PURPOSE

This report is the annual update of information about pregnancies among females under age 20. The data for 2013 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.php.

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 2003-2009 and 2011-2013 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/pop/index.php.

The 2013 Teenage Pregnancy report suppresses information in tables with small cell sizes. 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 1-14 present annual numbers and rates of pregnancy, fertility, and abortion by year from 2003 to 2013 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 2003 to 2013. 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 2003 to 2013 in Table 12.

Table 14 presents teen pregnancy rates by race/ethnicity and age group by year from 2003 to 2013. Table 15 provides information about the incidence of sexually transmitted infections among females 10-14 and 15-19 years old in Arizona in 2003-2013. Table 16 shows the incidence rates by year from 2003 to 2013.

Frequency counts, proportions, and rates in Tables 17-32 all apply to the 2013 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 2013 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 2003-2013.

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 2010 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.

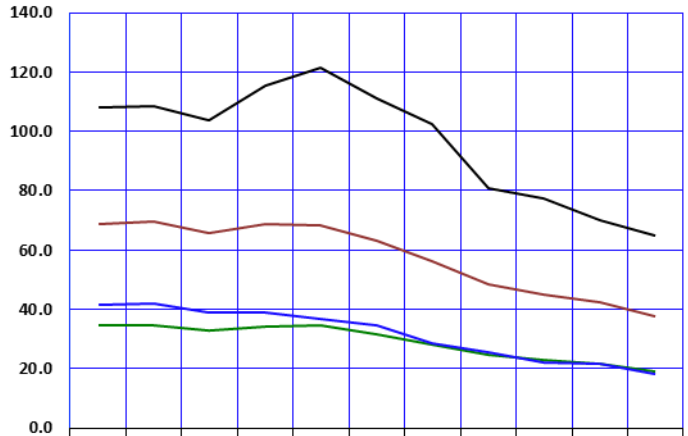
No comparable state-by-state teen pregnancy data for 2003 – 2013 are available at this time.

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 2013, the pregnancy rate of 19.2 pregnancies per 1,000 females 19 years or younger was 44.3 percent lower than the rate of 34.5 per 1,000 in 2003. The teen pregnancy rate of 19.2/1,000 females 19 years or younger was the lowest teen pregnancy rate since at least 1983.**
- **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 steeply by 56.7 percent from 41.6 per 1,000 in 2003 to 18.0 in 2013. The rate for older teenagers (aged 18-19 years) fell by 40.1 percent from 108.2/1,000 in 2003 to 64.8/1,000 in 2013.**
- **The 2013 teen pregnancy rate of 19.2/1,000 was based on 8,715 pregnancies occurring among 453,659 females aged 10-19 years. The number of 8,715 teen pregnancies in 2013 was 10.2 percent lower than 2012 and was the lowest number of teen pregnancies since 1984.**
- **From 2007 to 2013, the number of teen pregnancies declined particularly steeply for White non-Hispanic (50.0 percent), Hispanic or Latino (-46.0 percent), and Asian females (-50.3 percent).**
- **In 2013, Hispanic or Latino females accounted for 53.0 percent of all pregnancies in this age group, followed by White non-Hispanics (23.5 percent).**
- **In each year from 2003 to 2013, 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 2013, the Hispanic rate exceeded the average rate for all groups by 30.2 percent.**
- **If the 2013 "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 8,715 to approximately 3,085 ((6.8/1,000) * 453,659).**
- **The first birth rate for childless teenagers has dropped 46.3 percent from 49.5 first-time births per 1,000 females 15-19 years old in 2003 to 26.6/1,000 in 2013.**
- **The repeat birth rates for teenagers who had already had a child decreased by 21.0 percent from 185.2 in 2003 to 146.4 per 1,000 females 15-19 years old in 2013 who had a previous birth.**
- **Unwed mothers have accounted for an increasing annual proportion of births throughout the 1990s and 2000s. In 2013, nonmarital births accounted for 89.8 percent of births to mothers 19 years or younger.**
- **The total number of births to mothers 19 years or younger decreased by 38.3 percent from 11,700 in 2003 to 7,222 in 2013. 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 79.4 percent in 2003 to 84.3 percent in 2013.**

Figure 1
Pregnancy Rates by Age Group and Year among Females 19 or Younger, Arizona, 2003-2013



