



Abortions in Arizona

2011 Abortion Report

Bureau of Public Health Statistics

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Health and Wellness for all Arizonans

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State of Arizona

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MISSION

To promote, protect, and improve the health and wellness of individuals and communities in Arizona.

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Executive Summary

The Arizona Department of Health Services collected abortion information from providers within the state on a voluntary basis prior to passage of the federal legislation (*Roe v. Wade* 1973) permitting a woman to legally obtain an abortion in any of the fifty states within the United States.

As required by A.R.S §36-2163, this second annual comprehensive statistical report, presents abortion statistics. It includes data compiled from reports of elective abortion, a list of reported complications, and data about the petitions filed authorizing abortions to unemancipated minors as compiled by the Arizona Administrative Office of the Courts. Data is compiled annually based on calendar year using a secured web-based reporting system. Facilities and providers submit abortion procedure (A.R.S. §36-2161) and complication reports (A.R.S. §36-2162) to the Arizona Department of Health Services on a monthly basis.

In the 2011 calendar year, there were a total of 14,401 reported abortions compared to 11,438 abortions in 2010. This represents a 26 percent increase in the count of reported abortions. This increase in the number of abortions is perhaps attributable to more complete reporting of abortion data as well as enhanced surveillance. Ninety-four percent (n = 13,606) of the abortions were to resident women. The majority of the resident women who received abortions were unmarried. Approximately 57 percent of the resident women who received abortion were in the age-group 20 to 29 years. Of the total abortions (n = 14,401), about 63 percent (n = 9,089) abortions were surgical and approximately 37 percent (n = 5,298) were non-surgical procedures used for terminating pregnancies. During 2000-2011 the abortion rates for adolescents declined and there was approximately 36 percent increase in the percent of married women seeking abortions.

Incidents of complications from an abortion are not consistently reported at the state or national level. From 1981 to 1991 ADHS reported the count of hospitalization due to complications from abortions; then, as recently as 2009 the reporting of complications probably has been unreliable. Comparisons are therefore based on only two years of data collected on resident women. There were a total of 60 complications reported in 2011, and the most frequently reported complication was excessive hemorrhage.

This is the first complete year of data reporting the number of petitions filed with Arizona courts for authorization to obtain an abortion by an unemancipated minor without parental consent. The Arizona Administrative Office of the Courts provides aggregate data to ADHS annually. A total of fifty six (n= 56) petitions were received and an order authorizing the abortion was issued without parental consent for 32 young women and one petition was denied.

Introduction

Abortion surveillance in the U.S. has been conducted by the Centers for Disease Control and Prevention (CDC) since 1969 and the data are collected each year by the CDC through central health agencies of 52 reporting areas (the 50 states, the District of Columbia, and New York City) which provide this information voluntarily.¹ According to CDC, since 1973 the total number, rate (number of abortions per 1,000 women aged 15-44 years), and ratio (number of abortions per 1,000 live births) of reported abortions increased rapidly in the U.S. and reached its highest levels in the 1980s before decreasing.¹ Table 1 displays the number, rate, and ratio of reported abortions from selected states for the U.S for the period 1999-2008.

Table 1. Number, rate*, and ratio of reported abortions – selected states, United States, 1999-2008

Year	All reporting areas§	Continuously reporting areas¶			
	No.	No.	%**	Rate	Ratio
1999	861,789	836,119	97	16.6	261
2000	857,475	824,023	96.1	16.4	251
2001	853,485	819,681	96	16.2	251
2002	854,122	821,527	96.2	16.2	252
2003	848,163	817,586	96.4	16.2	247
2004	839,226	809,257	96.4	16	243
2005	820,151	799,084	97.4	15.8	238
2006	852,385††	825,604	96.9	16.2	238
2007	827,609	810,582	97.9	16	231
2008	825,564	808,528	97.9	16	234

* Number of abortions per 1,000 women aged 15--44 years.

† Number of abortions per 1,000 live births.

§ Excludes states that did not report abortion numbers to CDC: Alaska (1999--2002), California (1999--2008), Louisiana (2005), Maryland (2007--2008), New Hampshire (1999--2008), Oklahoma (1999), and West Virginia (2003--2004).

¶ Only includes areas that reported abortion counts every year during the period of analysis (1999--2008).

** Abortions from areas that reported every year during 1999--2008 as a percentage of all reported abortions.

†† This number is greater than reported in the 2006 report because of numbers subsequently provided by Louisiana.

1.1 Overview of the Arizona Abortion Reporting Requirements

For many years Arizona has been collecting and reporting abortion data in response to administrative rules written by the Arizona Department of Health Services (ADHS) as part of the Vital Records Administrative Code. Beginning in June 1976, as part of the required *Report of an Induced Termination of Pregnancy*, providers reported to ADHS basic information about abortions and complications. Adherence to the reporting requirement was not enforced but regular reminders along with a standard reporting format were sent to clinics that provided

abortion services. ADHS received these forms and used the data to prepare tables for inclusion in the annual Health Status and Vital Statistics (*HSVS*) report.* The abortion data improved the estimation of total pregnancies in addition to counts of births.

In 2010, SB1304 was enacted that statutorily required the reporting of abortions and treatment of complications associated with abortions.² In addition, the law requires the Arizona Administrative Office of the Courts to report the number of petitions received by the court for authorization to perform abortions on unemancipated minors as prescribed in Arizona Revised Statutes §36-2152. The collection of this information began on July 29, 2010. The 2010 ADHS report about abortions contained a combination of data collected prior to the passage of the law and after the passage of the law. However, starting July 29, 2010 abortion data has been reported through a web-based reporting system. The new reporting system was designed to meet the requirements of the new law and training was offered to all facilities that perform abortions. The data that providers submit to ADHS do not include individually identifiable information about patients, and only authorized entities can enter and submit data through a secure, password protected portal.

The 2011 Arizona abortion report is different in several ways. First, the report utilizes complete year's data for the 2011 calendar year reported uniformly after passage of the law. Second, where feasible, the report is formatted and categorized to suit both legislative requirements as well as CDC reporting standards for comparability. Third, the report includes specific terms associated with abortion, as well as a description of the strengths and limitations of the report. Fourth, the report details the methodology for assessing any 'statistically significant' differences as well as including details of how race and ethnicity was enumerated. Finally, the report discusses public health implications. A robust abortion surveillance system facilitates Arizona to monitor long-term changes in the overall incidence of abortion and further facilitates evaluation of programs for preventing unintended pregnancy in the nation as well as in Arizona.

1.2 Trends in Abortions in Arizona and the U.S.

In calendar year 2011 there were a total of 14,401 abortions reported in Arizona of which 13,606 abortions were to Arizona residents. The percent increase in total abortions from 2010 was about 26 percent. This increase is perhaps attributable to the law which prompted more complete reporting. Figure 1 below displays Arizona's abortion rate for the decade. As per ADHS estimates, Arizona's abortion rates have ranged from 10.2 per 1000 women in 1999 to 8.8 per 1000 women in 2010 with the highest rate in 1999 (10.2) and the lowest in 2001 with 7.3 per 1000 women. As per the Centers for Disease Control and Prevention (CDC) estimate (and the

* ADHS. [Health Status and Vital Statistics \(HSVSR\) Report](#). See section 1D of each annual report for the table of characteristics.

most recent data available) during this 1999-2008 period, Arizona's abortion rate was half (7.8 per 1000 women) compared to the overall nation's rate (16.0 per 1000 women see figure 1). Independent estimates available from Guttmacher Institute show abortion rates for Arizona that are consistently higher than the rates generated by ADHS (see figure 2).

Figure 1. Arizona estimates of abortion rates for Arizona 1999-2010 by state of residence

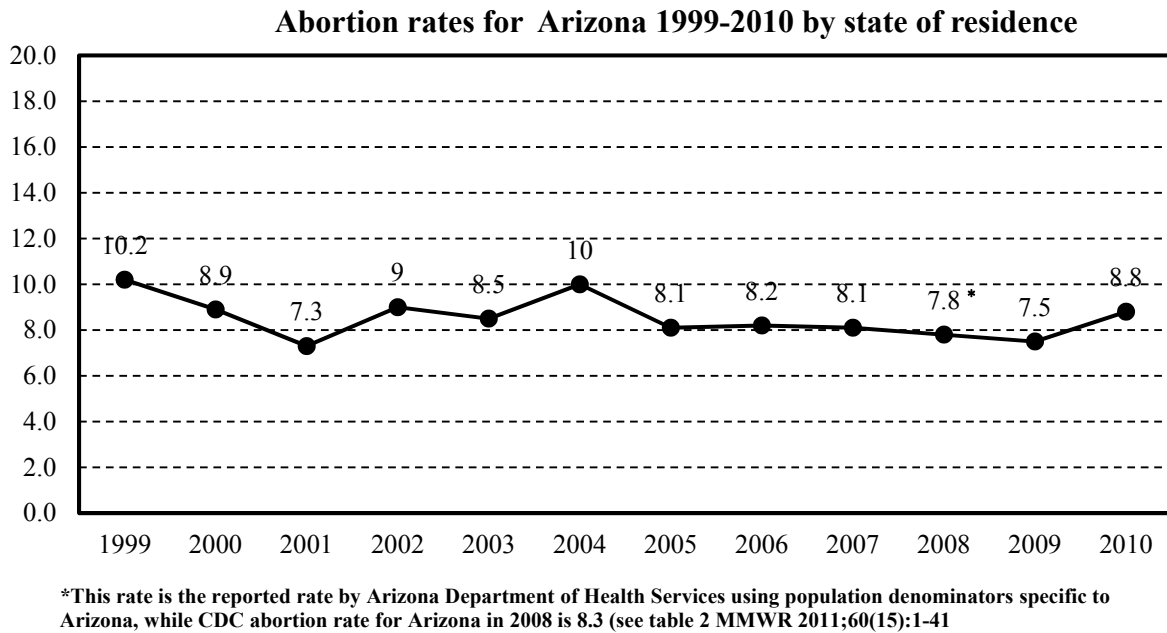
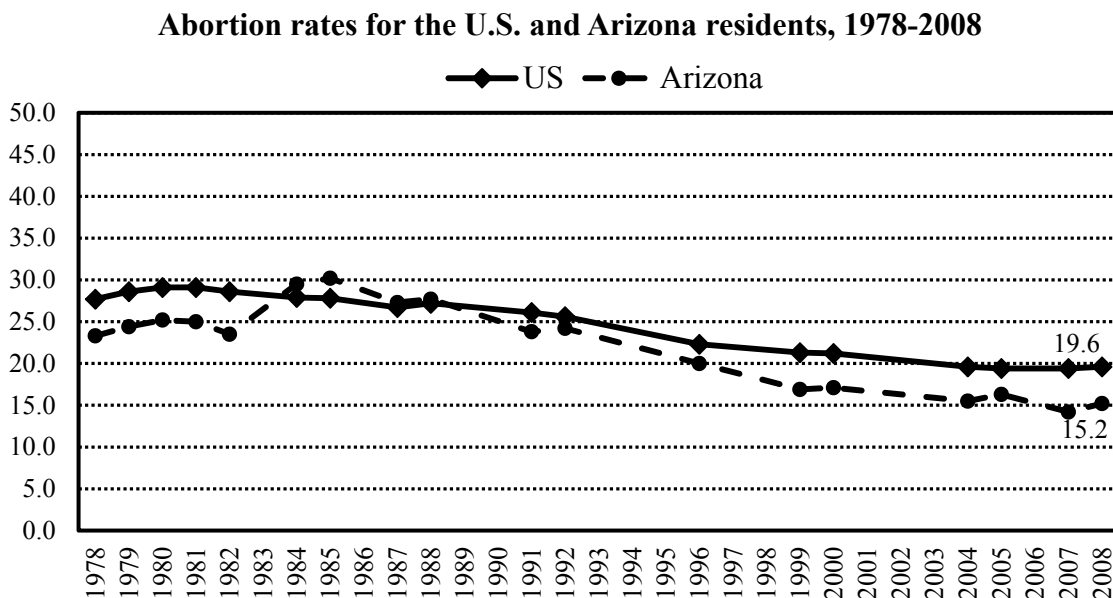


Figure 2. Guttmacher Institute estimates of abortion rates for the U.S. and Arizona, by state of residence



Differences in the ADHS's and Guttmacher Institute's estimates are likely due to differences in methodology. Since 1974, the year after abortion was legalized, abortion incidence estimates have been generated using periodic surveys of all known abortion providers in the United States.⁵ According to the CDC, the Guttmacher Institute uses numerous active follow-up techniques to increase the completeness of the data obtained through its periodic national survey of abortion providers.¹ Keeping this perspective in mind, the following report estimates the incidence of abortion in Arizona for 2011 calendar year.

