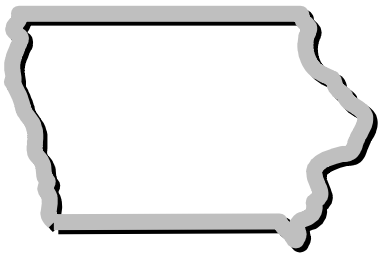
2001 IOWA
Termination Of Pregnancy Report



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Tables and Figures

Comparative Summary

The total number of pregnancy terminations decreased from 7,602 in 2000 to 6,845 in 2001. This represents a 10% decrease. Induced termination decreased from 6,059 to 5,722 (a 6% decrease) and spontaneous termination decreased from 1,541 to 1,119 (a 27% decrease).

Pregnancy terminations by maternal and child health regions (MCH)

- The fertility rate for the state as a whole increased from 62.3 per 1,000 to 62.6 per 1,000, from 2000 to 2001. In 2000, 15 MCH regions had a higher rate than the statewide fertility rate, while in 2001, the number of MCH regions with a higher rate than the statewide fertility rate dropped to 12. Region 7 continued to have the highest fertility rate and region 12 continued to have the lowest rate.
- The pregnancy rate decreased from 74.6 per 1,000 to 74.1 per 1,000. Region 16 continued to have the lowest pregnancy rate. However, region 23 had the highest pregnancy rate in 2001, compared to region 7 in 2000.
- The induced termination rate decreased 0.6 per 1,000 and down to 9.4 per 1,000 in 2001. Compared to 2000 reports, two fewer regions had a higher rate than the statewide induced termination rate in 2001 (8 regions in 2000 vs. 6 regions in 2001).
- The spontaneous termination rate for the state dropped to 1.8 per 1,000 from 2.5 per 1,000. The number of regions with a higher spontaneous termination rate decreased from 9 to 7. Region 14 had the highest rate, and region 20 had the lowest.
- The statewide induced termination ratio increased from 145.7 per 1,000 to 149.6 per 1,000. Region 12 had the highest ratio for both years, and region 22 had the lowest ratio.
- The statewide spontaneous termination ratio decreased from 39.7 per 1,000 to 29.3 per 1,000. One less region was higher, compared to 2000 data (9 regions in 2000 vs. 8 regions in 2001).

In summary, the geographic distribution of the 2001 data showed a pattern similar to that seen in 2000.

Generally, the frequency for both induced and spontaneous terminations decreased by month of occurrence, gestational age, marital status, and education level and mother's age. Specifically,

Pregnancy terminations by month of occurrence

The lowest number of births was February, the same as in 2000. The lowest number of induced and spontaneous terminations was in November, compared to September in 2000.
The highest number of births was in August, compared to July in 2000. The highest number of induced terminations was in January, compared to July in 2000. The highest number of spontaneous terminations was in March, compared to July in 2000. This pattern suggests the monthly variations are most likely due to chance or unstable causes.

Pregnancy terminations by gestational age of fetus

The number for both types of pregnancy terminations decreased. Specifically, induced terminations decreased by 270 cases (5,685 in 2000 vs. 5,415 in 2001) during the first trimester (0-13 weeks), and decreased by 69 cases (366 in 2000 vs. 297 in 2001) during the second trimester (14-28 weeks). The spontaneous terminations decreased by 386 cases (1,455 in 2000 vs. 1,069 in 2001) during the first trimester, and decreased by 33 cases (75 in 2000 vs. 43 in 2001) during the second trimester. If considered in gestational month, the number of terminations showed a decrease trend for the first 6 gestational months from 2000 to 2001. The exceptions were that induced termination increased by 110 cases in the 3rd gestation month and increased by 9 cases in the 6th month. Spontaneous terminations increased by 7 cases in the 6th gestation month as well.

Pregnancy terminations by marital status
The number of pregnancy terminations decreased for both married and single population. In 2001, induced terminations decreased by 107 cases and spontaneous terminations decreased by 335 cases for the married population. The induced terminations decreased by 218 cases and the spontaneous terminations decreased by 90 cases for the single population.

