

PURPOSE

This report is the annual update of information about pregnancies among females under age 20. The data for 2011 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 2001-2009 and 2011 are population estimates of Arizona resident females aged 10-19 years. The 2010 denominators are the actual census enumerations from the U.S. Census Bureau. Detailed information about the assumptions and specific data sources is available online at <http://www.azdhs.gov/plan/menu/info/pd.htm>.

The 2011 Teenage Pregnancy report is the first report in this series to include cell suppression. To protect the anonymity of the individuals included in this report, cells in tables with five or fewer observations are denoted by an asterisk (*), cells containing rates based on counts of five or fewer are denoted by a double-asterisk(**), and cells containing sums based on addends of five or fewer are rounded to the nearest tens-unit and denoted by a dagger (†).

DATA ORGANIZATION

Tables 1-16 present annual numbers and rates of pregnancy, fertility, and abortion by year from 2001 to 2011 for Arizona teens. Information is presented for specific age groups and by race/ethnicity. 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 2001 to 2011. 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 2001 to 2011 in Table 12.

Table 14 presents teen pregnancy rates by race/ethnicity and age group by year from 2001 to 2011. Table 15 provides information about the incidence of sexually transmitted infections among females 10-14 and 15-19 years old in Arizona in 2001-2011. Table 16 shows the incidence rates by year from 2001 to 2011.

Frequency counts, proportions, and rates in Tables 17-32 all apply to the 2011 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 source of payment for labor and delivery, previous pregnancies, marital status, education, trimester of entry into prenatal care, number of prenatal visits, tobacco and alcohol use during pregnancy, and risk for low-birthweight by selected characteristics. The 2011 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 2001-2011.

COMPARATIVE NATIONAL AND STATE DATA

Timely, comparable, and reliable teen pregnancy statistics for other States and the Nation provide meaningful comparisons to place Arizona's teenage birth experiences in context. The Center for Disease Control (CDC) provides a useful source of information on national pregnancy outcomes. The most recent national abortion data provided by the CDC available is for 2009 and the most recent fetal death data distributed by the CDC is available for 2006. Another source of national data on reproductive health is the Alan Guttmacher Institute. The report, "**U.S. Teenage Pregnancies, Births and Abortions, 2008: National Trends by Age, Race and Ethnicity**"* was published by the Alan Guttmacher Institute in February 2012. 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 2001 – 2011 are available at this time.

