

Terminated Pregnancy Report 2016



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Terminated Pregnancy Report

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Division of Vital Records

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Disclaimer

This report seeks to provide a comprehensive analysis of the occurrence of pregnancy termination in the state by focusing on the occurrence of terminations and multi-year trending. Trends identified in this report are based on data collected since 2012.

Due to the required publication of this report by mid-year, a cut-off date was established to create a 2016 dataset for analysis. As such, there is the possibility that reports were submitted after this cut-off and were not included in the analysis; this may cause the number of terminations for the year to be slightly lower than the true total.

The analysis presented in this report is not comparable to the results of state reports of terminated pregnancies prior to 2014. Data analyses presented in this report for 2012 and 2013 will not match results for these years previously published due to the change in analysis.

Analyses conducted by the Centers for Disease Control and Prevention (CDC) that are referenced in this report were subject to data availability at the federal level. For details, please refer to the original document released by the CDC.¹

Executive Summary

The Terminated Pregnancy Report for Indiana is produced annually to provide a comprehensive overview of terminations performed in Indiana throughout the previous year. Data is reported to the Indiana State Department of Health Division of Vital Records (ISDH) in accordance with Indiana Code § 16-34-2.

The 2016 reporting year was the first year that reports were collected using an online reporting system, in accordance with Indiana Code § 16-34-2-5.5.

For the past five years (2012-2016), the counts and rates of terminated pregnancy occurrences, regardless of residence, have decreased. The total number of resident terminations from 2012 to 2016 has decreased by approximately 1,500, resulting in a rate decrease of 1.2 terminations per 1,000 residents of childbearing age.

During calendar year 2016, 7,277 pregnancy terminations were reported by physicians to the ISDH, at the time of analysis. Of these terminations, 6,767 (93.0%) were Indiana residents.

Terminations by Year, 2012–2016		
Year	Total Count	Resident Count
2012	8,808	8,272
2013	8,179	7,596
2014	8,118	7,621
2015	7,957	7,487
2016	7,277	6,767

The most recent U.S. Census data estimates that 1,296,510 women of childbearing age (15–44 years) lived in Indiana in 2015.⁴ Based on this estimation, the termination rate for Indiana residents in 2016 was 5.2 terminations per 1,000 women aged 15–44.

Terminations at abortion clinics accounted for 99.45% of procedures, and reported terminations were performed in four counties: Lake, Marion, Monroe, and Tippecanoe. Of these, Marion County had the most, accounting for 66.11% of terminations; Tippecanoe County had the fewest, accounting for only 2.36% of terminations.

Of the women receiving terminations in 2016, 88.44% were unmarried. Reports show that 33.92% of women reported a high school diploma or General Educational Development (GED) as the highest level of education they completed at the time of procedure. This follows the same pattern seen from 2012 to 2015.

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Introduction

The Centers for Disease Control and Prevention (CDC) has reported on abortion surveillance since 1969. Annually, CDC requests data from throughout the United States; however, participation by health agencies is voluntary.¹ The Indiana State Department of Health Division of Vital Records (ISDH) has provided data to CDC since 1973.⁹ The most recently reported abortion numbers, rates (number of abortions per 1,000 women aged 15-44 years), and ratios (number of abortions per 1,000 live births) for the United States during the time frame 2004–2013 are shown in Table 1.

Table 1. Number, percentage, rate, and ratio of reported abortions – selected reporting areas, United States, 2004–2013¹					
Year	Selected reporting areas[§]	Continuously reporting areas[¶]			
	Count	Count	Percent^{**}	Rate	Ratio
2004	839,226	817,906	97.5	15.9	241
2005	820,151	807,680	98.5	15.7	236
2006	852,385 ^{††}	834,615	97.9	16.2	237
2007	827,609	818,923	99.0	15.8	229
2008	825,564	816,765	98.9	15.8	232
2009	789,217 ^{§§}	779,278	98.7	15.0	227
2010	765,651	754,780	98.6	14.6	227
2011	730,322	719,530	98.5	13.9	219
2012	699,202	688,149	98.4	13.2	210
2013	664,435	652,582	98.2	12.5	200

[§] For each given year, excludes reporting areas that did not report that year's abortion numbers to CDC: California (2004-2013), Louisiana (2005), Maryland (2007-2013), New Hampshire (2004-2013), and West Virginia (2004).

[¶] Only includes areas that reported abortion counts every year during the period of analysis (2003-2012).

^{**} Abortions from areas that reported every year during 2004-2013 as a percentage of all reported abortions.

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

^{§§} This number is greater than reported in the 2009 report because of numbers subsequently provided by Delaware.

Indiana Reporting Requirements

Reports were submitted through the Indiana State Health Gateway Terminated Pregnancy Reporting Application (Appendix A). Upon submission, all reports were reviewed for completeness; completed reports were accepted and incomplete forms were rejected to the physician for correction.

The performance of, and reporting requirements for, terminated pregnancy in Indiana are governed by Indiana Code Title 16, Article 34, Chapter 2 (§ 16-34-2).³ The pertinent Indiana Code can be found in its entirety at <https://iga.in.gov/legislative/laws/2016/ic/titles/016/articles/034/chapters/002/>.

Trends in Indiana

During calendar year 2016, 7,277 pregnancy terminations were reported by physicians to the ISDH, at the time of analysis. Of these terminations, 6,767 (92.9%) were Indiana residents.

The decrease in the total number of terminations performed in Indiana from 2012 to 2016 can be seen in Figure 1.

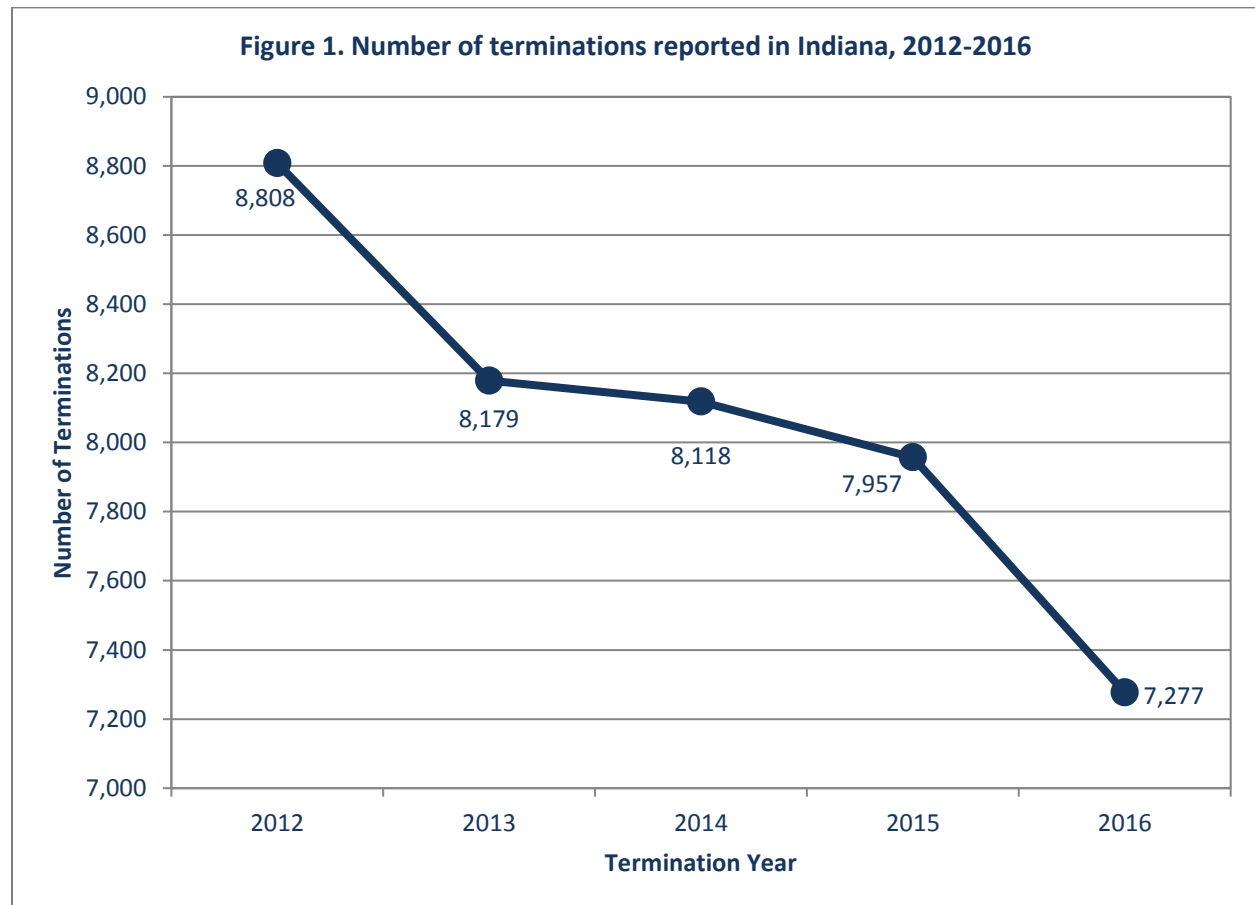


Table 2 shows the number of terminations among Indiana residents of childbearing age and the associated rates from 2012 to 2016. As rates are only based on Indiana residents, data is also provided to identify the percentage of all terminations reported that were Indiana residents. The count used to determine the rate is the number of Indiana residents receiving terminations from all reported terminations in Indiana.

Year	Count	Population Est. [§]	Rate [†]	Percent [¶]
2012	8,272	1,287,150	6.4	93.9
2013	7,596	1,292,138	5.9	92.9
2014	7,621	1,295,431	5.9	93.9
2015	7,487	1,296,510	5.8	94.1
2016	6,767	1,296,510*	5.2	93.0

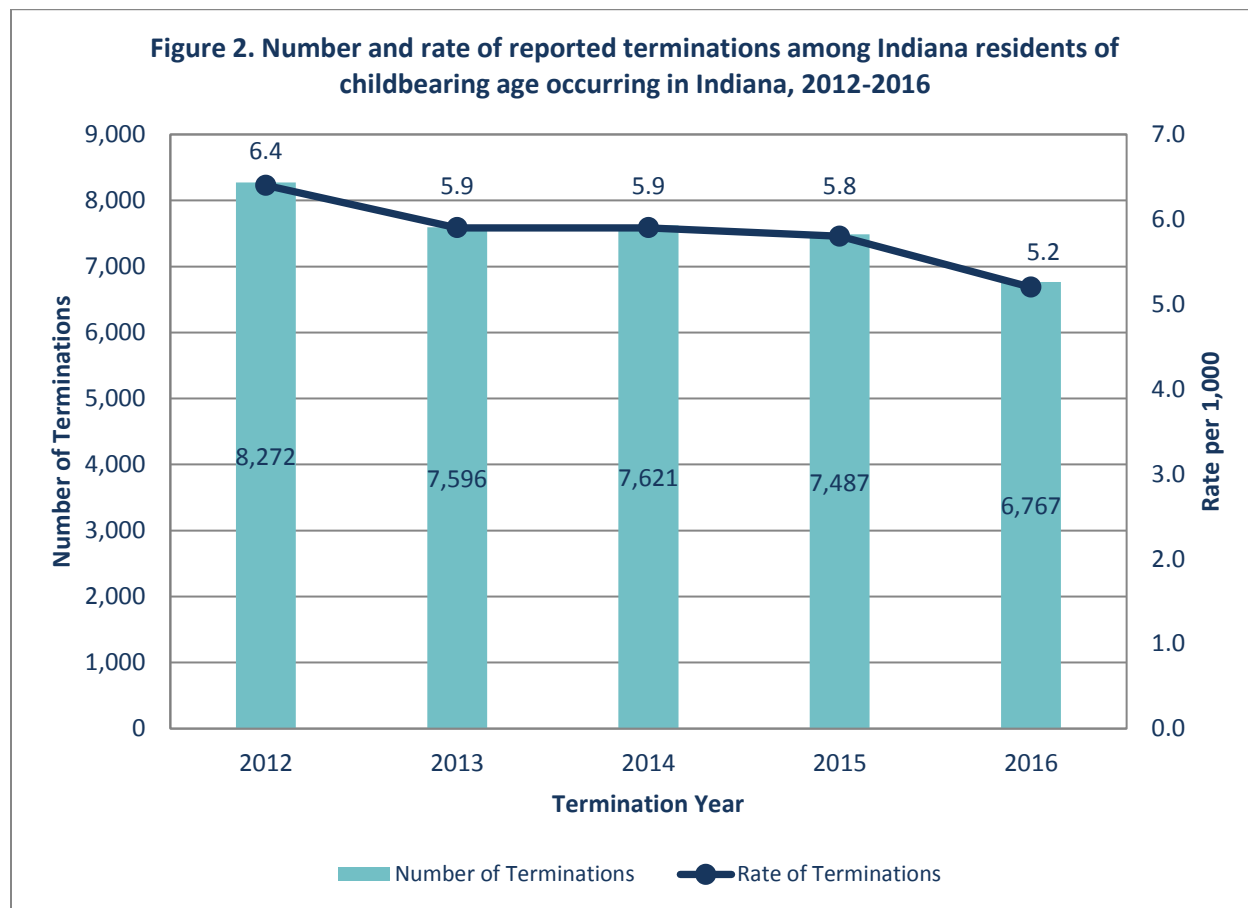
[§] Estimation of females aged 15–44 that were Indiana residents during the specified year.⁴

* Estimation based on the most recent year available at the time of publication, 2015.

