

Abortion Surveillance in Oklahoma

2002-2007 · OKLAHOMA STATE DEPARTMENT OF HEALTH

Introduction

Begun in 2000 by the Oklahoma State Department of Health (OSDH), the state's abortion surveillance activities record the number of legally induced terminations of pregnancy (ITOP), otherwise known as legal induced abortions. The OSDH uses these data to monitor the annual number of legal induced abortions and to describe those women receiving legal abortion services in Oklahoma. In doing so, the OSDH produces a partial accounting of pregnancies that terminate in outcomes other than a live born infant. The present report includes data collected by the office of Health Care Information (HCI), Center for Health Statistics, at the OSDH for calendar years 2002-2007.

Methods

For the study years, HCI assembled data submitted to the OSDH by the three medical facilities licensed to perform legal abortions in the state of Oklahoma. No other hospitals or clinics were sanctioned to perform abortion services during this time frame. These three facilities provided data on the number of abortions and the characteristics of women who obtained legal abortions. Legal induced abortion is defined by Oklahoma statute as the "purposeful termination of a human pregnancy, by any person with an intention other than to produce a live birth or to remove a dead unborn child."¹

This document reports on overall and characteristic-specific percentages, which are based only on known values. Single-year and multi-year abortion statistics are included in the report. Abortion ratios, defined as the number of abortions per 1,000 live births, and abortion rates, defined as the number of abortions per 1,000 women in a specified age group, are provided for many demographic

characteristics. Population data used to compute abortion rates were obtained from the U.S. Census Bureau.

Women between the ages of 20 and 34 years were grouped by 5-year age groups, while females less than 20 years of age and women greater than or equal to 35 years of age each comprised one age group (i.e., <20, 20-24, 25-29, 30-34, and ≥35). The number, ratio, and rate of abortions are presented for each age group. Abortion rates for women aged 20 or younger were based on population totals for women aged 10 to 19 years. Rates for women aged 35 or older were based on the population of women aged 35 to 44 years. Rates for all women who obtained abortions were based on the population of women 15-44 years of age. Age was missing for less than 1 percent of all reported legal induced abortions.

Race was classified into five categories: White, Black, American Indian, Asian or Pacific Islander, and Other. There were no records for which race was unavailable. However, ethnicity was not included in this analysis due to the large proportion of missing or unknown values (29 percent) for the period under study. Abortion numbers, ratios, and rates are presented by race only. Cross-tabulations by race and ethnicity are not presented.

Marital status was classified as either married (women who were married or separated) or unmarried (women who were never married, divorced, or widowed). Abortion numbers, ratios, and rates are presented by marital status. Abortion rates by marital status reflect the number of abortions per 1,000 females aged 15-50 in a specified marital group. This is a non-standard grouping for the population denominator but is useful to explore general patterns as undertaken here.

Education levels of women who obtained abortions were classified as less than high school education (8th grade through 12th grade, with no diploma), high school graduate or

¹ Title 63 O.S. Section 1-730.

GED² completed, some college (college credit attained with no degree), or college graduate (bachelor's degree and beyond). The number, ratio, and rate of abortions are shown by level of education. Abortion rates by educational attainment represent the number of abortions per 1,000 female population aged 18-44 years. Again, a non-standard population grouping is used here for review of general trends.

Percent distributions of abortions by previous live births and previous abortion history are presented. Previous live births were grouped into five classes: 0, 1, 2, 3, and 4 or more. Previous abortions were classified as 0, 1, 2, and 3 or more.

Measured in weeks, gestational age at the time of abortion was categorized as ≤6, 7, 8 and ≤8, 9-10, 11-12, 13-15, 16-20, and ≥21. Gestational age was based on the clinical estimate. The number and percent of abortions by length of gestation are included in the report. For select characteristics (e.g., race, age, education, marital status, type of procedure, and live birth and abortion history), gestational age is used as a summary variable, categorized as ≤8 weeks, 9-10 weeks, 11-12 weeks, 13-15 weeks, and ≥16 weeks.

The method of abortion was classified as curettage (suction and sharp), non-surgical medical abortion (RU-486, mifepristone and misoprostol), dilation and evacuation, and other procedures. The number and percent of legal abortions for each abortion method are provided.

To address concerns regarding confidentiality of women obtaining abortions and the stability of percentages, ratios, and rates, any computed statistic was suppressed when the numerator used in the calculation was less than 5 or when the denominator was less than 50. All statistics

described in this report reflect legal induced abortions to Oklahoma resident women.

Results

In total, among Oklahoma residents, there were 38,013 legal induced abortions (henceforth simply referred to as abortions) reported to the Oklahoma State Department of Health (OSDH) for the period 2002 through 2007 (Table 1). On average there were 6,335 abortions per year. Over the time period studied, the peak year for the number of abortions was 2006. In that year, there were 6,595 abortions reported to the OSDH. The fewest number (6,215) of abortions was recorded in 2002. For the period, the relative increase in the number of abortions was 1.7 percent.

Oklahoma experienced a modest decline (-6.9 percent) in the abortion ratio between 2002 and 2007 (Table 2). Over this period the abortion ratio dropped from 123.5 abortions per 1,000 live births in 2002 to its lowest level of 115.0 abortions per 1,000 live births in 2007. The abortion ratio peaked in 2003 at 124.6, dropped to 121.6 in 2004, and then rose to briefly stabilize at 122.1 for both 2005 and 2006, before dropping in 2007. For the period overall, the abortion ratio was recorded to be 121.4 abortions per 1,000 live births.

