

PURPOSE

This report is the annual update of information about pregnancies among females under age 20. The data for 2017 is placed in a temporal context by comparing it with the data from the preceding years. Earlier reports are available online at <http://pub.azdhs.gov/health-stats/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 2011-2017 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://pub.azdhs.gov/health-stats/menu/info/pop/index.php>.

The 2017 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 2007 to 2017 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 2007 to 2017. 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 2007 to 2017 in Table 12.

Table 14 presents teen pregnancy rates by race/ethnicity and age group by year from 2007 to 2017. Table 15 provides information about the incidence of sexually transmitted infections among females 10-14 and 15-19 years old in Arizona in 2007-2017. Table 16 shows the incidence rates by year from 2007 to 2017.

Frequency counts, proportions, and rates in Tables 17-32 all apply to the 2017 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 use during pregnancy, and risk for low-birthweight by selected characteristics. The 2017 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 2007-2017.

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 2015¹ and the most recent fetal death report published by the CDC presents statistics from 2014 through 2016². Another source of national data on reproductive health is the Guttmacher Institute. The latest report³, published by the Institute in September 2017, covers statistics available on the incidence of teen pregnancy, birth and abortion in the United States for 2013, with trend analysis since 1975. The authors present the complete count of births provided by every state to the NCHS in combination 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 2007 – 2017 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.

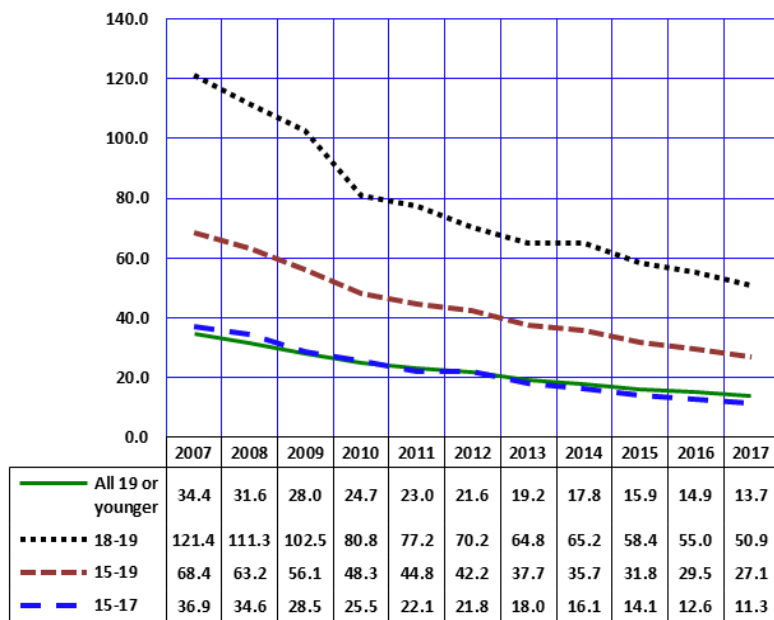
- **In 2017, the pregnancy rate of 13.7 pregnancies per 1,000 females 19 years or younger was 60.0 percent lower than the rate of 34.4 per 1,000 in 2007. The teen pregnancy rate of 13.7 per 1,000 females 19 years or younger was the lowest teen pregnancy rate since at least 1983.**
- **It is only since 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 69.4 percent from 36.9 per 1,000 in 2007 to 11.3 in 2017. The rate for older teenagers (aged 18-19 years) fell by 58.0 percent from 121.4 per 1,000 in 2007 to 50.9 per 1,000 in 2017.**
- **The 2017 teen pregnancy rate of 13.7 per 1,000 was based on 6,252 pregnancies occurring among 454,914 females aged 10-19 years. The number of 6,252 teen pregnancies in 2017 was 7.0 percent lower than 2016 and was the lowest number of teen pregnancies since 1984.**
- **From 2007 to 2017, the number of teen pregnancies declined most among Hispanic or Latino teens (58.9 percent), followed by declines among American Indians (59.6 percent), and White non-Hispanic teens (61.6 percent).**
- **In 2017, Hispanic or Latino females accounted for 56.2 percent of all pregnancies in this age group, followed by White non-Hispanics (25.2 percent).**
- **In each year from 2007 to 2017, 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 2017, the Hispanic rate exceeded the average rate for all groups by 29.8 percent.**
- **If the 2017 "risk of pregnancy" for Asian teens (i.e., their pregnancy rate of 5.8 per 1,000), were to be applied to all Arizona females 19 years or younger, it would reduce the number of Arizona teen pregnancies from 6,252 to just 2,639 ((5.8 per 1,000) * 454,914).**
- **The first birth rate for childless teenagers has dropped 62.3 percent from 49.9 first-time births per 1,000 females 15-19 years old in 2007 to 18.8 per 1,000 in 2017.**
- **The repeat birth rates for teenagers who had already had a child decreased by 22.3 percent from 190.6 in 2007 to 148.1 per 1,000 females 15-19 years old in 2017, who had a previous birth.**
- **Unwed mothers have accounted for an increasing annual proportion of births throughout the 1990s and 2000s. In 2017, non-marital births accounted for 89.4 percent of births to mothers 19 years or younger.**
- **The total number of births to mothers 19 years or younger decreased by 61.1 percent from 12,972 in 2007 to 5,041 in 2017. 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 80.1 percent in 2007 to 84.5 percent in 2017.**

