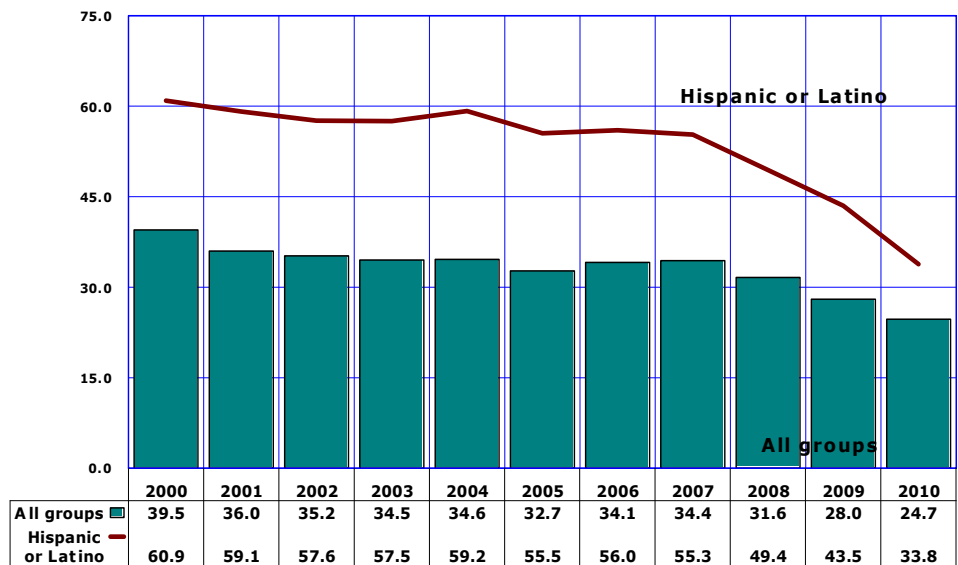
Figure 4
Comparison of Pregnancy Rates by Year among Hispanic or Latinos and all Females 19 or Younger, Arizona, 2000-2010

The teen pregnancy rates for all race and ethnic groups were lower in 2010 than in 2000 (**Figure 1**). However, the temporal trends in annual teen pregnancy rates differed considerably by race/ethnicity.

Figures 4, 5, 6, 7 and **8** reveal race/ethnicity-specific trends in teen pregnancy rates in Arizona in 2000-2010.

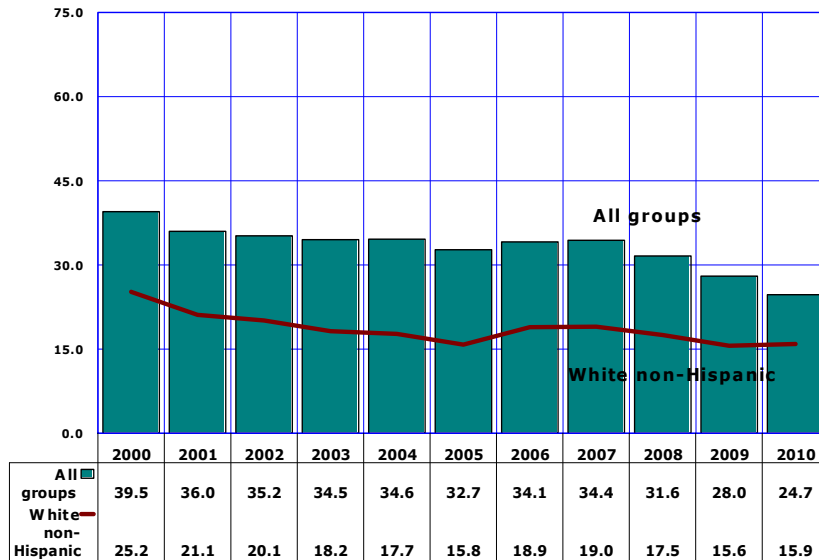
The pregnancy rate fell 5.6 percent for Hispanic or Latino females 19 years or younger in 2000-2003 and then increased in 2004. From 2006 to 2010 the pregnancy rate of Hispanic or Latino females fell by 42.9 percent (**Figure 4**).

In each year from 2000 to 2010, the pregnancy rates of Hispanic or Latino females were consistently greater than the average rates for all females 19 years or younger in Arizona. In 2010, the Hispanic rate exceeded the average rate for all groups by 33.8 percent.