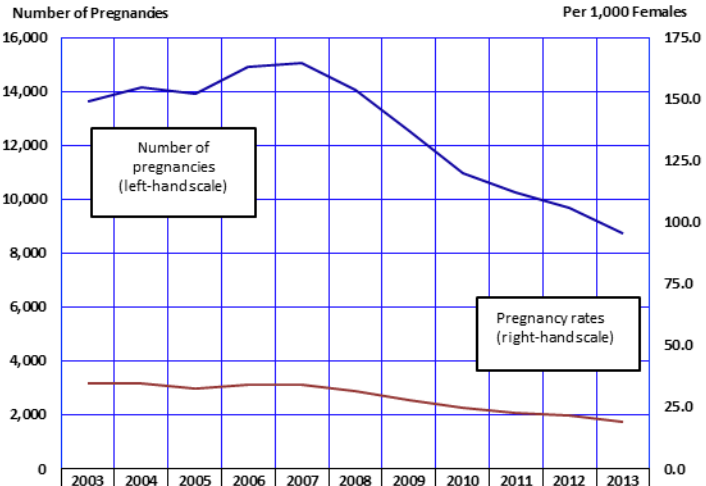
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All 19 or younger	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
18-19	108.2	108.7	103.6	115.6	121.4	111.3	102.5	80.8	77.2	70.2	64.8
15-19	68.9	69.4	65.6	68.7	68.4	63.2	56.1	48.3	44.8	42.2	37.7
15-17	41.6	42.0	39.1	39.0	36.9	34.6	28.5	25.5	22.1	21.8	18.0

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

Teenage pregnancy rates dropped 44.3 percent overall from 2003 to 2013. (**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 56.7 percent from 41.6 per 1,000 in 2003 to 18.0 in 2013. The rate for older teenagers (aged 18-19 years) fell by 40.1 percent from 108.2/1,000 in 2003 to 64.8/1,000 in 2013.

Two of the three components of the pregnancy rates for teenagers 19 years old or younger (births and fetal losses) declined from 2007 to 2013, though the abortion rate increased from 2010 to 2011 and returned to 3.4/1,000 females in 2012 and 3.2/1,000 females in 2013 (**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, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Pregnancies	13,654	14,163	13,898	14,918	15,038	14,047	12,537	10,980	10,269	9,710	8,715
Pregnancy rates	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2

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

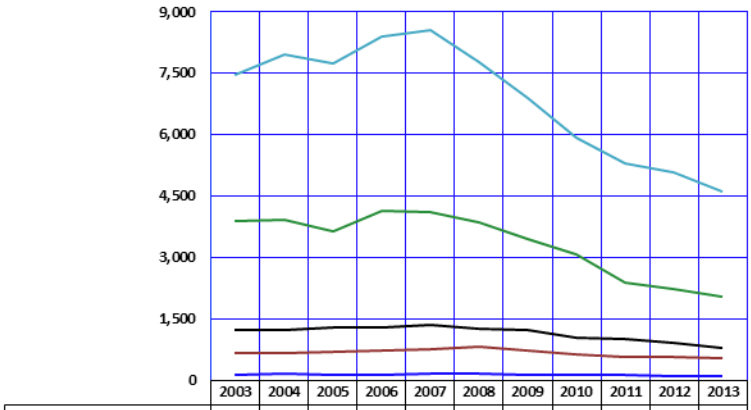
Trends in the number of pregnancies to teenage women do not always parallel the pregnancy rate. The teen pregnancy rate measures the proportion of teenagers becoming pregnant in a given year; in other words, the relative "*risk for pregnancy*" in a population "*at risk*". The number of pregnancies is, 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 2013 teen pregnancy rate of 19.2/1,000 was based on 8,715 pregnancies occurring among 453,659 females aged 10-19 years. The number of 8,715 teen pregnancies in 2013 was 10.2 percent lower than 2012 and was the lowest number of teen pregnancies since 1984.

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 2003-2013). In 2013, Hispanic or Latino females accounted for 53.0 percent of all pregnancies in this age group, followed by White non-Hispanics (23.5 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 2013 (16.1 percent) than they did in 2003 (14.7 percent).

From 2007 to 2013, the number of teen pregnancies declined particularly steeply for White non-Hispanic (50.0 percent), Hispanic or Latino (-46.0 percent), and Asian females (-50.3 percent).