¹<https://www.cdc.gov/mmwr/volumes/67/ss/ss6713a1.htm>

²<https://www.cdc.gov/nchs/products/databriefs/db316.htm>

³<https://www.guttmacher.org/report/us-adolescent-pregnancy-trends-2013>

Figure 1
Pregnancy Rates by Age Group and Year among Females 19 or Younger, Arizona, 2007-2017

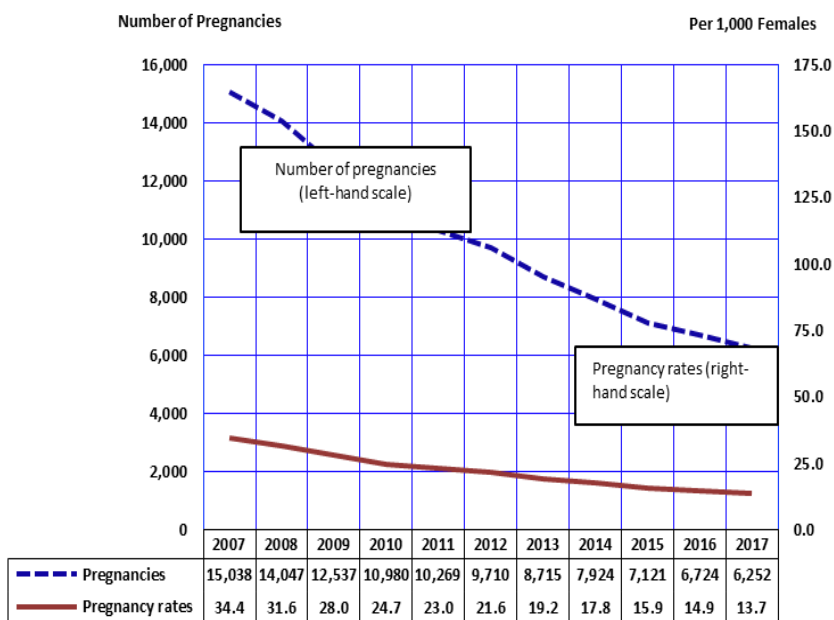


Note: All rates are per 1,000 females in specified group.

Teenage pregnancy rates dropped 60.0 percent overall from 2007 to 2017. (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 69.4 percent from 36.9 per 1,000 in 2007 to 11.3 in 2017. The rate for older teenagers (aged 18-19 years) fell by 58.0 percent from 121.4 per 1,000 in 2007 to 50.9 per 1,000 in 2017.

From 2007 to 2017, birth rate of teenagers 19 years old or younger declined; fetal losses rate fell and remained pretty stable at 0.1 per 1,000 females, while the abortion rate increased from 2010 to 2011 and returned to 3.4 per 1,000 females in 2012 then declined at 2.6 per 1,000 females in 2017 (Table 2). 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, 2007-2017



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

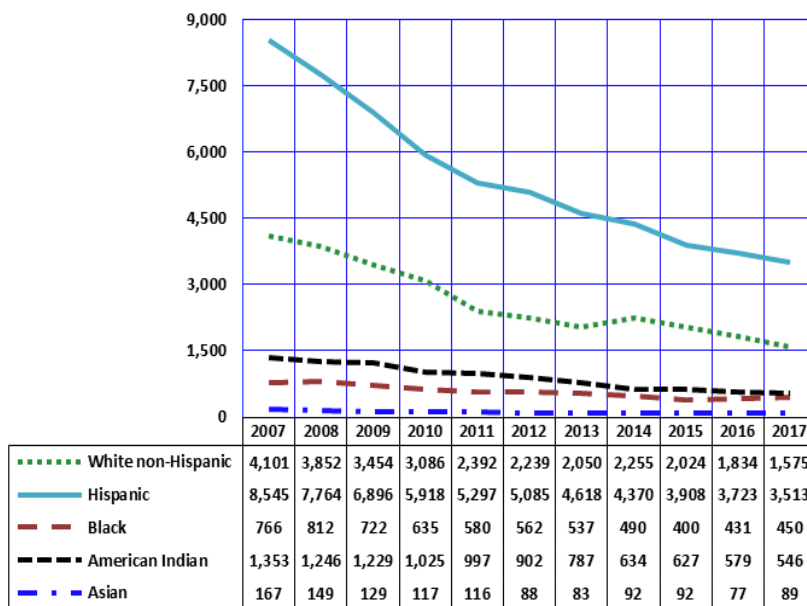
Trends in the number of pregnancies to teenage women do not always parallel the pregnancy rate. The teen pregnancy rate measures the proportion of teenagers becoming pregnant in a given year; in other words, the relative "risk for pregnancy" in a population "at risk." The number of pregnancies is, however, also determined by the size of the population "at risk," or in this case by the number of teenage females in the population.