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

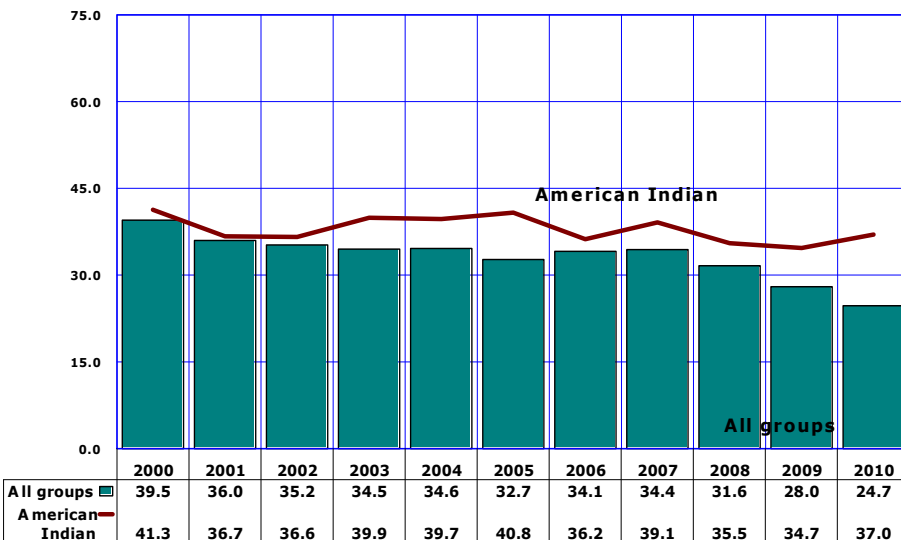
Figure 5
Comparison of Pregnancy Rates by Year among White non-Hispanics
and all Females 19 or Younger, Arizona, 2000-2010



The pregnancy rate for White non-Hispanics sharply increased by 19.6 percent in 2006 (Figure 5). The rate remained essentially unchanged at 19.0 in 2007 and then fell by 17.9 percent to 15.6/1,000 in 2009. In each year from 2000 to 2010, the pregnancy rates for White non-Hispanic females were lower than the average rates for all females 19 years or younger in Arizona.

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

Figure 6
Comparison of Pregnancy Rates by Year among American Indian or Alaska
Natives and all Females 19 or Younger, Arizona, 2000-2010



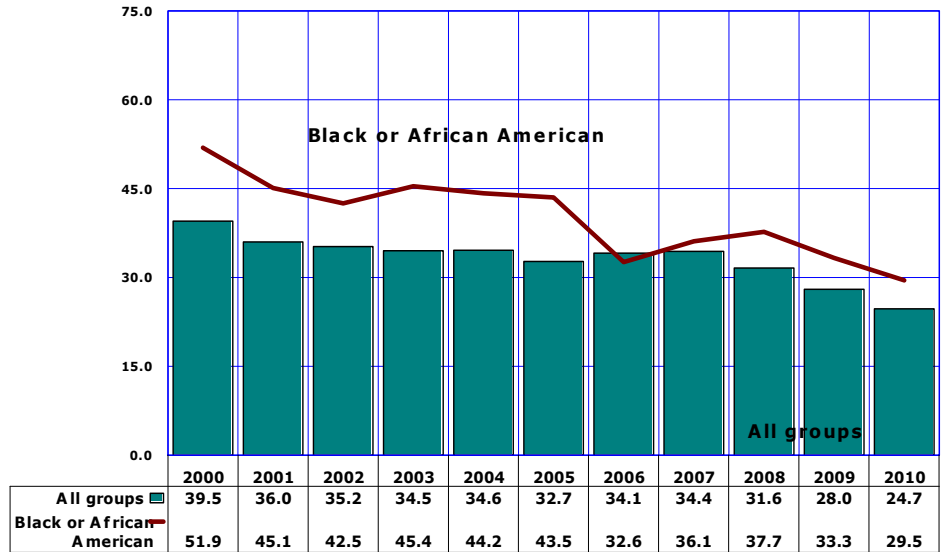
Despite some of the decreases noted between 2001 and 2002, the annual pregnancy rates among American Indian females 19 years or younger erratically varied from year to year (Figure 6). The American Indian rates were higher than the average for all groups in 2000-2010.