[†] Rate per 1,000.

[¶] Percent of total terminations reported to the Indiana State Department of Health for the specified year.

For the past five years (2012-2016), the counts and rates of terminated pregnancy occurrences, regardless of residence, have decreased; the percentage of all terminations among Indiana residents has also dropped.



As seen in Figure 2, the total number of resident terminations from 2012 to 2016 decreased by approximately 1,500, resulting in a rate decrease of 1.2 terminations per 1,000 residents of childbearing age. From 2012 to 2016, the number of resident terminations decreased by 10.0%; a 5.05% decrease from 2015 to 2016 accounts for half of the total five-year decrease.

Methodology

The data and information presented in this report resulted from the statutory requirements established by Indiana Code § 16-34.³

Data Source

The data source for this report was the electronic Indiana State Health Gateway Terminated Pregnancy Reporting Application database. For the years 2012 through 2015, data was entered into this system by ISDH personnel from official reports received by mail. As of January 1, 2016, all reports are submitted to the ISDH through the system by external reporting entities.

Included in this report are analyses of demographic information provided by the patient, as well as medical information collected from reports. Demographic information is self-reported by the patient and includes:

- Age;
- Marital status;
- Education level;
- Race;
- Ethnicity;
- County of residence (if an Indiana resident);
- State of residence.

Some medically relevant information is also reported by the patient, including the number of previous live births living, the number of previous live births deceased, the number of previous spontaneous terminations, the number of previous induced terminations excluding the termination being reported, dates of all past terminations, spontaneous and induced, and the date last normal menses began.

Medical information collected on reports regarding the present termination is completed by the physician. This information includes:

- Date of termination;
- Fetus delivered alive;
- Length of fetal survival if delivered alive;
- Viability of fetus;
- Reason for termination if viable;
- Completion of a pathological examination of the fetus;
- Results if pathological examination performed;
- Procedure employed for termination;
- Complications of the termination;
- Result in maternal death;
- Estimated gestational age and/or post-fertilization age;
- Method used to determine gestational age.

Other information reported includes the name of the facility where the termination was completed, the city or town of termination, the county of termination, the physician's full name, address, and signature, and the name and age of the father, if known. Reports do not include personally identifiable information.

Measures

Measures in this report are primarily consistent with CDC categorizations and definitions.

Aggregate counts of terminated pregnancies reported are for the following variables:

- Termination by month (Indiana resident, non-resident);
- Woman's age in years (10-14, 15-17, 18-19, 20-24, 25-29, 30-34, 35-39, 40-44, ≥ 45);
- Race (White, Black/African American, American Indian/Alaska Native, Pacific Islander/Native Hawaiian, Multiple Races, Other Race);
- Ethnicity (Hispanic/Latino, non-Hispanic/non-Latino, unknown);
- Marital status (married or unmarried);
- Education level (8th grade or less, 9th-12th grade but no diploma, high school diploma or GED, some college credit but no degree, Associate's Degree, Bachelor's Degree, Master's Degree, Doctoral or Professional Degree);
- Pregnancy history (0, 1, 2, ≥ 3);
- Procedure (Dilation & Evacuation, Mifepristone/Misoprostol, Suction Curettage, Medical (Non-Surgical), Menstrual Aspiration, Unknown);
- Facility (Facility where termination performed);
- Estimated gestational age in weeks at the time of termination (≤ 8 , 9-13, 14-15, 16-17, 18-20);
- County of termination (county where termination performed);
- County of residence (Indiana residents only).

In addition to aggregate data, cross-tabulations are also provided in this report. Reported cross-tabulations include age by race, adolescent age by race, procedure by facility type, and gestational age by procedure.

Figures are also shown for trending of data from 2012 to 2016 or to compare 2016 data across demographics. These figures demonstrate trends in age, race, ethnicity, marital status, education, pregnancy history, procedure, and gestational age.

Variables for race and ethnicity are based on specifications established by the Federal Office of Management and Budget (OMB). Women receiving terminations were asked to identify their ethnicity (i.e. Hispanic/Latino or non-Hispanic/non-Latino) and race. Race identification is based on five standard categories: White, Black/African American, Asian, American Indian/Alaska Native, and Pacific Islander/Native Hawaiian. If one of these OMB categories does not apply, women may identify as Other.²

Aggregate data for race is presented based on 1997 OMB standards; however, some analyses, such as cross-tabulations, were conducted with non-standard race categories. This change was made to provide a more accurate representation of the differences between races when analyzing particular variables.

Table 3. Equivalence of race categories in this report	
1997 OMB Standards	Non-Standard Race Categories
White	White
Black / African American	Black
Asian	Other
American Indian / Alaska Native	Other
Pacific Islander / Native Hawaiian	Other
Other	Other

Analytic Procedures

Counts and percentages were calculated using SAS statistical software, version 9.4. Univariate and bivariate statistics are presented where applicable.

Ratios are not provided in this analysis due to the fact that Indiana's 2016 natality file will not be considered complete until mid-2017.

Some records were removed from the dataset for reasons such as duplication or incomplete procedures prior to analysis. There were records that were submitted as terminations; however, receipt of a new record informed the ISDH that the original procedure had been unsuccessful and a new procedure was conducted to complete the termination. In these cases, the initial record has been removed from the dataset, as a termination was not completed in association with the record, and the new record was maintained to account for a completed termination.

Results

During 2016, 7,277 terminations were reported to the ISDH. Of these terminations, 6,767 were residents of Indiana. The most recent U.S. Census data estimates that 1,296,510 women of childbearing age (15–44 years) lived in Indiana in 2015.⁴ Based on this estimation, the termination rate for Indiana residents in 2016 was 5.2 terminations per 1,000 women aged 15–44. Table 4 provides a breakdown of the number of terminations among resident and non-resident women who received terminations in Indiana in 2016 by month.

Table 4. Terminations among resident and non-resident women in Indiana by Month, 2016		
Month	Resident Terminations (n = 6,767)	Non-Resident Terminations (n = 510)
January	599	34
February	607	49
March	687	54
April	661	35
May	566	55
June	552	61
July	549	52
August	530	28
September	530	49
October	476	33
November	502	18
December	508	42

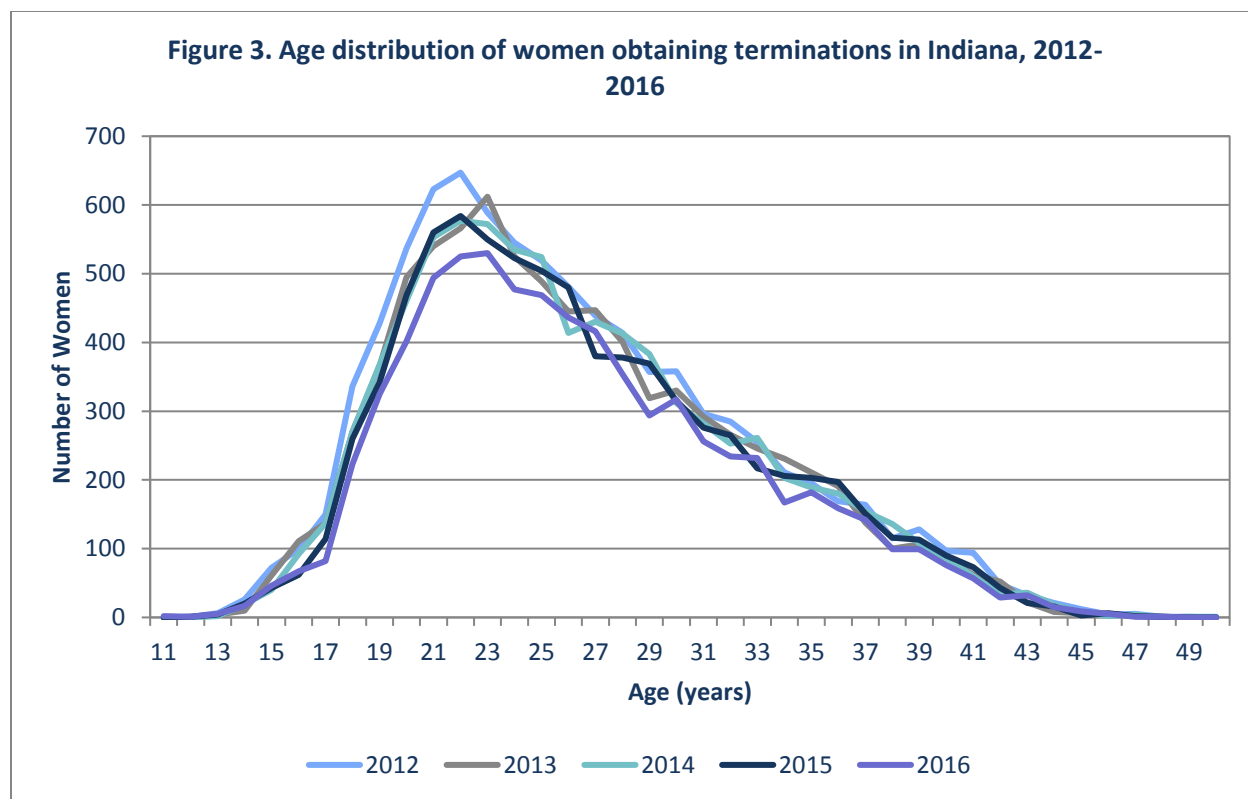
Demographic Information of Women Receiving Terminations

Demographic information collected and analyzed for this report includes age, race, ethnicity, marital status, and education level of the women receiving terminations in Indiana in 2016.