The abortion rate for Oklahoma increased from 8.5 abortions per 1,000 women aged 15-44 years in 2002 to 8.7 abortions per 1,000 women aged 15-44 years in 2007 (Table 2). Overall, the abortion rate rose 2.2 percent over the study period. The abortion rate rose to 8.7 per 1,000 population in 2003, dipped to 8.6 in 2004, reversed to 8.8 in 2005, and then climbed again in 2006 to a near-term high of 9.1 abortions per 1,000 women aged 15-44 years in 2006. The abortion rate for the full study interval was 8.7 per 1,000 female population aged 15-44 years.

Table 3 displays the number, ratio, and rate of abortions by county of residence. Between 2002 and 2007, the greatest number of abortions

² General educational development

occurred in Oklahoma County (12,421), followed by Tulsa County (9,420), representing 32.7 percent and 24.8 percent, respectively, of all abortions to Oklahoma residents. The fewest number of abortions was reported for Harmon County (<5) and Cimarron County (5). The abortion ratios for Oklahoma counties ranged from 10.8 abortions per 1,000 live births (Bryan County) to 174.3 abortions per 1,000 live births (Oklahoma County). Abortion rates varied from 0.7 abortions per 1,000 women aged 15-44 years (Bryan County) to 14.2 abortions per 1,000 women aged 15-44 years (Oklahoma County). Caution should be used when interpreting these county level statistics due to the wide variation in the number of abortions reported and the population size for rural counties. Multi-year calculations attempt to smooth the year-on-year fluctuation but this technique does not completely account for this variability.

Women aged 20-24 years obtained 33.3 percent of all abortions during the period 2002 to 2007. Women under 20 years of age obtained 16.8 percent of all abortions, with only a small fraction (<1 percent) of abortions occurring to the youngest of women (<15 years of age). Less than 3 percent of all abortions occurred to women aged 40 or older. The majority of abortions (54.5 percent) occurred to women in the principal childbearing years (ages 20-29). These abortion patterns changed little over the six-year period (Table 4). Abortion ratios were highest for women aged 35 or older and lowest for women aged 25-29 (Figure 1). In contrast, abortion rates were lowest for women in the older age group (Table 5). Women aged 35 or older had an abortion rate of 2.8 per 1,000 female population. Teenage women had the second lowest abortion rate at 4.6 abortions per 1,000 female population. The highest abortion rates were found among women in the age groups 20-24 (16.8 abortions per 1,000 female population) and 25-29 years (12.0 abortions per 1,000 female population). Figure 2 shows over time that teenage women and women 35 years

or older have consistently had the highest abortion ratios in Oklahoma. The general trend for all age groups has been downward for the study period. Additional characteristics of women by age can be found in Table 6.

Two-thirds of abortions were to White women. This is a consistent finding for the years under review. Overall, Black females obtained 18 percent of abortions, while another 6 percent were accounted for by American Indian women (Table 4). The abortion ratio for Black women was highest at 251.5 abortions per 1,000 live births, followed by Asian or Pacific Island women at 182.3 abortions per 1,000 live births (Table 5). The abortion ratio for White women was calculated to be 109.9 per 1,000 live births, with the lowest rate experienced by American Indian women at 64.8 abortions per 1,000 live births. A similar pattern of order was seen for abortion rates (Table 5), with Black women having a rate that was 3.5 times higher than American Indian women and more than twice as high as White women. Abortions are not reported by Hispanic origin due to the large percentage of records for which this characteristic was unknown.

Racial variability was evident when considering the age distribution of the women who obtained abortions (Table 7). Broadly speaking, differences between White and Black women were small. White women had a lesser percentage of abortions occurring to ages 25-29 (White, 21.6 percent; Black, 25.4 percent), while Black women had a smaller percentage of abortions to women in the oldest age group (age ≥35: White, 11.4 percent; Black, 7.2 percent). American Indian women (22.2 percent) had the highest percentage of abortions for ages less than 20 years. Conversely, Asian or Pacific Island women had the lowest percentages of abortions in the younger age groups with approximately 40 percent of this racial group's abortions occurring to women 30 years or older.

Examining abortions by educational attainment reveals that women with a high school education or equivalent GED accounted for the largest percentage of abortions (40.4 percent) (Table 4). College graduates made up 13 percent of Oklahoma resident abortions. Over the six years of data included in this report, the distribution of abortions by education was relatively unchanged. The number of abortions per 1,000 live births was highest for women with some college experience (172.2 per 1,000 live births) and lowest for women with a college degree (84.9 per 1,000 live births) (Table 5). Meanwhile, the number of abortions per 1,000 women aged 18-44 years was highest for women with a secondary education (12.8 per 1,000 women aged 18-44) and lowest for women who have graduated from college (6.6 per 1,000 women aged 18-44).

Three-quarters of abortions were to women who were unmarried (Table 4). Black women (87 percent) experienced the highest percentage of abortions to unmarried women, while Asian or Pacific Island women had the lowest percentage, 52.6 percent (Table 7). There was an inverse relationship between a woman's age and the percentage of abortions that were to unmarried women with older women making a diminishing percentage of unmarried abortions (Table 6). The abortion ratio and rate for unmarried women were 247.3 abortions per 1,000 live births and 12.7 abortions per 1,000 women aged 15-44 years, respectively (Table 5). The comparable numbers for married women were 41.2 and 2.7, respectively.