Figure 3
Trends in the Number of Pregnancies* by Race/Ethnicity among Females 19 or Younger, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Asian	134	148	132	132	167	149	129	117	116	88	83
Black	664	671	688	731	766	812	722	635	580	562	537
American Indian	1,215	1,215	1,289	1,277	1,353	1,246	1,229	1,025	997	902	787
White non-Hispanic	3,903	3,924	3,631	4,148	4,101	3,852	3,454	3,086	2,392	2,239	2,050
Hispanic	7,476	7,965	7,748	8,396	8,545	7,764	6,896	5,918	5,297	5,085	4,618

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

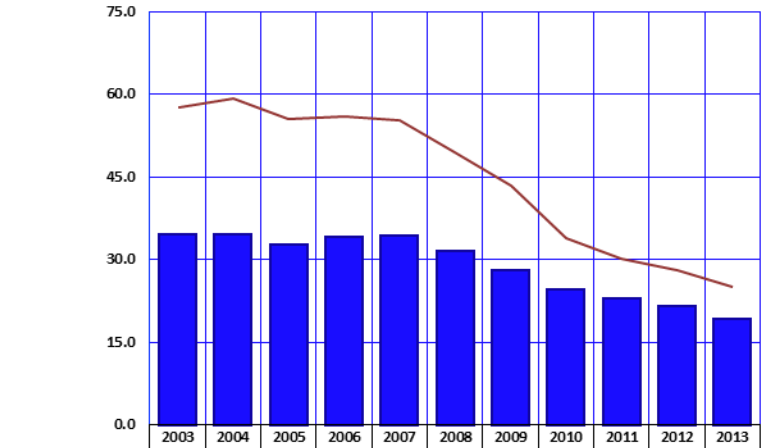
The teen pregnancy rates for all race and ethnic groups were lower in 2013 than in 2002 (**Figure 1**). However, the temporal trends in annual teen pregnancy rates differed considerably by race/ethnicity.

Figures 4, **5**, **6**, **7,** and **8** reveal race/ethnicity-specific trends in teen pregnancy rates in Arizona in 2003-2013.

From 2003 to 2013, the teenage pregnancy rate for Hispanic or Latino women declined more than 50 percent (56.5 percent), with the majority of the decline occurring between 2007 and 2013 (**Figure 4**).

In each year from 2003 to 2013, 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 2013, the Hispanic rate exceeded the average rate for all groups by 30.2 percent.

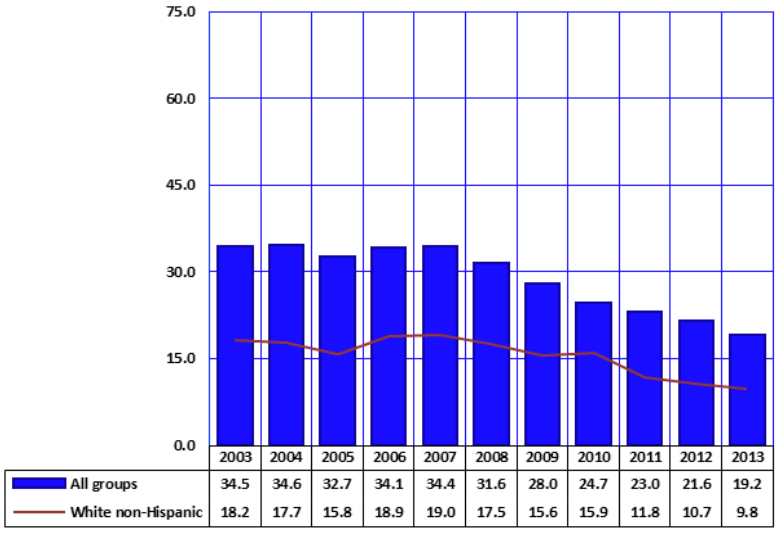
Figure 4
Comparison of Pregnancy Rates by Year among Hispanic or Latinos and all Females 19 or Younger, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All groups	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
Hispanic	57.5	59.2	55.5	56.0	55.3	49.4	43.5	33.8	30.2	28.0	25.0