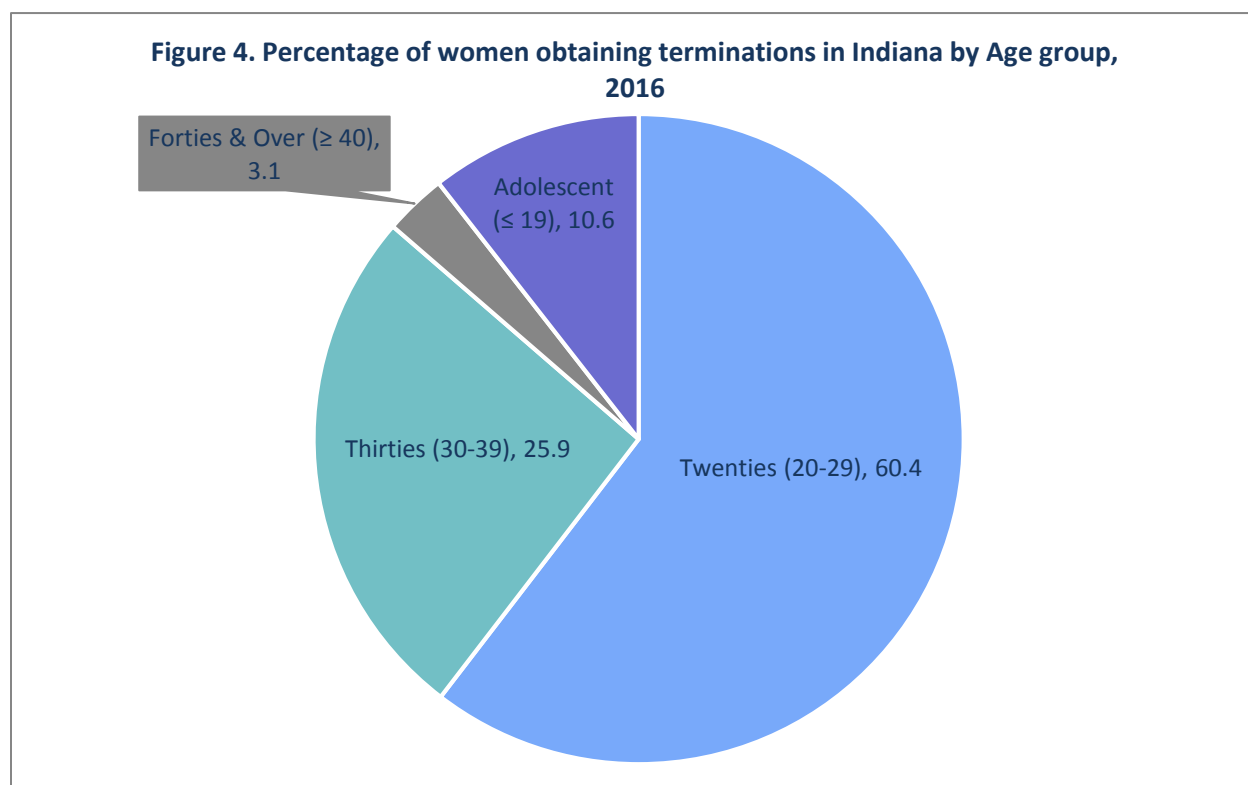
Age

The age range for women receiving terminations in Indiana in 2016 was 11 to 48 years. The average age of a woman who obtained a termination was 26.5 years (SD = 6.1 years), with a median age of 25 years.

Table 5. Age distribution of women obtaining terminations in Indiana, 2016		
Age (years)	Count	Percent
10-14	25	0.34
15-17	195	2.68
18-19	548	7.53
20-24	2,428	33.37
25-29	1,969	27.06
30-34	1,206	16.57
35-39	681	9.36
40-44	209	2.87
≥ 45	16	0.22
Total	7,277	100.0



Approximately 60% of terminations were performed for women in their twenties (20–29 years). Women aged forty and older had the smallest percentage of terminations, 3.09%.

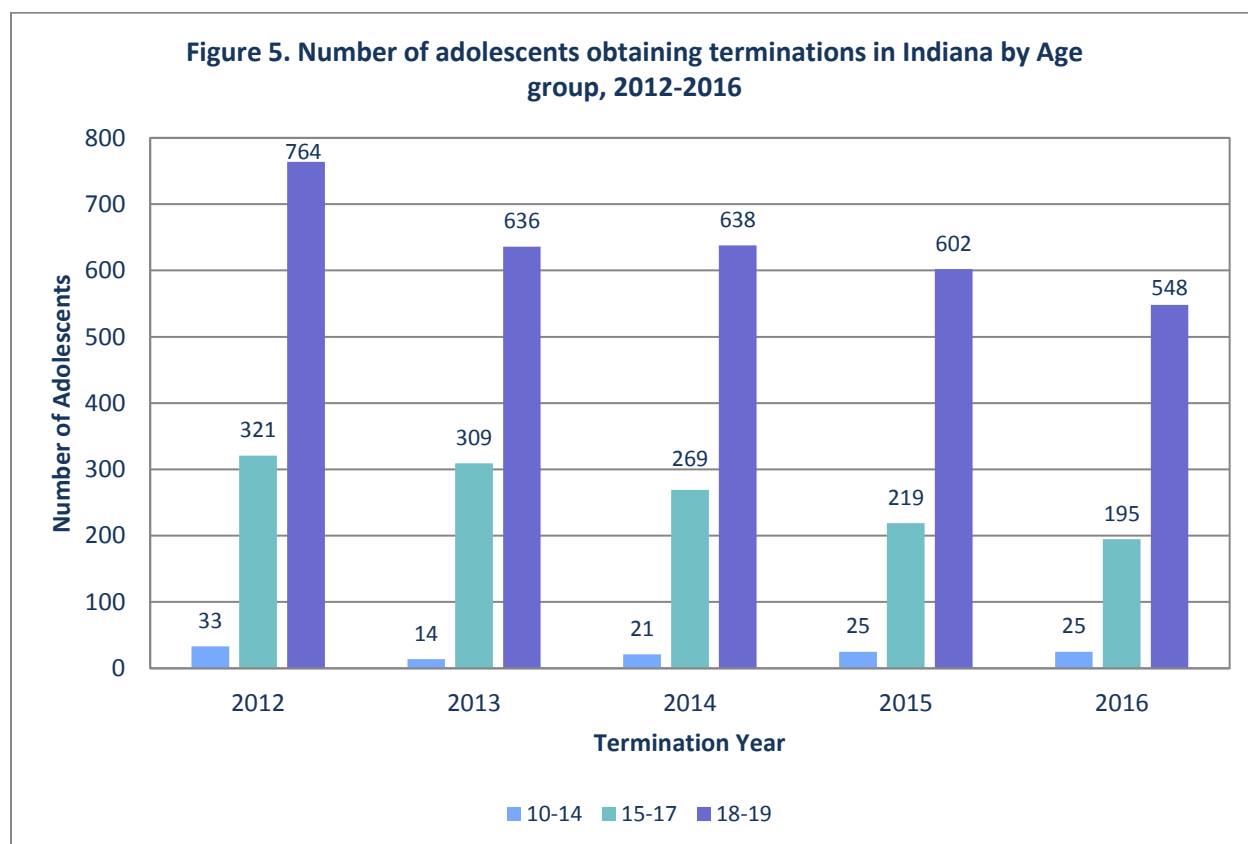


For each age group, more than half of the women were white. Based on cross-tabulation of age group by race, white women in their twenties received the most terminations in Indiana in 2016.

Age Group	Race						Total
	White		Black		Other		
	Count	Percent	Count	Percent	Count	Percent	
Adolescent (≤ 19)	463	60.29	210	27.34	95	12.37	768
Twenties (20-29)	2,446	55.63	1,398	31.79	553	12.58	4,397
Thirties (30-39)	1,076	57.02	530	28.09	281	14.89	1,887
Forties & Over (≥ 40)	146	64.89	47	20.89	32	14.22	225
Total	4,131		2,185		961		7,277

Adolescents

Adolescents, defined as females under age 20, accounted for 10.6% of terminations in Indiana in 2016. Females aged 18-19 were the most likely group of adolescents to receive terminations (71.35%) compared to those aged 15-17 (25.39%) and 10-14 (3.26%). This aligns with CDC's 2013 analysis, which identified that 18- to 19-year-olds accounted for 67.2% of adolescent terminations.¹



Among adolescents, white females were more likely to obtain a termination in Indiana, accounting for 60.29% of adolescent terminations in 2016. Black females accounted for 27.34% of adolescent terminations, while adolescents identifying as multiple races and other race accounted for 0.78% and 11.59%, respectively.

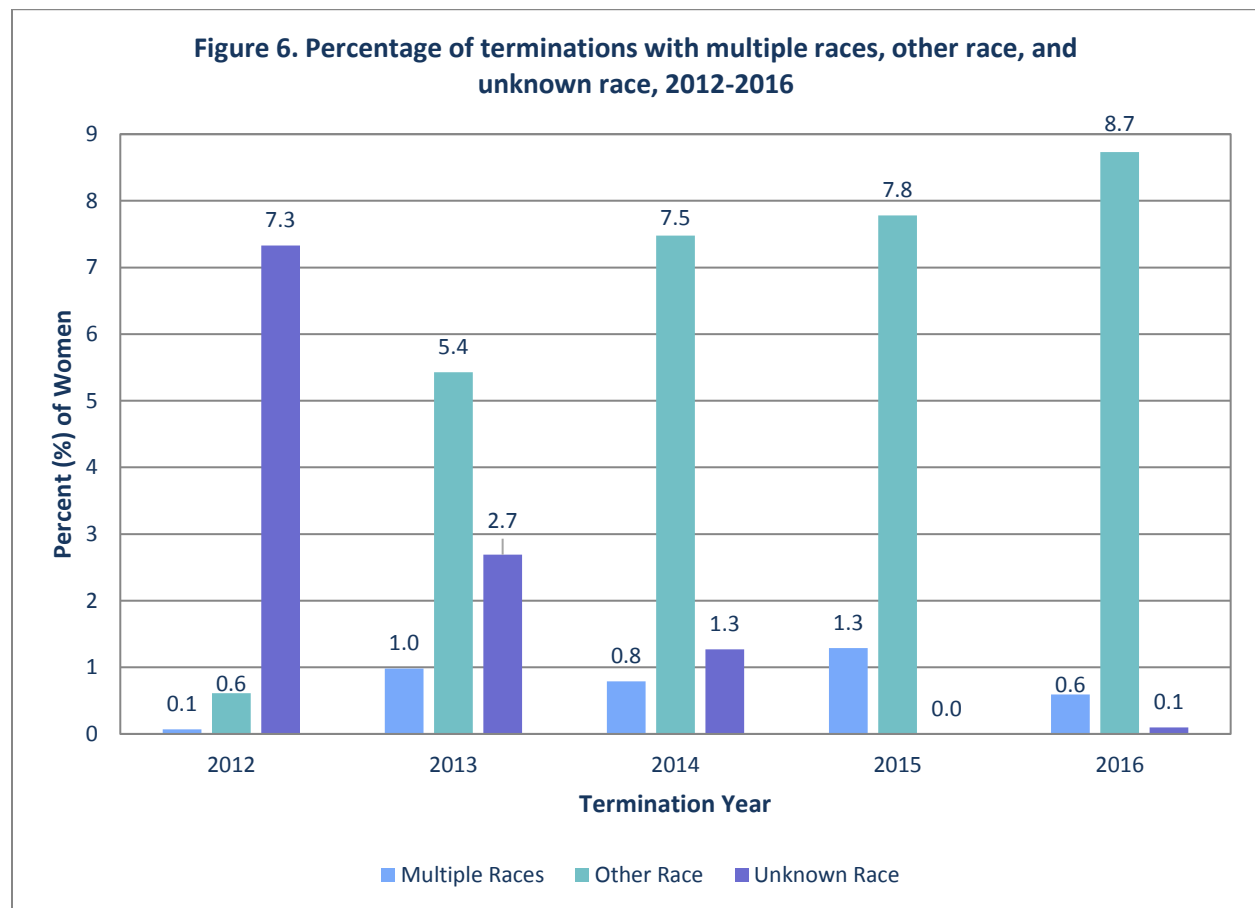
Table 7. Age of adolescents obtaining terminations in Indiana by Race, 2016									
Age Group	Race								Total
	White		Black		Multiple Races		Other		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
10–14	18	72.00	2	8.00	1	4.00	4	16.00	25
15–17	129	66.15	54	27.69	0	0.00	12	6.15	195
18–19	316	57.66	154	28.10	5	0.91	73	13.32	548
Total	463		210		6		89		768

Race and Ethnicity

The largest percentage of women reported their race as white, accounting for 56.77% of all records in 2016; 30.03% of women identified their race as black. The rates of reported white and black races have remained consistent since 2012. Women who marked more than one race checkbox on the report were classified under the multiple race category for this analysis.

Table 8. Race of women obtaining terminations in Indiana, 2016		
Race	Count	Percent
White	4,131	56.77
Black / African American	2,185	30.03
Asian	238	3.27
Pacific Islander / Native Hawaiian	13	0.18
American Indian / Alaska Native	25	0.34
Multiple Races	43	0.59
Other	635	8.73
Unknown	7	0.10
Total	7,277	100.0

The multiple race, other, and unknown categories have shown fluidity since 2012. As seen in Figure 6, the multiple race category continues to fluctuate, but remains low. As the percentage of unknown race has decreased drastically, the percentage of other race has increased.