The 2017 teen pregnancy rate of 13.7 per 1,000 was based on 6,252 pregnancies occurring among 454,914 females aged 10-19 years. The number of 6,252 teen pregnancies in 2017 was 7.0 percent lower than 2016 and was the lowest number of teen pregnancies since 1984.

KEY FINDINGS

Figure 3
Trends in the Number of Pregnancies* by Race/Ethnicity among Females 19 or Younger, Arizona, 2007-2017

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 2007-2017). In 2017, Hispanic or Latino females accounted for 56.2 percent of all pregnancies in this age group, followed by White non-Hispanics (25.2 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 2017 (17.4 percent) than they did in 2007 (15.2 percent). From 2007 to 2017, the number of teen pregnancies declined particularly steeply for White non-Hispanic (61.6 percent), American Indians (59.6 percent), and Hispanic or Latino (58.9 percent).



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

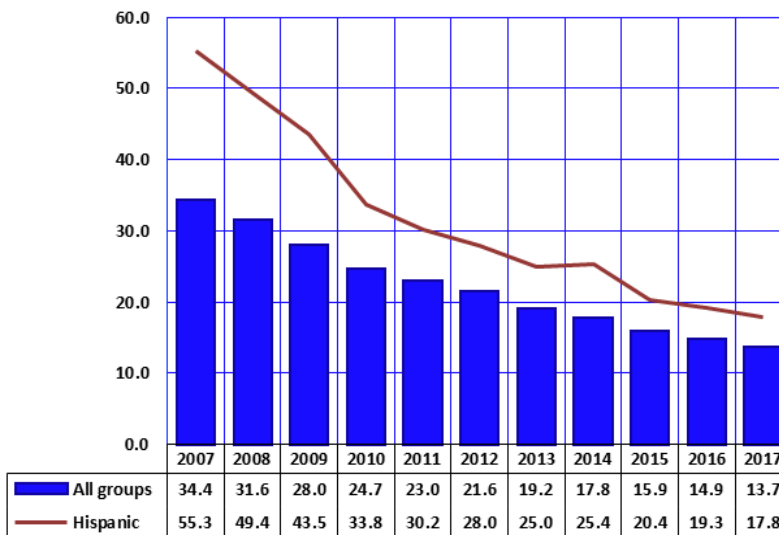
Figure 4
Comparison of Pregnancy Rates by Year among Hispanic or Latinos and all Females 19 or Younger, Arizona, 2007-2017

The teen pregnancy rates for all race and ethnic groups were lower in 2017 than in 2007 (**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 2007-2017.

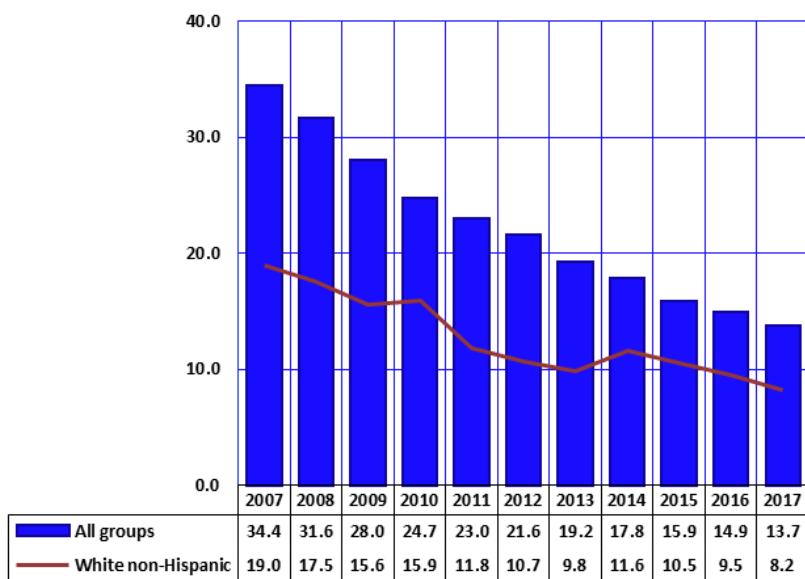
From 2007 to 2017, the teenage pregnancy rate for Hispanic or Latino women declined more than 50 percent (67.8 percent), with the majority of the decline occurring between 2007 and 2017 (**Figure 4**).