Methodology

Collection of accurate information on induced abortion can reveal the level of unwanted and/or unintended pregnancy in a population. Abortion also can affect maternal morbidity and mortality.⁶ The data presented in this report responds to statutory requirements following the passage of SB1304. The terms *induced termination of pregnancy* (I-TOP) and *abortions* in this report are used interchangeably.

2.1. Data sources

The primary data source for this report is the web-based reporting system for Arizona providers. The data does not include individually identifiable information of patients, and only authorized entities enter and submit data through a secure password protected portal. A secondary data source captures the number of petitions received by the court for authorization to perform abortions on unemancipated minors as prescribed in Arizona Revised Statutes §36-2152. It is plausible that the number of abortions performed on unemancipated minors is also reported in the web-based reporting system.

2.2. Measures

Measures reported here are mostly consistent with CDC categorization and definitions.

Aggregate abortion counts are reported for the following variables:

- Age in years of the woman (<15, 15–17, 18–19, 20–24, 25–29, 30–34, 35–39, 40–44, ≥ 45+);
- Gestational age in weeks at the time of abortion (≤ 6 , 7–20 by individual week, ≥ 21);
- Race (White, Black, American Indian/Alaska Native Asian and/or Native Hawaiian/Pacific Islander);
- Ethnicity (Hispanic or non-Hispanic);
- Method type (surgical, non-surgical);
- Marital status (married and unmarried);
- Number of previous live births (0, 1, 2, 3, or ≥ 4);
- Number of previous abortions (0, 1, 2, 3, or ≥ 4);
- Maternal residence (State, county of residence for resident abortions, border and non-border region).

Some important measures for abortions are: a) the total count of abortions in a given population, b) the percentage of abortions obtained within a given sub-population, c) the abortion rate (number of abortions per 1,000 women aged 15–44 years or other specific group within a

given population), and d) the abortion ratio (count of abortions per 1,000 live births within a given population).¹ Although total counts and percentages provide an overview of abortions, abortion rates are a more useful measure as they adjust for differences in sub-population size and reflect the likelihood of abortion in subgroups. On the contrary, abortion ratios reflect the relative number of pregnancies in a group and/or population that end in abortion compared with live birth. Abortion ratios change according to the proportion of pregnancies both intended and unintended in a population.¹

U.S. Census Bureau and Arizona Vital Statistics estimates of the resident female population of Arizona were used as the denominator for calculating abortion rates. Overall abortion rates were calculated from the population of women aged 15–44 years, with the exception of age-specific rates. To calculate abortion ratios, live birth data were obtained from Arizona natality files and utilized along with the Health Status and Vital Statistics report.

The variables for race and ethnicity are based on the instructions for the newly designed web-based reporting changes as well as the Office of Management and Budget (OMB) methodology. It is important to detail how race and ethnicity in this report was handled. Consistent with the OMB methodology³ the web-based reporting allowed for multiple race categorizations consistent with Census enumerations. For instance, women seeking abortions were asked about their ethnicity (namely, as Hispanic or Latino and/or Non-Hispanic or non-Latino) and separately about their race according to five standard race categories (i.e. White, Black, American Indian/Alaska Native, Asian, and/or Native Hawaiian/Pacific Islander). However, this year's report form allowed additional race choices, with "select one or more option" in addition to "some other race." With "select one or more option" there can be 31 unique race combinations with five standard race categories, and when combined with ethnicity this type of categorization now can result in 64 different combinations.^{1,7} This method posed a challenge for capturing data on race and ethnicity in the web-based reporting system as it resulted in accumulation of approximately 40 percent of the abortion records containing multiple race and ethnicity not reflective of Census enumerations. As denominators for multiple races are not readily available, utilizing multiple race and ethnicity categories complicate estimation of abortion rates⁴ for groups who report multiple races. To meet the requirements of OMB reporting standards for compiling statistics on these sub-groups, Hispanics or Latino irrespective of race were reported as Hispanics or Latino. When single race and ethnicity was reported, those categories were included and when multiple races were reported, multiple races were coded to multiple race categories.

Because Arizona is a border state it was important to examine the characteristics of abortions by border categorization. For the purpose of this report, women who reported their county of residence as Cochise, Pima, Santa Cruz, and Yuma were categorized as a 'border region' that essentially comprises of the U.S. Mexico border region, consistent with the U.S. Mexico Border Health Commission⁸ definition. We consider other counties as 'non-border' regions.

2.3. Analytic Procedures

Where applicable both univariate and bivariate statistics are presented. Rates, chi-square tests and tests for linear trends were estimated using SAS v9.3 2008 software. While abortion rates in general are reported for women of child-bearing age (15-44 years), age-specific rates were estimated using Census as well as Arizona Vital Statistics denominators for age-groups 10-14 years, 15-17 years, 18-19 years, 20-24 years, 25-29 years, 30-34 years, 35-39 years, and 40-44 years.

Results

A total of 25 facilities reported data for calendar year 2011. In calendar year 2011, there were a total of 14,401 abortion incidents reported in Arizona of which 13,606 abortions were to Arizona residents. The percent increase in total abortions from 2010 (n = 11,438) was about 26 percent. This increase is perhaps attributable to greater awareness that the law required enhanced reporting. Almost all (99.02%) of the abortions reported during the calendar year were elective abortions and most of these abortions were performed in clinics (99.65%). Out of the total abortions, about 63 percent (n = 9,089) of the abortions were surgical and approximately 37 percent (n = 5,298) were non-surgical procedures used for terminating pregnancies.

Table 2 gives an overview of 2011 abortions by month of termination, by residence and non-residence status, and the resident live births in those months.

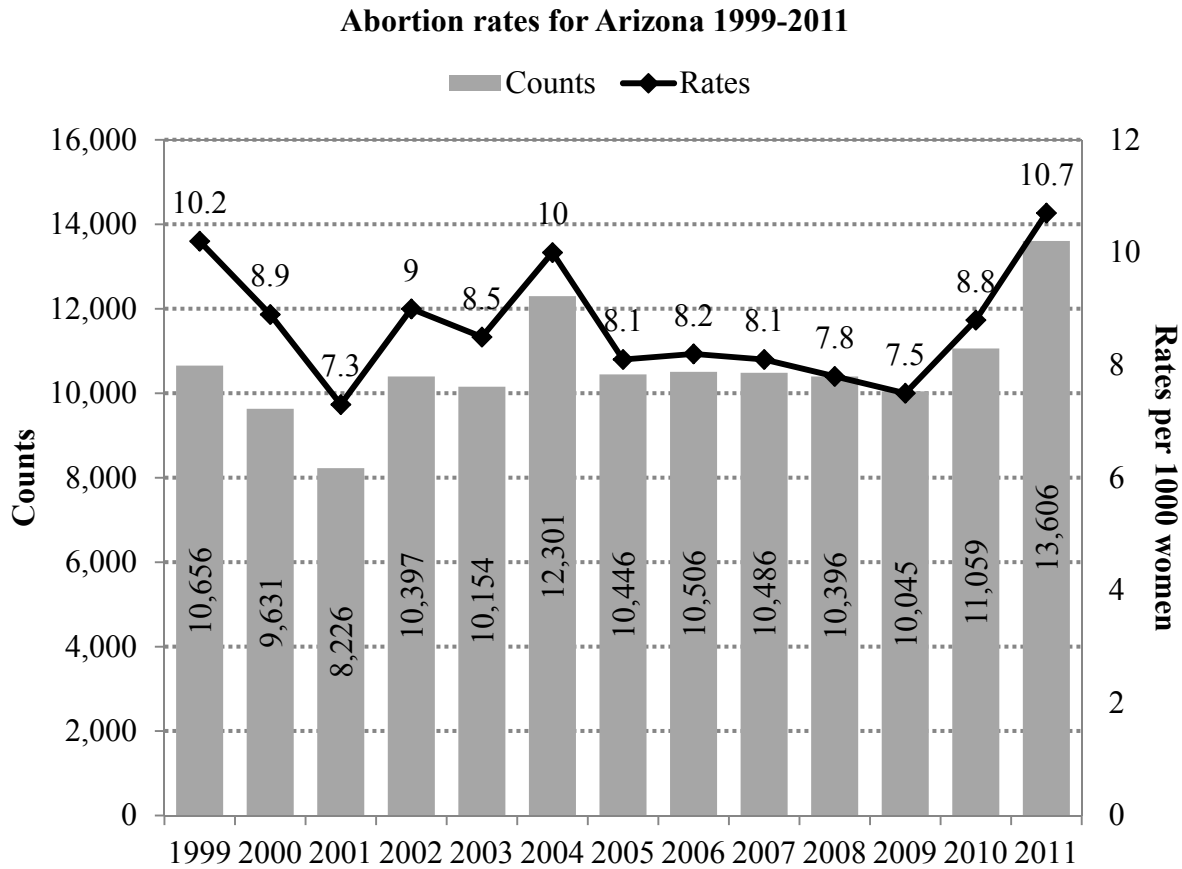
Table 2. Abortions in 2011 by month and resident status

Month	Non-resident abortions (N = 795)	Resident abortions (N = 13,606)	Resident live births (N = 85,190)	Abortion ratio[§] (160 per 1000 births)
January	73	1,238	7,127	174
February	78	1,334	6,500	205
March	105	1,399	7,254	193
April	56	1,208	6,498	186
May	47	1,161	6,678	174
June	59	1,158	7,086	163
July	47	1,170	7,222	162
August	57	1,025	7,688	133
September	51	885	7,750	114
October	79	941	7,361	128
November	54	960	6,987	137
December	89	1,127	7,039	160

[§]Abortion ratio is then number of abortions per 1000 live births

The overall abortion ratio for the calendar year 2011 was 160 per 1000 live births compared to 127 per 1000 live births in the year 2010. The overall abortion rate for the calendar year 2011 was 10.7 per 1000 women of child-bearing age (15-44 years). The difference in the 2010 and 2011 rates for abortions was statistically significant. Figure 3 displays Arizona's abortion rates for the 1999-2011 time-periods.

Figure 3. Abortion counts and rates for Arizona residents during 1999-2011



3.1. Characteristics of women receiving abortions in Arizona

Characteristics described here examine age of the mother, race and ethnicity, marital status, and education. They also included a description of pregnancy history (i.e. previous pregnancies, previous number of live births, previous induced termination of pregnancy, previous spontaneous termination of pregnancy), type of facility accessed by women, and the method used for terminating a pregnancy (i.e. surgical or non-surgical). Where feasible, comparative statistics for the U.S. and Arizona are shown.

Age

Age is an important element in all epidemiological analyses, and maternal age is especially critical in determining maternal and child health. The average age of a woman receiving abortion in Arizona in 2011 was 26.45 years ($SD = 6.45$ years) with age ranges between 10 to 49 years. In general, there were no differences in the average age of a woman seeking abortion by resident status. Table 3 displays the age-distribution of the women receiving abortions in Arizona by resident status. Irrespective of their resident status, the proportion of women in each group receiving abortions in Arizona in 2011 was similar.