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, 2003-2013

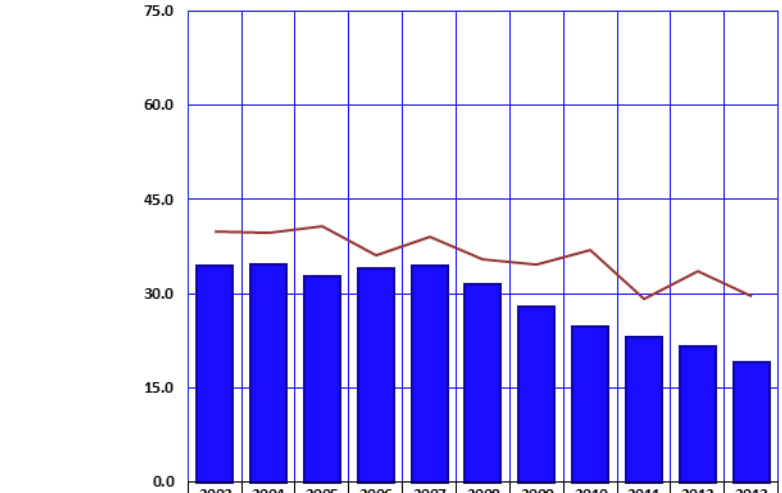


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All groups	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
White non-Hispanic	18.2	17.7	15.8	18.9	19.0	17.5	15.6	15.9	11.8	10.7	9.8

The pregnancy rate for White non-Hispanics has substantially declined from 2003 to 2013 (46.82 percent), save for an increase from 2005 to 2007 (**Figure 5**). In each year from 2003 to 2013, 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, 2003-2013



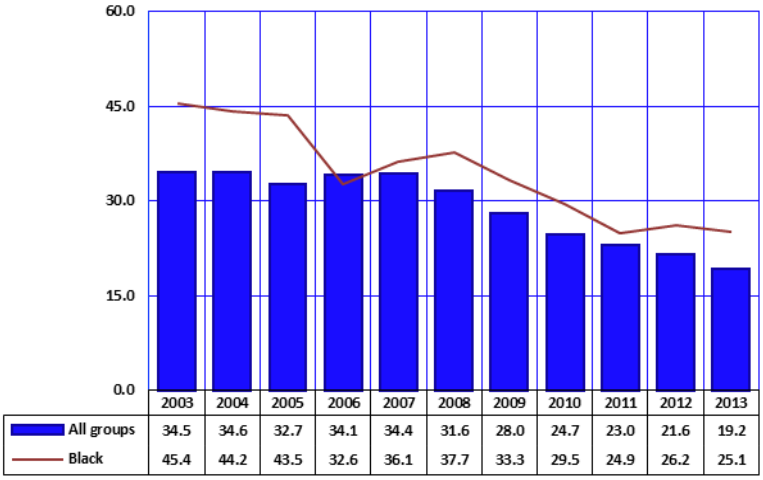
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All groups	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
American Indian	39.9	39.7	40.8	36.2	39.1	35.5	34.7	37.0	29.2	33.6	29.7

The pregnancy rate among American Indian females 19 years or younger varied somewhat erratically from 2003 to 2013, showing a 21.1 percent decrease from 2010 to 2011, a 15.1 percent increase from 2011 to 2012, and an 11.6 percent increase from 2012 to 2013 (**Figure 6**). The American Indian teenage pregnancy rate was higher than the average for all groups from 2003 to 2013.

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

Pregnancy rates for Black or African American females 19 years or younger decreased from 45.4/1,000 in 2003 to 25.1/1,000 in 2013 (**Figure 7**). Excluding 2006, the pregnancy rates for Black or African American teenagers exceeded the pregnancy rate for all groups.

Figure 7
Comparison of Pregnancy Rates by Year among Black or African Americans and all Females 19 or Younger, Arizona, 2003-2013



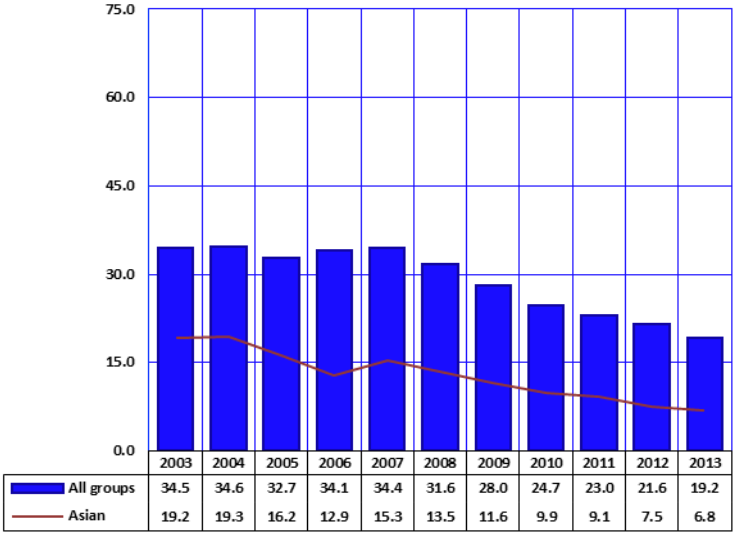
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All groups	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
Black	45.4	44.2	43.5	32.6	36.1	37.7	33.3	29.5	24.9	26.2	25.1