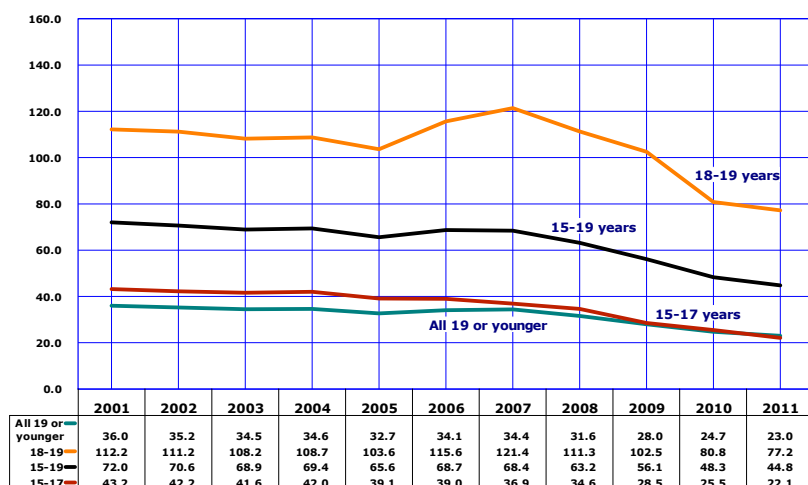
KEY FINDINGS

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 2011, the pregnancy rate of 23.0 pregnancies per 1,000 females 19 years or younger was 36.1 percent lower than the rate of 36.0 per 1,000 in 2001.
- It is only since 2008 that the reduction in the number of teen pregnancies was accompanied by an equally impressive decline in pregnancy rates.
- Historically, the declines in teenage pregnancy have been steeper for younger than for older teenagers, but recently are becoming more closely aligned. The rate for teenagers 15-17 years dropped by 40.1 percent from 43.2 per 1,000 in 2001 to 22.1 in 2011. The rate for older teenagers (aged 18-19 years) fell as well, by 36.4 percent from 121.4 per 1,000 in 2007 to 77.2 per 1,000 in 2011.
- The 2011 teen pregnancy rate of 23.0/1,000 was based on 10,269 pregnancies occurring among 447,155 females aged 10-19 years. The number of 10,269 teen pregnancies in 2011 was the lowest since 1984.
- From 2007 to 2011, the number of teen pregnancies declined particularly steeply for White non-Hispanic (41.7 percent), Hispanic or Latino (-38.0 percent), and Asian females (-30.5 percent).
- In 2011, Hispanic or Latino females accounted for 51.6 percent of all pregnancies in this age group, followed by White non-Hispanics (23.3 percent).
- In each year from 2001 to 2011, 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 2011, the Hispanic rate exceeded the average rate for all groups by 31.3 percent.
- If the 2011 "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 10,269 to approximately 4,069 $((9.1/1,000) * 447,155)$.
- The proportion of non-surgical abortions to females 19 years or younger decreased from 40.6 percent in 2010 to 33.8 percent in 2011.
- The first birth rate for childless teenagers has dropped 36.6 percent from 52.7 first-time births per 1,000 females 15-19 years old in 2001 to 33.4 per 1,000 in 2011.
- The repeat birth rates for teenagers who had already had a child decreased by 65.2 percent from 183.1 in 2001 to 63.8 per 1,000 females 15-19 years old in 2011 who had a previous birth.
- Unwed mothers have accounted for an increasing annual proportion of births throughout the 1990s and 2000s. In 2011, nonmarital births accounted for 89.1 percent of births to mothers 19 years or younger.
- The total number of births to mothers 19 years or younger decreased by 28.5 percent from 11,790 in 2001 to 8,435 in 2011. In contrast, the proportional share of births paid for by the Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) increased from 73.7 percent in 2001 to 83.6 percent in 2011.

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

Figure 1
Pregnancy Rates by Age Group and Year among Females 19 or Younger, Arizona, 2001-2011

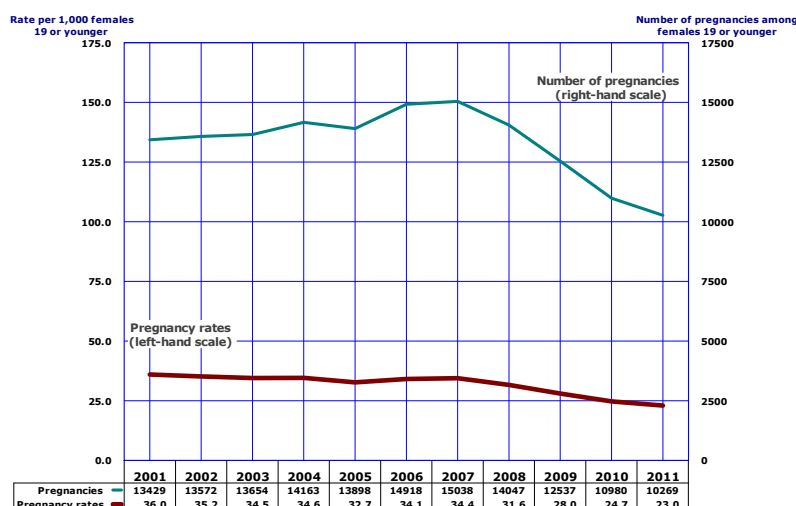


Note: All rates are per 1,000 females in specified group.

Teenage pregnancy rates dropped 36.1 percent overall from 2001 to 2011. (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 43.2 per 1,000 in 2001 to 22.1 in 2011. The rate for older teenagers (aged 18-19 years) fell as well, by 31.2 percent beginning in 2001, from 112.2 to 77.2.

Two of the three components of the pregnancy rates for teenagers 19 years old or younger (births and fetal losses) declined from 2007 to 2010, though the abortion rate increased from 2010 to 2011 (Table 1). The increase in the teenage abortion rate from 2010 to 2011 is likely attributable to changes in abortion reporting requirements that took effect in 2011.

Figure 2
Trends in the Number of Pregnancies and Pregnancy Rates among Females 19 or Younger, Arizona, 2001-2011



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 2002 - 2005 were lower than the 2001 rate of 36.0 /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).

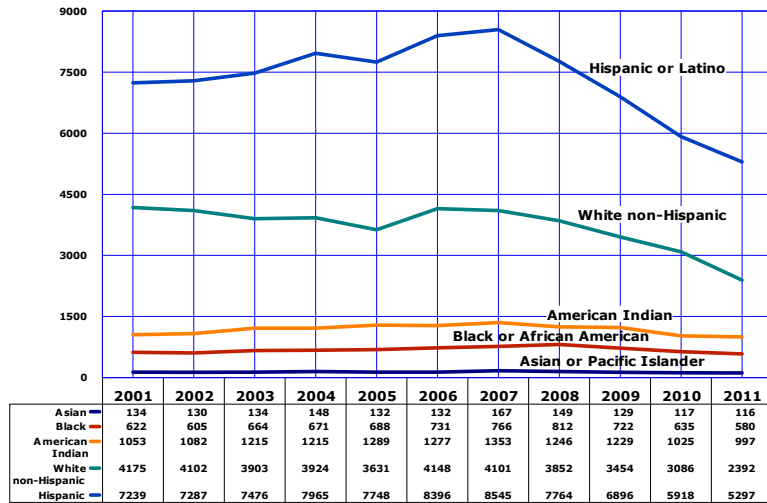
The 2011 teen pregnancy rate of 23.0/1,000 was based on 10,269 pregnancies occurring among 447,155 females aged 10-19 years. The number of 10,269 teen pregnancies in 2011 was the lowest since 1984.