Table 3. Age-distribution of women receiving abortions in Arizona by state of residence

Age-distribution	Non-Resident (N = 795)		Resident (N = 13,606)	
	Count	Percent	Count	Percent
<15 years	3	0.38%	49	0.36%
15-17 years	23	2.89%	478	3.51%
18-19 years	59	7.42%	1,258	9.25%
20-24 years	265	33.33%	4,386	32.24%
25-29 years	191	24.03%	3,428	25.19%
30-34 years	144	18.11%	2,153	15.82%
35-39 years	78	9.81%	1,308	9.61%
40-44 years	28	3.52%	512	3.76%
45+ years	4	0.50%	34	0.25%

Table 4 on the following page presents reported abortions, by age group and year for Arizona residents during 2000 – 2011. Women in the youngest and the oldest group accounted for the smallest percentage of abortions (0.36% and 4.06%) in 2011 and during 2000-2011 time-periods. It is evident from the table that the proportion of abortions for women less than 15 years of age declined from 0.59 percent in 2000 to 0.36 percent in 2011. Similarly, among women 15 to 19 years of age, the proportion of abortions declined from 20.05 percent in 2000 to 12.76 percent in 2011 – a 36 percent decline. Decline in the proportion of abortions in women less than 15 years of age (-54%) was highest during the 2005-2009 time-period, while for women 15 to 19 years of age (-15%) the highest decline was during the 2000-2011 time-period. On the contrary, the proportion of abortions increased for all other age-groups increased, with the highest increase in women 40 and older (50%). For instance, the proportion of abortion in 2000 was 2.68 percent of all abortions, however, by 2011 this proportion increased to 4.18 percent – approximately 50 percent increase.

Abortion rates for women less than 15 years of age declined (-28%) from 0.31 per 1000 in 2000 to 0.22 in 2011 with the highest decline seen in 2005-2009 time-periods (-58%). Similarly, the abortion rates for women 15 to 19 years of age declined from 10.90 per 1000 in 2000 to 7.69 per 1000 in 2011 (~30%). There was also an increase in rates of abortion for women in all other age-groups. For instance, the abortion rate for women 40 and older was 1.38 per 1000 women in 2000 and by 2011 this rate increased to 2.43 per 1000 women with a 76 percent increase during 2000-2011 time-frames.

As noted earlier, the abortion ratio compares the count of elective terminations to the count of live births, and is expressed as abortions per 1,000 live births. It is evident from the table that

abortion ratio for women less than 15 years of age increased from 264 per 1000 live births in 2000 to 485 per 1000 live births in 2011 – an increase of 84 percent. Similarly, the abortion ratio for women 15 to 19 years of age in 2000 was 161 per 1000 live births and this increased to 208 per 1000 live births in 2011 (29%). Abortion ratios for women greater than or equal to 40 years of age also increased between 2000 (165 per 1000 live births) and 2011 (261 per 1000 live births).

Table 4. Abortions, abortion rates, and abortion ratios by age group and year for Arizona residents during 2000 – 2011

Age in years	Year												% Change			
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2000 to 2004	2005 to 2009	2010 to 2011	2000 to 2011
% of Abortions[†]																
<15 yrs	0.59%	0.56%	0.42%	0.59%	0.36%	0.52%	0.66%	1.35%	0.64%	0.24%	0.40%	0.36%	-40%	-54%	-9%	-39%
15-19 yrs	20.05%	18.02%	18.77%	17.80%	17.69%	17.60%	17.61%	17.52%	16.79%	14.88%	13.27%	12.76%	-12%	-15%	-4%	-36%
20-24 yrs	31.58%	31.90%	32.37%	34.12%	34.16%	33.40%	33.57%	32.93%	33.98%	33.55%	33.10%	32.24%	8%	0%	-3%	2%
25-29 yrs	20.64%	20.53%	19.63%	20.35%	21.12%	21.01%	21.35%	22.75%	22.33%	23.72%	23.67%	25.19%	2%	13%	6%	22%
30-34 yrs	13.08%	13.37%	13.27%	13.48%	13.12%	12.72%	13.14%	12.72%	12.22%	13.75%	15.33%	15.82%	0%	8%	3%	21%
35-39 yrs	7.56%	7.31%	7.59%	7.26%	7.88%	7.63%	8.34%	7.91%	8.01%	8.66%	9.44%	9.61%	4%	14%	2%	27%
≥40 yrs	2.68%	2.74%	2.94%	3.20%	2.89%	2.97%	4.25%	4.66%	2.89%	2.80%	3.38%	4.01%	8%	-6%	19%	50%
Abortion rates[‡]																
<15 yrs	0.31	0.24	0.22	0.30	0.20	0.25	0.31	0.64	0.30	0.11	0.20	0.22	-35%	-58%	11%	-28%
15-19 yrs	10.90	8.10	10.33	9.31	10.06	8.83	8.66	8.54	7.99	6.78	6.54	7.69	-8%	-23%	17%	-30%
20-24 yrs	17.70	14.77	18.36	18.38	19.40	17.13	16.45	16.44	16.54	15.59	17.18	20.45	10%	-9%	19%	15%
25-29 yrs	11.12	9.13	10.69	10.52	11.66	10.34	10.40	10.35	9.86	9.98	12.21	15.87	5%	-4%	30%	43%
30-34 yrs	7.12	6.01	7.31	7.05	7.37	6.33	6.50	6.26	5.79	6.20	8.29	10.45	3%	-2%	26%	47%
35-39 yrs	3.77	3.01	3.83	3.48	4.24	3.49	4.31	3.89	3.84	3.92	5.08	6.32	12%	12%	24%	67%
≥40 yrs	1.38	1.16	1.53	1.58	1.64	1.40	2.06	2.23	1.35	1.25	1.86	2.43	19%	-11%	31%	76%
Abortion ratio[§]																
<15 yrs	264	232	214	284	234	292	406	789	416	182	415	485	-11%	-38%	17%	84%
15-19 yrs	161	128	173	157	186	156	145	144	146	138	157	208	16%	-12%	32%	29%
20-24 yrs	127	108	134	135	163	132	125	124	135	141	165	202	28%	7%	22%	58%
25-29 yrs	86	74	87	83	101	83	78	83	82	90	105	141	18%	9%	34%	64%
30-34 yrs	77	65	78	74	84	67	68	63	62	70	88	111	9%	4%	27%	44%
35-39 yrs	93	78	99	89	110	89	89	83	83	92	115	143	18%	4%	25%	53%
≥40 yrs	165	137	186	183	182	163	223	235	150	140	193	261	11%	-14%	35%	58%

[†]Percents do not add up to a 100 due to rounding errors as well as unknown age-categories in some reporting years

[‡]Number of abortions obtained by women in a given age group per 1,000 women in that same age group. Adolescents aged 10–14 years were used as the denominator for the group of adolescents aged <15 years, and women aged 40–44 years were used as the denominator for the group of women aged ≥40 years.

[§]Number of abortions obtained by women in a given age group per 1,000 live births to women in that same age group.

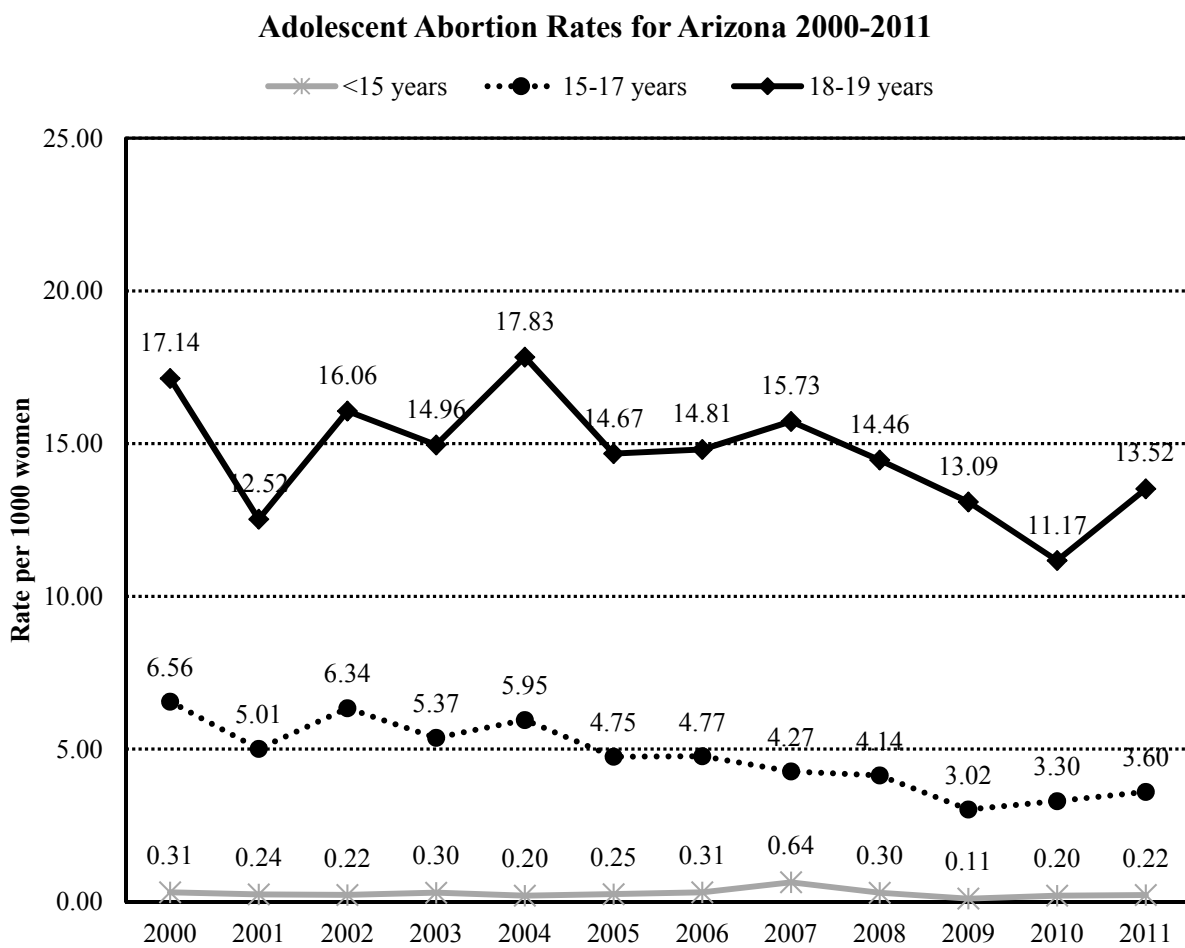
Adolescents

Figure 4 on the following page displays adolescent abortion rates for residents during 2000-2011 for Arizona. It is evident that during 2000-2011 abortion rates for adolescents in all age-groups declined. For instance, the 2000 abortion rate for adolescents aged 15 to 17 years was 6.56 per

1000 women while in 2011 this rate was 3.60 per 1000 women. The percent change in abortion rates during 2000-2011 was highest among 15 to 17 year olds (~45%). Linear regression results for trends indicated that there was a significant decline in trend for adolescents 15 to 17 years. However, between 2010 (3.30 per 1000 women) and 2011 (3.60 per 1000 women) there was approximately a nine percent increase in the rates of abortion for the same age-group.

Among the 18 to 19 year olds there was approximately 21% decline in abortion rates from 17.14 per 1000 women in 2000 to 13.52 per 1000 women in 2011. However, between 2010 and 2011 there was a 21 percent increase in abortion rates for this age-group.

Figure 4. Adolescent abortion rates for Arizona 2000-2011



Race and Ethnicity

In nearly 40 percent (n = 4,442) of the cases multiple race categories were reported, and in approximately 17 percent (n = 2,265) there was no indication of any race(s). Of the total 13,606 abortions to resident women in 2011, approximately 38 percent (n = 4,274) of the abortions were

for resident Hispanic women followed by approximately 21 percent (n = 2,385) for non-Hispanic White women. African American resident women accounted for approximately one percent (n = 145), followed by American Indian (n = 48), and Asian or Pacific Islanders (n = 47). Table 5 gives an overview of the trends in abortions by race and ethnicity during 2000-2011. The 2011 abortion rates for those other than Hispanics and/or Latinos should be interpreted with caution due to the problems in race categorization noted above. In general, the Hispanic and/or Latino abortions (as a proportion of abortions among all race groups) remained similar throughout this time-period. However, between 2010 and 2011 there was approximately 23 percent increase in the abortion rates and a 29 percent increase in abortion ratios for Hispanics and/or Latinos. Some of the race- and ethnic-specific figures markedly changed beginning in 2010 and this may reflect changes in the way these variables were reported in the new electronic reporting system.