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

In each year from 2003 to 2013, 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 2013, the Asian rate (6.8/1,000) was 64.6 percent lower than the rate for all groups (19.2/1,000).

If the 2013 "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 8,715 to approximately 3,085 ((6.8/1,000) * 453,659).

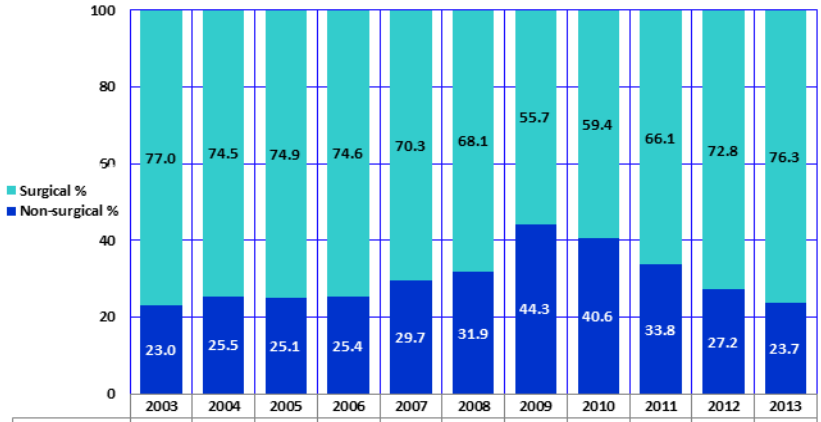
Figure 8
Comparison of Pregnancy Rates by Year among Asian or Pacific Islanders and all Females 19 or Younger, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
All groups	34.5	34.6	32.7	34.1	34.4	31.6	28.0	24.7	23.0	21.6	19.2
Asian	19.2	19.3	16.2	12.9	15.3	13.5	11.6	9.9	9.1	7.5	6.8

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, 2003-2013

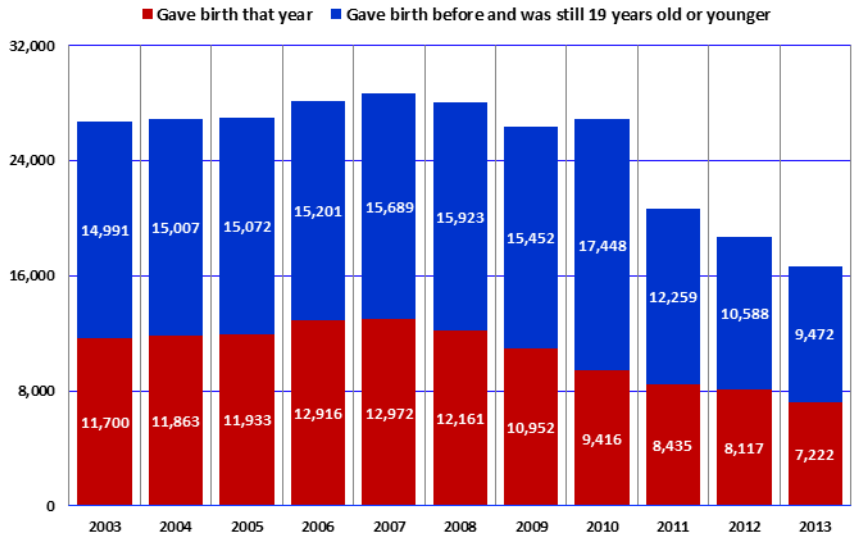


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Surgical #	1,438	1,654	1,417	1,431	1,392	1,235	846	878	1,179	1,121	1,099
Non-surgical #	429	566	475	488	587	578	673	614	603	419	342
Surgical %	77.0	74.5	74.9	74.6	70.3	68.1	55.7	59.4	66.1	72.8	76.3
Non-surgical %	23.0	25.5	25.1	25.4	29.7	31.9	44.3	40.6	33.8	27.2	23.7

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

The proportion of non-surgical abortions to females 19 years or younger decreased from 44.3 percent in 2009 to 23.7 percent in 2013, indicating the proportion of surgical abortions increased 20.6 percent over that period (**Figure 9**).