The number and percent of abortions by gestational age for selected characteristics of women who obtained abortions are presented in Table 8. For 2002-2007, nearly 6 in 10 (58.7 percent) abortions occurred prior to 9 weeks gestation. More than 85 percent of all abortions occurred at less than 13 weeks gestation. A very small percentage of abortions occurred beyond 16 weeks (3.5 percent). Figure 3 displays abortion timing by age group and indicates that older women were more likely to obtain

abortions during the first 8 weeks after becoming pregnant. Teen women were more likely than other age groups to obtain an abortion in the period 9-12 weeks (32.3 percent) or after the 13th week of gestation (13.0 percent). Generally speaking, women who were of Asian or Pacific Island descent, older, college educated, married, or primiparous were most likely to obtain abortions during the first 8 weeks of gestation.

Thirty-six percent of reported abortions were to women who had not had a previous live birth (Table 4). Of the remaining percentage of abortions that occurred to women with a previous live birth, those with one previous live birth accounted for 26.2 percent; women with two previous live births, 20.5 percent; women with three previous live births, 8.2 percent; and women with 4 or more previous live births, 3.6 percent. The abortion ratio was highest for women with two previous live births (145.9 per 1,000 live births) and lowest for women with one previous live birth (106.8 abortions per 1,000 live births) (data not shown).

Curettage, either suction or sharp, was the most common type of procedure for abortions over this period, accounting for more than 81 percent of abortions. Nonsurgical medical abortions, which involve the administration of medication to induce abortion, made up 10 percent of Oklahoma resident abortions. Dilation and evacuation amounted to just 3 percent of all abortions. The majority of curettage procedures were suction curettage (92 percent). Fifty-seven percent of curettage procedures occurred during the first 8 weeks of gestation (Table 8), while nearly all medical abortions occurred in the first 8 weeks of pregnancy, which is optimal for this type of procedure to be effective at inducing abortion. More than 80 percent of White, Black, and Asian or Pacific Island women who obtained an abortion did so by the curettage procedure (Table 7). American Indian women (19.7 percent) were most likely to use medical abortion than were other racial groups. Overall,

there was little difference by age in the proportion of women who obtained an abortion by curettage; however, a higher percentage of teenage women (8.9 percent) than those women aged 35 or older (5.8 percent) underwent a sharp curettage procedure when obtaining an abortion. The proportion of women electing a medical abortion increased with age (Table 6). Women with less than a high school education were most likely to obtain an abortion by curettage than were other education groups. College graduates had the highest proportion (17.6 percent) of all education levels to use medical abortion. There was little difference by marital status in the type of procedure used for abortion (data not shown).

Discussion

Oklahoma had 38,013 reported abortions in 2002-2007. More than half of these abortions were performed to residents in just two counties, Oklahoma County and Tulsa County. For the study period, resident births for these two counties represented 40.7 percent of all births in Oklahoma and 20.1 percent and 16.4 percent of the female childbearing population in Oklahoma and Tulsa counties, respectively. Thus, a much larger percentage of abortions were to female residents of these counties than population measures would suggest was expected. In part, this likely is a function of the relatively wider availability of abortion services to the female population of Oklahoma and Tulsa counties, given that the medical facilities providing such services are located within these counties boundaries. Yet other societal, cultural, and reproductive factors play a role and cannot be ruled out based on such limited data reported here.

The number and rate of abortions rose only slightly over the period 2002-2007. Conversely, the abortion ratio dropped modestly by about 6.9 percent. This decrease was driven by a faster growth in the number of births in Oklahoma. The number of births in the state

rose 9.2 percent over the study period. Meanwhile, the number of abortions rose by only 1.7 percent. This combination of different growth patterns produced the moderate decline in the abortion ratio. In a similar way, we can trace the marginal increase in the rate of abortions as a function of the quicker climb in the number of abortions relative to the decrease in the Oklahoma female childbearing population (-0.5 percent). Direct comparisons to national level abortion data are difficult due to the character of data collection. National reporting suffers from frequent changes in the geographic areas covered, as some states do not report abortion data, while others report data intermittently. As a consequence of the year-on-year changing in the number and mix of states making data available, national data are not provided in this report. However, general patterns in the U.S. measures indicate a downward trend in number, ratio, and rate of abortions.

There was little shifting in the demographic distribution of abortions for key characteristics. Neither age nor marital status experienced appreciable change over the time frame included in this analysis. Likewise previous birth history revealed little alteration in the distribution of abortions for primiparous or multiparous women. Slight change was evident in the proportion of abortions occurring to females with a college education. For each year of data included in the study, college graduates increased their proportion of all abortions, rising from 11.6 percent in 2002 to 14.5 percent in 2007. While not a strict monotonic increase, and one of lesser magnitude, females with some college credit experienced an overall climb in the proportion of abortions for which they contribute, increasing to 30.4 percent from 28.8 percent. These increases in proportions should be interpreted as general patterns and not as statistically significant changes for no significance testing was performed on these abortion data. In the Other racial group there was a sizable drop from 5.6 percent of all

abortions in 2002 to 0.4 percent of all abortions in 2007 (Table 4). This abrupt drop, much of which occurred within a single year, is likely due to changes in racial coding rather than a real decline in the fraction of abortions for which the Other racial category is a source.