Table 5. Proportion of abortions, rates, and ratios by race and ethnicity during 2000-2011

Race and Ethnicity	Year											
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 [¶]
% of Abortions[†]												
White non-Hispanic	49.69%	47.62%	47.22%	48.13%	42.89%	42.42%	48.60%	49.61%	45.57%	47.38%	47.39%	17.53%
Hispanic or Latino	31.10%	33.27%	34.30%	33.89%	36.46%	29.79%	30.08%	35.47%	30.05%	32.88%	30.94%	31.41%
Black or African American	5.51%	5.47%	5.35%	4.87%	5.88%	5.60%	5.53%	6.44%	7.16%	7.33%	4.30%	1.07%
American Indian	2.63%	2.67%	2.74%	3.52%	2.77%	3.38%	3.26%	2.96%	2.86%	2.99%	1.97%	0.35%
Asian or Pacific Islander	2.60%	2.52%	2.63%	2.68%	3.61%	3.63%	3.72%	4.33%	3.96%	3.88%	2.30%	0.35%
Multiple races	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32.65%
Unknown	0.08	0.08	0.08	0.07	0.08	0.15	0.09	0.01	0.10	0.06	0.13	16.65%
Abortion rates[‡]												
White non-Hispanic	7.40	6.10	7.10	6.90	7.70	5.70	7.21	7.30	6.45	6.38	8.21	3.67
Hispanic or Latino	9.10	8.90	10.90	10.20	12.90	8.60	8.10	9.20	7.59	7.96	8.05	9.95
Black or African American	13.30	12.50	14.50	11.80	17.70	13.00	10.27	12.70	13.81	13.34	8.45	2.48
American Indian	4.20	3.60	4.40	5.10	5.10	5.10	4.38	3.80	3.60	3.59	3.20	0.58
Asian or Pacific Islander	NA	NA	NA	8.30	14.70	11.30	9.27	10.40	9.31	8.73	5.24	0.92
Multiple races	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Abortion ratio[§]												
White non-Hispanic	120	101	127	126	134	112	119	123	113	115	135	62
Hispanic or Latino	88	78	99	88	110	74	70	81	73	86	100	129
Black or African American	192	165	202	164	225	170	150	162	173	168	110	44
American Indian	45	41	51	61	56	56	54	48	47	49	38	8
Asian or Pacific Islander	123	98	120	108	170	135	125	133	120	115	77	12
Multiple races	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Unknown	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[†]Percents do not add up to a 100 due to rounding errors as well as unknown age-categories in some reporting years

[‡]Number of abortions obtained by women in a given race and ethnic group per 1,000 women in that same group.

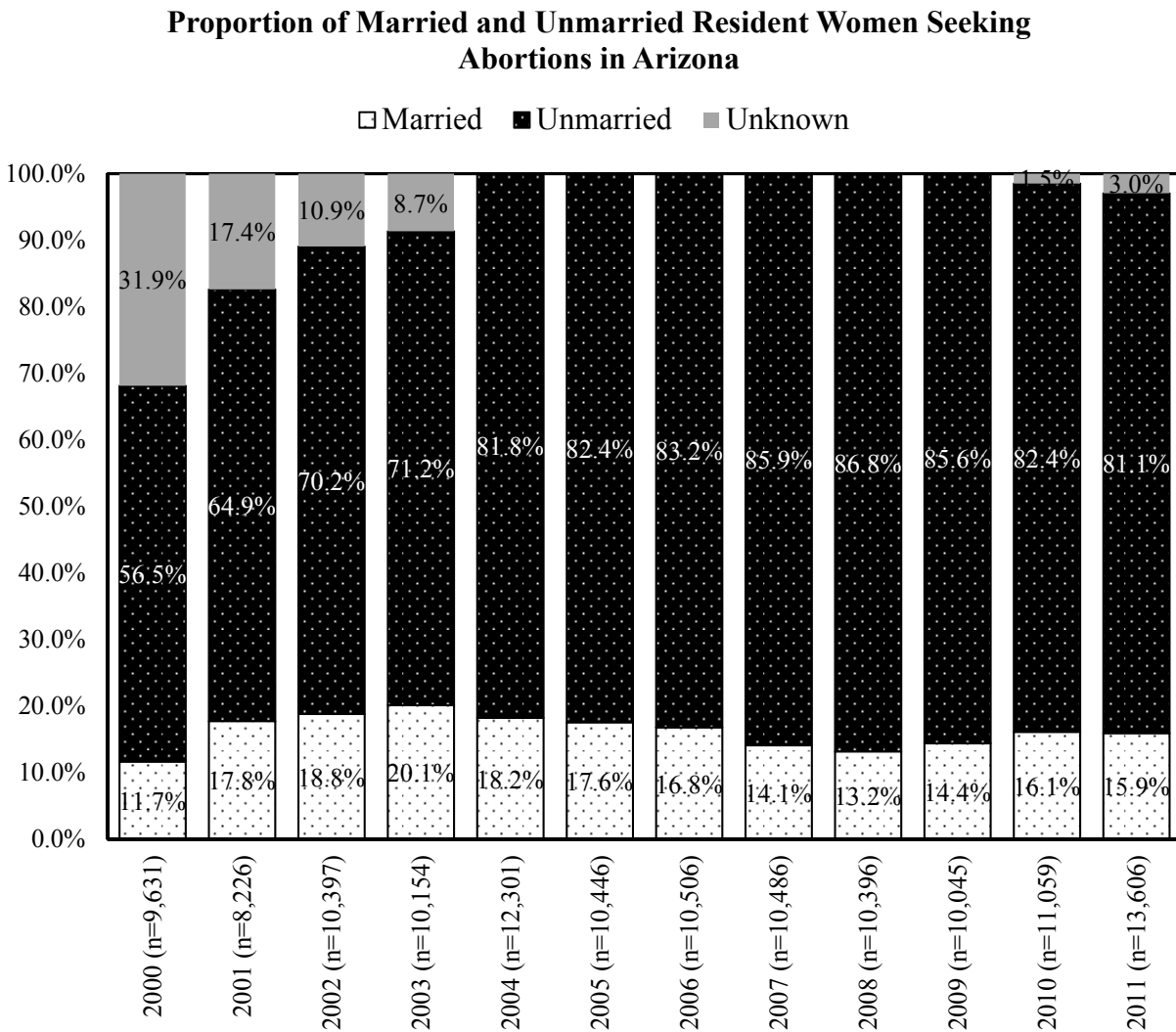
[§]Number of abortions obtained by women in a given race and ethnic group per 1,000 live births to women in that same age group.

[¶]Rates and ratios for 2011 race groups should be interpreted with caution as they are severely underreported due to choice of multiple race and ethnic category selections for which denominators are not available. The reports based on single race selections are the best estimates of rates and ratios.

Marital Status

In 2011, 16.43 percent (n = 2,169) of the women seeking abortion were married. Figure 5 displays the trend data on the proportion of married and unmarried resident women in Arizona who sought abortion during 2000-2011. The percent of married women during 2000-2011 ranged from 12 percent to 20 percent and has remained consistent similar to unmarried women seeking abortions during the time-period ignoring unknown cases. According to latest available U.S. data, “among the 40 areas that reported marital status for 2008, 15.7% of all women were married, and 84.3% were unmarried.”^{1 (p7)} Between 2000 and 2011 there was an approximately 36 percent increase in the percent of married women seeking abortions.

Figure 5. Married and unmarried resident women seeking abortions in Arizona during 2000-2011



Not surprisingly, the percent of married women increased with age, and of those who were married, almost 90 percent of the married women were in the 20 to 39 years age-group (i.e.

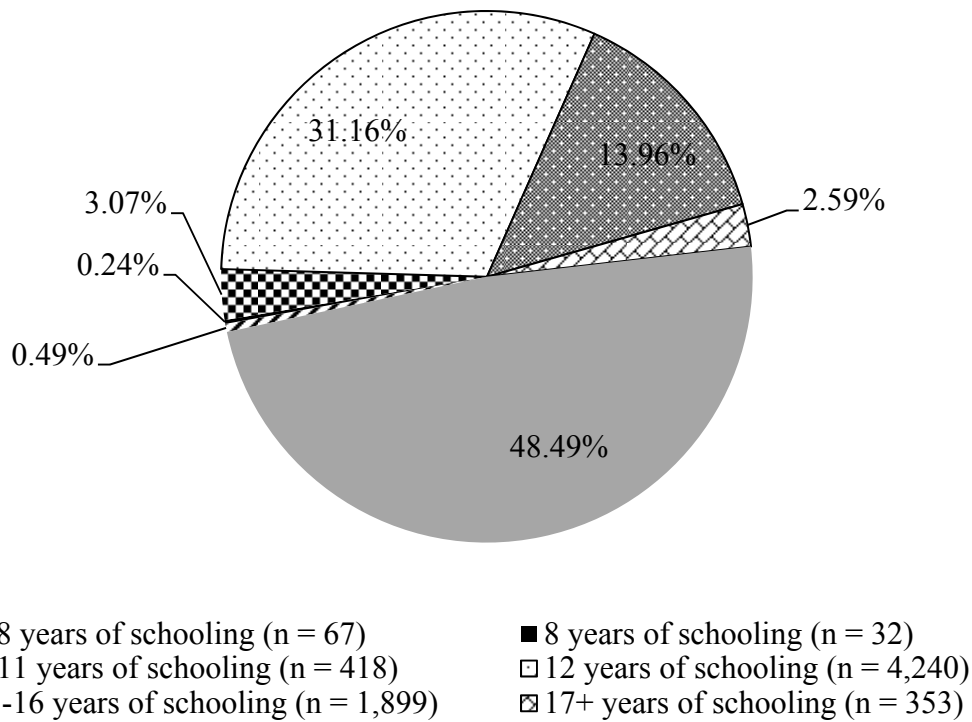
~17% in 20 to 24 years; ~26% in 25 to 29 years; ~27% in 30 to 34 years; ~19% in 35 to 39 years age-groups).

Education

Figure 6 displays the distribution of educational attainment of Arizona resident women seeking abortions in 2011. The largest proportion had unknown educational status (~48%). Thirty-one percent of the women who sought abortions in 2011 had 12 years of schooling, followed by approximately 14 percent (n = 1,899) women who had 13 to 16 years of schooling. Four percent had less than a high school education.

Figure 6. Educational status of Arizona resident women seeking abortions in 2011

Educational Status of Resident Women receiving Abortions in 2011



Previous Pregnancy History

Previous pregnancy history captures the previous number of pregnancies, previous number of live births, previous induced terminations of pregnancy, and previous spontaneous termination of pregnancy. Previous pregnancy history provides an overview of the risk involved in future pregnancy outcomes. For instance, in the case of abortions, some studies have indicated that “the

risk of preterm birth is higher in women who have undergone induced abortion, and that the risk is related to the number of abortions.”^{9(p.734)} More recent meta analytic study by Shah et al. indicated that previous induced terminations of pregnancy (I-TOP) was associated with a significantly increased risk of low birth weight (LBW) and preterm birth (PTB) but not with small for gestational age (SGA) and the risk increased with increase in the number of I-TOP.¹⁰

Table 6 shows the previous number of live births, previous induced termination of pregnancy, and previous spontaneous termination. Data from 2011 suggests that one-third (~33%) of the resident women had three or more previous pregnancies and approximately 16 percent had previous live births. Of the women who received abortions during 2011, approximately 12 percent had two or more previous abortions; approximately three percent had two or more previous spontaneous terminations of pregnancies.