KEY FINDINGS

Figure 3
Trends in the Number of Pregnancies* by Race/Ethnicity among Females 19 or Younger, Arizona, 2001-2011

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 2001-2011). In 2011, Hispanic or Latino females accounted for 51.6 percent of all pregnancies in this age group, followed by White non-Hispanics (23.3 percent). Black or African American, Asian or Pacific Islander, and American Indian females aged 19 years or younger accounted for a larger share of pregnancies in 2011 (16.5 percent) than they did in 2001 (13.5 percent).

From 2007 to 2011, the number of teen pregnancies declined particularly steeply for White non-Hispanic (41.7 percent), Hispanic or Latino (-38.0 percent), and Asian females (-30.5 percent).



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

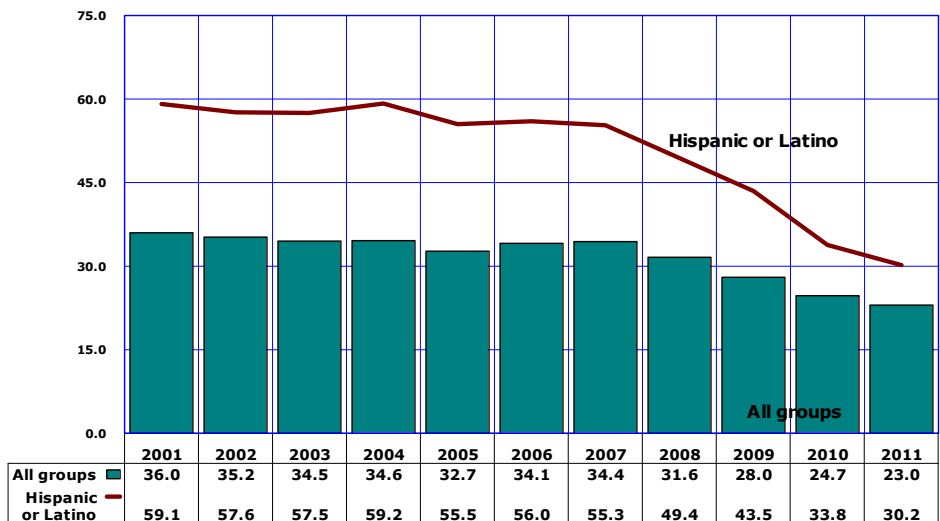
Figure 4
Comparison of Pregnancy Rates by Year among Hispanic or Latinos and all Females 19 or Younger, Arizona, 2001-2011

The teen pregnancy rates for all race and ethnic groups were lower in 2011 than in 2001 (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 2001-2011.

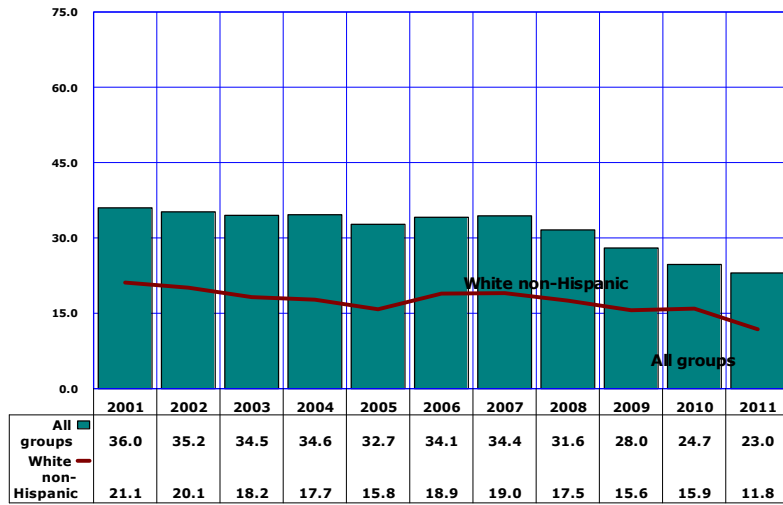
From 2001 to 2011, the teenage pregnancy rate for Hispanic or Latino women declined nearly 50 percent (48.9 percent), with the majority of the decline occurring between 2007 and 2011 (Figure 4).

In each year from 2001 to 2011, 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 2011, the Hispanic rate exceeded the average rate for all groups by 31.3 percent.