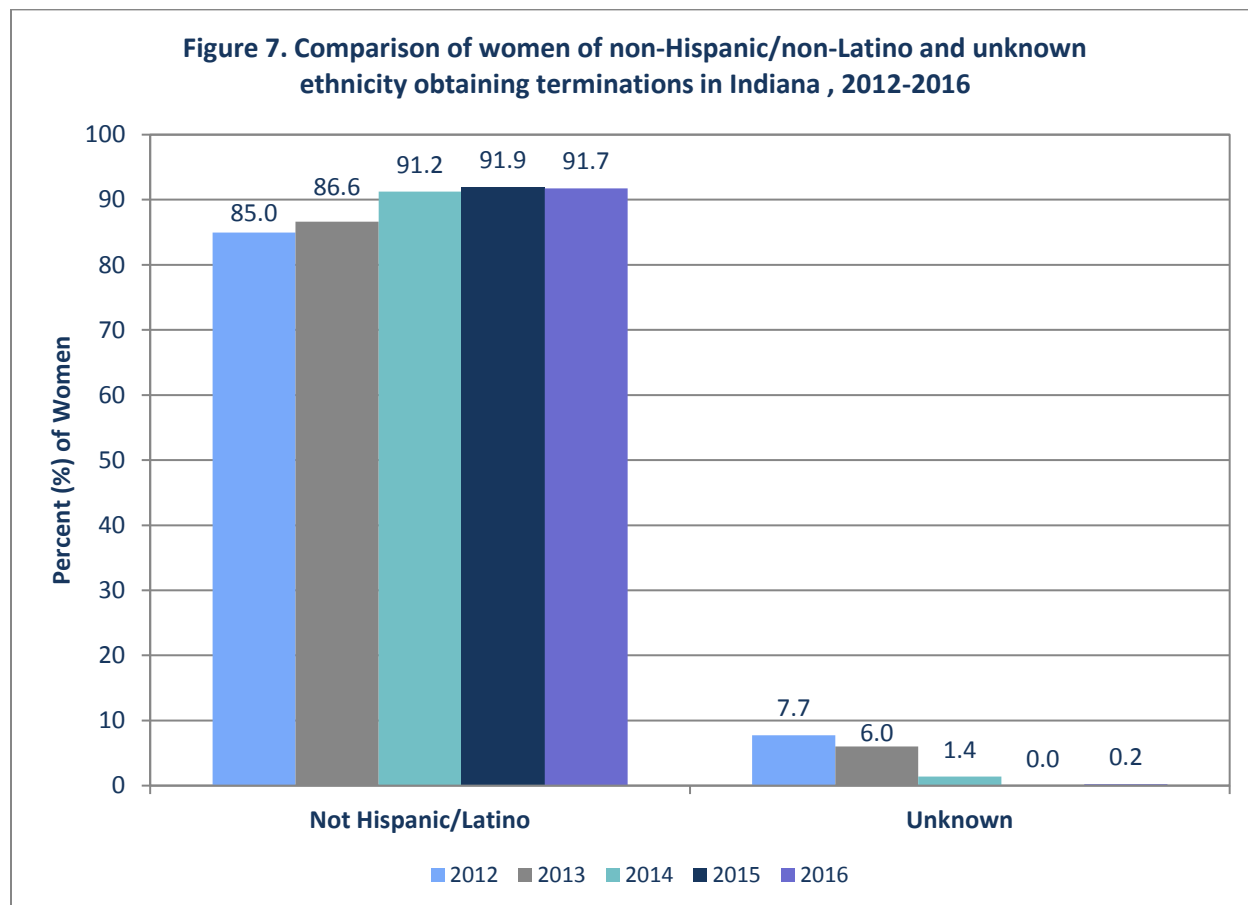
Regarding ethnicity, 8.09% of women receiving a termination in Indiana self-identified as being either Hispanic or Latino in 2015 compared to 7.4% in 2014. In 2013, 7.37% of women reported as either Hispanic or Latino and 7.28% reported as such in 2012.

The 2016 data illustrates little change in the percentage of women receiving terminations that identify as Hispanic or Latino.

Table 9. Ethnicity of women obtaining terminations in Indiana, 2016		
Ethnicity	Count	Percent
Hispanic / Latino	585	8.04
Non-Hispanic / Non-Latino	6,675	91.73
Ethnicity Unknown	17	0.23
Total	7,277	100.0

The number of women reported as Hispanic or Latino has increased slightly from 2012 to 2016. The number of women reporting as non-Hispanic/non-Latino and the number with unknown ethnicity appear to be inversely related; if the percent of non-Hispanic/non-Latino increases, unknown ethnicity

decreases. In 2016, as the percent of women identifying as non-Hispanic/non-Latino decreased, the percent of unknown ethnicity increased. These changes can be seen in Figure 7.

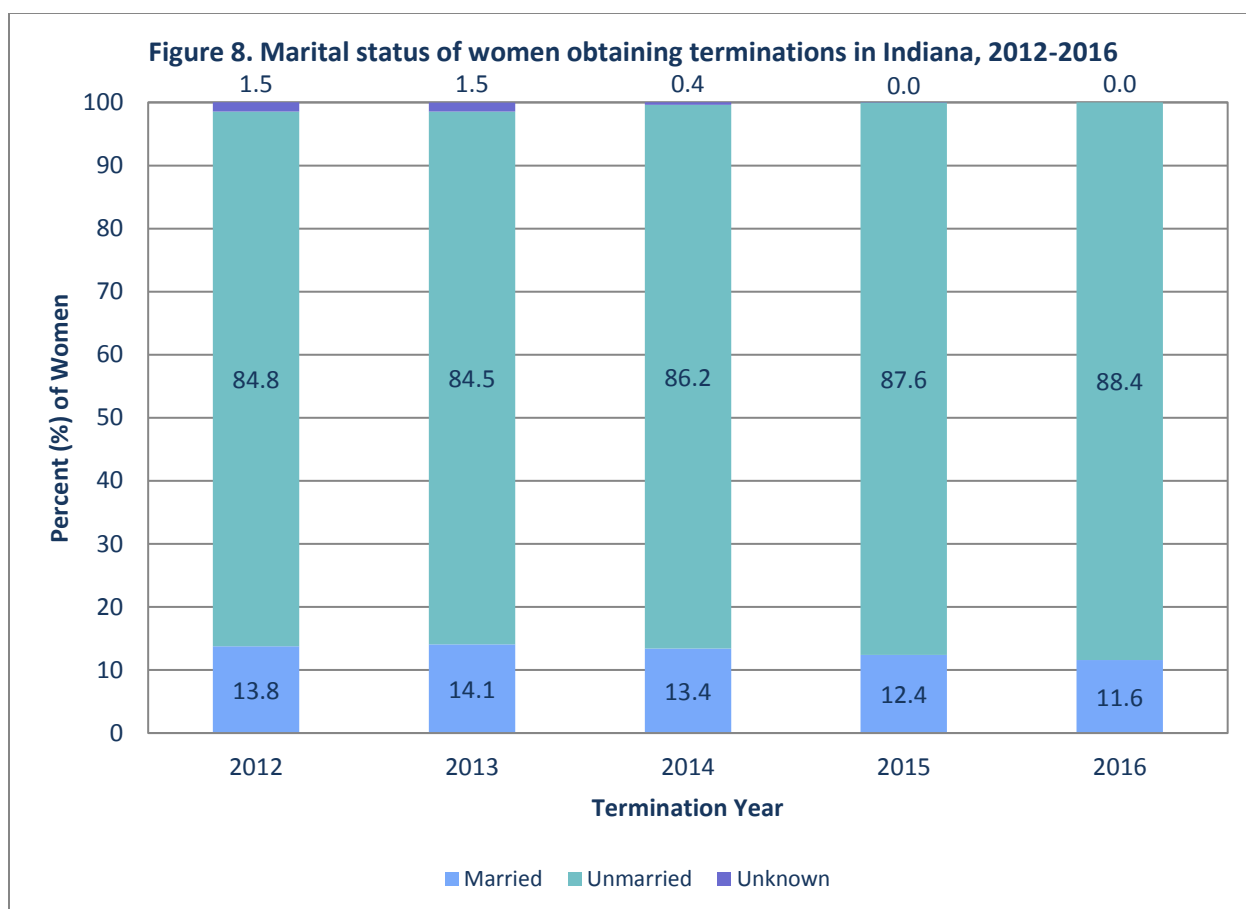


Marital Status

Of the women receiving terminations in 2016, 88.44% were unmarried and 11.56% were married.

Marital Status	Count	Percent
Married	841	11.56
Unmarried	6,436	88.44
Total	7,277	100.0

The percentages of married and unknown marital status among women receiving terminations in Indiana have both decreased since 2013; inversely, the percentage of unmarried women obtaining terminations has increased. The trend in marital status can be seen in Figure 8.

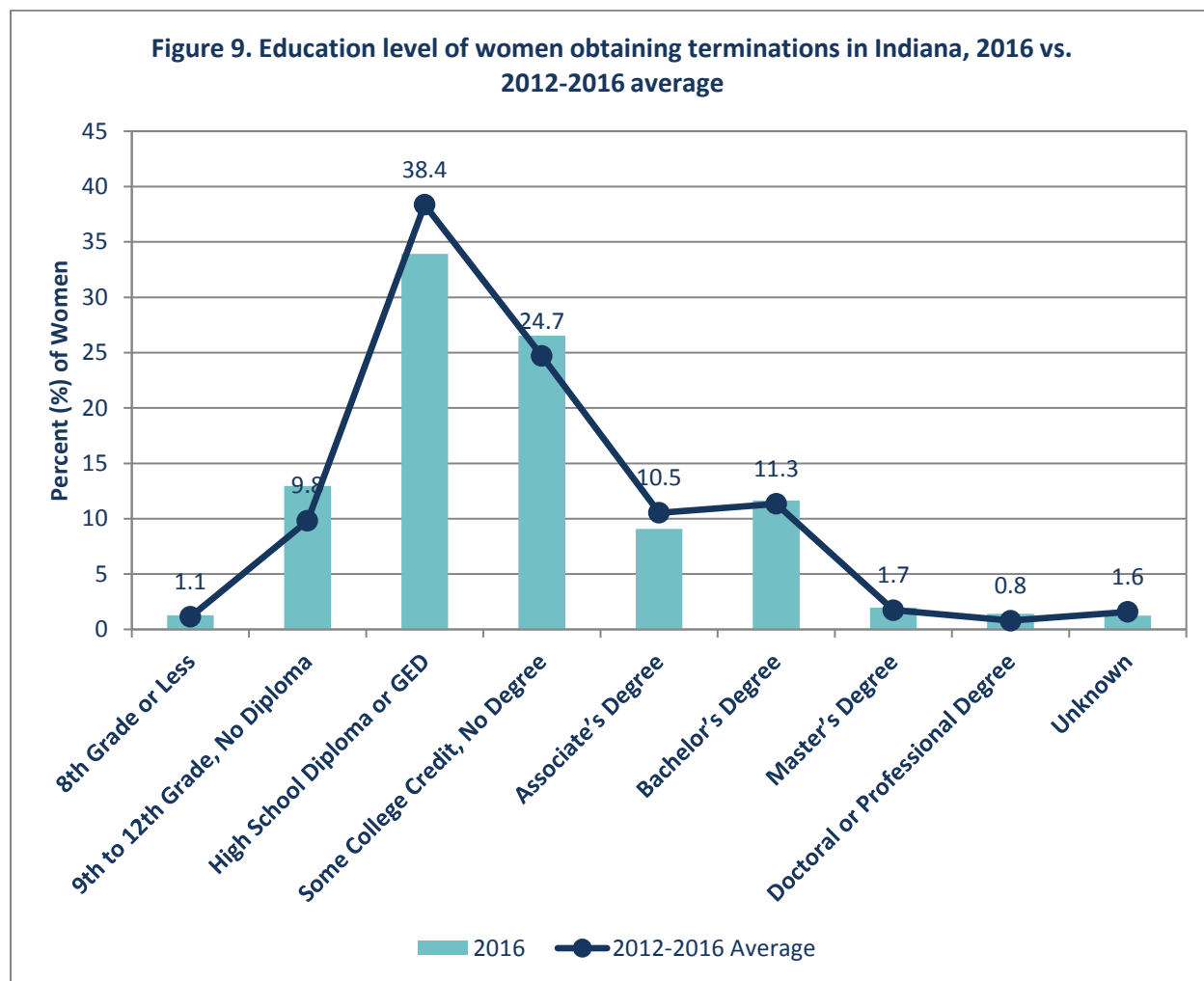


Education Level

In 2016, 33.92% of women reported a high school diploma or General Educational Development (GED) as the highest level of education they completed. The second-most-identified education level was some college credit, but no college degree, accounting for 26.54% of reported education levels.