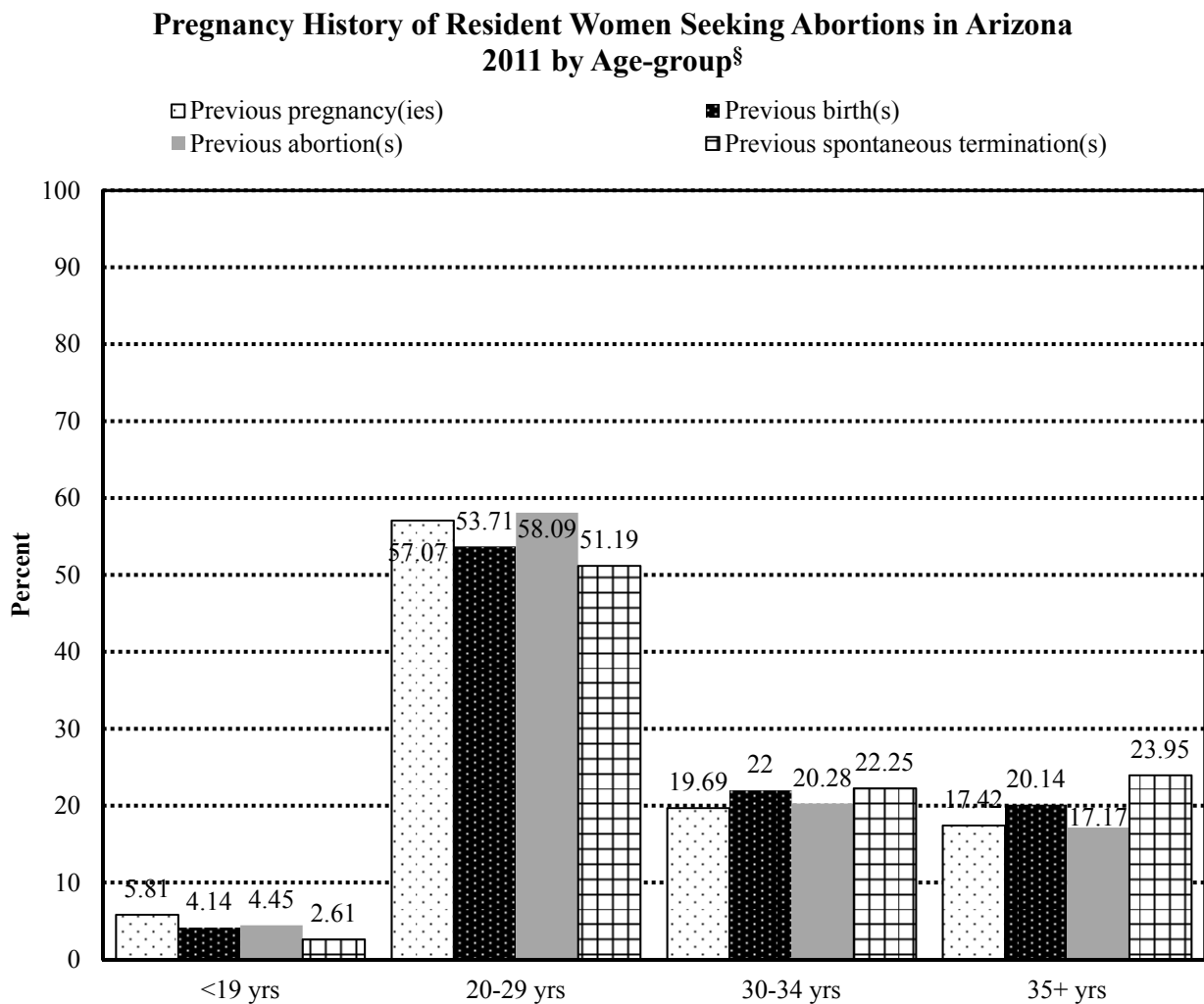
Table 6. Pregnancy history of resident women seeking abortions in Arizona in 2011

Pregnancy History	2011	
	Count (N = 13,606)	Percent
Number of previous pregnancies		
0	3,745	27.52
1	2,844	20.90
2	2,459	18.07
3 or more	4,545	33.41
Unknown	13	0.10
Number of previous live births		
0	5,820	42.78
1	3,132	23.02
2	2,521	18.53
3 or more	2,119	15.57
Unknown	14	0.10
Previous induced termination of pregnancy		
0	8,382	61.61
1	3,467	25.48
2	1,159	8.52
3 or more	557	4.1
Unknown	41	0.3
Previous spontaneous termination of pregnancy		
0	11,257	82.74
1	1,809	13.3
2	368	2.7
3 or more	124	0.91
Unknown	48	0.35

Of those women who sought abortions in 2011, 7,239 (53%) never had a previous induced termination of pregnancy and never had a previous spontaneous termination (data not shown). Approximately, 8.5 percent (n = 1,148) had at least one or more previous induced termination of pregnancy and had one or more previous spontaneous terminations. Further, about 8.5 percent (n = 1,141) had a previous spontaneous termination but did not have a previous induced termination of pregnancy; and about 30 percent (n = 4,015) had a previous abortion but did not have a previous spontaneous termination.

Figure 7 gives an overview of the pregnancy history of resident women who sought abortions in 2011 by age-groups. It is evident that the proportion of pregnancies, previous live births, previous induced terminations of pregnancy, as well as previous spontaneous terminations mostly concentrated in women 20-29 years of age.

Figure 7. Pregnancy history of resident women seeking abortions in Arizona 2011 by age-groups



[§]Indicates one or more counts for each age-group combination

Abortion Method

Of those women who had abortions in 2011, approximately 38 percent (n = 5,108) had non-surgical procedures and approximately 62 percent (n = 8,485) had surgical procedures. Table 7 provides an overview of the method of abortions in 2011. Of the total surgical procedures reported, the most common procedure was suction curettage (~75%), followed by dilation and evacuation (D&E) accounting for approximately 15 percent, and sharp curettage (D&C) accounting for ten percent of the total surgical procedures. Of the total non-surgical procedures that were reported, Mifeprex and/or Misoprostol (~50%) was the most common.

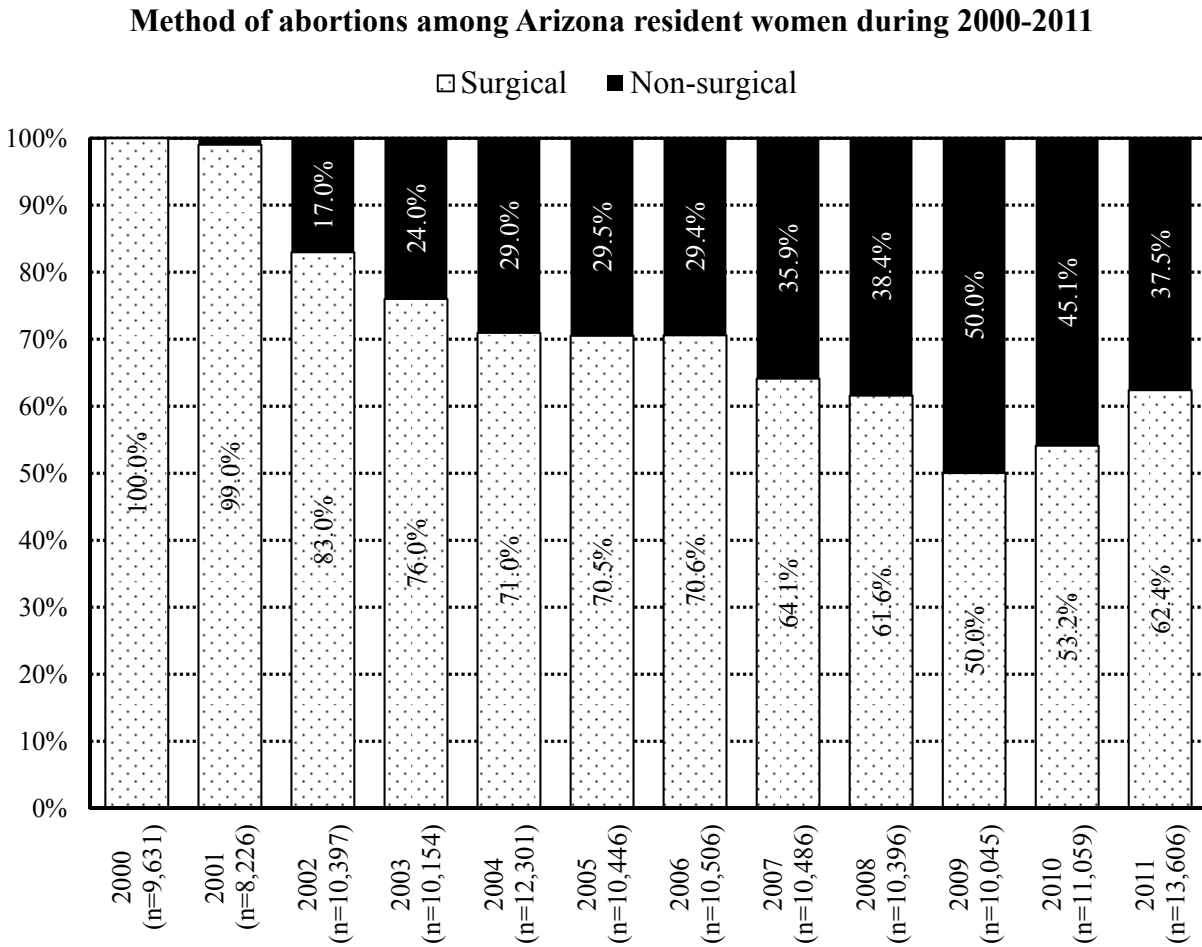
Table 7. Method of abortion used by resident women in Arizona 2011

Method [¶]	Count	Percent
Surgical Procedures		
Sharp Curettage (D&C)	910	10.72%
Suction Curettage	6,327	74.57%
Insertion/Laminaria	15	0.18%
Hysterotomy/Hysterectomy	1	0.01%
Insertion/Intra-amniotic (saline)	0	0.00%
Insertion/Prostaglandin	23	0.27%
Dilation and Evacuation (D&E)	1,204	14.19%
Other procedure	5	0.06%
Non-surgical Procedures		
Methotrexate and misoprostol (Cytotec)	1	0.02%
Mifepristone (Mifeprex) and misoprostol (Cytotec)	27	0.53%
Mifeprex and misoprostol	2,666	52.19%
Digoxin	2,351	46.03%
Other	63	1.23%

[¶]In 13 cases procedures were unknown

Figure 8 displays the trends in surgical as well as non-surgical procedures during 2000-2011. It is evident that the number of non-surgical abortions increased until 2009 and then decreased in 2010 and 2011. In 2000, almost all procedures for abortions comprised of surgical procedures; however in 2011, surgical procedures accounted for 62 percent of all abortion procedures. Similarly, in 2001 non-surgical procedures comprised of less than one percent (0.01%) and in 2011 comprised 38 percent. Between 2005-2009 time-period, there was approximately 29 percent decrease for surgical procedures; however, during the same time-frame there almost 70 percent increase in non-surgical procedures.

Figure 8. Method of abortion among Arizona resident women during 2000-2011



Facility and Reason for Termination

Of the 13,606 abortions reported for Arizona residents, 13,566 (99.66%) were performed in clinics, followed by 38 in hospitals (0.28%), six in an outpatient surgical center, and two in an outpatient treatment center. The most common reason for pregnancy termination was elective (99.10%), followed by 122 (0.9%) cases reported for medical reasons. Of those 122 cases that indicated terminating pregnancy for medical reasons, approximately 80 percent (n = 97) of the terminations were surgical procedures and 19 percent (n = 23) of the abortions were non-surgical. Of those 122 cases, approximately 70 percent (n = 86) were performed in clinics and approximately 30 percent (n = 36) were performed in hospitals. Of those 122 cases, approximately 95 percent (n = 116) of the abortions were performed on women age 20 or older.

Medical complications occurring during pregnancy are reported on the abortion procedure report. During 2011, 25 women experienced medical complications of pregnancy and 97 experienced complications with the fetus and majority these related to birth defects. The complications noted for the mother were maternal cardiac complications (n = 2), maternal renal complications (n = 2),

chorioamnionitis (n = 3), preeclampsia or HELLP syndrome (n = 5), premature rupture of membranes (n = 7), and other unspecified maternal conditions (n = 6).

3.2. Abortions by gestational age

Gestational age plays a critical role in an induced termination of pregnancy and some evidence suggests that longer gestational age is perhaps associated with abortion-related mortality.¹¹ Table 8 gives an overview of the gestational ages of the fetus at the time of abortion for 2011.