Pregnancy terminations by level of education
Generally, the number of terminations dropped for all levels of education (<=8 years, 9-12 years, 13-16 years, and 17-20 years). The exception was that spontaneous terminations for individuals with 17 to 20 years education increased by 2 cases (39 vs. 41).

Pregnancy terminations by mother's age
The number of terminations decreased in general for all age groups. The exceptions were that induced terminations increased for the ages of 26, 30-31, 35, 39, 41, >=43, and spontaneous terminations increased for the ages of <=14, 16-17, 41, 44. The difference did not appear to be significant.

Note: The number of reported pregnancy terminations was relatively low in November and December, compared to the other months. More termination records may come with the 2002 data. We will add these pick-ups at the end of 2002.

Introduction

This report is a compilation of data on reported terminations of pregnancy in Iowa. These are terminations that actually occurred during the period from January 2001 through December 2001. The annual reporting of termination of pregnancy events is required by state legislation. With this legislative requirement, Iowa joins the other 49 states, the District of Columbia, and New York City in providing information that relates to issues of pregnancy, termination of pregnancy, live births, and fetal deaths (1). This information contributes to the ability of public health officials and policy makers to better understand these issues.

The Iowa reporting system is a variation on the model published by the National Center for Health Statistics in 1987 (2). These guidelines described the criteria and expectations for reporting pregnancy information.

Purpose

One of the purposes of termination of pregnancy surveillance is to determine if there are areas of the state with higher than expected rates of spontaneous pregnancy loss. The surveillance system also provides state health planners the information needed to address public health issues related to pregnancy loss. Data are collected using the 26 maternal and child health (MCH) regions as geographic identifiers. Most of these 26 regions are composed of multiple counties, although a few, which comprise Metropolitan Statistical Areas (MSAs), are single counties. During analysis, birth data (including pregnancy and fertility data) from these regions are used to achieve proper perspective. Other uses of these data may include issues of family planning, maternal and child health, access to health care, quality of care, and sexual education (3). It should be noted, however, that since termination of pregnancy can occur across state boundaries, undercounting of certain events is likely.

Definitions and Types

A standard definition of the termination of pregnancy is

> "the termination of pregnancy before the fetus is viable. In the medical sense, the terms abortion and miscarriage both refer to the termination of pregnancy before the fetus is capable of survival outside the uterus. In general language, however, abortion most often refers to deliberate interruption of pregnancy, whereas miscarriage connotes a spontaneous or natural loss of the fetus." (4)

Two types of terminations of pregnancy are examined in this report: spontaneous and induced. Spontaneous termination is "abortion occurring naturally" (4). "It has been estimated that 10 to 12 percent of all pregnancies end in spontaneous abortion" (4). Some research has shown that spontaneous abortions occur commonly, are directly associated with increasing maternal age, and may cluster by chance (5). The same article suggests a possible link between spontaneous termination and nitrate-contaminated water. Hormonal imbalances, emotions, and psychological disturbances frequently play an important role in spontaneous termination (4). Some other causes include trauma, stress, malformation of the fetus, and drug or alcohol use. Hemorrhage, shock, and infection are also involved in spontaneous terminations. Treatment usually consists of dilation and curettage (D&C) to remove tissues that may be retained in the uterus (4).

The difference between a spontaneous termination and a fetal death is that a fetal death is "a birth which fails to show any signs of life after delivery. Reportable fetal deaths in Iowa are those greater than 20 weeks gestation" (6).

Induced termination is "abortion brought on intentionally by medication or instrumentation" (4).

The Centers for Disease Control and Prevention (CDC) has collected and compiled data on abortions since 1969 (1). Therefore, this Iowa data may be compared to the nation as a whole or to other states. National data indicate that there were increases in all measures of induced abortion until around 1990. Since that time, however, there have been decreases (see Table 1).