Education Level	Count	Percent
8th Grade or Less	93	1.28
9th to 12th Grade, No Diploma	943	12.96
High School Diploma or GED	2,468	33.92
Some College Credit, No Degree	1,931	26.54
Associate's Degree	660	9.07
Bachelor's Degree	846	11.63
Master's Degree	144	1.98
Doctoral or Professional Degree	102	1.40
Unknown	90	1.24
Total	7,277	100.0

Figure 9 shows a graphical representation of the highest level of education achieved by women obtaining terminations in 2016 compared to the average for 2012 to 2016. Women having received their high school diploma or GED were consistently more likely to obtain a termination over the five-year period, 2012 to 2016. Women with no more than an eighth grade education or an advanced degree were much less likely to receive terminations.

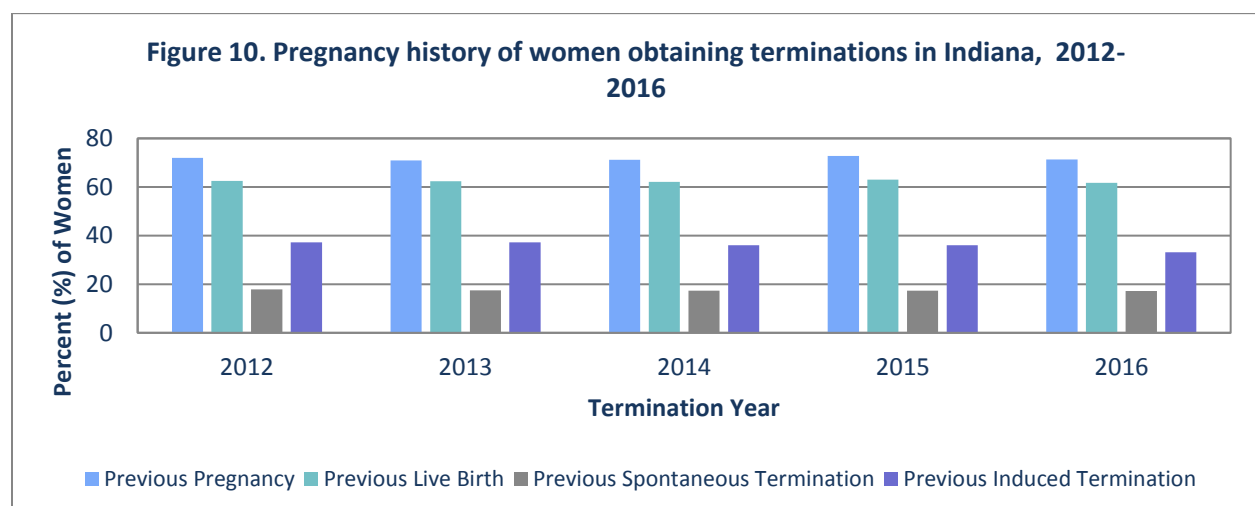


Pregnancy History of Women Receiving Terminations

The number of previous pregnancies was calculated by adding the values reported for previous live births living, previous live births deceased, previous spontaneous terminations, and previous induced terminations. The number of previous live births was calculated by combining the reported values for previous live births living and previous live births deceased.

Table 12. Pregnancy history of women obtaining terminations in Indiana, 2016		
Pregnancy History	Count	Percent
Previous pregnancies		
0	2,089	28.71
1	1,483	20.38
2	1,375	18.90
≥ 3	2,330	32.02
Previous live births		
0	2,791	38.35
1	1,853	25.46
2	1,531	21.04
≥ 3	1,102	15.14
Previous spontaneous terminations		
0	6,021	82.74
1	971	13.34
2	215	2.95
≥ 3	70	0.96
Previous induced terminations		
0	4,868	66.90
1	1,605	22.06
2	551	7.57
≥ 3	253	3.48

The trend of pregnancy history is consistent for the five-year period from 2012 to 2016. The percentage of women receiving terminations who had a previous pregnancy, live birth, spontaneous termination, or induced termination averaged 71.6%, 62.3%, 17.4%, and 35.9%, respectively, over the five-year period.



As seen in Figure 11, among women with at least one previous pregnancy, white women have the greatest number of all pregnancy history outcomes; however, spontaneous terminations were more common than live births or induced terminations. Among black women, induced terminations were more frequent than live births or spontaneous terminations; all other race categories showed similar percentages between previous pregnancies and live births, and spontaneous and induced terminations, respectively.

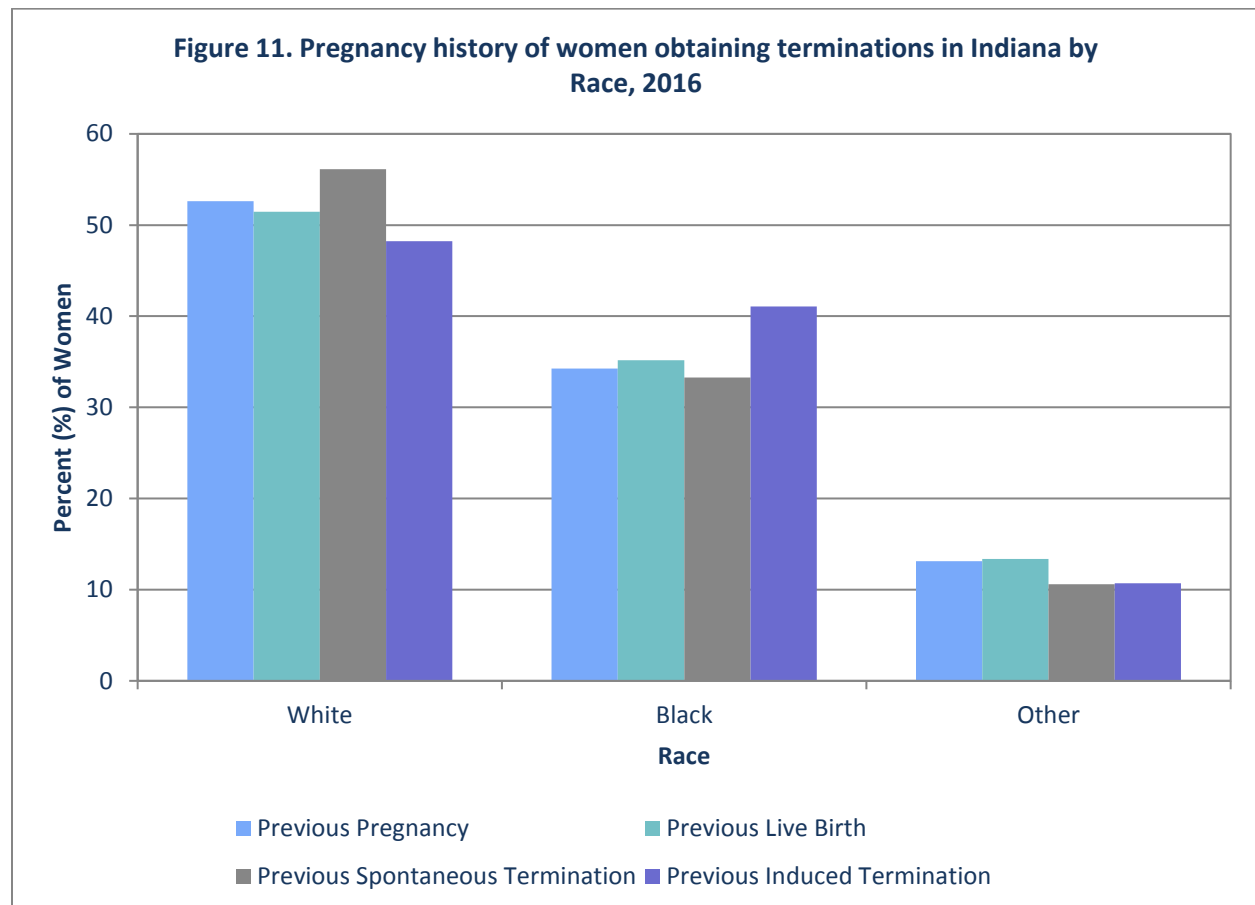
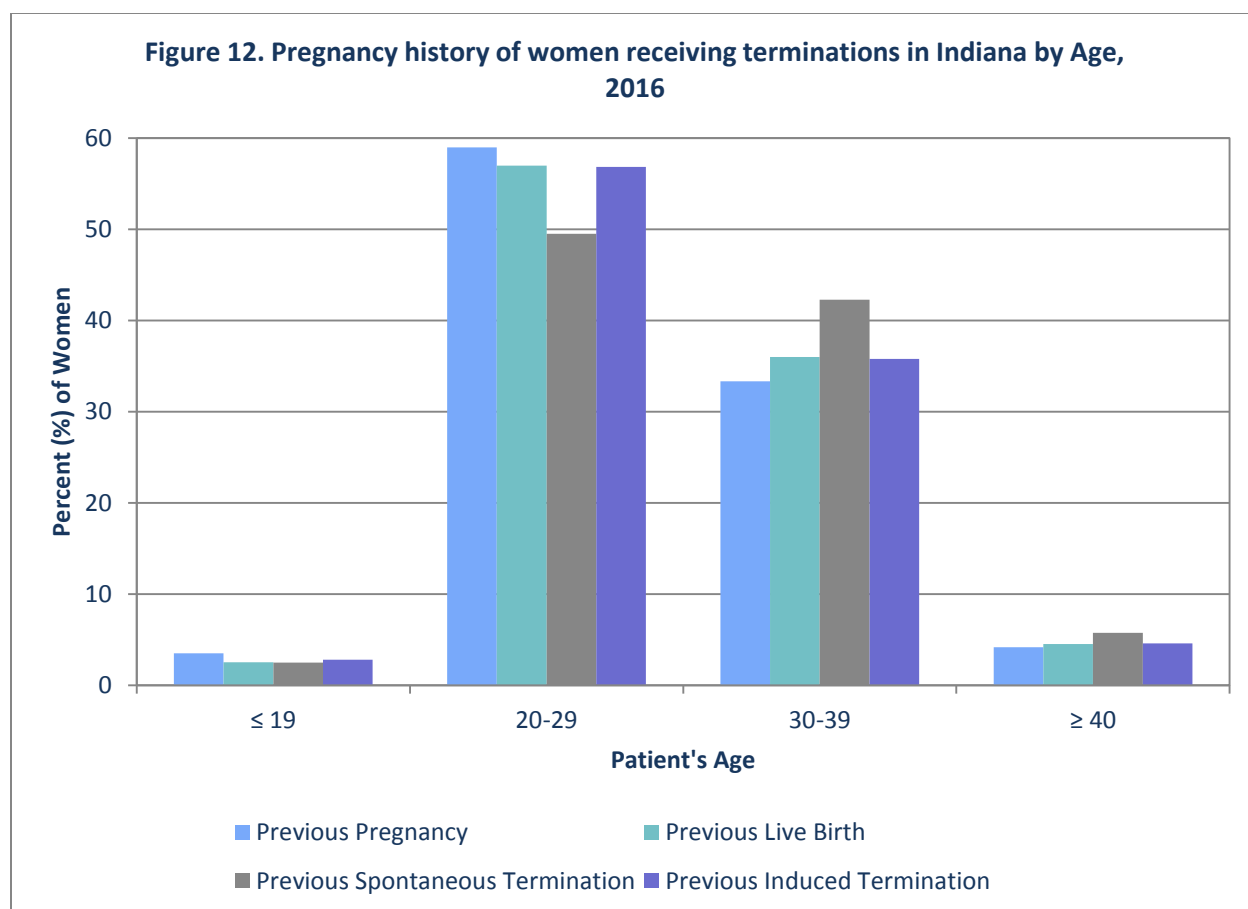


Figure 12 further shows that women in their twenties (20–29) had the highest percentages for all pregnancy history outcomes. Women under 30 had greater numbers of pregnancies, live births, and induced terminations than spontaneous terminations. Women in their thirties and over had a higher occurrence of spontaneous terminations than other outcomes.