Women less than 20 years of age were less likely to obtain their abortions during the first eight weeks of pregnancy, but slightly more likely to obtain an abortion at 9-10 weeks of pregnancy. For all other age groups, more than 60 percent received their abortions during the first 8 weeks of pregnancy with the highest proportion evident for women aged 35 years and older. This finding suggests a number of possible explanations for later receipt of abortion services among teenage women. Teen women may have less access to services due to parental consent requirements for obtaining legal abortion. This possibility may delay action on the part of the pregnant teen. Older women may be timelier in the identification of the signs or symptoms of pregnancy than younger women. This may be particularly true of multiparous women who have had experience with prior pregnancies. Prompt identification may lead to timelier decisions and earlier procurement of abortion services. Other possibilities, beyond the scope of the data provided here, are possible, including the mix of factors surrounding contraceptive use, intention of pregnancy, and the culture milieu in which pregnancies occur in Oklahoma.

Limitations

These abortion data were subject to a number of limitations. First, abortion data reported here reflect only those submitted from three licensed medical facilities. Abortions that occurred in other settings were not included in this report. For example, health care providers supplying patients in the office setting with medications that serve as abortifacients were excluded from this report because these records were not submitted to OSDH. It is likely that these

abortion statistics underestimate the true but unknown number of abortions in Oklahoma. Second, abortions occurring to Oklahoma residents outside the state were not submitted to OSDH for inclusion in the abortion database. Third, Oklahoma abortion data do not allow for the calculation of abortion-related mortality rates for women obtaining abortion services. Fourth, no information was available that details why Oklahoma women decide to have abortions. Fifth, data submitted by medical facilities may be incomplete. Sixth, due to the large number of missing or unknown values for Hispanic origin, abortion statistics were not included for the ethnicity of Oklahoma women. Seventh, these data, as important as they are in terms of documenting the most basic features of abortions, do not give a comprehensive assessment of the nature of abortion in Oklahoma. It is not possible with the current data to conduct in-depth analyses on the clinical, cultural, and economic aspects of the procedure and its impact on women and families and the public health system.

Finally, a comment on the disagreement between OSDH abortion statistics and those released by the Alan Guttmacher Institute (AGI) is necessary to address any confusion caused by the conflicting numbers. A principal difference in the two methods is that AGI actively surveys abortion providers with the intent of documenting the availability of abortion services. OSDH data are used for documenting the frequency and rate of abortions, the type of abortion procedures used, and the characteristics of women obtaining abortion services. It is likely that OSDH data under-estimate the true number and rate of abortions that occur in the state of Oklahoma. It is better to view the data from both sources as complementary, using each to gain an improved but not conclusive or comprehensive understanding of the nature of abortions and the women who receive them.

Table 1. Number of Legal Induced Abortions by Characteristics of Women: Oklahoma, 2002-2007

Characteristic	Total	2007	2006	2005	2004	2003	2002
Total	38,013	6,319	6,595	6,322	6,221	6,341	6,215
Age (yrs)							
<20	6,739	1,086	1,064	1,087	1,108	1,235	1,159
20-24	13,343	2,223	2,379	2,204	2,176	2,210	2,151
25-29	8,500	1,466	1,489	1,453	1,376	1,393	1,323
30-34	5,239	832	864	890	904	890	859
≥35	4,014	688	739	653	651	613	670
Race							
White	26,733	4,430	4,693	4,517	4,441	4,493	4,159
Black	7,264	1,314	1,272	1,252	1,145	1,138	1,143
American Indian	2,219	363	408	351	371	377	349
Asian or Pacific Islander	1,226	184	211	178	209	246	198
Other	571	28	11	24	55	87	366
Marital status							
Married	7,867	1,238	1,366	1,301	1,317	1,329	1,316
Unmarried	30,146	5,081	5,229	5,021	4,904	5,012	4,899
Education							
<HS	6,431	1,056	1,048	1,034	1,037	1,105	1,151
HS or GED	15,348	2,430	2,688	2,501	2,567	2,611	2,551
Some college	11,159	1,918	1,909	1,916	1,805	1,821	1,790
College graduate	5,073	915	950	870	811	804	723
Previous live births							
0	14,498	2,461	2,483	2,407	2,325	2,440	2,382
1	10,557	1,719	1,827	1,742	1,757	1,782	1,730
2	8,228	1,345	1,463	1,380	1,393	1,320	1,327
3	3,295	551	579	547	532	560	526
≥4	1,433	241	243	246	214	239	250

Table 2. Number, Ratio¹, and Rate² of Legal Induced Abortions: Oklahoma, 2002-2007

Year	Number	Live births	Ratio	Population³	Rate
Total	38,013	313,072	121.4	4,346,942	8.7
2007	6,319	54,946	115.0	724,996	8.7
2006	6,595	54,010	122.1	723,297	9.1
2005	6,322	51,775	122.1	720,869	8.8
2004	6,221	51,157	121.6	722,304	8.6
2003	6,341	50,874	124.6	727,029	8.7
2002	6,215	50,310	123.5	728,447	8.5
Percent change, 2002-2007	1.7	9.2	-6.9	-0.5	2.2

¹ Number of abortions per 1,000 live births

² Number of abortions per 1,000 female population aged 15-44 years

³ U.S. Census Bureau, number of females aged 15-44 years

Table 3. Number, Ratio¹, and Rate² of Legal Induced Abortions by County of Residence: Oklahoma, 2002-2007