The majority of the abortions (67.10%) to Arizona resident women were performed at less than or equal to 8 weeks of gestation; the comparable U.S. figure was (62.8%).¹ Ninety-five percent of the Arizona abortions were performed at less than or equal to 15 weeks of gestation. It is evident from the table that one-third of the abortions were performed at six weeks of gestation, followed by approximately one-fifth at seven weeks of gestation, and slightly more than one-tenth of the abortions at eight weeks of gestation. About one percent (n = 141) of the abortions were performed at 21 weeks of gestation and in 23 cases no gestational age was reported.

Table 8. Distribution of gestational age at time of abortion of Arizona residents

Gestational age (in weeks)	Count	Percent
	(N = 13,606)	
Less than or equal to 8 weeks	9,130	67.10%
6 weeks	4,550	33.44%
7 weeks	2,697	19.82%
8 weeks	1,883	13.84%
9 to 13 weeks	3,398	24.97%
9 weeks	1,147	8.43%
10 weeks	759	5.58%
11 weeks	671	4.93%
12 weeks	449	3.30%
13 weeks	372	2.73%
14 to 15 weeks	408	3.00%
14 weeks	220	1.62%
15 weeks	188	1.38%
16 to 17 weeks	271	1.99%
16 weeks	146	1.07%
17 weeks	125	0.92%
18 to 20 weeks	235	1.73%
18 weeks	93	0.68%
19 weeks	95	0.70%
20 weeks	47	0.35%
Greater than or equal to 21 weeks	141	1.04%
21 weeks	141	1.04%
Unknown/Missing		
Unknown	23	0.17%

Table 9 presents the distribution of age of the women and the gestational age in weeks at the time of abortion. It is evident that irrespective of age, the majority of the abortions were performed at less than or equal to 13 weeks of gestation. However, among women less than 15 years of age, approximately 16 percent of the abortions (n = 8), were performed between 14 to 20 weeks of gestation, and in two cases the abortions were performed at 21 weeks of gestation. Similarly, among women 15 to 19 years of age, about nine percent of the abortions (n = 154), were performed at 14 to 20 weeks of gestation, and in about one percent (n = 24) of the cases abortions were performed at 21 weeks of gestation.

Table 9. Distribution of gestational age at time of abortion by age-groups

Age in (years)	Gestational age (in weeks) [¶]					
	<=13 weeks		14 to 20 weeks		21 weeks	
	Count	Percent	Count	Percent	Count	Percent
<15 yrs	39	79.59%	8	16.33%	2	4.08%
15-19 yrs	1,554	89.72%	154	8.89%	24	1.39%
20-24 yrs	4,048	92.42%	281	6.42%	51	1.16%
25-29 yrs	3,166	92.49%	230	6.72%	27	0.79%
30-34 yrs	1,991	92.65%	132	6.14%	26	1.21%
35-39 yrs	1,219	93.41%	79	6.05%	7	0.54%
>=40 yrs	511	93.76%	30	5.50%	4	0.73%
Totals	12,528	92.23%	914	6.73%	141	1.04%

[¶]Totals do not add to 13,606 due to 23 unknown gestational age

Table 10 provides an overview of the gestational age and the method of abortion. Irrespective of gestational age, surgical procedure was one of the most utilized methods for terminating pregnancy. In the majority of the cases (n = 5,956; ~80) involving surgical procedure, suction curettage (D&C) was the most common procedure utilized at less than or equal to 13 weeks of gestation. Similarly, Mifeprex and/or misoprostal (n = 2,658; ~52%), followed by Digoxin (n = 2,346; ~46%) was the most common non-surgical procedure utilized at less than or equal to 13 weeks of gestation. At 14 to 20 weeks of gestation, dilation and evacuation (D&E) accounted for approximately 65 percent (n = 585) of the surgical procedures, followed by suction curettage accounting for one-third (n = 301; ~33%) of the surgical procedures.

Table 10. Method of abortion and gestational age

Method [§]	Gestational age (in weeks) [¶]					
	<=13 weeks (n = 12,528)		14 to 20 weeks (n = 914)		21 weeks (n = 141)	
	Count	Percent	Count	Percent	Count	Percent
Surgical	(n = 7,450)		(n = 904)		(n = 126)	
Sharp Curettage (D&C)	898	12.05%	9	1.00%	1	0.79%
Suction Curettage	5,956	79.95%	301	33.30%	67	53.17%
Insertion/Laminaria	14	0.19%	0	0.00%	1	0.79%
Insertion/Prostaglandin	16	0.21%	7	0.77%	0	0.00%
Dilatation and Evacuation (D&E)	562	7.54%	585	64.71%	57	45.24%
Other procedure/Unknown	4	0.05%	2	0.22%	0	0.00%
Non-surgical	(n = 5,074)		(n = 10)		(n = 15)	
Methotrexate and misoprostol (Cytotec)	27	0.53%	0	0.00%	1	6.67%
Mifepristone (Mifeprex) and misoprostol (Cytotec)	2,658	52.36%	1	10.00%	0	0.00%
Mifeprex and misoprostol	41	0.81%	3	30.00%	0	0.00%
Digoxin	2,346	46.22%	0	0.00%	0	0.00%
Other procedure/Unknown	2	0.04%	6	60.00%	14	93.33%

[¶]In about 23 cases gestational age was unknown

[§]In about 13 cases method of abortion was unknown

3.3. Abortions by patient's county of residence

Table 11 on the following page gives an overview of the abortions, number of live births, abortion rates, and ratio by county of residence as well as border and non-border region. The border region consists of Cochise, Pima, Santa Cruz, and Yuma counties while the remaining counties are considered non-border counties.

The overall Arizona rate for abortions in 2011 was 10.7 per 1000 women and 13 out of the 15 counties had abortion rates below the state rate. Greenlee (26.50 per 1000 women) and Maricopa (12.88 per 1000 women) exceeded the state rate. Similarly, 12 out of the 15 counties had abortion ratios below the state ratio (159.71) while Greenlee (344.50 per 1000 births), Maricopa (192.65 per 1000 births) and Pima (171.72 per 1000 births) exceeded the overall state abortion ratio.

When comparing border and non-border regions, the overall abortion rate for the border region was 9.13 per 1000 women compared to 11.11 per 1000 women in the non-border region. And, the overall abortion ratio for border region was 138.15 per 1000 births compared to 165.26 per 1000 births in the non-border region. Both abortion rates as well as the abortion ratio for the border region was below the state rate.

Table 11. Arizona 2011 abortions, live births, rate, and ratio by county of residence

Resident county [¶]	Abortions		Live Births		Abortion Rate [‡]	Abortion Ratio [§]
	Count	%	Count	%		
Apache	15	0.11%	1,071	1.26%	1.12	14.01
Cochise	162	1.19%	1,664	1.95%	7.26	97.36
Coconino	184	1.35%	1,771	2.08%	5.86	103.90
Gila	41	0.30%	620	0.73%	5.38	66.13
Graham	12	0.09%	606	0.71%	1.76	19.80
Greenlee	41	0.30%	119	0.14%	26.50	344.54
La Paz	11	0.08%	172	0.20%	4.42	63.95
Maricopa	10,280	75.55%	53,361	62.64%	12.88	192.65
Mohave	43	0.32%	1,962	2.30%	1.48	21.92
Navajo	77	0.57%	1,642	1.93%	4.04	46.89
Pima	2,039	14.99%	11,874	13.94%	10.54	171.72
Pinal	313	2.30%	4,607	5.41%	4.58	67.94
Santa Cruz	35	0.26%	694	0.81%	3.77	50.43
Yavapai	181	1.33%	1,829	2.15%	6.05	98.96
Yuma	172	1.26%	3,198	3.75%	4.43	53.78
Border region[†]	2,408	17.70%	17,430	20.46%	9.13	138.15
Non-border region	11,198	82.30%	67,760	79.54%	11.11	165.26
Arizona	13,606	100%	85,190	100%	10.70	159.71

[¶]Residence indicates women's place residence

[†]Border region in Arizona include Cochise, Pima, Santa Cruz, and Yuma

[‡]Number of abortions obtained by women per 1,000 women of child-bearing age (15-44 years of age)

[§]Number of abortions obtained by women per 1,000 live births

Table 12 on the following page displays the trends in abortions, rates, ratios, and percent change by county of residence for 2000-2011. During 2000-2011, the number of abortions increased in most counties, except for Cochise, Coconino, Graham, Pima, and Santa Cruz. The percent change in the number of abortions in Arizona during 2000-2011 was 41 percent.

During 2000-2011, Mohave (617%) Greenlee (583%), Pinal (175%) and Yuma (126%) had the highest percent change. The high percentage change in Mohave and Greenlee may be due to the small number of cases (possibly undercount in previous years). Graham (47%), Santa Cruz (33%), Coconino (19%), Cochise (17%), and Pima (15%) saw a decline in the count of abortions during this time-period. The same pattern was true for abortion rates and abortion ratios.

Table 12. Number of abortions, rates, and ratio by county of residence 2000-2011

County of Residence	Year											% Change					
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2000 to 2004	2005 to 2009	2010 to 2011	2000 to 2011	
# of Abortions																	
ARIZONA	9,631	8,226	10,397	10,154	12,301	10,446	10,506	10,486	10,396	10,045	11,059	13,606	28%	-4%	23%	41%	
Apache	11	12	15	17	43	46	47	43	15	19	19	15	291%	-59%	-21%	36%	
Cochise	196	144	201	150	181	136	176	81	127	147	107	162	-8%	8%	51%	-17%	
Coconino	226	190	239	233	291	266	299	275	281	266	274	184	29%	0%	-33%	-19%	
Gila	23	29	27	15	29	10	27	36	27	27	28	41	26%	170%	46%	78%	
Graham	21	17	20	18	21	9	15	12	15	23	15	12	0%	156%	-20%	-43%	
Greenlee	6	8	7	4	4	6	4	7	7	8	22	41	-33%	33%	86%	583%	
La Paz	4	8	8	3	9	-	6	12	6	2	6	11	125%	0%	83%	175%	
Maricopa	6,082	4,697	6,371	7,027	8,178	6,541	6,496	7,188	7,166	6,732	7,774	10,280	34%	3%	32%	69%	
Mohave	6	4	11	5	20	6	16	45	32	21	22	43	233%	250%	95%	617%	
Navajo	46	45	73	54	70	51	47	51	59	40	69	77	52%	-22%	12%	67%	
Pima	2,394	2,422	2,764	2,080	2,965	3,018	2,636	1,908	2,054	2,124	1,844	2,039	24%	-30%	11%	-15%	
Pinal	106	147	110	83	131	85	277	420	257	163	217	313	24%	92%	44%	195%	
Santa Cruz	52	45	70	45	50	36	81	76	36	35	31	35	-4%	-3%	13%	-33%	
Yavapai	122	132	144	100	190	208	263	251	234	183	204	181	56%	-12%	-11%	48%	
Yuma	76	84	112	133	119	28	81	76	74	156	151	172	57%	457%	14%	126%	
Unknown	-	-	-	-	-	-	-	-	6	-	276	-	NA	NA	NA	NA	
Abortion Rates[†]																	
ARIZONA	8.88	7.33	8.98	8.53	9.97	8.14	8.24	8.06	7.84	7.47	8.76	10.70	12%	-8%	22%	20%	
Apache	0.77	0.85	1.04	1.17	2.93	3.03	3.10	2.82	0.98	1.23	1.43	1.12	280%	-59%	-22%	45%	
Cochise	8.74	6.34	8.51	6.25	7.42	5.42	7.16	3.24	4.98	5.66	4.77	7.26	-15%	4%	52%	-17%	
Coconino	7.97	6.61	7.81	7.41	9.24	8.37	9.73	9.02	9.17	8.47	8.70	5.86	16%	1%	-33%	-26%	
Gila	2.73	3.43	3.10	1.70	3.27	1.11	3.02	3.89	2.84	2.75	3.67	5.38	20%	147%	46%	97%	
Graham	3.26	2.65	3.05	2.71	3.00	1.27	2.19	1.68	1.96	2.89	2.23	1.76	-8%	128%	-21%	-46%	
Greenlee	3.51	4.82	4.06	2.33	2.38	3.27	2.66	4.61	4.26	5.13	14.22	26.50	-32%	57%	86%	655%	
La Paz	1.38	2.75	2.67	0.98	2.88	0.00	1.92	3.94	1.99	0.64	2.47	4.42	109%	0%	79%	221%	
Maricopa	9.01	6.69	8.79	9.41	10.55	8.14	8.21	8.97	8.79	8.14	9.81	12.88	17%	0%	31%	43%	
Mohave	0.23	0.15	0.40	0.18	0.66	0.19	0.47	1.26	0.88	0.58	0.76	1.48	185%	204%	95%	537%	
Navajo	2.38	2.27	3.62	2.62	3.27	2.31	2.05	2.13	2.47	1.66	3.62	4.04	38%	-28%	12%	70%	
Pima	13.12	12.98	14.35	10.56	14.70	14.49	13.01	9.35	9.94	10.20	9.59	10.54	12%	-30%	10%	-20%	
Pinal	3.49	4.60	3.38	2.43	3.51	1.99	5.46	7.26	4.04	2.51	3.25	4.58	1%	26%	41%	31%	
Santa Cruz	6.35	5.32	8.23	5.15	5.56	3.81	8.57	7.86	3.67	3.53	3.38	3.77	-12%	-8%	11%	-41%	
Yavapai	4.41	4.56	4.84	3.24	5.79	6.07	7.26	6.59	5.99	4.61	6.83	6.05	31%	-24%	-11%	37%	
Yuma	2.47	2.64	3.43	3.94	3.39	0.75	2.19	1.99	1.91	3.99	3.99	4.43	37%	429%	11%	80%	
Abortion Ratio[§]																	
ARIZONA	113	97	119	112	132	109	103	102	105	109	127	160	16%	0%	26%	41%	
Apache	9	11	14	14	32	36	40	37	12	15	17	14	279%	-57%	-19%	65%	
Cochise	113	88	118	85	100	77	97	44	71	80	60	97	-11%	4%	62%	-14%	
Coconino	122	101	128	121	144	129	145	129	142	140	154	104	18%	9%	-33%	-15%	
Gila	34	45	118	22	43	15	41	52	39	38	42	66	28%	149%	58%	94%	
Graham	46	38	128	42	47	20	28	21	23	36	28	20	2%	79%	-30%	-57%	
Greenlee	56	84	39	46	39	61	36	51	53	62	210	345	-29%	1%	64%	520%	
La Paz	22	43	35	14	39	0	26	52	24	12	30	64	80%	0%	113%	195%	
Maricopa	112	84	113	119	135	105	98	109	114	117	143	193	21%	11%	34%	72%	
Mohave	3	2	6	2	9	3	7	19	14	10	11	22	168%	252%	101%	545%	
Navajo	27	29	45	32	39	27	25	25	30	21	40	47	43%	-21%	18%	72%	
Pima	191	200	222	163	228	233	189	138	152	165	152	172	19%	-29%	13%	-10%	
Pinal	41	58	41	28	43	23	62	80	45	31	44	68	5%	32%	56%	67%	
Santa Cruz	65	59	92	57	62	46	108	99	45	46	45	50	-5%	0%	13%	-23%	
Yavapai	69	76	75	54	95	98	111	104	106	89	112	99	37%	-10%	-12%	43%	
Yuma	25	28	37	42	36	9	24	23	22	48	47	54	42%	467%	15%	113%	