Table 1

Reported Number of Legal Induced Abortions, Abortion Ratios,* and Abortion Rates,† United States, Selected Years, 1972-1997

Year	Reported number of legal induced abortions	Abortion ratio*	Abortion rate†
1972	586,760	180	13
1976	988,267	312	21
1980	1,297,606	359	25
1985	1,328,570	354	24
1990	1,429,577	345	24
1991	1,388,937	339	24
1992	1,359,145	335	23
1993	1,330,414	334	22
1994	1,267,415	321	21
1995	1,210,883	311	20
1996	1,221,585	314	20
1997	1,186,039	306	20

* Ratio = Number of legal induced abortions per 1,000 live births.
† Rate = Number of legal induced abortions per 1,000 women aged 15-44 years.

The Data

The data for this report are from incidents that occurred during the period of January 2001 through December 2001. A total of 6,845 abortions were reported to have occurred during this time period. Of these, 5,722 were reported as induced, and 1,119 were reported as spontaneous. There were four cases where type was not identified.

It should be noted that Iowa has no agreement with border states on mandatory reporting of terminations in those states; therefore, the current data may be incomplete. It should also be noted that births data used for calculation in this report are actually from 2000 since birth data for the year 2001 will not be available and/or complete until late summer (2002). The numbers for 2000 terminations shown here may differ somewhat from what was presented in last year's report due to additional information being received after the report was published. Data files are typically closed by the end of March for the previous year. For the sake of clarity, figures show only the occurrence of terminations for the year 2001.

Data were analyzed based on key demographic factors and other variables as specified in the *Code of Iowa*. These variables include Maternal and Child Health (MCH) region, age, race, marital status, education of the woman, and gestational age of the fetus. The findings are shown in the tables and figures in this report.

Table 2 shows the number of births and terminations by month of occurrence in the state from 1999 to 2001. The 2001 termination data are shown in Figure 1. Both Table 2 and Figure 1 show a relatively constant pattern of terminations and births during each of the months of occurrence. The lowest number of births was in February. The lowest number of induced and spontaneous terminations was in November. The highest number of births was in August, the highest number of induced terminations was in January, and the highest number of spontaneous terminations was in March. This pattern does not resemble data shown last year. This means the monthly variations are most likely due to chance or unstable causes.