In each year from 2007 to 2017, 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 2017, the Hispanic rate exceeded the average rate for all groups by 29.8 percent.



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

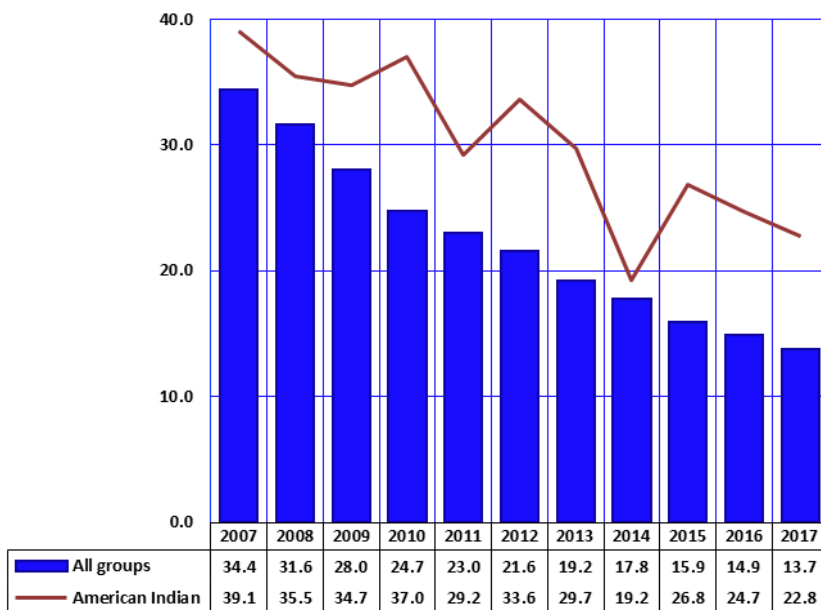
Figure 5
Comparison of Pregnancy Rates by Year among White non-Hispanics
and all Females 19 or Younger, Arizona, 2007-2017



The pregnancy rate for White non-Hispanics has gradually declined from 2007 to 2017 (57.1 percent), with the exception of slight increases in 2010 and 2014 (Figure 5). In each year from 2007 to 2017, 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, 2007-2017



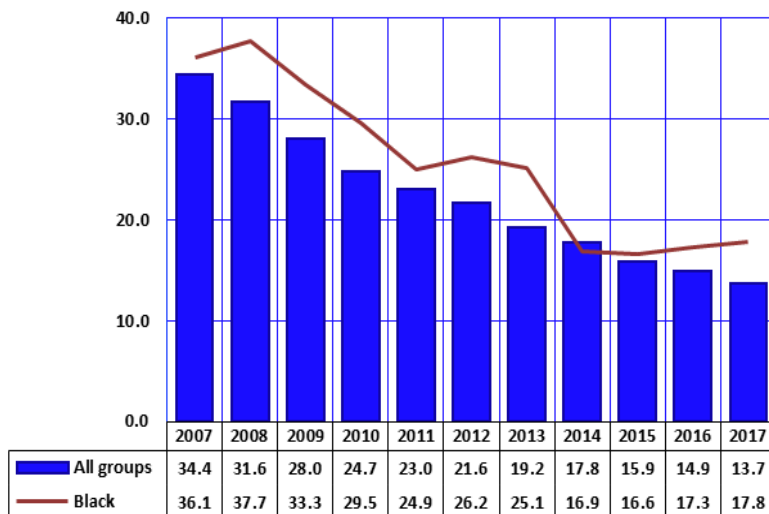
The pregnancy rate among American Indian females 19 years or younger varied somewhat erratically from 2007 to 2017, showing a 21.1 percent decrease from 2010 to 2011, a 15.1 percent increase from 2011 to 2012, a 35.4 percent decline from 2013 to 2014, an increase in 2015, then again a decrease in 2016 and in 2017 (Figure 6). The American Indian teenage pregnancy rate was higher than the average for all groups from 2007 to 2017.

Note: Pregnancy rate = the number of pregnancies 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, 2007-2017

Pregnancy rates for Black or African American females 19 years or younger decreased from 36.1 per 1,000 in 2007 to 17.8 per 1,000 in 2017 (Figure 7). Excluding 2014, the pregnancy rates for Black or African American teenagers exceeded the pregnancy rate for all groups.