County	Number	Ratio	Rate	County	Number	Ratio	Rate
Adair	56	24.7	2.1	LeFlore	174	39.2	3.1
Alfalfa	9	31.4	1.9	Lincoln	171	70.7	4.6
Atoka	18	18.3	1.2	Logan	248	92.9	5.5
Beaver	10	23.8	1.8	Love	31	44.0	3.2
Beckham	145	78.0	6.7	McClain	253	103.4	7.1
Blaine	53	60.3	4.8	McCurtain	42	14.4	1.1
Bryan	34	10.8	0.7	McIntosh	110	83.0	5.3
Caddo	228	88.5	6.7	Major	27	55.0	3.6
Canadian	966	120.9	8.0	Marshall	32	27.1	2.1
Carter	282	69.6	5.2	Mayes	242	74.0	5.3
Cherokee	350	92.5	5.8	Murray	66	67.3	4.6
Choctaw	30	22.3	1.7	Muskogee	701	115.1	8.3
Cimarron	5	26.7	1.8	Noble	51	59.7	4.2
Cleveland	2,564	156.4	8.1	Nowata	66	87.3	5.5
Coal	18	40.7	2.8	Okfuskee	73	85.0	6.1
Comanche	1,513	129.7	10.9	Oklahoma	12,421	174.3	14.2
Cotton	41	90.5	5.8	Okmulgee	377	114.9	8.2
Craig	115	102.9	7.0	Osage	264	96.7	5.2
Creek	566	107.2	7.1	Ottawa	170	64.2	4.5
Custer	232	99.9	6.6	Pawnee	121	97.0	6.5
Delaware	128	46.5	3.0	Payne	829	158.1	7.1
Dewey	26	74.9	6.1	Pittsburg	228	70.9	5.0
Ellis	14	47.5	4.1	Pontotoc	237	77.7	5.3
Garfield	436	79.5	6.6	Pottawatomie	514	93.2	5.8
Garvin	199	90.7	6.5	Pushmataha	31	37.3	2.4
Grady	324	83.6	5.3	Roger Mills	14	48.3	4.9
Grant	9	35.6	1.9	Rogers	554	95.6	5.6
Greer	19	50.0	3.9	Seminole	136	62.9	4.9
Harmon	-	-	-	Sequoyah	181	53.9	3.7
Harper	9	32.6	2.8	Stephens	202	60.8	4.3
Haskell	46	45.7	3.4	Texas	27	11.6	1.1
Hughes	50	47.0	3.7	Tillman	34	49.6	3.8
Jackson	178	65.3	5.4	Tulsa	9,420	166.4	13.2
Jefferson	19	38.0	2.8	Wagoner	357	73.9	4.5
Johnston	31	35.5	2.6	Washington	322	89.5	5.9
Kay	172	41.2	3.4	Washita	58	61.1	4.6
Kingfisher	93	78.7	5.8	Woods	28	51.7	2.9
Kiowa	37	52.7	3.8	Woodward	142	83.8	6.7
Latimer	31	45.8	2.3				

¹Number of abortions per 1,000 live births

²Number of abortions per 1,000 female population aged 15-44 years

Table 4. Percent of Legal Induced Abortions by Characteristics of Women: Oklahoma 2002-2007

Characteristic	Total	2007	2006	2005	2004	2003	2002
Age (yrs)							
<20	16.8	16.4	15.1	16.5	16.5	18.6	18.0
20-24	33.3	33.6	33.9	33.4	32.4	33.3	33.4
25-29	21.2	22.2	21.2	22.0	20.5	21.0	20.5
30-34	13.1	12.6	12.3	13.5	13.5	13.4	13.3
≥35	10.0	10.4	10.5	9.9	9.7	9.2	10.4
Race							
White	66.5	66.7	66.2	68.0	66.2	67.6	64.0
Black	18.1	19.8	17.9	18.9	17.1	17.1	17.6
American Indian	5.5	5.5	5.8	5.3	5.5	5.7	5.4
Asian or Pacific Islander	3.0	2.8	3.0	2.7	3.1	3.7	3.0
Other	1.4	0.4	0.2	0.4	0.8	1.3	5.6
Marital status							
Married	19.6	18.6	19.3	19.6	19.6	20.0	20.2
Unmarried	74.9	76.5	73.8	75.6	73.1	75.4	75.4
Education							
<HS	16.9	16.7	15.9	16.4	16.7	17.4	18.5
HS or GED	40.4	38.5	40.8	39.6	41.3	41.2	41.0
Some college	29.4	30.4	28.9	30.3	29.0	28.7	28.8
College graduate	13.3	14.5	14.4	13.8	13.0	12.7	11.6
Previous live births							
0	36.0	37.1	35.0	36.2	34.6	36.7	36.6
1	26.2	25.9	25.8	26.2	26.2	26.8	26.6
2	20.5	20.3	20.6	20.8	20.8	19.9	20.4
3	8.2	8.3	8.2	8.2	7.9	8.4	8.1
≥4	3.6	3.6	3.4	3.7	3.2	3.6	3.8

Table 5. Number, Ratio¹, and Rate² of Legal Induced Abortions by Characteristics of Women: Oklahoma, 2002-2007

Characteristic	Number	Live births	Ratio	Population ³	Rate
Total	38,013	313,072	121.4	4,346,942	8.7
Race					
White	26,733	243,200	109.9	3,410,035	7.8
Black	7,264	28,885	251.5	404,506	18.0
American Indian	2,219	34,261	64.8	429,759	5.2
Asian or Pacific Islander	1,226	6,726	182.3	102,642	11.9
Age (yrs)					
<20	6,739	43,168	156.1	1,452,380	4.6
20-24	13,343	104,597	127.6	793,888	16.8
25-29	8,500	87,060	97.6	709,536	12.0
30-34	5,239	52,576	99.6	665,902	7.9
≥35	4,014	25,637	156.6	1,446,617	2.8
Education⁴					
<HS	6,431	71,201	90.3	549,828	11.7
HS or GED	15,348	115,906	132.4	1,199,914	12.8
Some college	11,159	64,807	172.2	1,332,429	8.7
College graduate	5,073	59,786	84.9	769,096	6.6
Marital Status⁵					
Married ⁶	7,867	191,110	41.2	2,869,361	2.7
Unmarried ⁷	30,146	121,889	247.3	2,366,729	12.7