[†]Number of abortions obtained by women per 1000 women of child-bearing age (15-44 yrs)

[§]Number of abortions obtained by women per 1000 live births

Table 13 displays the county of residence and the age of women who sought abortions in 2011. The majority of the women resided in Maricopa county irrespective of age. Within Maricopa County the proportion of women age 30 or older receiving abortion was slightly higher (at 3014/10280 or 30% of the Maricopa women) compared to Pima county's proportion (536/2039 or 26%) of women age 30 or older.

Table 13. Abortions by county of residence and age group, Arizona, 2011

County	<=19 years		20-29 years		30+ years	
	Count	Percent	Count	Percent	Count	Percent
Apache	3	0.17%	7	0.09%	5	0.12%
Cochise	27	1.51%	94	1.20%	41	1.02%
Coconino	35	1.96%	108	1.38%	41	1.02%
Gila	8	0.45%	24	0.31%	9	0.22%
Graham	2	0.11%	5	0.06%	5	0.12%
Greenlee	5	0.28%	25	0.32%	11	0.27%
La Paz	2	0.11%	5	0.06%	4	0.10%
Maricopa	1,285	71.99%	5,891	75.39%	3,104	77.46%
Mohave	6	0.34%	31	0.40%	6	0.15%
Navajo	14	0.78%	45	0.58%	18	0.45%
Pima	300	16.81%	1,203	15.40%	536	13.38%
Pinal	43	2.41%	153	1.96%	117	2.92%
Santa Cruz	8	0.45%	21	0.27%	6	0.15%
Yavapai	19	1.06%	98	1.25%	64	1.60%
Yuma	28	1.57%	104	1.33%	40	1.00%
Border region[†]	363	20.34%	1422	18.20%	623	15.55%
Non-border region	1422	79.66%	6392	81.80%	3384	84.45%
ARIZONA	1,785	100%	7,814	100%	4,007	100%

[¶]Residence indicates women's county of residence

[†]Border region in Arizona include Cochise, Pima, Santa Cruz, and Yuma

Table 14 on the following page displays the residence county and the race and ethnicity of resident women who sought abortions in Arizona in 2011. As noted earlier, the majority of the respondents selected more than two race categories and therefore, race and ethnicity data for 2011 need to be interpreted with caution.

Table 14. Abortions by county of residence and race and ethnicity, Arizona, 2011

County [¶]	White	Hispanic	Black or African American	American Indian or Alaskan Native	Asian or Pacific Islander	Multiple race	Unknown
Apache	0	1	0	3	0	8	3
Cochise	34	51	2	1	0	47	27
Coconino	60	30	1	5	3	64	21
Gila	6	11	0	0	0	16	8
Graham	3	4	0	0	0	3	2
Greenlee	8	12	0	0	0	21	0
La Paz	0	4	0	0	0	4	3
Maricopa	1,704	3,116	120	30	36	3,511	1763
Mohave	11	9	0	0	1	17	5
Navajo	9	22	0	4	0	31	11
Pima	408	773	18	4	6	535	295
Pinal	41	84	3	0	0	117	68
Santa Cruz	2	24	0	0	0	3	6
Yavapai	76	28	1	1	1	52	22
Yuma	23	105	0	0	0	13	31
Border region[†]	467	953	20	5	6	598	359
Non-border region	1,918	3,321	125	43	41	3,844	1,906
ARIZONA	2,385	4,274	145	48	47	4,442	2,265

[¶]Residence indicates women's county of residence

[†]Border region in Arizona include Cochise, Pima, Santa Cruz, and Yuma

3.4. Complications from abortion procedures.

The way ADHS assesses and reports the complications of abortion has changed over time. Beginning in June 1976, as part of the required *Report of an Induced Termination of Pregnancy*, providers reported to ADHS basic information about the complication. Specifically, the providers reported whether the patient was hospitalized for complications which occurred during the abortion procedure. Between 1982 and 2003 the ADHS annual *Health Status and Vital Statistics Report (HSVSR, Table D1-1)* used these provider-submitted reports to list a count of patients who received abortion and who were hospitalized for complications. Beginning with 1986 data, the table of complications included only Arizona residents. From 2004 to 2009 the ADHS *HSVSR* continued to report the general characteristics of women receiving abortions but did not list the count of complications.

Following passage of SB1304 in 2010, Arizona Revised Statutes §36-2162 added new requirements for reporting the complications of abortion procedures. Since July 2010, healthcare professionals who provide medical treatment to women experiencing complications

from an abortion or an attempted abortion are required to file a report of the complications. The information below presents statistics compiled from analysis of those reports.

There were a total of 60 reported complications in 2011 to Arizona resident women. Table 15 lists complications from an abortion by key variables.

Table 15. Complications from an abortion for Arizona resident women

Complications from an abortion for Arizona resident women by key variables	Count (n = 60)	Percent
Age (in years)		
<15 yrs	0	0.00%
15-19 yrs	11	18.33%
20-24 yrs	19	31.67%
25-29 yrs	24	40.00%
30-34 yrs	3	5.00%
35-39 yrs	2	3.33%
>=40 yrs	1	1.67%
Gestational age (in weeks)		
<= 13 weeks	29	48.33%
14 to 20 weeks	5	8.33%
21 weeks	1	1.67%
Unknown	25	41.67%
Patient's county of residence		
Apache	0	0.00%
Cochise	1	1.67%
Coconino	0	0.00%
Gila	0	0.00%
Graham	0	0.00%
Greenlee	0	0.00%
La Paz	0	0.00%
Maricopa	37	61.67%
Mohave	2	3.33%
Navajo	0	0.00%
Pima	15	25.00%
Pinal	0	0.00%
Santa Cruz	1	1.67%
Yavapai	0	0.00%
Yuma	2	3.33%
Unknown	2	3.33%
Description of complications		
639.0 Complicated by genital tract and pelvic infection	6	10.00%
639.1 Complicated by delayed or excessive hemorrhage	34	56.67%
639.2 Complicated by damage to pelvic organs	3	5.00%
639.6 Complicated by embolism	1	1.67%
639.8 Without mention of complication	7	11.67%
Urinary tract infection following conditions classifiable to 630-638	9	15.00%

Of the case reports that contained race and ethnicity approximately 28 percent (n = 17) were non-Hispanic White, followed by 22 percent (n = 13) Hispanic, and seven percent (n = 4) African Americans. In approximately 43 percent (n = 26) of the cases, no race and/or ethnicity information was available.

3.5 Petitions filed with the Arizona Administrative Office of the Courts

As specified in A.R.S. § 36-2163 subsection C, the Arizona Administrative Office of the Courts collects data and reports aggregate statistics on the number of petitions filed with Arizona courts to obtain authorization for unemancipated minors to undergo abortion without parental consent.

Following is the summary provided by the Arizona Administrative Office of the Courts. The dates of petitions filed range from January 1, 2011 to December 31, 2011. Although not specified in statute, the total number of petitions issued an order are included for context. A total of 56 petitions were filed, of which 45 (82%) were issued an order authorizing an abortion: 32 without parental consent and 13 with parental consent. It should be noted that while a petition may be filed during a specific period, resolution may be in the following period.

Table 16. Petitions filed in the Arizona Administrative Office of the Courts

Reporting Category	# of petitions
1. Number of petitions filed pursuant to A.R.S. § 36-2152 Subsection B	56
2. Of the petitions filed pursuant to A.R.S. § 36-2152 Subsection B, the number in which the judge appointed a guardian <i>ad litem</i> or court-appointed counsel for the minor pursuant to A.R.S. § 36-2152 Subsection D.	51
3. Of the petitions filed pursuant to A.R.S. § 36-2152 Subsection B, the number in which the judge issued an order authorizing an abortion without parental consent. <i>Note: A total of 45 petitions were issued however, 13 were issued with parental consent.</i>	32
4. Of the petitions filed pursuant to A.R.S. § 36-2152 Subsection B, the number in which the judge issued an order denying the petition. <i>Note: In addition, 8 petitions were withdrawn or otherwise terminated.</i>	3
5. Of the petitions denied, the number appealed to the court of appeals.	1
6. The number of those appeals that resulted in the denials being affirmed.	0
7. The number of those appeals that resulted in the denial being reversed.	1

Conclusion

The true incidence of abortions is difficult to estimate as the reporting of abortions to ADHS has been subject to the variable requirements of the abortion providers. For instance, in Arizona prior to the expanded reporting of abortions required by ARS §36-2161 and 36-2162, varying compliance in provider reporting may have underestimated the incidence rates. This is clearly evidenced through the trends and recent increases (post SB1304) in the number of reported abortions. In calendar year 2011, providers reported a total of 14,401 abortions in Arizona compared to 11,438 abortions in 2010, an increase of about 26 percent. Some of the increase in the count of abortions might be attributable to better reporting of abortion data as well as enhanced surveillance. For instance, ADHS held several training events for web-based reporting as well as the use of specific abortion reporting forms at ADHS. Over 20 facilities and 60 attendees participated at these events. Further, ADHS partnered with the Arizona Medical Board to post the notification about the requirements of abortion reporting on their website as well as collaborated with the Division of Licensing at ADHS to field questions about reporting requirements. In addition to these efforts, ADHS sent letters to OB-GYNs as well as outpatient treatment and surgical centers and developed the Abortion Reporting information website <http://www.azdhs.gov/plan/crr/ar/> with a telephone number that allows providers for feedback. This URL is also emailed with their registration confirmation.