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

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Figure 7
Comparison of Pregnancy Rates by Year among Black or African Americans and all Females 19 or Younger, Arizona, 2000-2010

The pregnancy rates for Black or African American females 19 years or younger decreased from 51.9/1,000 in 2000 to 29.5/1,000 in 2010. Except 2006, the pregnancy rates for Black or African American teenagers exceeded in 2000-2005 and 2007-2010 the pregnancy rate for all groups.

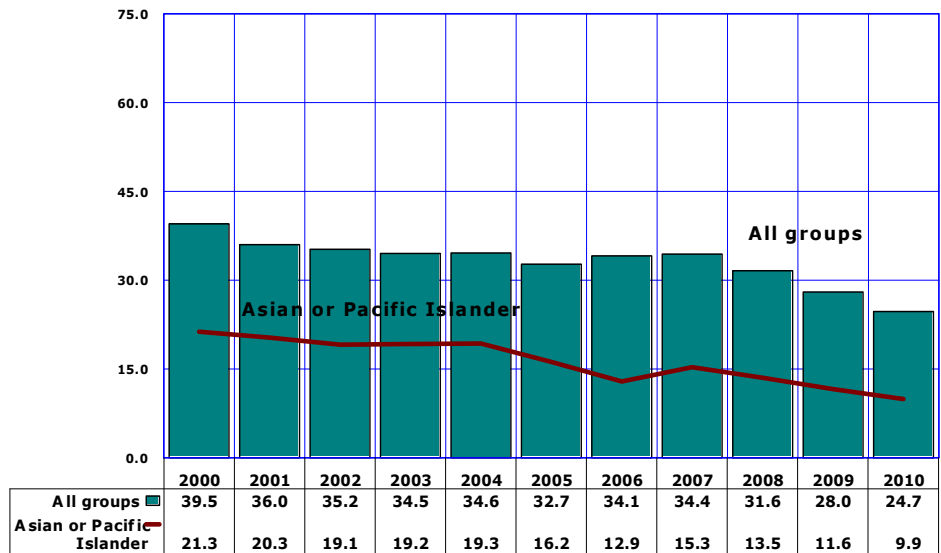


Note: All rates are per 1,000 females in specified group.

Figure 8
Comparison of Pregnancy Rates by Year among Asian or Pacific Islanders and all Females 19 or Younger, Arizona, 2000-2010

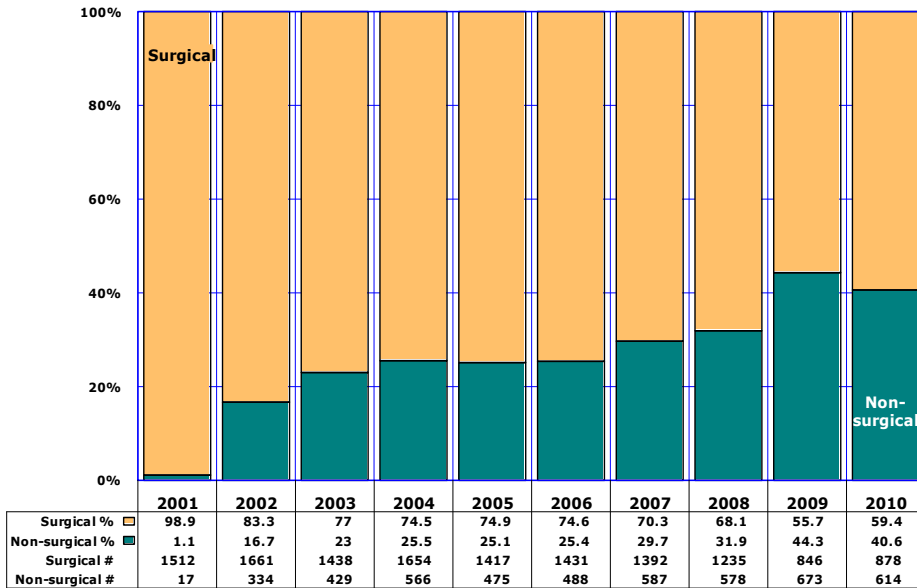
In each year from 2000 to 2010, the pregnancy rates for Asian or Pacific Islander females 19 years or younger were substantially lower than the average rates among all females 19 years or younger in Arizona (Figure 8). In 2010, the Asian rate (9.9/1,000) was 59.9 percent lower than the rate for all groups (24.7/1,000).