¹Number of abortions per 1,000 live births

²Number of abortions per 1,000 female population aged 15-44

³U.S. Census Bureau, number of females aged 15-44

⁴Includes females aged 18-44 years

⁵Number of abortions per 1,000 female population aged 15-50

⁶Now married including spouse absent

⁷Never married, widowed, divorced

Table 6. Number and Percent (%) of Abortions by Age Group and Selected Characteristics: Oklahoma, 2002-2007

Characteristic	Age group (yrs)				
	<20	20-24	25-29	30-34	≥35
Race					
White	4,805 (71.3)	9,369 (70.2)	5,738 (67.5)	3,661 (69.9)	3,026 (75.4)
Black	1,255 (18.6)	2,688 (20.1)	1,839 (21.6)	930 (17.8)	520 (13.0)
American Indian	491 (7.3)	780 (5.8)	492 (5.8)	276 (5.3)	177 (4.4)
Asian or Pacific Islander	99 (1.5)	337 (2.5)	280 (3.3)	274 (5.2)	231 (5.8)
Other	89 (1.3)	169 (1.3)	151 (1.8)	98 (1.9)	60 (1.5)
Education					
<HS	3,169 (47.0)	1,610 (12.1)	894 (10.5)	426 (8.1)	305 (7.6)
HS or GED	2,361 (35.0)	5,715 (42.8)	3,499 (41.2)	2,086 (39.8)	1,618 (40.3)
Some college	1,191 (17.7)	4,914 (36.8)	2,550 (30.0)	1,468 (28.0)	985 (24.5)
College graduate	18 (0.3)	1,103 (8.3)	1,556 (18.3)	1,259 (24.0)	1,106 (27.6)
Marital status					
Married	227 (3.4)	1,886 (14.1)	2,280 (26.8)	1,810 (34.5)	1,634 (40.7)
Unmarried	6,512 (96.6)	11,457 (85.9)	6,220 (73.2)	3,429 (65.5)	2,380 (59.3)
Previous live births					
0	5,400 (80.1)	5,954 (44.6)	1,940 (22.8)	725 (13.8)	407 (10.1)
1	1,106 (16.4)	4,478 (33.6)	2,587 (30.4)	1,392 (26.6)	943 (23.5)
2	203 (3.0)	2,231 (16.7)	2,542 (29.9)	1,758 (33.6)	1,459 (36.3)
3	21 (0.3)	551 (4.1)	1,033 (12.2)	918 (17.5)	758 (18.9)
≥4	9 (0.1)	129 (1.0)	397 (4.7)	445 (8.5)	447 (11.1)
Previous induced abortions					
0	5,841 (86.7)	9,094 (68.2)	4,621 (54.4)	2,582 (49.3)	2,012 (50.1)
1	789 (11.7)	3,145 (23.6)	2,513 (29.6)	1,631 (31.1)	1,224 (30.5)
2	95 (1.4)	807 (6.0)	857 (10.1)	617 (11.8)	473 (11.8)
≥3	14 (0.2)	297 (2.2)	508 (6.0)	408 (7.8)	305 (7.6)
Gestational age (wks)					
≤8	3,684 (54.7)	8,217 (61.6)	5,431 (63.9)	3,436 (65.6)	2,712 (67.6)
9-10	1,470 (21.8)	2,481 (18.6)	1,553 (18.3)	919 (17.5)	665 (16.6)
11-12	707 (10.5)	1,343 (10.1)	792 (9.3)	460 (8.8)	300 (7.5)
13-15	546 (8.1)	829 (6.2)	446 (5.2)	259 (4.9)	205 (5.1)
≥16	331 (4.9)	472 (3.5)	278 (3.3)	165 (3.1)	131 (3.3)
Type of Procedure					
Curettage	5,638 (83.8)	10,754 (80.8)	6,897 (81.3)	4,197 (80.3)	3,145 (78.4)
Suction	5,042 (74.9)	9,867 (74.1)	6,416 (75.6)	3,893 (74.5)	2,912 (72.6)
Sharp	596 (8.9)	887 (6.7)	481 (5.7)	304 (5.8)	233 (5.8)
RU-486	559 (8.3)	1,385 (10.4)	932 (11.0)	610 (11.7)	553 (13.8)
Dilation and evacuation	275 (4.1)	445 (3.3)	235 (2.8)	140 (2.7)	110 (2.7)
Other	259 (3.8)	729 (5.5)	421 (5.0)	277 (5.3)	201 (5.0)

Table 7. Number and Percent (%) of Legal Induced Abortions by Race and Selected Characteristics: Oklahoma, 2002-2007