Figure 10
Cumulative Number of Mothers who were 19 or Younger in Arizona by Year, 2003-2013

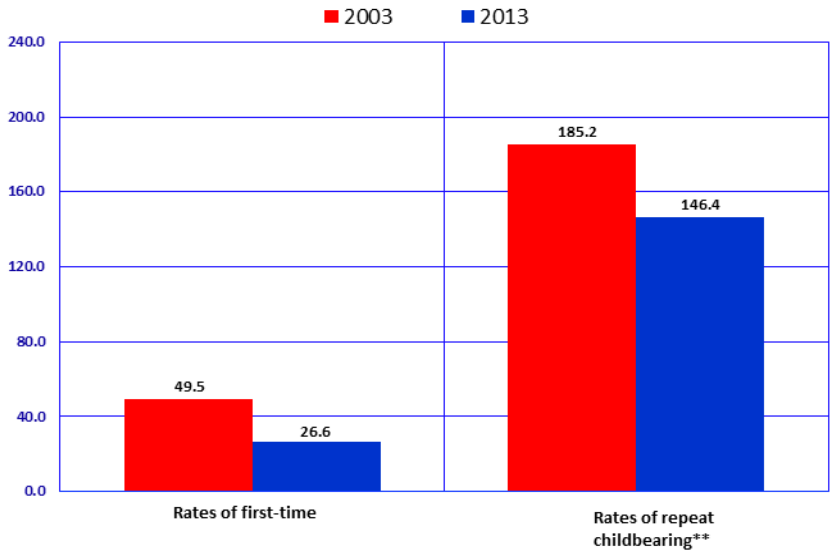


There were approximately 16,694 mothers under the age of 20 in Arizona in 2013. Among them there were the 7,222 who gave birth in 2013 and the 9,472 who gave birth prior to 2013 and were still 19 years old or younger in 2013 (**Figure 11, Table 13**). The cumulative number of mothers who were 19 years or younger in Arizona in 2013 decreased by 37.9 percent from 26,864 in 2010.

Figure 11
Rates of First and Repeat Births to Females 15-19 Years, Arizona, 2003 and 2013

The first birth rate for childless teenagers has dropped 46.3 percent from 49.5 first-time births per 1,000 females 15-19 years old in 2003 to 26.6/1,000 in 2013 (**Figure 12**).

The repeat birth rates for teenagers who had already had a child decreased by 21.0 percent from 185.2 in 2003 to 146.4 per 1,000 females 15-19 years old in 2013 who had a previous birth (**Figure 12).**



Note: * 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 12
Births to Mothers 19 or Younger by Marital Status, Arizona, 1993, 2003, and 2013

Unwed mothers have accounted for an increasing annual proportion of births throughout the 1990s and 2000s. Two decades ago, more than 7 out of 10 teenage mothers were unmarried (**Figure 13**). In 2013, nonmarital births accounted for 89.8 percent of births to mothers 19 years or younger.