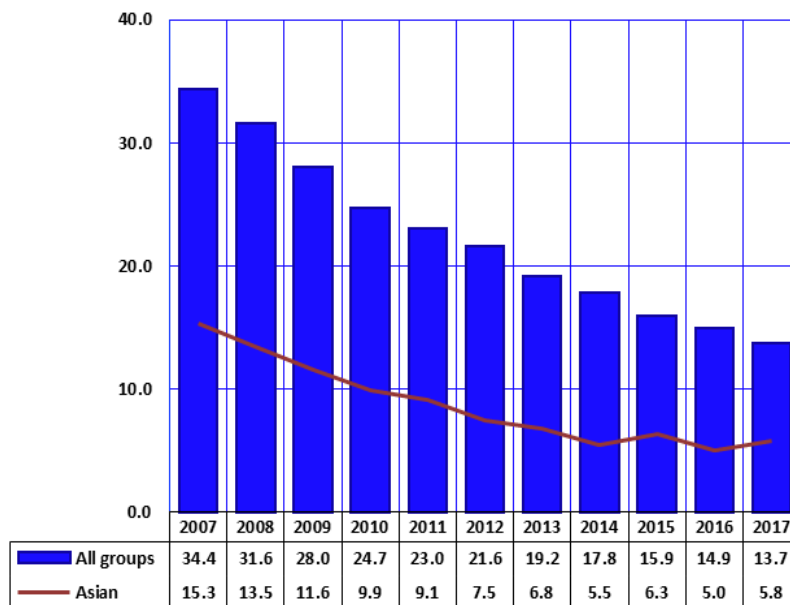


Note: All rates are per 1,000 females in specified group.

Figure 8
Comparison of Pregnancy Rates by Year among Asian or Pacific Islanders and all Females 19 or Younger, Arizona, 2007-2017

In each year from 2007 to 2017, 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 2017, the Asian rate (5.8 per 1,000) was 57.8 percent lower than the rate for all groups (13.7 per 1,000).

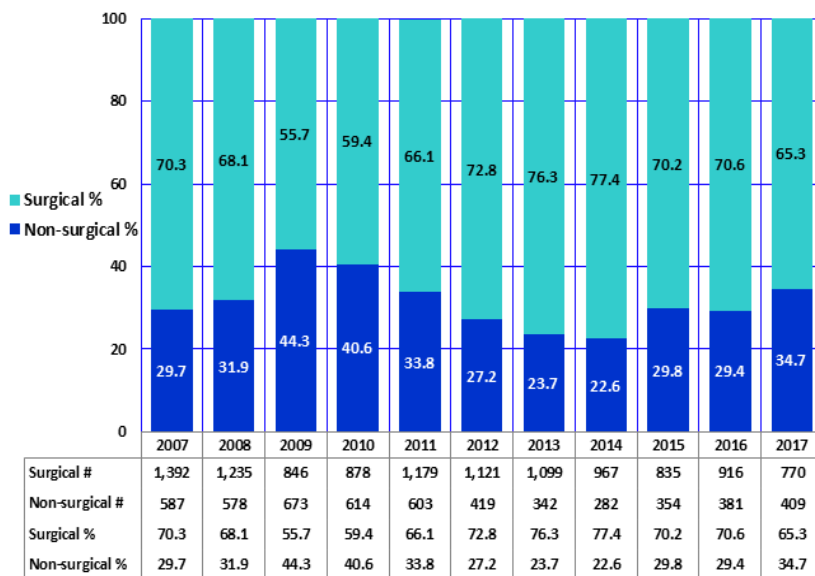
If the 2017 "risk for pregnancy" of Asian teens (i.e., their pregnancy rate) applied to all Arizona females 19 years or younger, the number of teen pregnancies in the State would have been reduced from 6,252 to approximately 2,639 ((5.8 per 1,000) * 454,914).



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

KEY FINDINGS

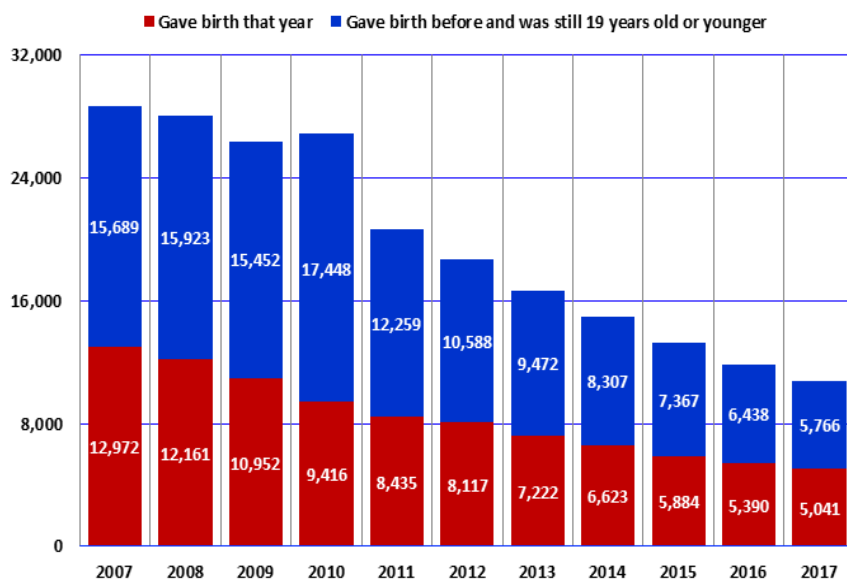
Figure 9
Proportional Contribution of Surgical and Non-Surgical Abortions
by Year among Females 19 or Younger, Arizona, 2007-2017