Characteristic	Race				
	White	Black	Am. Indian	Asian or P.I.	Other
Age (yrs)					
<20	4,805 (18.1)	1,255 (17.4)	491 (22.2)	99 (8.1)	89 (15.7)
20-24	9,369 (35.2)	2,688 (37.2)	780 (35.2)	337 (27.6)	169 (29.8)
25-29	5,738 (21.6)	1,839 (25.4)	492 (22.2)	280 (22.9)	151 (26.6)
30-34	3,661 (13.8)	930 (12.9)	276 (12.5)	274 (22.4)	98 (17.3)
≥35	3,026 (11.4)	520 (7.2)	177 (8.0)	231 (18.9)	60 (10.6)
Education					
<HS	4,724 (17.7)	995 (13.7)	420 (18.9)	148 (12.1)	144 (25.2)
HS or GED	10,715 (40.1)	2,953 (40.7)	1,050 (47.3)	418 (34.1)	212 (37.1)
Some college	7,760 (29.0)	2,458 (33.8)	497 (22.4)	326 (26.6)	118 (20.7)
College graduate	3,532 (13.2)	858 (11.8)	252 (11.4)	334 (27.2)	97 (17.0)
Marital Status					
Married	5,720 (21.4)	943 (13.0)	437 (19.7)	581 (47.4)	186 (32.6)
Unmarried	21,013 (78.6)	6,321 (87.0)	1,782 (80.3)	645 (52.6)	385 (67.4)
Previous Live Births					
0	10,713 (40.1)	2,225 (30.6)	806 (36.3)	548 (44.7)	206 (36.1)
1	7,286 (27.3)	2,270 (31.3)	609 (27.4)	242 (19.7)	150 (26.3)
2	5,717 (21.4)	1,599 (22.0)	486 (21.9)	284 (23.2)	142 (24.9)
3	2,172 (8.1)	768 (10.6)	214 (9.6)	95 (7.7)	46 (8.1)
≥4	843 (3.2)	402 (5.5)	104 (4.7)	57 (4.6)	27 (4.7)
Previous Induced Abortions					
0	17,391 (65.1)	4,274 (58.8)	1,418 (63.9)	777 (63.4)	413 (72.3)
1	6,443 (24.1)	1,908 (26.3)	558 (25.1)	314 (25.6)	114 (20.0)
2	1,903 (7.1)	666 (9.2)	183 (8.2)	78 (6.4)	29 (5.1)
≥3	994 (3.7)	416 (5.7)	60 (2.7)	57 (4.6)	15 (2.6)
Gestational Age (wks)					
≤8	17,297 (64.7)	3,950 (54.4)	1,073 (48.4)	899 (73.3)	377 (66.0)
9-10	4,764 (17.8)	1,588 (21.9)	495 (22.3)	183 (14.9)	93 (16.3)
11-12	2,360 (8.8)	841 (11.6)	308 (13.9)	73 (6.0)	40 (7.0)
13-15	1,424 (5.3)	570 (7.8)	212 (9.6)	42 (3.4)	43 (7.5)
≥16	885 (3.3)	315 (4.3)	131 (5.9)	29 (2.4)	18 (3.1)
Type of Procedure					
Curettage	21,484 (80.5)	6,156 (84.9)	1,675 (75.7)	1,009 (82.5)	462 (81.3)
Suction	19,807 (74.2)	5,645 (77.9)	1,423 (64.3)	962 (78.7)	444 (78.2)
Sharp	1,677 (6.3)	511 (7.0)	252 (11.4)	47 (3.8)	18 (3.2)
RU-486	3,013 (11.3)	463 (6.4)	437 (19.7)	107 (8.7)	34 (6.0)
Dilation and evacuation	771 (2.9)	319 (4.4)	69 (3.1)	27 (2.2)	24 (4.2)
Other	1,417 (5.3)	312 (4.3)	33 (1.5)	80 (6.5)	48 (8.5)

Table 8. Number and Percent (%) of Legal Induced Abortions by Gestational Age and Selected Female Characteristics: Oklahoma, 2002-2007