If the 2010 "risk for pregnancy" of Asian teens (i.e., their pregnancy rate) applied to all Arizona females 19 years or younger, the number of teen pregnancies in the State would have been reduced from 10,980 to approximately 4,395.



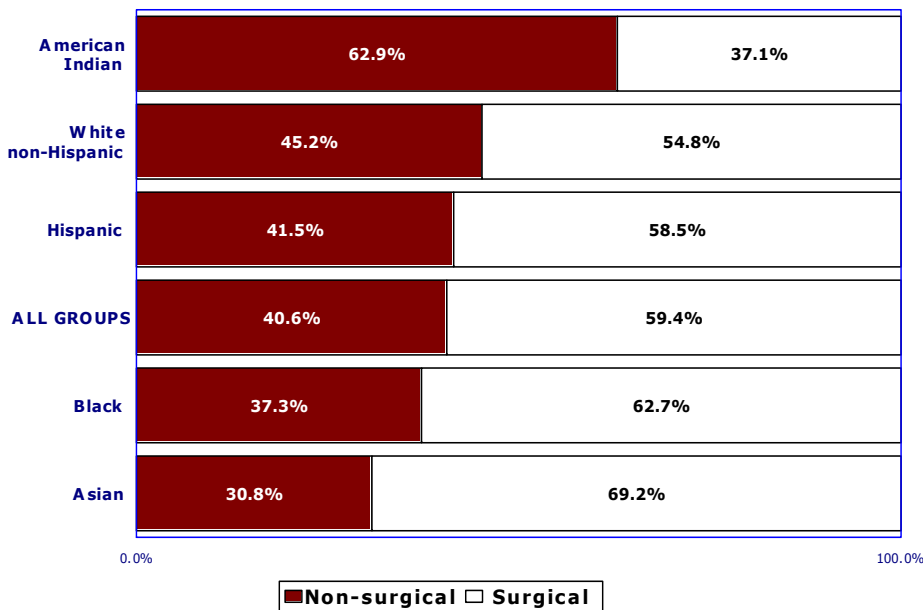
Note: All rates are per 1,000 females in specified group.

Figure 9
Proportional Contribution of Surgical and Non-Surgical Abortions
by Year among Females 19 or Younger, Arizona, 2001-2010



The proportion of non-surgical abortions to females 19 years or younger decreased from 44.3 percent in 2009 to 40.6 percent in 2010 (Figure 9).

Figure 10
Proportional Contribution of Non-Surgical and Surgical Abortions by
Race/Ethnicity among Females 19 or Younger, Arizona, 2010



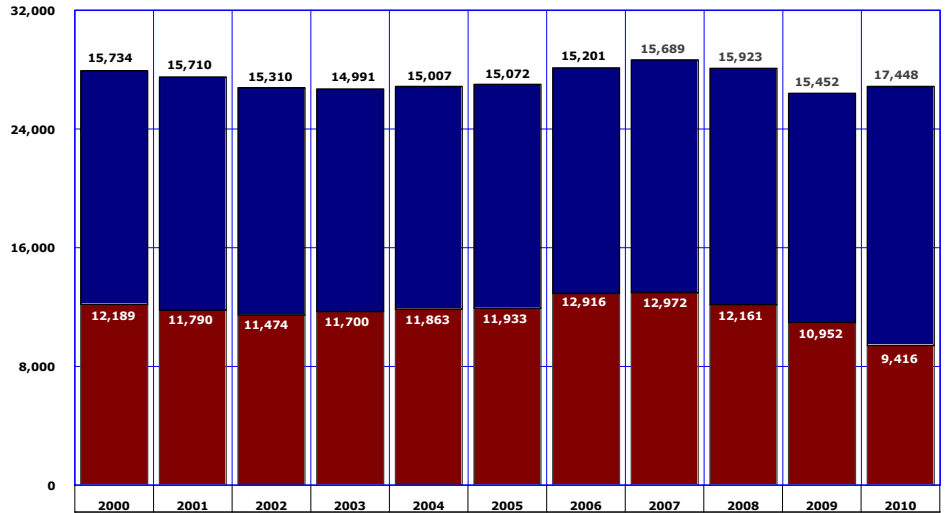
Among American Indian, White non-Hispanic or Latino teens the proportion of non-surgical abortions exceeded the average for all groups (Figure 10). The ratios of reported non-surgical abortions among Asian and Black females were the lowest among ethnic groups.