The proportion of non-surgical abortions to females 19 years or younger decreased from 40.6 percent in 2010 to 34.7 percent in 2017, while the proportion of surgical abortions decreased 9.9 percent over the same period of time (**Figure 9**).

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

Figure 10
Cumulative Number of Mothers who were 19 or Younger
in Arizona by Year, 2007-2017



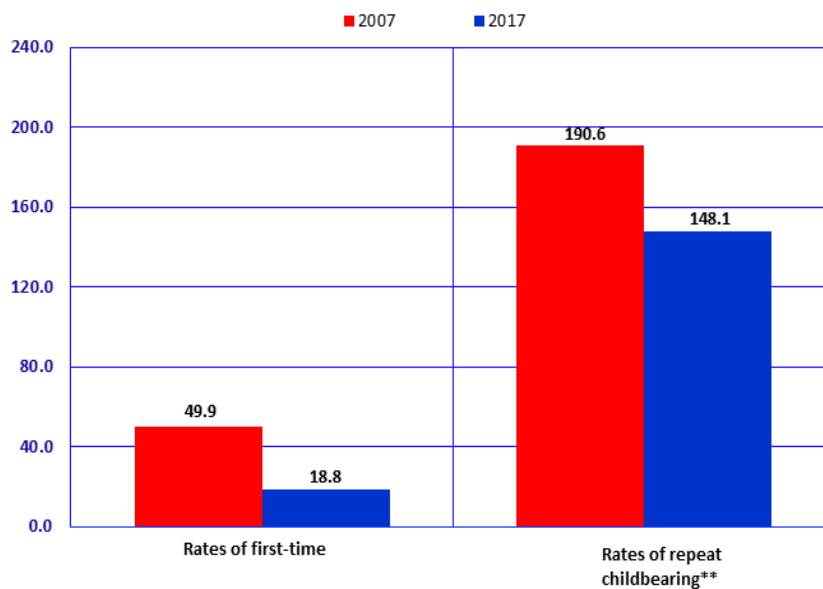
There were approximately 10,807 mothers under the age of 20 in Arizona in 2017. Among these teenage mothers there were 5,041 who gave birth in 2017, and 5,766 who gave birth prior to 2017 and were still 19 years old or younger in 2017 (**Figure 10, Table 13**). The cumulative number of mothers who were 19 years or younger in Arizona in 2017 decreased by 59.8 percent from 26,864 in 2010.

KEY FINDINGS

Figure 11
Rates of First and Repeat Births to Females 15-19 Years, Arizona, 2007 and 2017

The first birth rate for childless teenagers has dropped 62.3 percent from 49.9 first-time births per 1,000 females 15-19 years old in 2007 to 18.8 per 1,000 in 2017 (**Figure 12**).

The repeat birth rates for teenagers who had already had a child decreased by 22.3 percent from 190.6 in 2007 to 148.1 per 1,000 females 15-19 years old in 2017 who had a previous birth (**Figure 12**).



Notes: * 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, 1997, 2007, and 2017

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 2017, non-marital births accounted for 89.4 percent of births to mothers 19 years or younger.