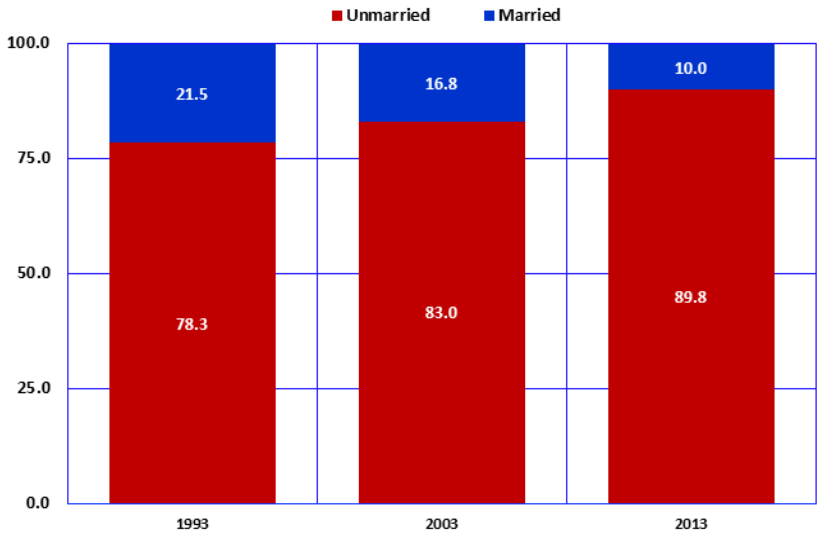
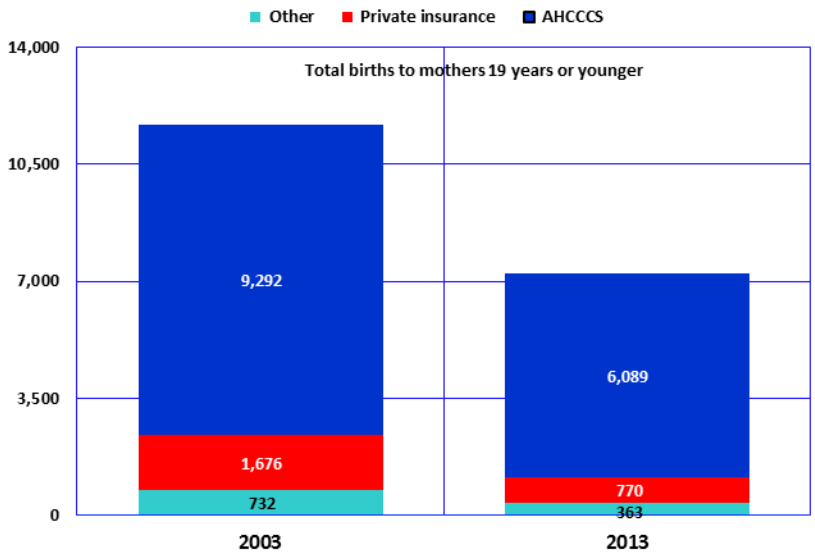
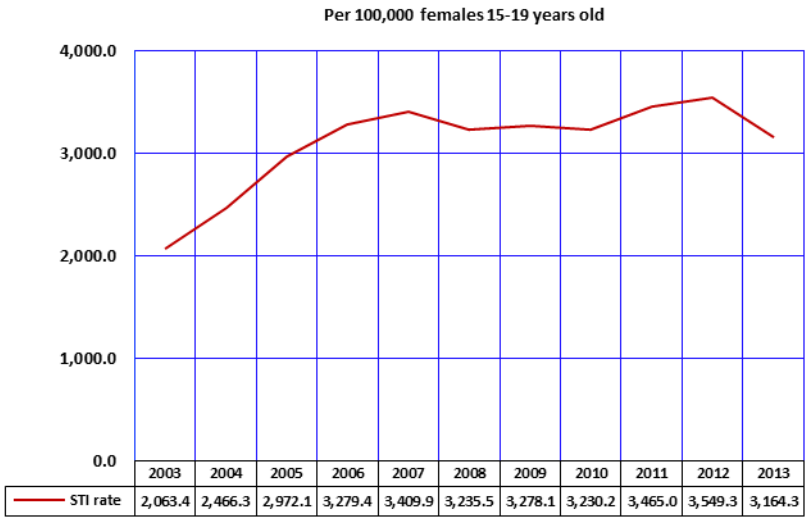


Figure 13
Number of Births to Mothers 19 or Younger by Payee, Arizona, 2003 and 2013



The total number of births to mothers 19 years or younger decreased by 38.3 percent from 11,700 in 2003 to 7,222 in 2013 (**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 79.4 percent in 2003 to 84.3 percent in 2013 (**Figure 14**).

Figure 14
Trends in the Incidence of Sexually Transmitted Infections* among Females 15-19 Years, Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
STI rate	2,063.4	2,466.3	2,972.1	3,279.4	3,409.9	3,235.5	3,278.1	3,230.2	3,465.0	3,549.3	3,164.3

In each year from 2007 to 2012, the total number of sexually transmitted infections (STI) among females aged 19 or younger exceeded 7,400, but fell to 6,921 in 2013 (**Table 15**). Even with the recent decline, the rate of STI among females 15-19 years old increased 53.4 percent from 2,063.4 cases per 100,000 in 2003 to a rate of 3,164.3/100,000 in 2013.