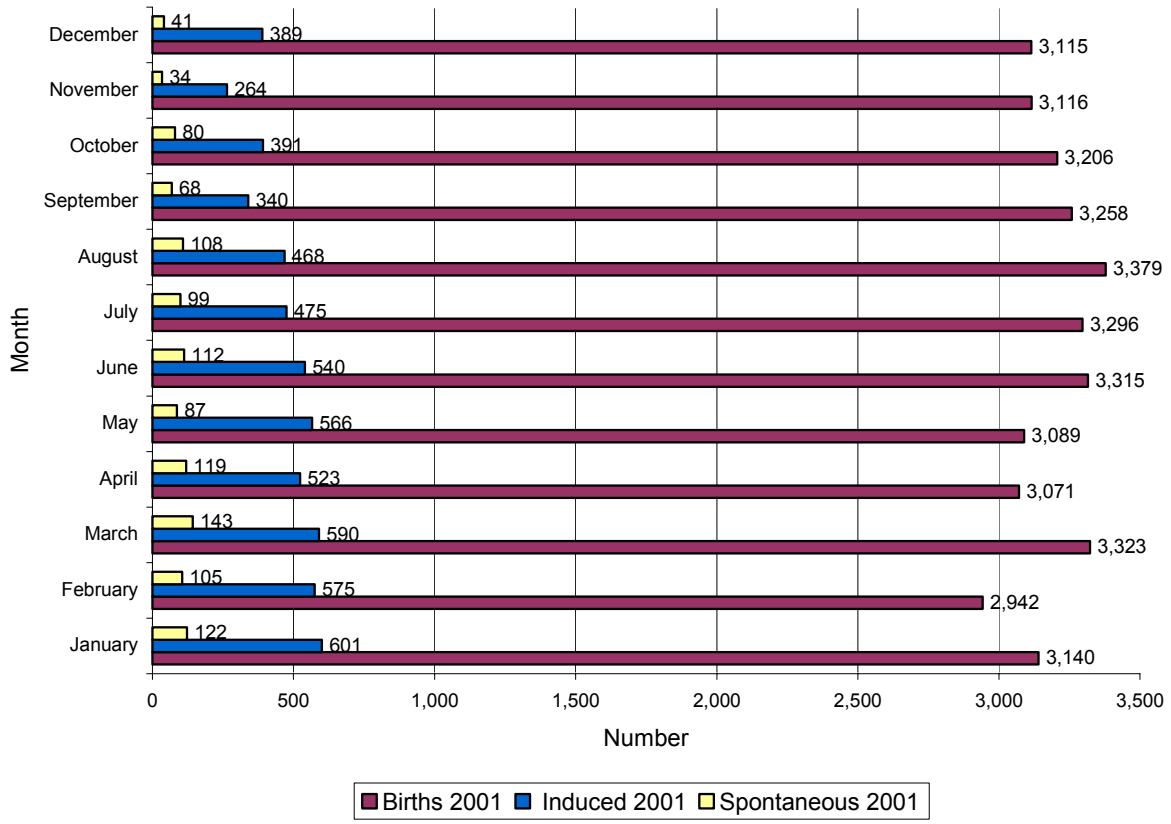
Table 2

Total Births and Pregnancy Terminations by Month of Occurrence

Month	1999				2000				2001		
	Total Births	Induced	Spont.	Unknown	Total Births	Induced	Spont.	Unknown	Induced	Spont.	Unknown
January	2,962	537	135	2	3,140	527	157	0	601	122	0
February	2,878	497	148	1	2,942	582	137	0	575	105	1
March	3,134	640	178	0	3,323	563	130	0	590	143	1
April	3,088	515	124	0	3,071	488	127	0	523	119	1
May	3,122	524	135	0	3,089	522	121	0	566	87	1
June	3,208	485	123	0	3,315	548	132	0	540	112	0
July	3,373	535	121	0	3,296	487	159	0	475	99	0
August	3,280	428	137	0	3,379	501	118	1	468	108	0
September	3,299	471	155	1	3,258	399	106	0	340	68	0
October	3,065	496	136	0	3,206	453	122	0	391	80	0
November	3,019	451	111	0	3,116	510	118	0	264	34	0
December	3,121	527	149	2	3,115	479	113	1	389	41	0
Unknown	0	0	0	0	0	0	1	0	0	1	0
Total	37,549	6,106	1,652	6	38,250	6,059	1,541	2	5,722	1,119	4

Figure 1

2000 Birth Counts and Terminations by Month of Occurrence, 2001



All induced terminations in the state occur during the first and second trimesters of pregnancy. The first trimester is from 0 to 13 weeks of gestation; the second trimester is from 14 to 28 weeks. Approximately 95 percent of induced terminations took place in the first trimester, while five percent were second trimester terminations. Most induced terminations occurred in the second month of gestation (see Tables 3a and 3b and Figure 2). This distribution was similar to spontaneous terminations.

Table 3a
Gestational Age of Fetus by Termination Type Considered in Trimesters

Gestational Age	1999				2000				2001			
	Induced	Percent	Spont.	Percent	Induced	Percent	Spont.	Percent	Induced	Percent	Spont.	Percent
0 to 13 weeks	5,657	92.6%	1,555	94.1%	5,685	93.8%	1,455	94.4%	5,415	94.6%	1,069	95.5%
14 to 28 weeks	446	7.3%	92	5.6%	366	6.0%	75	4.9%	297	5.2%	43	3.8%
Over 28 weeks	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Unknown	3	0.0%	5	0.3%	8	0.1%	11	0.7%	10	0.2%	7	0.6%
Total	6,106	100.0%	1,652	100.0%	6,059	100.0%	1,541	100.0%	5,722	100.0%	1,119	100.0%