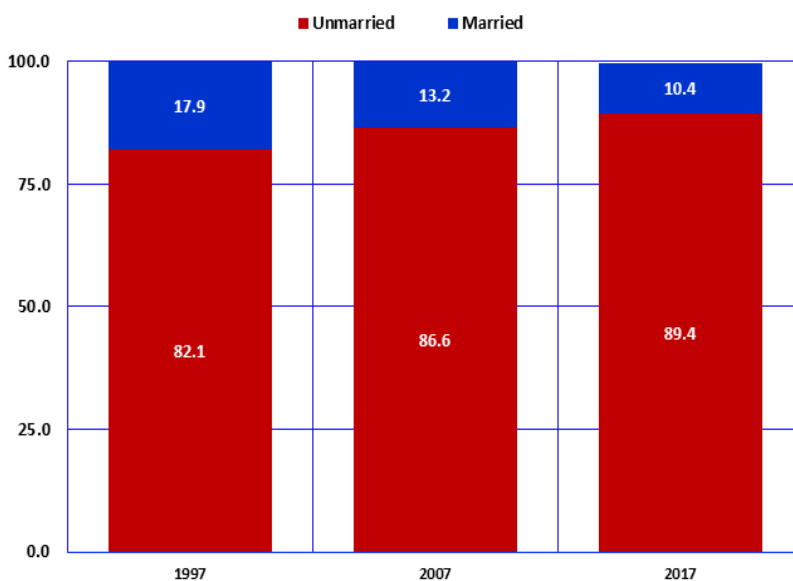
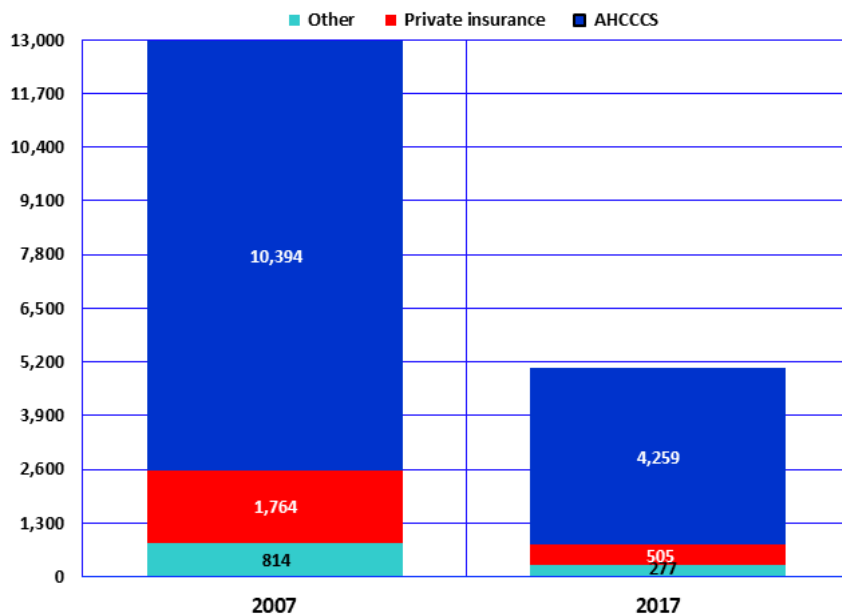
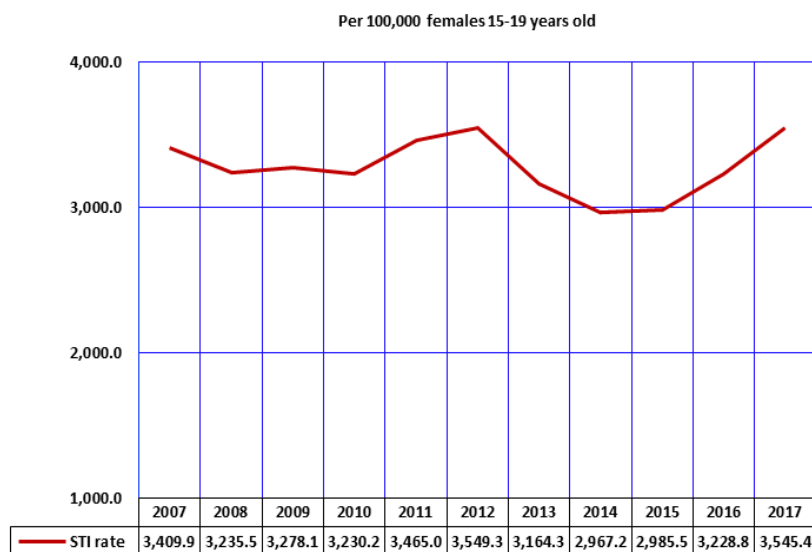


Figure 13
Number of Births to Mothers 19 or Younger by Payer, Arizona, 2007 and 2017



The total number of births to mothers 19 years or younger decreased by 61.1 percent from 12,972 in 2007 to 5,041 in 2017 (**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 80.1 percent in 2007 to 84.5 percent in 2017 (**Figure 13**).

Figure 14
Trends in the Incidence of Sexually Transmitted Infections* among Females 15-19 Years, Arizona, 2007-2017



In each year from 2007 to 2012, the total number of sexually transmitted infections (STI) among females aged 19 or younger exceeded 7,300, but fell to 6,723 in 2014, then increased to 8,258 in 2017. (**Table 15**). Among females 15-19 years, the rate of 2017 was higher than 2016, and 4.0 percent higher than the rate of 2007.