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

KEY FINDINGS

Figure 11
Cumulative Number of Mothers who were 19 or Younger
in Arizona by Year, 2000-2010

■ Gave birth that year ■ Gave birth before and was still 19 years old or younger

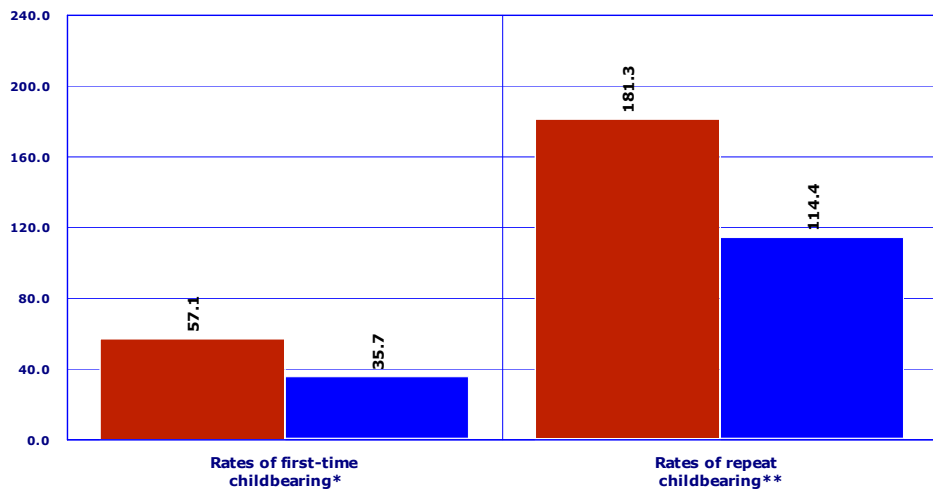


There were approximately 26,864 mothers under age 20 in Arizona in 2010, the second lowest number since 2000. Among them there were the 9,416 who gave birth that year and the 17,448 who gave birth prior to 2010 and were still 19 years old or younger (**Figure 11, Table 13**). The cumulative number of mothers who were 19 years or younger in Arizona increased by 1.7 percent from 26,404 in 2009.

*See Table 13 for more details.

Figure 12
Rates of First and Repeat Births to Females 15-19 Years,
Arizona, 2000 and 2010

■ 2000 ■ 2010

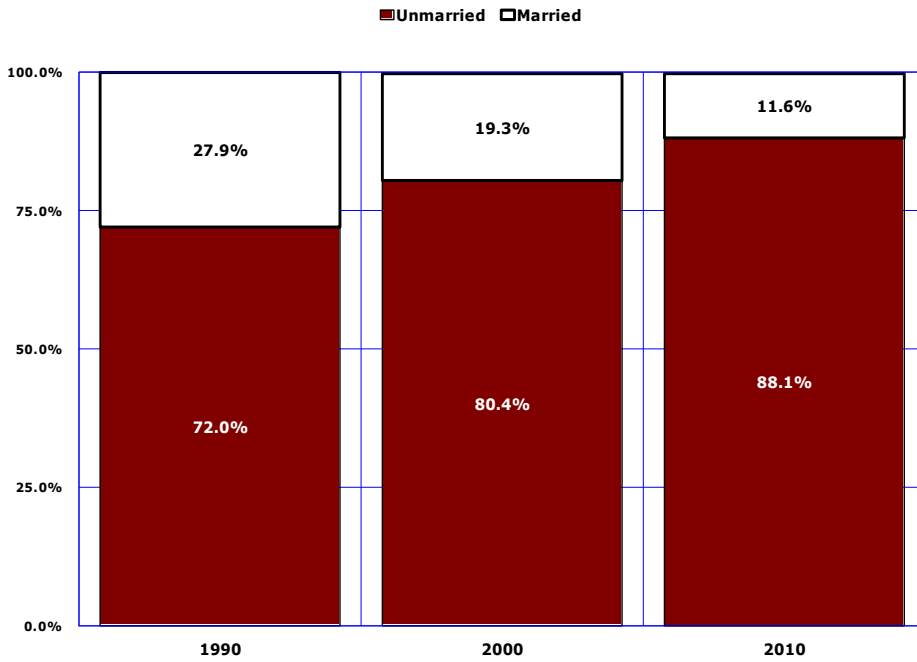


The first birth rate for childless teenagers has dropped 37.5 percent from 57.1 first-time births per 1,000 females 15-19 years old in 2000, to 35.7/1,000 in 2010 (**Figure 12**).