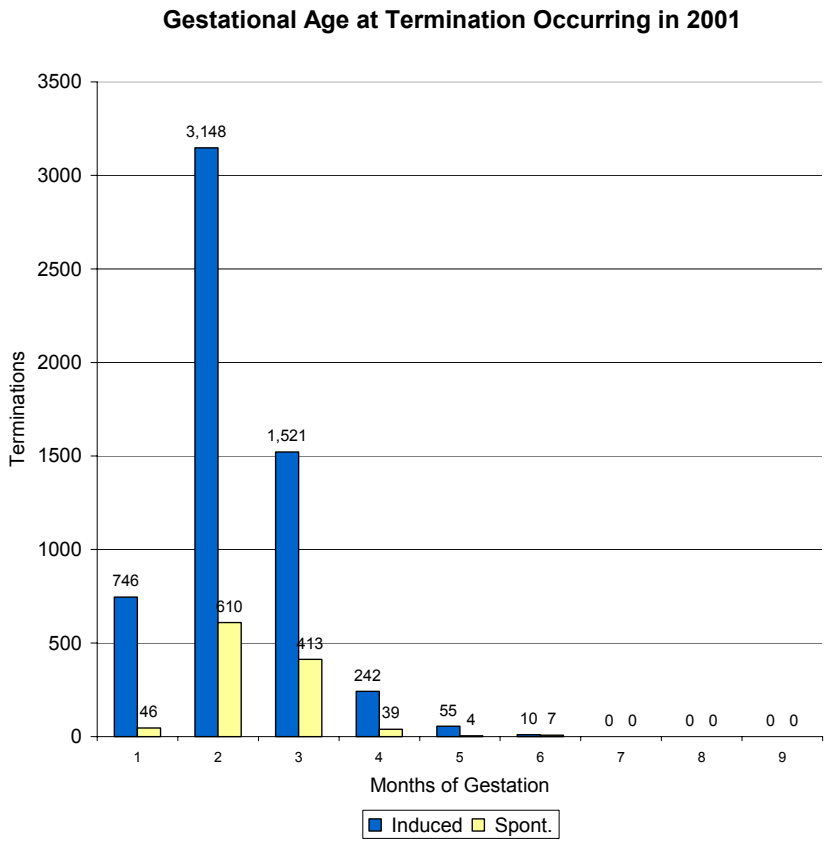
Spont. = Spontaneous

Table 3b

Gestational Age of Fetus by Termination Type Considered in Months

Months of Gestation	1999			2000			2001		
	Induced	Spont.	Unknown	Induced	Spont.	Unknown	Induced	Spont.	Unknown
1	937	88	0	986	61	0	746	46	0
2	3,201	850	4	3,068	794	1	3,148	610	4
3	1,519	617	2	1,631	600	1	1,521	413	0
4	283	72	0	267	56	0	242	39	0
5	142	20	0	98	19	0	55	4	0
6	21	0	0	1	0	0	10	7	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
Unknown	3	5	0	8	11	0	10	7	0
Total	6,106	1,652	6	6,059	1,541	2	5,722	1,119	4

Figure 2



Single women experienced more induced terminations of pregnancy than married women during the reporting period. On the other hand, married women experienced more spontaneous terminations than single women. The pattern is shown in Table 4 and Figure 3.