These STIs are a significant public health concern. *Chlamydia* can cause sterility in the affected mother as well as eye infections and pneumonia in the newborn. The complications of *Syphilis* are not to be underestimated as the disease can lead to blindness and maternal and/or infant death.

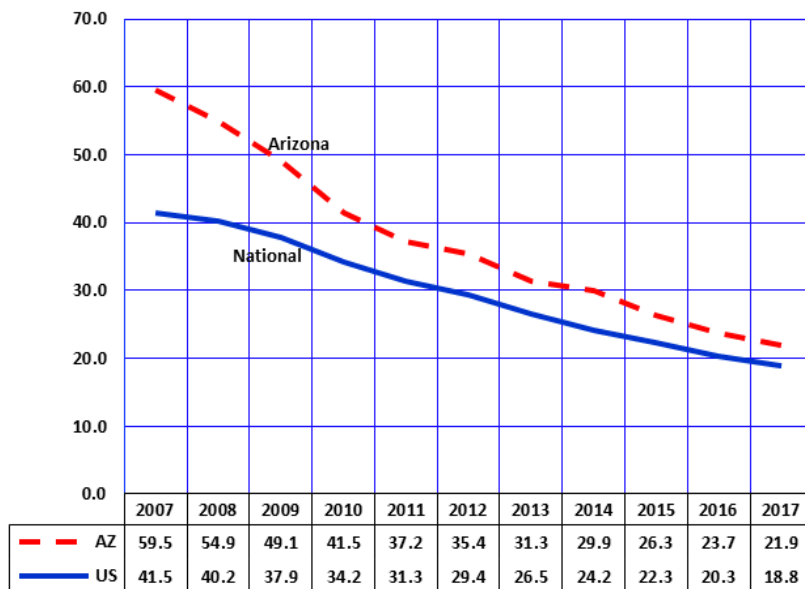
Note: * The sum of annually reported cases of gonorrhea, chlamydia, and early syphilis.
 Source: Bureau of Epidemiology and Disease Control Services, Office of Infectious Disease Services.

KEY FINDINGS

Figure 15
Birth Rates for Teenagers 15-19 Years, Nationally and in Arizona, 2007-2017

In each year from 2007 to 2017, birth rates for Arizona teenagers 15-19 years old exceeded the rates of their national peers (**Figure 15, Table 11**).

In Arizona, Hispanic or Latino females 15-19 years old, a high-fertility group, accounted for 30.4 percent of females aged 15-19 years in 2017. A high proportional representation of Hispanic or Latino females in Arizona puts upward pressure on the overall teen birth rate.

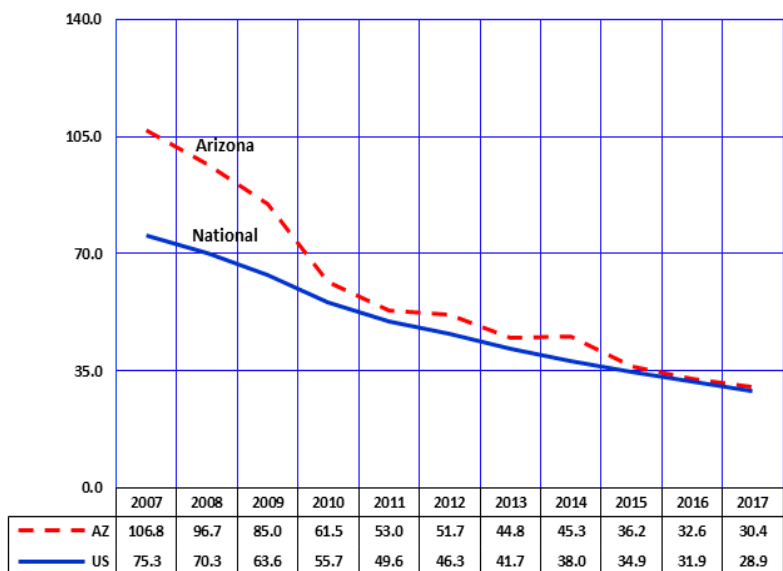


Note: The number of births per 1,000 females 15-19 years old.

Figure 16
Birth Rates for Hispanic or Latino Teenagers 15-19 Years, Nationally, and in Arizona, 2007-2017

In 2017, Hispanics or Latino teens aged 15-19 years disproportionately accounted for 58.6 percent of births to mothers in this age group in Arizona (2,953 out of 5,041; see **Table 6** and **Table 7**).

Historically the birth rates among Hispanic or Latino teenagers have been higher in Arizona than nationally.



Notes: The number of births per 1,000 females 15-19 years old; the U.S. birth rate for Hispanic teens 15-19 years was not available at the time of the preparation of this report.