The repeat birth rates for teenagers who had already had a child decreased by 36.9 percent from 181.3 in 2000 to 114.4 per 1,000 females 15-19 years old in 2010 who had a previous birth (**Figure 12**).

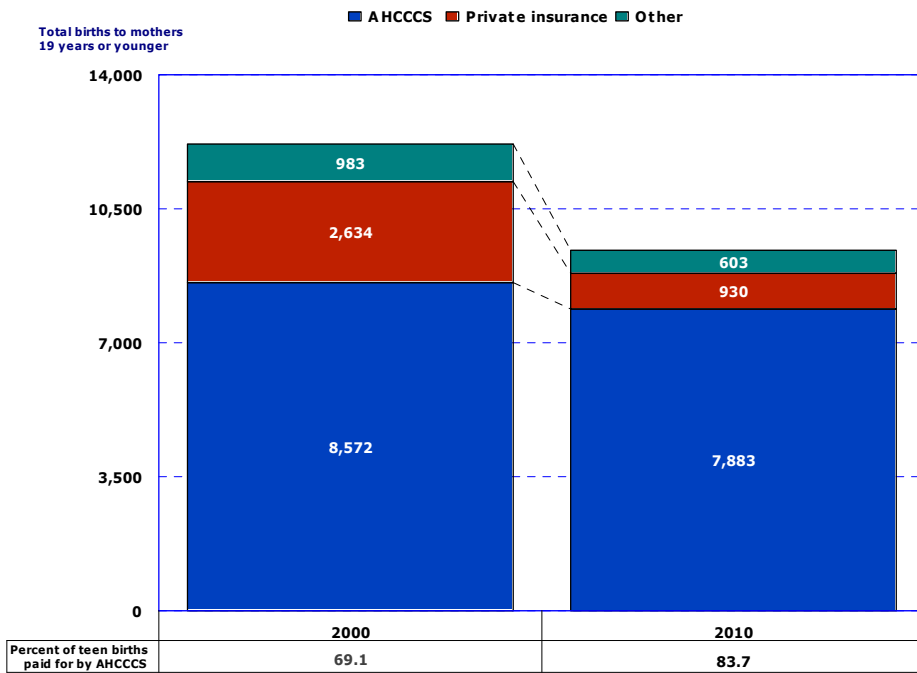
* Number of first births per 1,000 females 15-19 years old who have not had a birth.
 **Number of repeat births per 1,000 females 15-19 years old who have had a previous birth.
 See Appendix "How to compute rates of first and repeat childbearing."

Figure 13
Births to Mothers 19 or Younger by Marital Status,
Arizona, 1990, 2000 and 2010



Unwed mothers have accounted for an increasing annual proportion of births throughout the 1980s and 1990s. Two decades ago, approximately 7 out of 10 teenage mothers were unmarried (**Figure 13**). In 2010, nonmarital births accounted for 88.1 percent of births to mothers 19 years or younger.

Figure 14
Number of Births to Mothers 19 or Younger by Payee,
Arizona, 2000 and 2010



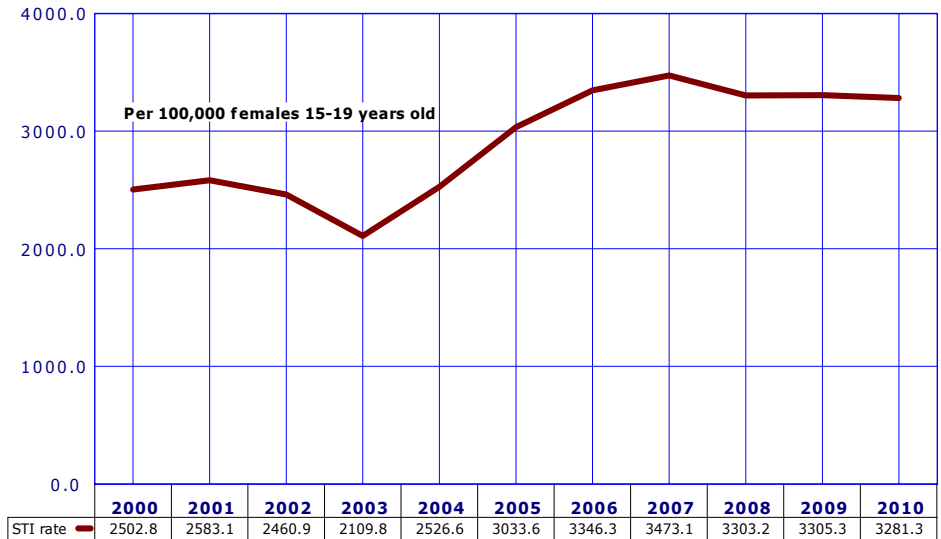
The total number of births to mothers 19 years or younger decreased by 22.7 percent from 12,189 in 2000 to 9,416 in 2010 (**Table 1**). In contrast, the proportional share of births paid for by the Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) increased by 21.1 percent from 69.1 percent in 2000 to 83.7 percent in 2010 (**Figure 14**).