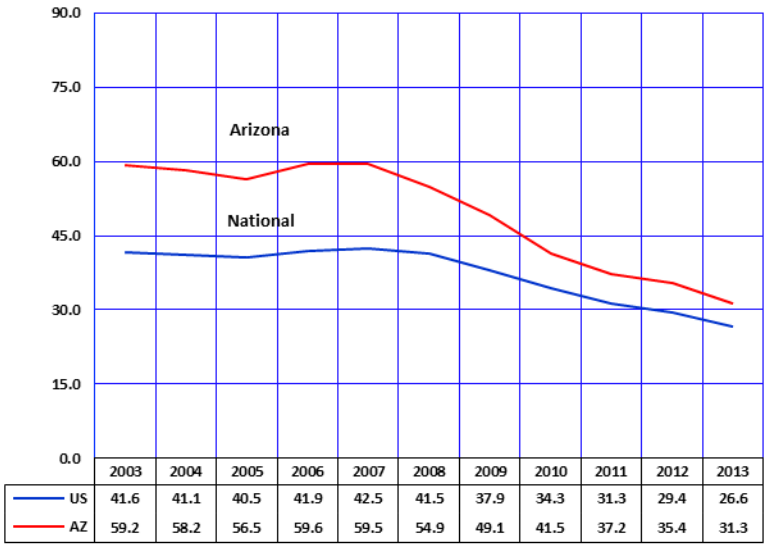
These STIs include *chlamydia* and *syphilis.* *Chlamydia* can cause sterility in the affected mother and eye infections and pneumonia in the newborn. *Syphilis* can cause blindness and maternal and/or infant death.

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

In each year from 2003 to 2013, 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 40.7 percent of females aged 15-19 years in 2013. A high proportional representation of Hispanic or Latino females in Arizona puts upward pressure on the overall teen birth rate.

Figure 15
Birth Rates for Teenagers 15-19 Years, Nationally and in Arizona, 2003-2013



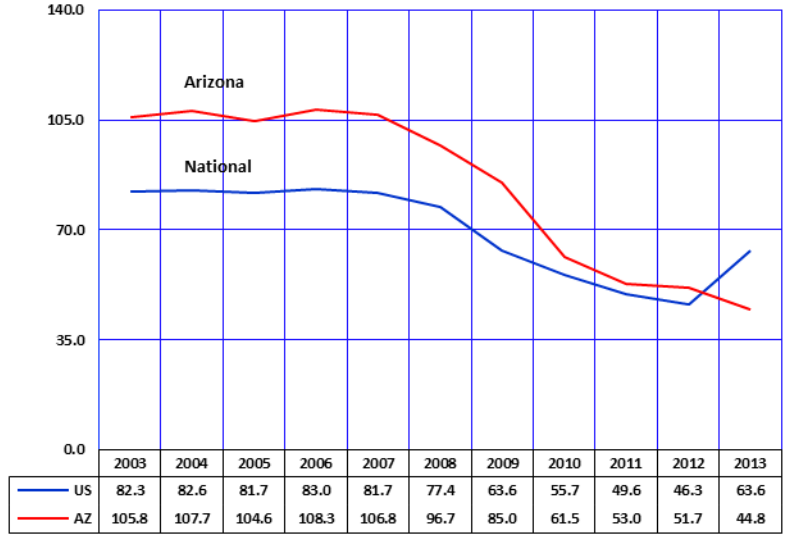
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
US	41.6	41.1	40.5	41.9	42.5	41.5	37.9	34.3	31.3	29.4	26.6
AZ	59.2	58.2	56.5	59.6	59.5	54.9	49.1	41.5	37.2	35.4	31.3

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

In 2013, Hispanics or Latinos aged 15-19 years disproportionately accounted for 57.0 percent of births to mothers in this age group in Arizona (4,627 out of 7,222; see **Table 6** and **Table 7**).

Historically the birth rates among Hispanic or Latino teenagers have been higher in Arizona than nationally. In 2013, the national birth rate for Hispanic teenagers increased 37.4 percent from 2012, making the national rate 42.0 percent higher than Arizona's rate of 44.8 in 2013.

Figure 16
Birth Rates for Hispanic or Latino Teenagers 15-19 Years, Nationally, and in Arizona, 2003-2013



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
US	82.3	82.6	81.7	83.0	81.7	77.4	63.6	55.7	49.6	46.3	63.6
AZ	105.8	107.7	104.6	108.3	106.8	96.7	85.0	61.5	53.0	51.7	44.8

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