Medical Information of Women Receiving Terminations

Medical information analyzed and presented in this report includes the procedure used to terminate a pregnancy, the facility type where the termination occurred, and the gestational age of the fetus at the time of termination.

Procedure and Facility Type

Four procedures were reported as having been used to terminate a pregnancy in 2016 in Indiana: Dilation and Evacuation (D&E), menstrual aspiration, medication combination of Mifepristone & Misoprostol, and suction curettage. Although D&E is not a specific field to be selected on the reporting system, all procedures reported as medical (surgical) specified D&E as the procedure used for termination.

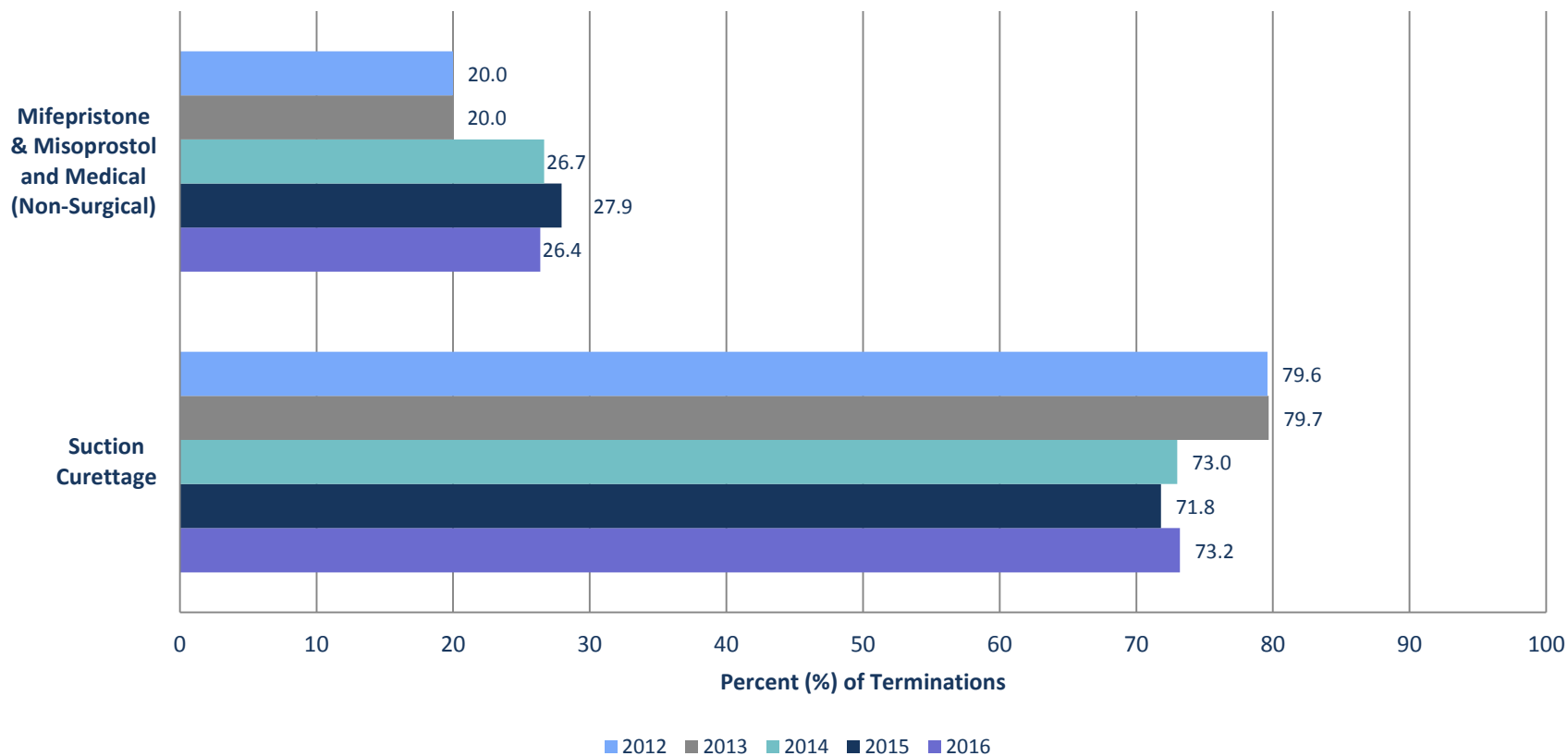
Suction curettage was the most commonly employed technique in 2016, accounting for 73.2% of terminations. Administration of the pharmaceuticals Mifepristone & Misoprostol was the second most commonly used technique, accounting for 26.37% of terminations.

The use of Mifepristone & Misoprostol, or another medical (non-surgical) procedure decreased in 2016 for the first time in five years; the use of suction curettage increased in 2016. The rate of use for D&E and menstrual aspiration have remained consistent since 2012.

Table 13. Procedure used to terminate pregnancy in Indiana, 2012–2016

Procedure	2016		2015		2014		2013		2012	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Dilation & Evacuation	27	0.37	19	0.24	27	0.33	23	0.28	29	0.33
Mifepristone & Misoprostol	1,919	26.37	2,222	27.93	2,165	26.67	1,631	19.94	160	1.82
Suction Curettage	5,327	73.20	5,713	71.80	5,926	73.00	6,519	79.70	7,011	79.60
Medical (Non-Surgical)	0	0.00	0	0.00	0	0.00	1	0.01	1,601	18.18
Menstrual Aspiration	4	0.05	3	0.04	0	0.00	3	0.04	5	0.06
Unknown	0	0.00	0	0.00	0	0.00	2	0.02	2	0.02
Total	7,277		7,957		8,118		8,179		8,808	

Figure 13. Selected procedure used to terminate pregnancy in Indiana, 2012-2016



As of January 1, 2016, six abortion clinics were licensed in Indiana. Of the 7,277 procedures performed in the state, 99.45% were performed at abortion clinics and 0.55% at acute care hospitals.

Table 14 provides a breakdown of the number of terminations performed by each reporting facility in 2016.

Table 14. Terminations reported in Indiana by Facility, 2016				
Facility Type	Facility Name	Facility Address	Count	Percent
Abortion Clinic	Clinic for Women	3607 W. 16 th St. Indianapolis	682	9.37
	Indianapolis Women's Center	1201 N. Arlington Ave. Indianapolis	1,252	17.20
	Planned Parenthood of Indiana and Kentucky – Indianapolis	8590 Georgetown Rd. Indianapolis	2,837	38.99
	Planned Parenthood of Indiana and Kentucky – Bloomington	421 S. College Ave. Bloomington	1,016	13.96
	Planned Parenthood of Indiana and Kentucky – Lafayette	964 Mezzanine Dr. Lafayette	172	2.36
	Planned Parenthood of Indiana and Kentucky – Merrillville	8645 Connecticut St. Merrillville	1,278	17.56
Acute Care Hospital	Indiana University Health Methodist Hospital	1701 Senate Blvd. Indianapolis	7	0.10
	Sidney & Lois Eskenazi Hospital	720 Eskenazi Ave. Indianapolis	33	0.45
Total			7,277	100.0

Terminations at abortion clinics accounted for 99.45% of procedures, as well as 100% of terminations using Mifepristone & Misoprostol, and 99.81% of terminations employing suction curettage. All surgical terminations (D&E) were performed at acute care hospitals. Menstrual aspiration was performed at both abortion clinics (25%) and acute care hospitals (75%) in 2016.

Table 15. Procedure used to terminate pregnancy in Indiana by Facility type, 2016					
Procedure	Facility Type				Total
	Abortion Clinic		Acute Care Hospital		
	Count	Percent	Count	Percent	
Dilation & Evacuation	0	0.00	27	100.0	27
Menstrual Aspiration	1	25.00	3	75.00	4
Mifepristone/Misoprostol	1,919	100.0	0	0.00	1,919
Suction Curettage	5,317	99.81	10	0.19	5,327
Total	7,237		40		7,277

Performance of the least invasive procedures in non-clinic settings has remained consistent since 2012. This trend is clearly seen when reviewing the use of Mifepristone & Misoprostol at abortion clinics and D&E at acute care hospitals. No terminations were reported from ambulatory surgical centers, other clinics, or physician offices in 2016.

Estimated Gestational Age

Indiana Code dictates that the gestation of the fetus is determined by the physician's determination of post-fertilization age; as such, estimated gestational age, in weeks, is based on this value. In the absence of post-fertilization age, estimated gestational age was used for gestational age analyses.

The gestational age range was 0 to 19 weeks, with an average gestational age of 6.7 weeks (SD = 2.14 weeks) and a median gestational age of 6 weeks.

In Indiana, 79.18% of terminations occurred prior to the ninth week of pregnancy, 20.52% occurred during the 9-13 week timeframe, and those more than 13 weeks accounted for less than 1 percent of terminations in 2016. Data from 2012 to 2015 show a similar trend, with 77.99% (2012), 75.41% (2013), 78.82% (2014), and 80.21% (2015) of terminations occurring prior to week nine.

Table 16. Estimated gestational age at time of termination in Indiana, 2016		
Weeks of Gestation	Count	Percent
≤ 8	5,762	79.18
9-13	1,493	20.52
14-15	4	0.05
16-17	14	0.19
18-20	4	0.05
Total	7,277	100.0

During 2016, gestational age of six weeks was reported most frequently by physicians, accounting for 22.17%, while five weeks was reported for 20.34% of terminations; this reflects a return to the trend of gestational age frequency seen for the period 2012 to 2014. In 2015, a shift in the most frequent gestational age at termination was seen. The shifts can be seen in Figures 14 and 15.