KEY FINDINGS

Figure 15
Trends in the Incidence of Sexually Transmitted Infections* among Females 15-19 Years, Arizona, 2000-2010

In each year from 2006 to 2010, the total number of sexually transmitted infections (STI) among females aged 19 or younger exceeded 7,400 (Table 15) compared to approximately 4,300 reported in 2003. Females aged 15-19 years accounted for 96.7 percent of all sexually transmitted infections in 2010. The rate of STI among females 15-19 years old increased by 64.6 percent from 2109.8 cases per 100,000 in 2003 to 3473.1/100,000 in 2007 and then declined to a rate of 3281.3/100,000 in 2010.

These STIs include *chlamydia* and *syphilis*. *Chlamydia* can cause sterility in the affected mother and eye infections and pneumonia in the newborn. *Syphilis* can cause blindness, maternal and/or infant death.



* The sum of annually reported cases of gonorrhea, chlamydia, genital herpes, and early syphilis.
Source: Bureau of Epidemiology and Disease Control Services, Office of Infectious Disease Services.

Figure 16
Cumulative Number of Cases of Genital Herpes among Females 15-19 Years, Arizona, 2000-2010

Unlike gonorrhea or chlamydia, genital herpes cannot be cured. Since genital herpes is not a fatal disease, new cases arising each year may add to the pool of people infected with the disease who can then transmit the disease to others.

Assuming that females 15-19 years old reported with genital herpes since 2000 have not died or left the State, the 2010 prevalence of this disease based on 1,355 accumulated cases (Figure 16), one in every 63 females aged 15-19 years may be infected.

Genital herpes also is a threat to newborns. Out of 155 females aged 15-19 years who were diagnosed with genital herpes in 2010, 52 (or 33.5 percent) also gave birth that year (Figure 16, Table 15).

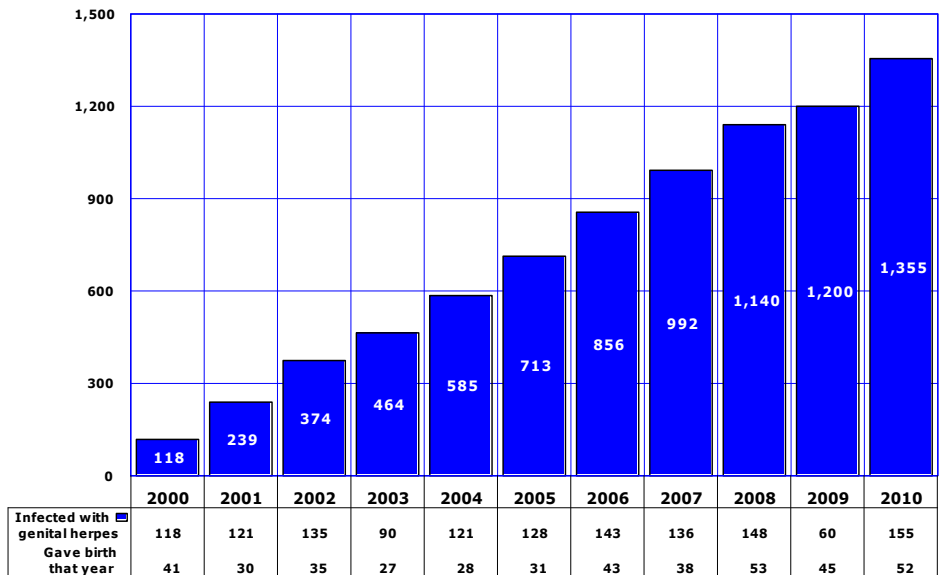
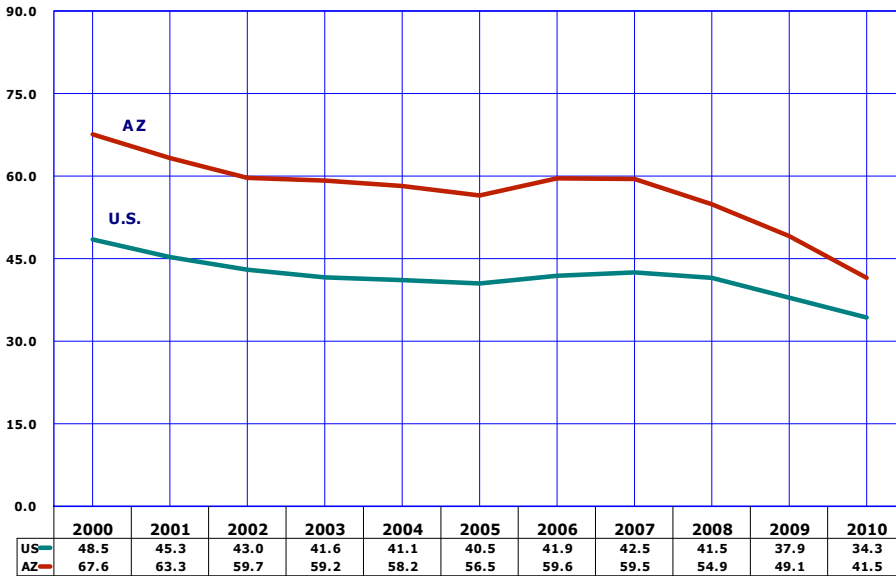