Characteristic	Gestational age (wks)				
	≤8	9-10	11-12	13-15	≥16
Total	23,596 (58.7)	7,123 (17.7)	3,622 (9.0)	2,291 (5.7)	1,378 (3.5)
Race					
White	17,297 (64.7)	4,764 (17.8)	2,360 (8.8)	1,424 (5.3)	885 (3.3)
Black	3,950 (54.4)	1,588 (21.9)	841 (11.6)	570 (7.8)	315 (4.3)
American Indian	1,073 (48.4)	495 (22.3)	308 (13.9)	212 (9.6)	131 (5.9)
Asian or Pacific Islander	899 (73.3)	183 (14.9)	73 (6.0)	42 (3.4)	29 (2.4)
Other	377 (66.0)	93 (16.3)	40 (7.0)	43 (7.5)	18 (3.2)
Age					
<20	3,684 (54.7)	1,470 (21.8)	707 (10.5)	546 (8.1)	331 (4.9)
20-24	8,217 (61.6)	2,481 (18.6)	1,343 (10.1)	829 (6.2)	472 (3.5)
25-29	5,431 (63.9)	1,553 (18.3)	792 (9.3)	446 (5.2)	278 (3.3)
30-34	3,436 (65.6)	919 (17.5)	460 (8.8)	259 (4.9)	165 (3.1)
≥35	2,712 (67.6)	665 (16.6)	300 (7.5)	205 (5.1)	131 (3.3)
Education					
<HS	3,506 (54.5)	1,416 (22.0)	722 (11.2)	494 (7.7)	293 (4.6)
HS or GED	8,755 (57.0)	3,097 (20.2)	1,636 (10.7)	1,148 (7.5)	711 (4.6)
Some college	7,649 (68.6)	1,865 (16.7)	927 (8.3)	460 (4.1)	256 (2.3)
College graduate	3,125 (71.5)	673 (15.4)	302 (6.9)	173 (4.0)	100 (2.3)
Marital Status					
Married	5,268 (67.0)	1,389 (17.7)	621 (7.9)	359 (4.6)	229 (2.9)
Unmarried	18,328 (60.8)	5,734 (19.0)	3,001 (10.0)	1,932 (6.4)	1,149 (3.8)
Previous live births					
0	9,392 (64.8)	2,573 (17.7)	1,171 (8.1)	840 (5.8)	521 (3.6)
1	6,397 (60.6)	1,994 (18.9)	1,120 (10.6)	663 (6.3)	382 (3.6)
2	5,149 (62.6)	1,546 (18.8)	789 (9.6)	468 (5.7)	275 (3.3)
3	1,933 (58.7)	674 (20.5)	353 (10.7)	203 (6.2)	132 (4.0)
≥4	724 (50.5)	335 (23.4)	189 (13.2)	117 (8.2)	68 (4.7)
Previous Induced Abortions					
0	15,145 (62.4)	4,507 (18.6)	2,242 (9.2)	1,477 (6.1)	899 (3.7)
1	5,756 (61.6)	1,758 (18.8)	932 (10.0)	560 (6.0)	331 (3.5)
2	1,714 (60.0)	564 (19.7)	300 (10.5)	177 (6.2)	104 (3.6)
≥3	980 (63.6)	293 (19.0)	148 (9.6)	77 (5.0)	44 (2.9)
Type of Procedure					
Curettage	17,572 (57.1)	7,094 (23.0)	3,579 (11.6)	1,606 (5.2)	933 (3.0)
Suction	17,155 (60.7)	6,966 (24.6)	3,504 (12.4)	453 (1.6)	201 (0.7)
Sharp	417 (16.6)	128 (5.1)	75 (3.0)	1,153 (46.0)	732 (29.2)
RU-486	4,040 (99.7)	5 (0.1)	5 (0.1)	-	-
Dilation and evacuation	49 (4.0)	16 (1.3)	36 (3.0)	674 (55.7)	435 (36.0)
Other	1,873 (99.2)	7 (0.4)	-	5 (0.3)	-

Figure 1. Abortion ratio* by age group for women who obtained a legal abortion: Oklahoma, 2002-2007

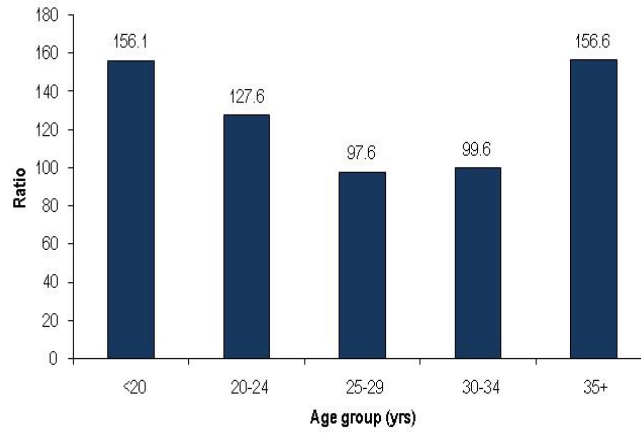
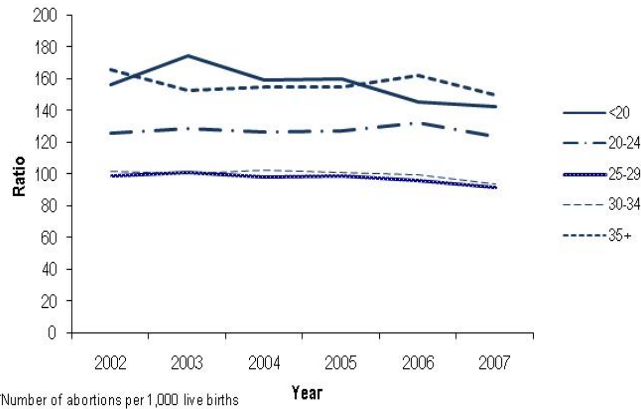
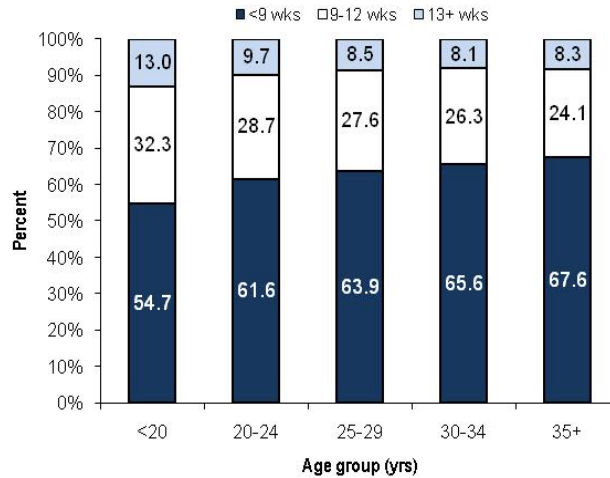


Figure 2. Abortion ratio* by age group for women who obtained a legal abortion: Oklahoma, 2002-2007



*Number of abortions per 1,000 live births

Figure 3. Percentage of women by timing of abortion and age group: Oklahoma, 2002-2007



Acknowledgments

Terry L. Cline, PhD
Commissioner of Health

Kelly M. Baker, MPH
Director, Center for Health Statistics

Author

Paul H. Patrick, MPH
Senior Analyst, Health Care Information

Reviewer

Jennifer L. Han, PhD
Staff Analyst, Health Care Information