Nonetheless, the estimate of abortion incidence is still below other independent estimates such as that of the Guttmacher Institute report, which reports higher incident rates of abortion. According to CDC, the Guttmacher Institute uses numerous active follow-up techniques to increase the completeness of the data obtained through its periodic national survey of abortion providers.¹ While there are differences in methodology, one plausible reason for the difference between the State estimates and independent estimates of the incidence of abortions is perhaps due to lack of awareness about mandatory reporting among providers; however, it is a complex proposition to test.


Of the 14,401 abortions reported in 2011, 13,606 abortions were to Arizona resident women compared to 11,059 abortions to resident women in 2010. There was a 23 percent increase in abortion incidence for resident women from 2010 and 41 percent increase during 2000-2011. Almost all abortions reported (99.02%) in 2011 were elective abortions and most of these abortions were performed in clinics (99.65%). In 2011, there were a total of 85,190 live births of Arizona residents and the overall abortion ratio was 160 per 1000 live births compared to 127 per 1000 live births in the year 2010. The overall abortion rate in calendar year 2011 was 10.7 per 1000 women of child-bearing age (15-44 years) compared to 8.8 per 1000 women in 2010. The difference in 2010 and 2011 rate for abortions was statistically significant ($p < 0.01$). Abortion rates for women 15 to 19 years of age declined from 10.90 per 1000 to 7.69 per 1000 during

2000-2011 time-periods, representing a 30 percent decline in abortion rates. The proportion of abortions and abortion rates for 19 and younger declined and this trend has been consistent with declines in the number of pregnancies for 19 and younger.


While this report provides a comprehensive overview of the incidence of abortion in Arizona it is limited by the descriptive nature. It cannot draw inferences about increases and/or declines in abortion rates in specific sub-groups because there have been differences in the collection of abortion data across time. Trend comparisons should be interpreted with the caveat of the varying provider reporting that was in effect prior to 2010, and the expanded reporting requirements that went in to effect in July 2010. Moreover, there are no data available to assess the extent of any underreporting of incidences. Analysis of abortion data has public health implications, as ongoing abortion surveillance can facilitate efforts at preventing unintended pregnancies.¹ Abortion surveillance provides an important measure of pregnancies that are unintended and/or unwanted. Abortions are a key element in compilation of pregnancy statistics because the numerator for 'pregnancy rate' is comprised of the count of live births, abortions, and spontaneous fetal losses. Another important element of abortion surveillance is to assess the complications resulting from abortions. The 2011 data show that surgical procedures were the most common procedures for terminating pregnancy irrespective of gestational age, and the most common complication resulting from an abortion was excessive hemorrhage.

In conclusion, the 2011 report provides a comprehensive overview of the abortions in the State of Arizona following the passage of SB1304. In April of 2012, a new abortion law HB2036¹² was signed that restricts abortions being performed at 20 weeks of gestational age or greater and expands the scope of parental consent for unemancipated minors. One implication of this law would be a decline in the number of abortions performed at 20 weeks of gestation or greater (~188 cases and/or 1.5% of the abortions in 2011). Another implication of this law would be a decline in the number of abortions to unemancipated minors (527 cases and/or ~4.0% of the abortions in 2011). Irrespective of the effect of the new law, this report highlights the importance of continuing public health prevention messaging about unintended pregnancies and the risks associated thereof in women of child-bearing age, especially in the adolescent teen population.

Appendix A – Abortion Reporting Form



Leadership for a Healthy Arizona
Arizona Department of Health Services



Arizona's Official Web Site

[Report A Problem](#) | [Home](#)

Arizona Department of Health Services
Abortion Procedure Report

NOTICE: This is a MONTHLY report that must be filed within 15 days after the last day of the reporting month.

Facility Information

Facility Name	Facility Type	
<input type="text"/>	<input type="text"/>	
County of Pregnancy Termination		
<input type="text"/>		
Address of Facility		
<input type="text"/>		
City	State	Zip
<input type="text"/>	<input type="text"/>	<input type="text"/>
Provider Name (First Last)	Provider Type	License Number
<input type="text"/>	<input type="text"/>	<input type="text"/>

[Additional Provider](#) [Clear Fields](#)

Patient Information

Age	Education	Residence State	Residence County	Of Hispanic Origin?
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Unknown
		<input type="checkbox"/> Non USA Resident		
		<input type="checkbox"/> Residence Unknown		
Race, check all that apply				
<input type="checkbox"/> White	<input type="checkbox"/> Asian			
<input type="checkbox"/> American Indian	<input type="checkbox"/> Native Hawaiian or Other Pacific Islander			
<input type="checkbox"/> Black or African American	<input type="checkbox"/> Other			
Married	Prior Pregnancy	Prior Birth	Prior Abortion	Prior Spontaneous Terminations
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

[Clear Fields](#)

Medical Information

Estimate of Gestational Age Fetus Weight In Grams Date of Termination

Reason for Termination

Diagnosis Code

Surgical Procedure Performed Non-Surgical/Medical Procedure Performed

Medical Complication

Preexisting medical conditions that would complicate pregnancy (4000 characters left)

The basis for any medical judgment that a medical emergency existed that excused the physician from compliance with the requirements of this chapter.

Please Explain (4000 characters left)

Physician's statement if required pursuant to Arizona Revised Statutes Title 36 Public Health and Safety - Section 36-2301.01

Physician's Statement (4000 characters left)

[Clear Fields](#)

Submit Form

Name of Person Preparing Report Report Date

I declare that the information in this report provided to the Arizona Department of Health Services is correct to the best of my knowledge.



[Report A Problem](#) | [Home](#)

Arizona Department of Health Services

Abortion Complication Report

NOTICE: This is a MONTHLY report that must be filed within 15 days after the last day of the reporting month.

Reporting Facility Information

Facility Name	Facility Type	
<input type="text"/>	<input type="text" value="v"/>	
Address of Facility		
<input type="text"/>		
City	State	Zip
<input type="text"/>	<input type="text"/>	<input type="text"/>
Provider Name (First Last)	Provider Type	License Number
<input type="text"/>	<input type="text" value="v"/>	<input type="text"/>

[Additional Provider](#) [Clear Fields](#)

Facility Where Abortion Was Performed

Facility Name	Facility Type	
<input type="text"/>	<input type="text" value="v"/>	
Address of Facility		
<input type="text"/>		
City	State	Zip
<input type="text"/>	Arizona	<input type="text"/>

[Clear Fields](#)

Patient Information

Age Education Residence State Residence County Of Hispanic Origin? Yes No Unknown

Non USA Resident
 Residence Unknown

Race, check all that apply

White Asian
 American Indian Native Hawaiian or Other Pacific Islander
 Black or African American Other

Married Prior Pregnancy Prior Birth Prior Abortion Prior Spontaneous Terminations

[Clear Fields](#)

Medical Information

Estimate of Gestational Age Date of Termination

Surgical Procedure Performed Non-Surgical/Medical Procedure Performed

Nature of complication

Medical Treatment Given (4000 characters left)

Nature and Extent of any Permanent Condition Caused by the Complication

[Clear Fields](#)

Submit Form

Name of Person Preparing Report Report Date

I declare that the information in this report provided to the Arizona Department of Health Services is correct to the best of my knowledge.

Appendix B- Glossary

Abortion or Induced termination of pregnancy (ITOP) – *Abortion* means the use of any means to terminate the clinically diagnosable pregnancy of a woman with knowledge that the termination by those means will cause, with reasonable likelihood, the death of the unborn child. Abortion does not include birth control devices, oral contraceptives used to inhibit or prevent ovulation, conception or the implantation of a fertilized ovum in the uterus or the use of any means to save the life or preserve the health of the unborn child, to preserve the life or health of the child after a live birth, to terminate an ectopic pregnancy or to remove a dead fetus. (A.R.S. 36-2151)

Abortion rate – The number of abortions per 1,000 women aged 15-44 year or other specific group within a given population.

Abortion ratio – The number of abortions per 1,000 live births within a given population. The ratio reflects the relative number of pregnancies in a population that end in abortion compared to live birth.

Birth or Live birth – The complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy which, after such expulsion or extraction, breathes or shows any other evidence of life such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Heartbeats are to be distinguished from transient cardiac contractions; respirations are to be distinguished from fleeting respiratory efforts or gasps.

Epidemiology - *Epidemiology* is the study of the distribution and determinants of disease, injury, and other health outcomes in human populations.

Gestational age – *Gestational age* means the age of the unborn child as calculated from the first day of the last menstrual period of the pregnant woman.

Pregnancies – Pregnancies are the sum of live births, spontaneous terminations of pregnancy (fetal deaths or stillbirths) and induced terminations of pregnancy (abortions)

Proportion – A *proportion* is a ratio in which those in the numerator are also in the denominator.

Rate – A *rate* is a ratio in which those in the numerator are also in the denominator, and those in the denominator are "at risk" of being in the numerator. The denominator is the sum of "at risk" person-time or, by convention, the count of individuals "at risk" in a given time period.

Ratio – A *ratio* is any division of one number by another; the numerator and denominator do not have to be mutually exclusive.

Standard Deviation – Standard deviation (*SD*) indicates the variation or “dispersion” in a variable especially from the average (mean). A low *SD* implies there is little variation and the data points are close to the average and a high *SD* implies that data points are spread out. In a normally distributed population 68% of the data points lie between $\pm 1SD$.

Unemancipated minor – *Unemancipated minor* means a minor who is subject to the control, authority, and supervision of his or her parents or guardians, as determined under State law (See Title 42. The Public Health and Welfare; Chapter 6a USCS §300z-1).

End notes:

1. Centers for Disease Control and Prevention. Abortion Surveillance — United States, 2008. *MMWR* 2011;60(15):1-41
2. SB1304 State of Arizona Senate Forty-ninth Legislature Second Regular Session 2010. <http://www.azleg.gov/legtext/49leg/2r/bills/sb1304p.pdf>
3. Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity: Federal Register Notice. Retrieved from http://www.whitehouse.gov/omb/fedreg_1997standards/ accessed on July 16, 2012.
4. Abortion rate is essentially denoted as number of abortions per 1000 women. Race specific abortion rates are obtained by estimating the number of abortions (numerator) by women in a given racial group per 1,000 women in that same racial group.
5. Methodologies for Estimating Abortion Incidence and Abortion-Related Morbidity: A Review. Retrieved from <http://www.guttmacher.org/pubs/compilations/IUSSP/abortion-methodology.html> accessed on July 16, 2012.
6. Sedgh G, Henshaw S. Measuring the Incidence of Abortion in Countries With Liberal Laws. In: Singh S, Remez L, Tartaglione eds. *Methodologies for Estimating Abortion Incidence and Abortion-Related Morbidity: A Review* New York: Guttmacher Institute; and Paris: International Union for the Scientific Study of Population, 2010.
7. Subcommittee on Standardized Collection of Race/Ethnicity Data for Healthcare Quality Improvement, Institute of Medicine. "Front Matter." Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement. Washington, DC: The National Academies Press, 2009.
8. United States-México Border Health Commission. Border Region. Available at http://www.borderhealth.org/border_region.php Website. Accessed on July 16, 2012.
9. Ancel Pierre-Yevel et al., History of induced abortion as a risk factor for preterm birth in European countries: results of the EUROPOP survey. *Human Reproduction*, 2004, 19(3):734-740.
10. Shah P, Zao J. Induced termination of pregnancy and low birthweight and preterm birth: a systematic review and meta-analyses. *BJOG* 2009;116:1425–1442.
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12. Arizona State Legislature. House Bill No. 2036. Available at http://www.azleg.gov/DocumentsForBill.asp?Bill_Number=HB2036 Website. Accessed on September 8, 2012.