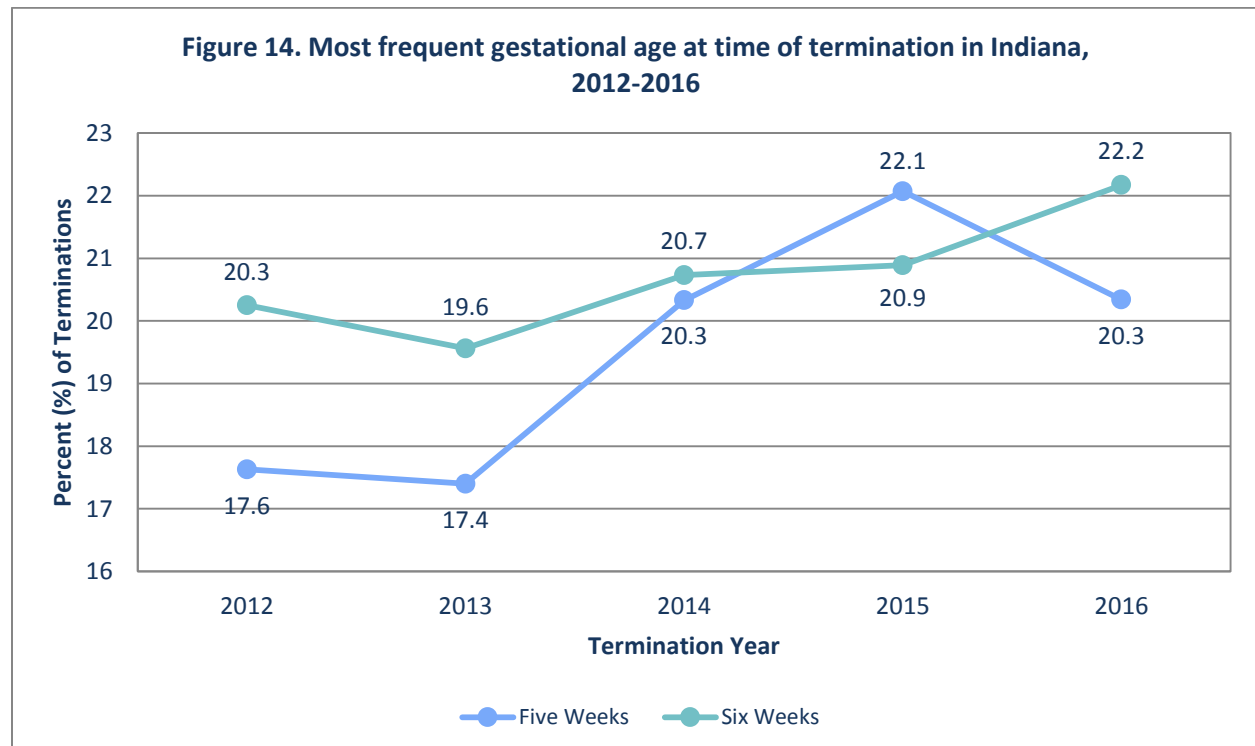
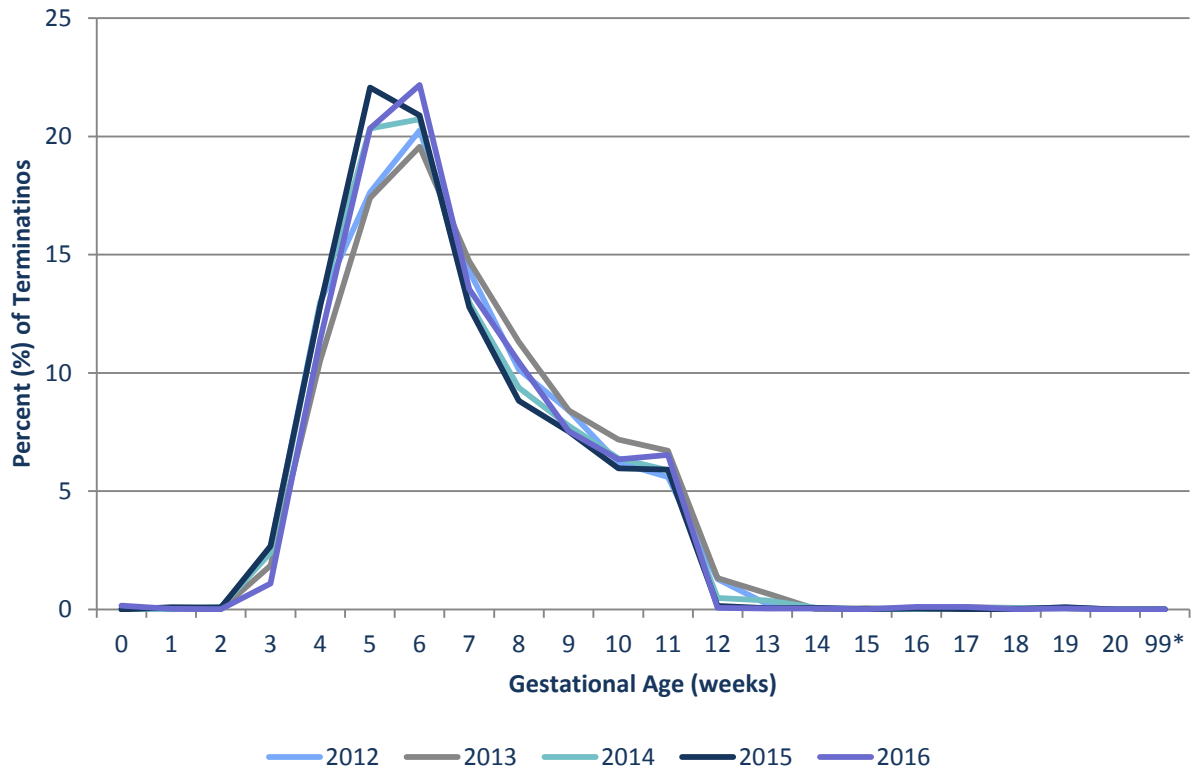


Figure 15. Estimated gestational age at time of termination in Indiana, 2012-2016



* Indicates percentage of terminations where the gestation age in weeks was not provided on the report.

Of the terminations that were completed at more than 13 weeks gestation, 100% were D&E. Suction curettage accounted for 73.2% of terminations 13 weeks or less; 26.37% of procedures at thirteen weeks or less were completed with Mifepristone & Misoprostol. All menstrual aspirations were performed under eight weeks.

Table 17. Estimated gestational age among women obtaining terminations in Indiana by Procedure, 2016

Weeks of Gestation	Procedure								Total
	Dilation & Evacuation		Menstrual Aspiration		Mifepristone & Misoprostol		Suction Curettage		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
≤ 8	0	0.00	4	0.07	1,914	33.22	3,844	66.71	5,762
9-13	5	0.33	0	0.00	5	0.33	1,483	99.33	1,493
14-15	4	100.0	0	0.00	0	0.00	0	0.00	4
16-17	14	100.0	0	0.00	0	0.00	0	0.00	14
18-20	4	100.0	0	0.00	0	0.00	0	0.00	4
Total	27		4		1,919		5,327		7,277

Geographic Information of Women Receiving Terminations

Geographic information provided on terminated pregnancy reports consists of the county where the termination was performed, and the state and county of the woman's residence.

County of Termination

In 2016, reported terminations were performed in four counties: Lake, Marion, Monroe, and Tippecanoe. Of these, Marion County had the most, accounting for 66.11% of terminations; Tippecanoe County had the fewest, accounting for only 2.36% of terminations.

Table 18. County where termination performed in Indiana, 2016		
County of Termination	Count	Percent
Lake	1,278	17.56
Marion	4,811	66.11
Monroe	1,016	13.96
Tippecanoe	172	2.36
Total	7,277	100.0

Marion County continues to see the most terminations, with 61.51% in 2012, 63.08% in 2013, 64.24% in 2014, and 63.1% in 2015. During the past five years, over 25,000 terminations have been performed in Marion County. Marion County has reported 3.83 times more procedures in the five-year period 2012 to 2016 than the second most frequent county of termination, Lake County.

Table 19. Number of terminations in Indiana by County of occurrence, 2012-2016						
County of Termination	2012	2013	2014	2015	2016	Total
Allen	263	353	0	0	0	616
Hamilton	2	0	0	2	0	4
Lake	1,678	1,231	1,228	1,275	1,278	6,690
Marion	5,418	5,159	5,215	5,021	4,811	25,624
Monroe	811	753	718	822	1,016	4,120
St. Joseph	555	618	788	578	0	2,539
Tippecanoe	81	65	169	259	172	746

County of Residence

In 2016, 6,767 terminations were reported among Indiana residents. County of residence was only analyzed for women who were Indiana residents. Table 20 breaks down the number of terminations by county of residence and age (less than 20 and at least 20), for the counties that accounted for at least 1 percent of the total number of residential women.

Table 20. County of residence of Indiana residents receiving terminations in Indiana by Age, 2016			
County of Residence*	Count		Percent of All Residents
	Adolescent (< 20)	Adult (≥ 20)	
Allen	27	262	4.27
Bartholomew	7	82	1.32
Delaware	12	92	1.54
Elkhart	10	82	1.36
Hamilton	22	250	4.02
Hendricks	9	116	1.85
Howard	11	75	1.27
Johnson	16	159	2.59
Lake	59	537	8.81
LaPorte	20	96	1.71
Madison	22	116	2.04
Marion	190	2,251	36.07
Monroe	23	209	3.43
Porter	24	123	2.17
St. Joseph	13	148	2.38
Tippecanoe	32	196	3.37
Vanderburgh	22	101	1.82
Vigo	14	95	1.61

* Counties that accounted for at least one percent of the total number of residential women.

Similar to the occurrence of terminations by county, Marion County also had the largest number of female residents obtaining terminations in 2016 (36.07%). Lake County accounted for 8.81% of residential terminations, while Monroe and Tippecanoe counties each accounted for just over 3% of residential terminations. Allen and Hamilton county residents accounted for just over 4% of resident terminations each in 2016; facilities reporting terminations have previously been located in both counties.

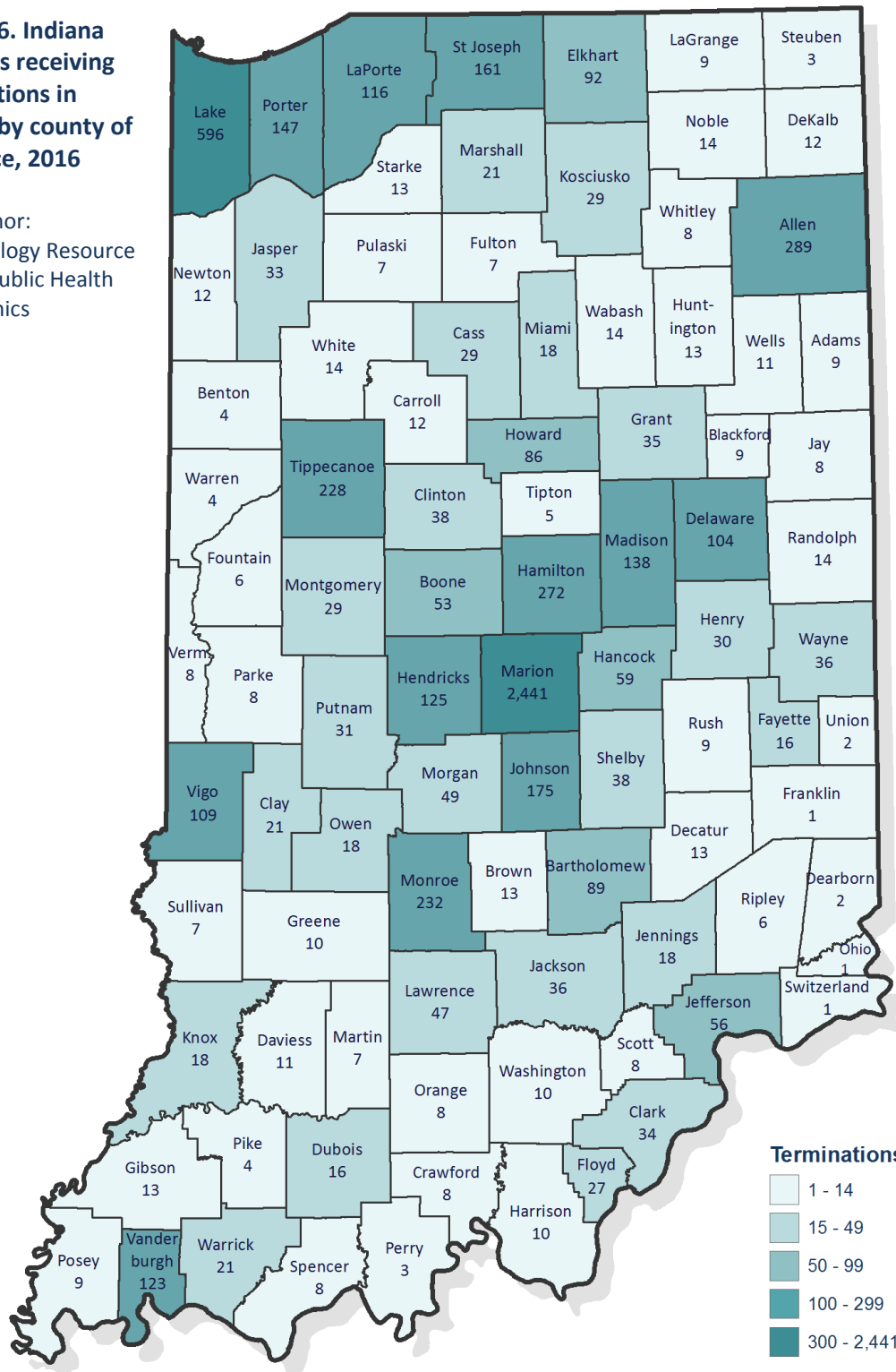
Table 21 provides a breakdown of the number of residents from each Indiana county that received terminations in 2016. Similar to county of occurrence, Marion County was the most frequent residence county, with approximately four times as many residents receiving terminations than the second most common county of residence, Lake.