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

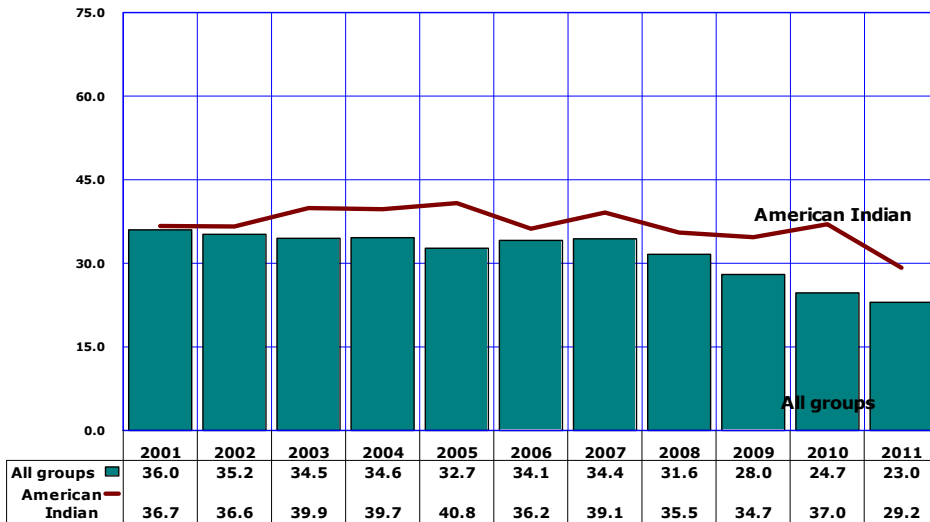
Figure 5
Comparison of Pregnancy Rates by Year among White non-Hispanics
and all Females 19 or Younger, Arizona, 2001-2011



The pregnancy rate for White non-Hispanics has substantially declined from 2001 to 2011 (44.1 percent), save for an increase from 2005 to 2007 (**Figure 5**). In each year from 2001 to 2011, 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, 2001-2011



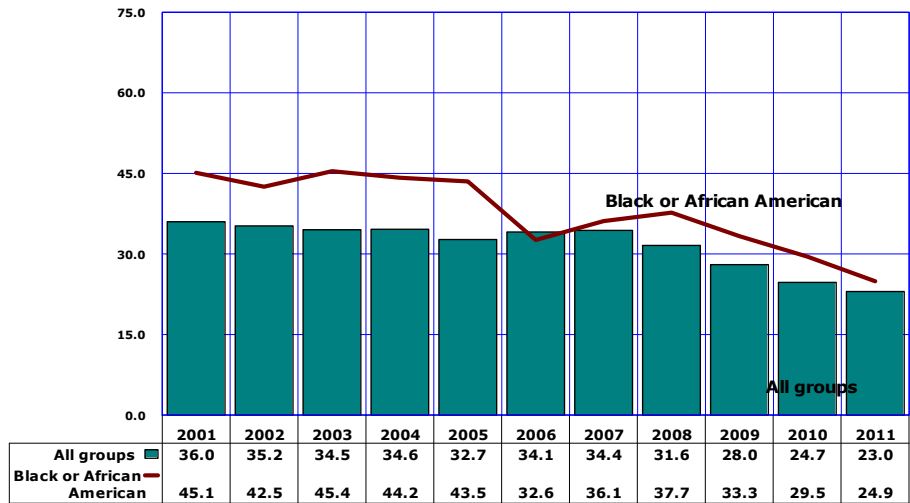
Pregnancies to American Indian females 19 years or younger varied somewhat erratically from 2001 to 2010, but from 2010 to 2011, the pregnancy rate of teenage American Indian mothers decreased 21.1 percent, the greatest single year decline observed from 2001 to 2011 (**Figure 6**). The American Indian rates were higher than the average for all groups in 2001-2011.

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

KEY FINDINGS

Figure 7
Comparison of Pregnancy Rates by Year among Black or African Americans and all Females 19 or Younger, Arizona, 2001-2011

The pregnancy rates for Black or African American females 19 years or younger decreased from 45.1/1,000 in 2001 to 24.9/1,000 in 2011 (**Figure 7**). Except for 2006, the pregnancy rates for Black or African American teenagers exceeded the pregnancy rate for all groups.