Figure 17
Birth Rates for Teenagers 15-19 Years, Nationally and in Arizona, 2000-2010

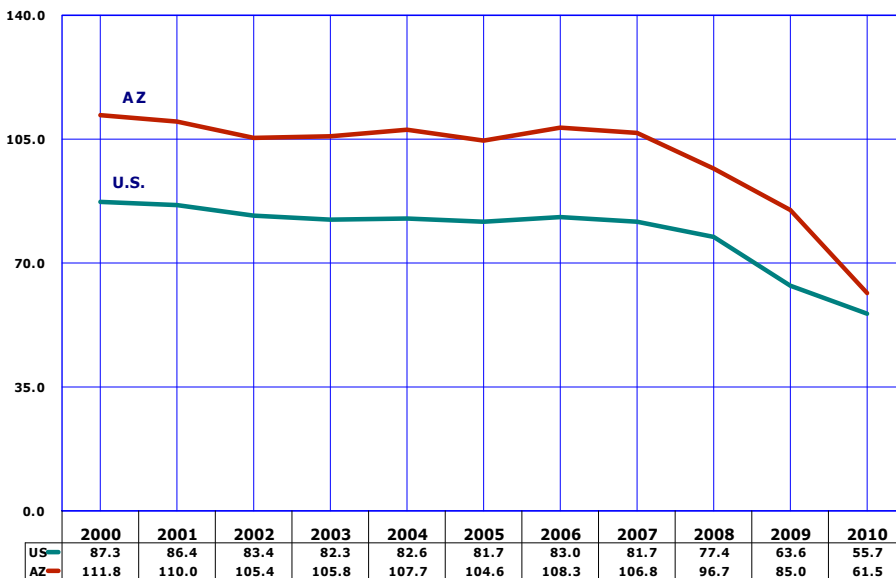


In each year from 2000 to 2010 birth rates for Arizona teenagers 15-19 years old exceeded the rates of their national peers (**Figure 17, Table 11**).

In Arizona, Hispanic or Latino females 15-19 years old, a high-fertility group, accounted for 39.4 percent of females aged 15-19 years in 2010. A high proportional representation of Hispanic or Latino females in Arizona puts upward pressure on the overall teen birth rate.

The number of births per 1,000 females 15-19 years old.

Figure 18
Birth Rates for Hispanic or Latino Teenagers 15-19 Years, Nationally, and in Arizona, 2000-2010



In 2010, Hispanics or Latinos aged 15-19 years disproportionately accounted for 56.7 percent of births to mothers in this age group in Arizona (5,280 out of 9,311; see **Table 6** and **Table 7**).

The 2010 birth rate among teen 15-19 years old exceeded the national rate for this age/ethnic group by 10.4 percent.

The number of births per 1,000 females 15-19 years old.