Table 21. Number of Indiana residents receiving terminations in Indiana by County of residence, 2016					
County of Residence	Count	County of Residence	Count	County of Residence	Count
Adams	9	Hendricks	125	Pike	4
Allen	289	Henry	30	Porter	147
Bartholomew	89	Howard	86	Posey	9
Benton	4	Huntington	13	Pulaski	7
Blackford	9	Jackson	36	Putnam	31
Boone	53	Jasper	33	Randolph	14
Brown	13	Jay	8	Ripley	6
Carroll	12	Jefferson	56	Rush	9
Cass	29	Jennings	18	St. Joseph	161
Clark	34	Johnson	175	Scott	8
Clay	21	Knox	18	Shelby	38
Clinton	38	Kosciusko	29	Spencer	8
Crawford	8	LaGrange	9	Starke	13
Daviess	11	Lake	596	Steuben	3
Dearborn	2	LaPorte	116	Sullivan	7
Decatur	13	Lawrence	47	Switzerland	1
DeKalb	12	Madison	138	Tippecanoe	228
Delaware	104	Marion	2,441	Tipton	5
Dubois	16	Marshall	21	Union	2
Elkhart	92	Martin	7	Vanderburgh	123
Fayette	16	Miami	18	Vermillion	8
Floyd	27	Monroe	232	Vigo	109
Fountain	6	Montgomery	29	Wabash	14
Franklin	1	Morgan	49	Warren	4
Fulton	7	Newton	12	Warrick	21
Gibson	13	Noble	14	Washington	10
Grant	35	Ohio	1	Wayne	36
Greene	10	Orange	8	Wells	11
Hamilton	272	Owen	18	White	14
Hancock	59	Parke	8	Whitley	8
Harrison	10	Perry	3	Total	6,767

Figure 16 provides a graphical representation of the number of Indiana residents receiving terminations in Indiana, by their county of residence.

Figure 16. Indiana residents receiving terminations in Indiana by county of residence, 2016

Map author:
Epidemiology Resource
Center, Public Health
Geographics



Discussion

This report identifies consistencies and trends among women obtaining pregnancy terminations in Indiana by exploring new data from 2016 in conjunction with retrospective data from 2012 to 2015. A 5.05% decrease in reported terminations occurred from 2015 to 2016, with a 10.0% decrease seen for the five-year period since 2012.

In 2016, the largest portion of pregnancy terminations reported were among women in their twenties (60.42%). Women were also more likely to identify as white (56.77%), not Hispanic or Latino (91.73%), and unmarried (88.44%). The most frequently reported education levels were completion of a high school diploma or GED (33.92%) or some college credit, but no degree (26.54%).

Women in their twenties (20–29) were identified as having the highest numbers of previous pregnancies, previous live births, previous spontaneous terminations, and previous induced terminations, when compared to all other age groups. Regardless of age group, 82.74% of women reported no previous spontaneous terminations and 66.9% of women reported no previous induced terminations.

The use of Mifepristone & Misoprostol or another medical (non-surgical) procedure decreased in 2016 for the first time in five years, while the use of suction curettage increased. The majority of terminations in 2016 were performed in licensed abortion clinics (99.45%), and terminations with reported gestational age less than nine weeks accounted for 79.18% of reports.

Marion County was reported as the most common county of termination (66.11%) as well as the most common county of residence (36.07%), for Indiana residents. Lake County was identified as second most common for terminations and residency, accounting for 17.56% of all terminations and 8.81% of Indiana residents.

This report has some limitations. Due to the fact that demographic and pregnancy history are reported by the women receiving terminations, the information is subject to bias. There is also the possibility that women who required a second procedure to complete the termination were reported as a new record, or they attended a different facility to complete the procedure; each of these scenarios would lead to an increase in the number of terminations reported to the ISDH. A third scenario may increase the number of reported terminations if the woman had an incomplete procedure but chose not to return for follow-up, instead choosing to have the child, because the reported termination would have been incomplete. Finally, all data is obtained from reported terminated pregnancies; as such, there is the possibility for terminations to occur of which the ISDH is not informed and cannot be included in this report.

Appendix A: Terminated Pregnancy Reporting System

IVER - Terminated Pregnancy				submit save cancel
Facility * <input style="width: 100%;" type="text"/>		<small>If the facility name or address are incorrect, please contact the Electronic Registrar Helpdesk at 317-233-7989.</small>		
Patient's Age <input style="width: 100%;" type="text"/>	Married <input type="radio"/> Yes <input type="radio"/> No	Date of Termination * <input style="width: 100%;" type="text"/>	Education <input style="width: 100%;" type="text"/>	
Race <input type="checkbox"/> American Indian or Alaska Native <input type="checkbox"/> Native Hawaiian or Pacific Islander <input type="checkbox"/> Unknown		<input type="checkbox"/> Asian <input type="checkbox"/> White <input type="checkbox"/> Black or African American <input type="checkbox"/> Other		Ethnicity <input type="radio"/> Hispanic or Latino <input type="radio"/> Not Hispanic or Latino <input type="radio"/> Unknown
Live Births Number now living: <input style="width: 100%;" type="text"/> Number now deceased: <input style="width: 100%;" type="text"/>		Other Terminations Spontaneous Terminations: <input style="width: 100%;" type="text"/> Induced Terminations: <input style="width: 100%;" type="text"/>		
Previous Termination Dates 1) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown 2) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown 3) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown 4) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown 5) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown 6) <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown				
Fetus delivered alive? <input type="radio"/> Yes <input type="radio"/> No		Fetus viable? <input type="radio"/> Yes <input type="radio"/> No		Pathological exam? <input type="radio"/> Yes <input type="radio"/> No
Type of Termination Procedures Procedure that Terminated Pregnancy <input style="width: 100%;" type="text"/>		Additional Procedure used for this Termination <input style="width: 100%;" type="text"/>		Complication(s) of Termination <small>(check all that apply)</small> <input type="checkbox"/> None <input type="checkbox"/> Uterine Perforation <input type="checkbox"/> Hemorrhage <input type="checkbox"/> Cervical Laceration <input type="checkbox"/> Infection <input type="checkbox"/> Retained Products <input type="checkbox"/> Other
Did this termination of pregnancy result in a maternal death? <input type="radio"/> Yes <input type="radio"/> No				
Date last normal menses began <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input style="width: 100px;" type="text"/> <input type="checkbox"/> Unknown		Physician estimate of gestation <input style="width: 100px;" type="text"/> (in weeks)		Postfertilization age of the fetus <input style="width: 100px;" type="text"/> (in weeks)
How were the gestational age and postfertilization age determined? <input style="width: 100%;" type="text"/>				
Physician * DR. <input style="width: 100px;" type="text"/> PIN: <input style="width: 100px;" type="text"/> <small>*PIN is required to submit report.</small> Address <input style="width: 100%;" type="text"/>		Patient Identification Number: <input style="width: 100px;" type="text"/> State of Residence: <input style="width: 100px;" type="text"/> INDIANA County of Residence: <input style="width: 100px;" type="text"/> Zip Code: <input style="width: 100px;" type="text"/>		Father <input type="checkbox"/> Unknown Name: <input style="width: 100px;" type="text"/> Age: <input style="width: 100px;" type="text"/> <input type="checkbox"/> Approximate Date Submitted: <input style="width: 100px;" type="text"/>
Indiana State Department of Health - Vital Records				submit save cancel

Appendix B: Glossary

Childbearing years: The reproductive age span of women, assumed for statistical purposes to be 15–44 or 15–49 years of age.¹⁰

Dilation & Evacuation (D&E): Dilation & evacuation is a surgical abortion that is typically performed midway during the second trimester of pregnancy and in which the uterine cervix is dilated and fetal tissue is removed using surgical instruments (as a forceps and curette) and suction. It is also referred to as D&E.⁵

Induced abortion: An intentional termination of pregnancy before the fetus has developed enough to live if born. From 20% to 50% of pregnancies are terminated deliberately at the request of the mother or for medical indications, during the first trimester by vacuum aspiration and/or curettage or during the second trimester by dilation and evacuation, induction of labor, or hysterotomy.¹¹ This report references induced terminations regarding pregnancy history.

Terminated pregnancy or abortion: “Abortion” means the termination of human pregnancy with an intention other than to produce a live birth or to remove a dead fetus. The term includes abortions by surgical procedures and by abortion inducing drugs (IC § 16-18-2-1).³

Mifepristone (RU-486): RU-486, also known as Mifepristone, is a drug taken orally to induce abortion, especially early in pregnancy, by blocking the body’s use of progesterone. The chemical formula for Mifepristone is $C_{29}H_{35}NO_2$.⁶ Mifepristone may also be identified by the proprietary names Korlym® and Mifeprex®.⁸

Misoprostol: Misoprostol is a synthetic prostaglandin analog used to induce abortion in conjunction with RU-486 and to prevent stomach ulcers associated with nonsteroidal anti-inflammatory drug (NSAID) use. The chemical formula for Misoprostol is $C_{22}H_{38}O_5$.⁷

Pregnancy history: Pregnancy history is a calculated variable that is the sum of the number of previous live births, the number of previous spontaneous terminations, and the number of previous induced terminations.

Previous live births: The number of previous live births is a calculated variable that is the sum of the number of previous live births living and previous live births deceased.

Rate: The number of terminations per 1,000 women aged 15–44 years estimated as living in Indiana. Terminations where age was unknown were excluded from the numerator.

Spontaneous abortion or miscarriage: A termination of pregnancy before the twentieth week of gestation as a result of abnormalities of the conceptus or maternal environment. Up to 30% of pregnancies may end as spontaneous abortions, many caused by blighted ova that have congenital defects incompatible with life.¹¹ This report references spontaneous terminations regarding pregnancy history.

Suction curettage or vacuum aspiration: A method of removing tissues from the uterus by suction for diagnostic purposes or to remove elements of conception. With the patient under local or light general anesthesia, the cervix is dilated, and the uterus is emptied with suction.¹¹

References

1. Extracted from Centers for Disease Control and Prevention. Abortion Surveillance – United States, 2013. MMWR Surveillance Summaries 2016; 65(12):1-44. Digital version available at <https://www.cdc.gov/mmwr/volumes/65/ss/ss6512a1.htm>
2. 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/
3. Indiana Code. Retrieved from <http://iga.in.gov/legislative/laws/2016/ic/>
4. Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States, States, Counties, and Puerto Rico Commonwealth and Municipios: April 1, 2010 to July 1, 2015: 2015 Indiana Population Estimates. U.S. Census American FactFinder. Retrieved from <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#none>
5. Merriam-Webster Medline Plus Medical Dictionary. Dilation and Evacuation. Retrieved from <http://www.merriam-webster.com/medlineplus/dilation%20and%20evacuation>
6. Merriam-Webster Medline Plus Medical Dictionary. RU-486. Retrieved from <http://www.merriam-webster.com/medlineplus/ru-486>
7. Merriam-Webster Medline Plus Medical Dictionary. Misoprostol. Retrieved from <http://www.merriam-webster.com/medlineplus/misoprostol>
8. U.S. Food and Drug Administration Orange Book: Approved Drug Products and Therapeutic Equivalence Evaluations. Active ingredient: mifepristone. Retrieved from <http://www.accessdata.fda.gov/scripts/cder/ob/docs/tempai.cfm>
9. CDC Division of Reproductive Health Inquiry. Inquiry submitted 15 Apr 2015. Response received 29 Apr 2015.
10. Glossary of Demographic Terms. Population Reference Bureau. Retrieved from <http://www.prb.org/Publications/Lesson-Plans/Glossary.aspx>
11. Mosby's Medical Dictionary: 9th Edition. 2013. Induced abortion, Spontaneous abortion.