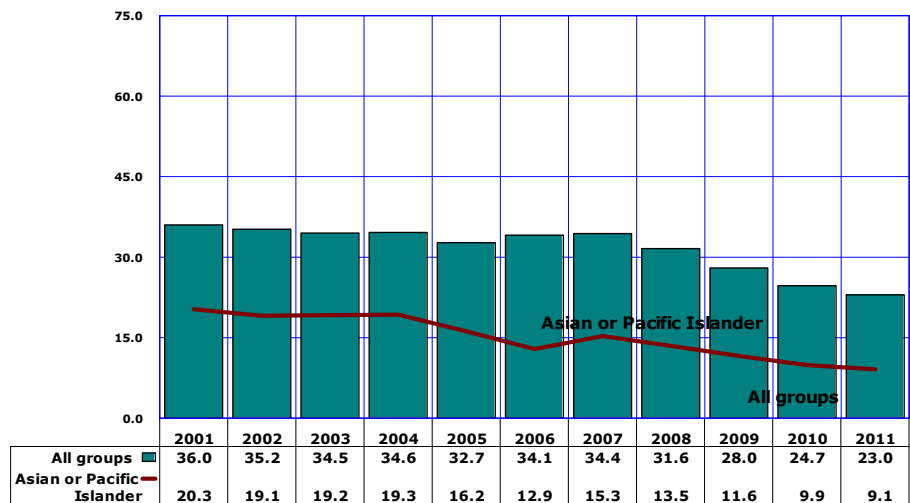


Note: All rates are per 1,000 females in specified group.

Figure 8
Comparison of Pregnancy Rates by Year among Asian or Pacific Islanders and all Females 19 or Younger, Arizona, 2001-2011

In each year from 2001 to 2011, 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 2011, the Asian rate (9.1/1,000) was 60.4 percent lower than the rate for all groups (23.0/1,000).

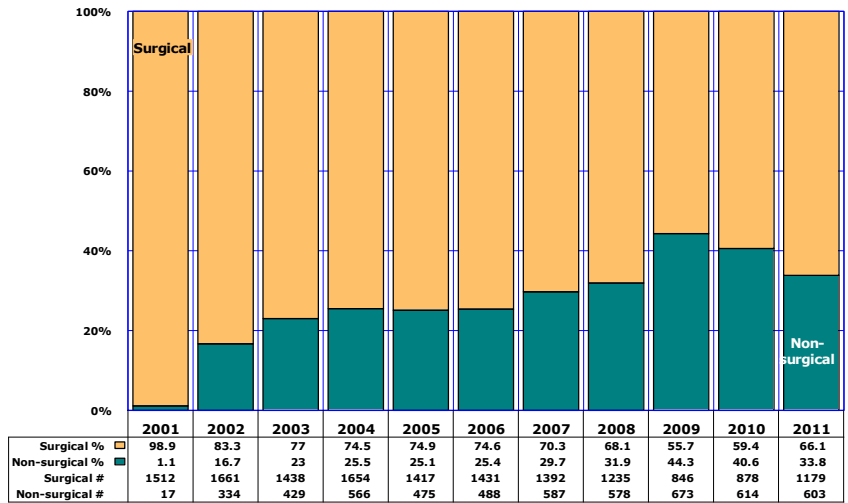
If the 2011 "risk for pregnancy" of Asian teens (i.e., their pregnancy rate) applied to all Arizona females 19 years or younger, the number of teen pregnancies in the State would have been reduced from 10,269 to approximately 4,069 ((9.1/1,000) * 447,155).



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

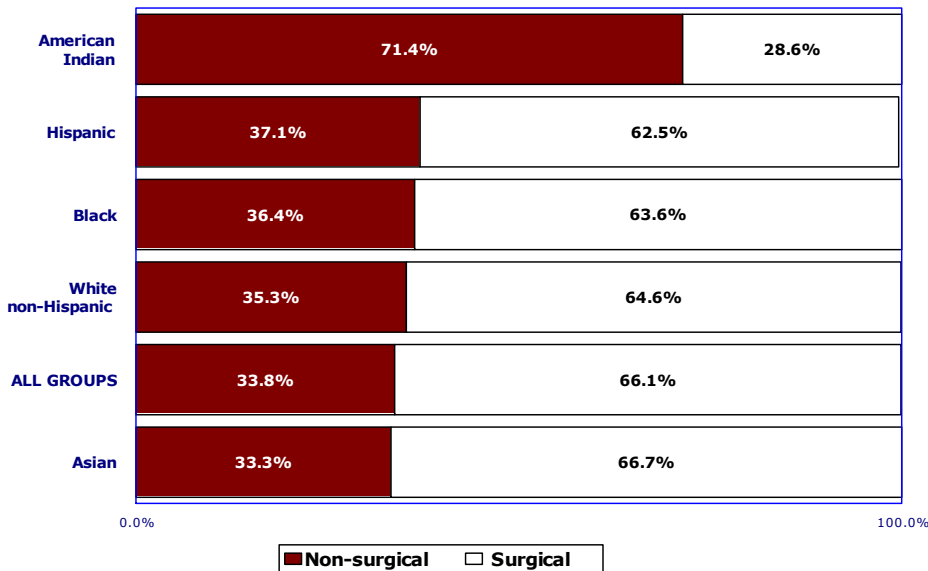
KEY FINDINGS

Figure 9
Proportional Contribution of Surgical and Non-Surgical Abortions
by Year among Females 19 or Younger, Arizona, 2001-2011



The proportion of non-surgical abortions to females 19 years or younger decreased from 44.3 percent in 2009 to 33.8 percent in 2011, indicating the proportion of surgical abortions increased 10.4 percent over that period (**Figure 9**).