Table 4

Termination of Pregnancy by Marital Status

Marital Status	1999			2000			2001		
	Induced	Spont.	Unknown	Induced	Spont.	Unknown	Induced	Spont.	Unknown
Married	1,355	1,195	1	1,313	1,115	1	1,206	780	1
Single	4,614	438	5	4,694	413	1	4,476	323	2
Unknown	137	19	0	52	13	0	40	16	1
Total	6,106	1,652	6	6,059	1,541	2	5,722	1,119	4

Figure 3

Distribution of Terminations Occurring in 2001 by Marital Status

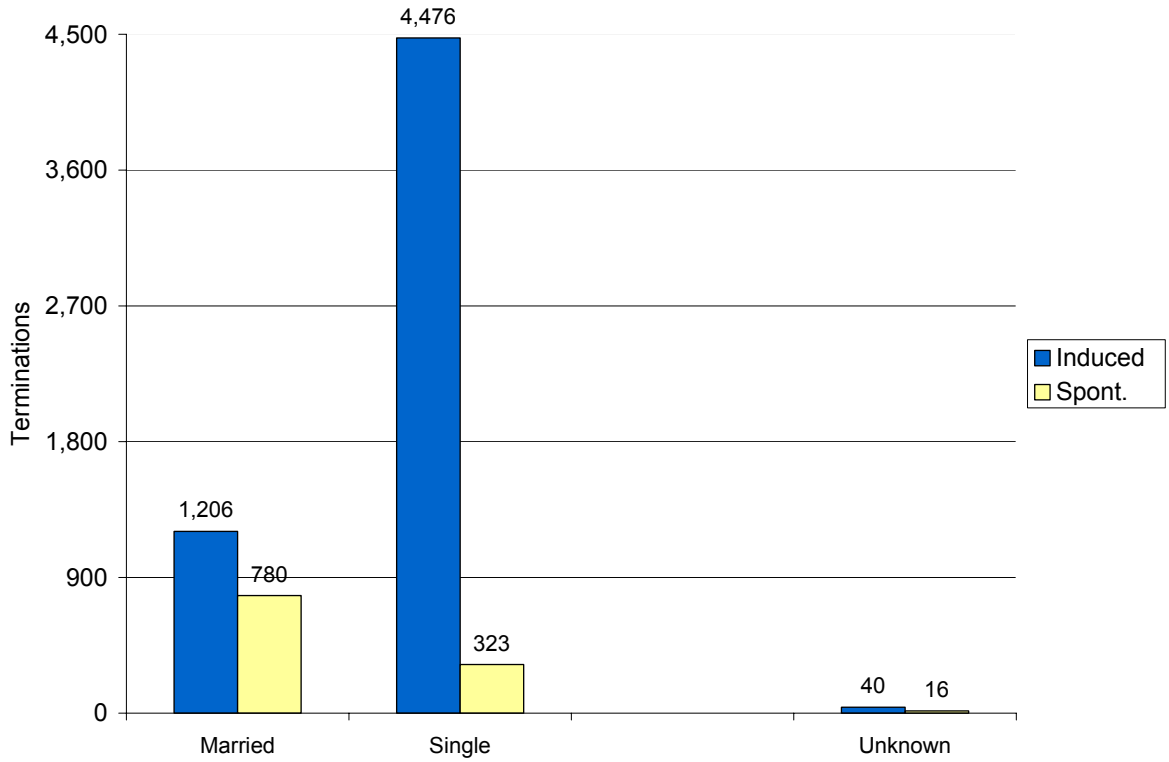


Table 5 and Figure 4 show the number of pregnancy terminations for women with differing amounts of education. Women with 9-12 years of education had more induced terminations, while women with 13-16 education had more spontaneous terminations than did women at other education levels during the reporting year. In the year 2000, women with 9-12 years of education had the most terminations in both types.

Table 5

Termination of Pregnancy by Education Level

Level of Education	1999			2000			2001		
	Induced	Spont.	Unknown	Induced	Spont.	Unknown	Induced	Spont.	Unknown
<= 8 years	103	17	0	119	13	0	101	8	0
9 to 12 years	3,000	602	5	3,164	600	1	2,961	375	2
13 to 16 years	2,557	480	0	2,467	452	1	2,413	380	1
17 to 20 years	143	42	0	121	39	0	99	41	0
Not Identified	303	511	1	188	437	0	148	315	1
Total	6,106	1,652	6	6,059	1,541	2	5,722	1,119	4