Figure 10
Proportional Contribution of Non-Surgical and Surgical Abortions by
Race/Ethnicity among Females 19 or Younger, Arizona, 2011



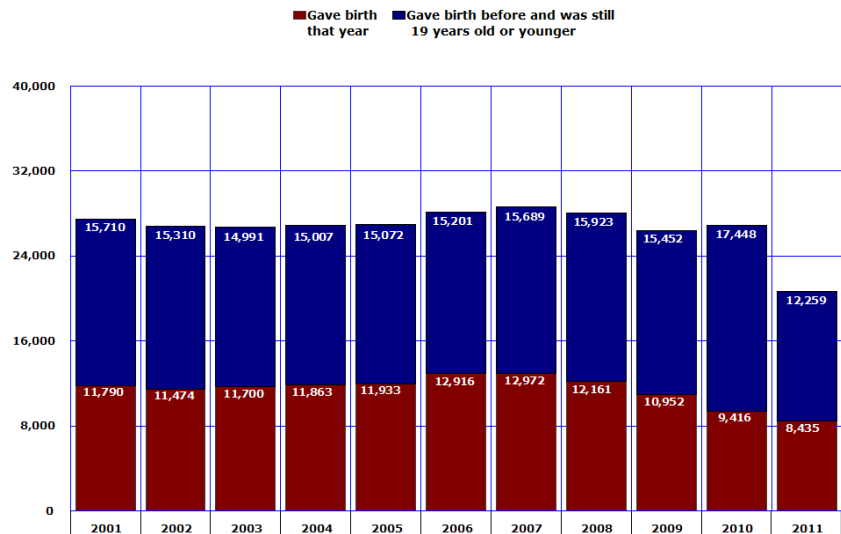
Among American Indian, Hispanic or Latino, Black, and White non-Hispanic teens, the proportion of non-surgical abortions exceeded the average for all groups (**Figure 10**). The ratio of reported non-surgical abortions among Asian females was the lowest among all ethnic groups.

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

KEY FINDINGS

Figure 11
Cumulative Number of Mothers who were 19 or Younger in Arizona by Year, 2001-2011

There were approximately 20,694 mothers under age 20 in Arizona in 2011, the lowest number since 2001. Among them there were the 8,435 who gave birth in 2011 and the 12,259 who gave birth prior to 2011 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 decreased by 23.0 percent from 26,864 in 2010.

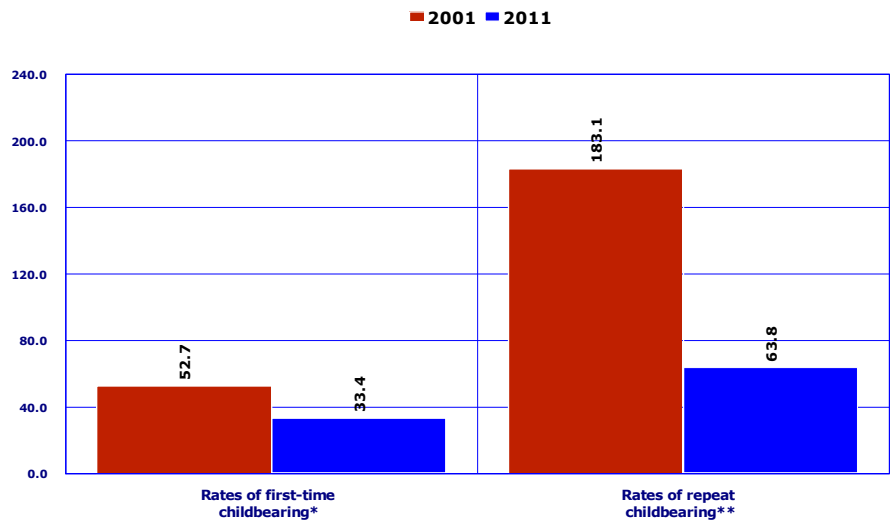


*See Table 13 for more details.

Figure 12
Rates of First and Repeat Births to Females 15-19 Years, Arizona, 2001 and 2011

The first birth rate for childless teenagers has dropped 36.6 percent from 52.7 first-time births per 1,000 females 15-19 years old in 2001 to 33.4/1,000 in 2011 (Figure 12).

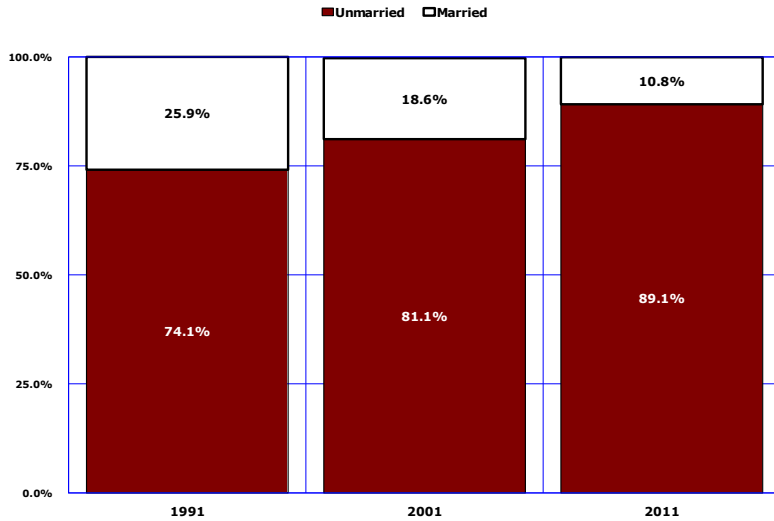
The repeat birth rates for teenagers who had already had a child decreased by 65.2 percent from 183.1 in 2001 to 63.8 per 1,000 females 15-19 years old in 2011 who had a previous birth (Figure 12).



* Number of first births per 1,000 females 15-19 years old who have not had a birth.

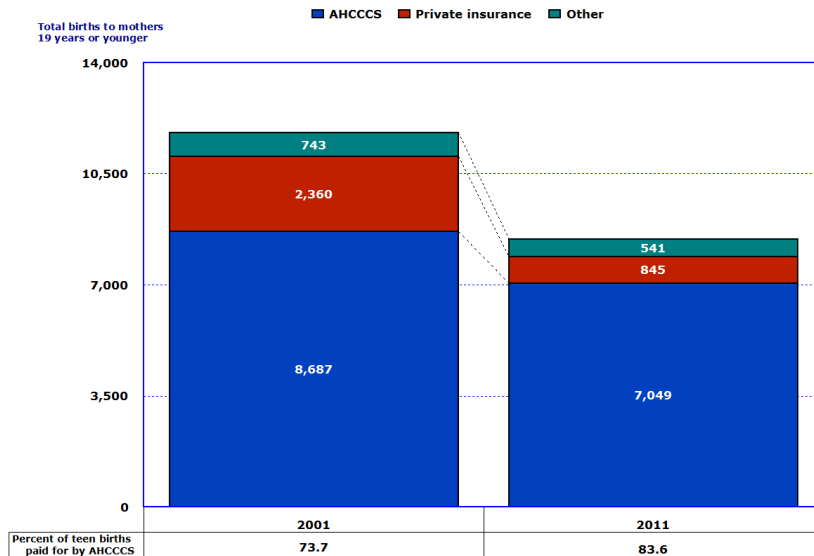
**Number of repeat births per 1,000 females 15-19 years old who have had a previous birth. See Appendix "How to compute rates of first and repeat childbearing."

Figure 13
Births to Mothers 19 or Younger by Marital Status,
Arizona, 1991, 2001, and 2011



Unwed mothers have accounted for an increasing annual proportion of births throughout the 1990s and 2000s. Two decades ago, approximately 7 out of 10 teenage mothers were unmarried (**Figure 13**). In 2011, nonmarital births accounted for 89.1 percent of births to mothers 19 years or younger.

Figure 14
Number of Births to Mothers 19 or Younger by Payee,
Arizona, 2001 and 2011



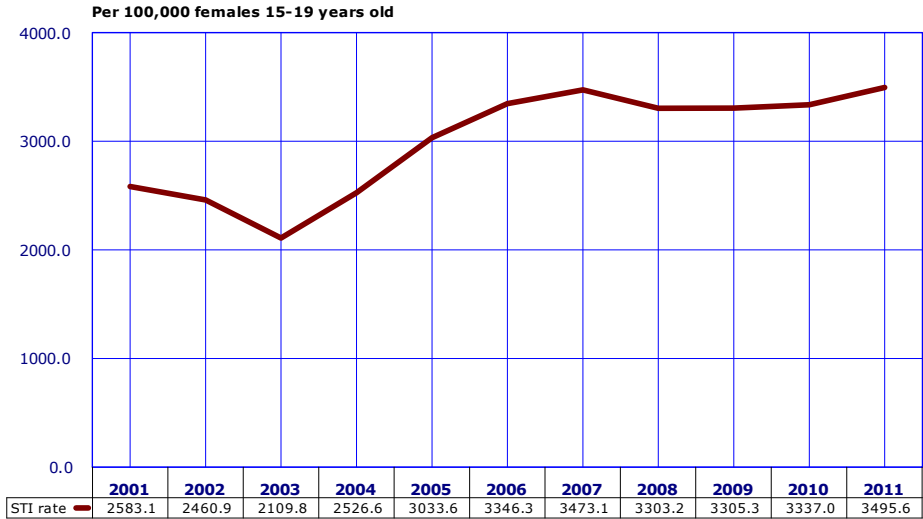
The total number of births to mothers 19 years or younger decreased by 28.5 percent from 11,790 in 2001 to 8,435 in 2011 (**Table 1**). In contrast, the proportional share of births paid for by the Arizona Health Care Cost Containment System (AHCCCS, the State's Medicaid program) increased from 73.7 percent in 2001 to 83.6 percent in 2011 (**Figure 14**).

KEY FINDINGS

Figure 15
Trends in the Incidence of Sexually Transmitted Infections*
among Females 15-19 Years, Arizona, 2001-2011

In each year from 2006 to 2011, the total number of sexually transmitted infections (STI) among females aged 19 or younger exceeded 7,400 (**Table 15**) compared to an average of 5,206 reported in years 2001 to 2005. The rate of STI among females 15-19 years old increased by 35.3 percent from 2583.1 cases per 100,000 in 2001 to a rate of 3495.6/100,000 in 2011.

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 and 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
Birth Rates for Teenagers 15-19 Years, Nationally and in Arizona,
2001-2011

In each year from 2001 to 2011, 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 38.2 percent of females aged 15-19 years in 2011. A high proportional representation of Hispanic or Latino females in Arizona puts upward pressure on the overall teen birth rate.

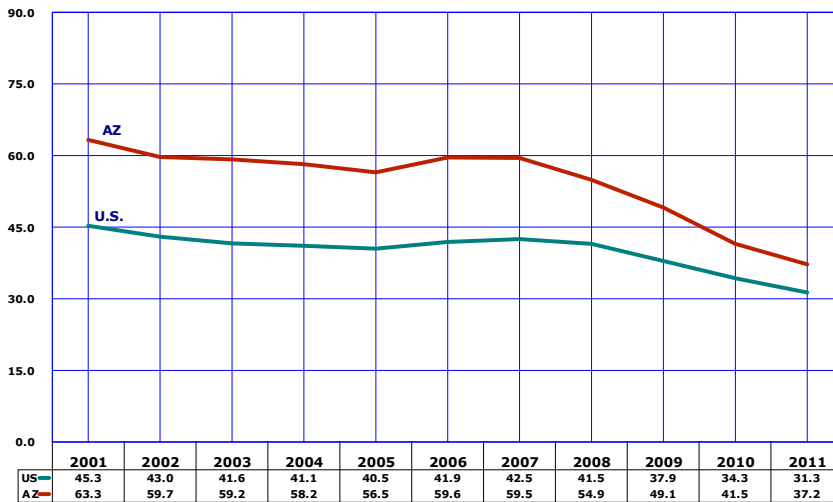
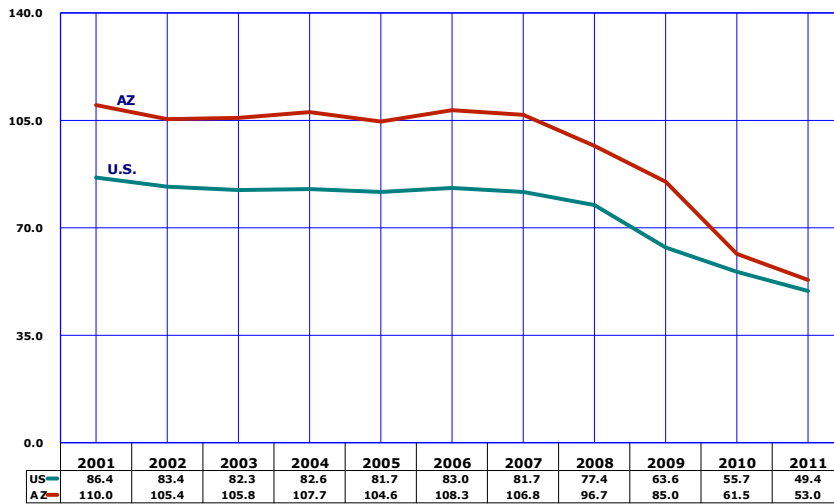


Figure 17
Birth Rates for Hispanic or Latino Teenagers 15-19 Years, Nationally,
and in Arizona, 2001-2011



In 2011, Hispanics or Latinos aged 15-19 years disproportionately accounted for 54.8 percent of births to mothers in this age group in Arizona (4,570 out of 8,334; see **Table 6** and **Table 7**).

The 2011 birth rate among teen 15-19 years old exceeded the national rate for this age/ethnic group by 3.6 percent.

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