Figure 4

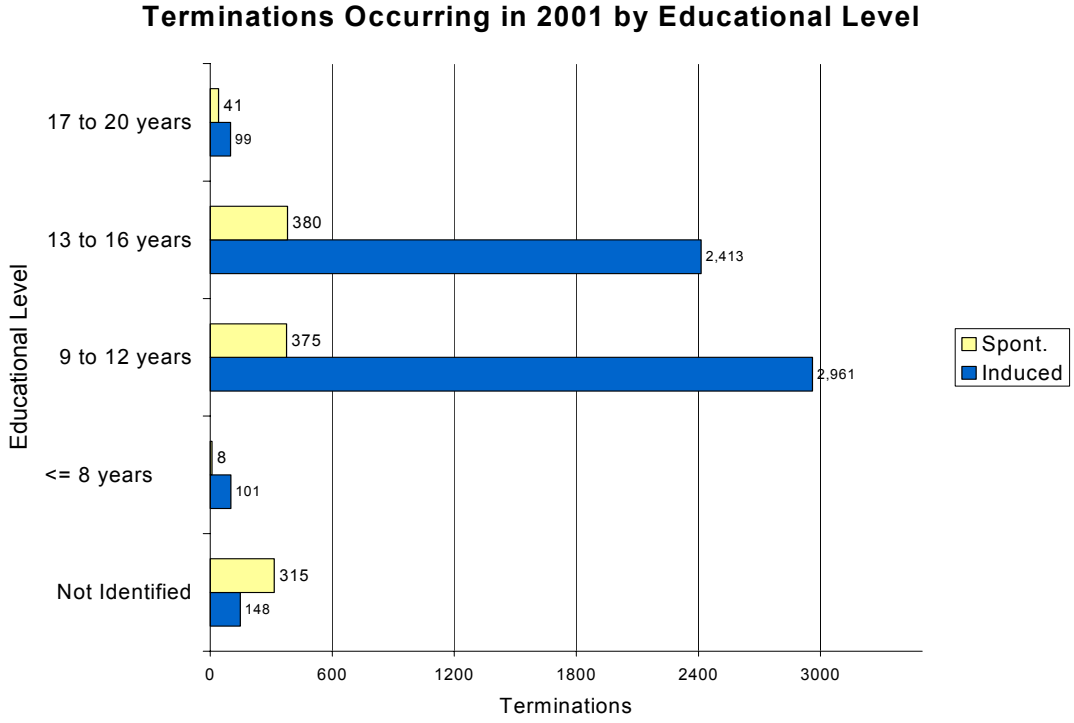


Table 6 and Figure 5 show the number of pregnancy terminations by age of the mother. There is a value for each year of age, except at the extremes of the distribution, where numbers of occurrences become very small. The distribution of induced terminations peaks at 21 years old. The distribution of spontaneous terminations is much shallower and peaks at 30 and 31 years old.

Table 6

Termination of Pregnancy by Age of Mother

Age of Mother	2000			2001		
	Induced	Spont.	Unknown	Induced	Spont.	Unknown
<=14	42	1	0	38	2	0
15	91	9	0	73	4	0
16	132	6	0	113	10	0
17	239	16	0	200	20	0
18	401	46	0	320	17	0
19	438	53	0	416	30	0
20	483	47	0	450	39	0
21	441	64	0	464	56	0
22	424	61	0	431	48	0
23	384	54	0	368	52	1
24	320	77	1	322	52	1
25	296	86	0	255	57	0
26	229	81	0	264	63	0
27	217	102	0	208	55	0
28	234	93	0	218	65	0
29	229	91	0	201	57	0
30	212	82	0	213	66	1
31	155	75	0	172	66	0
32	150	72	0	141	52	0
33	136	66	0	113	45	0
34	134	55	0	117	40	1
35	94	51	0	103	36	0
36	109	55	1	104	31	0
37	125	33	0	87	28	0
38	103	34	0	86	28	0
39	64	34	0	74	26	0
40	67	26	0	59	24	0
41	28	17	0	36	18	0
42	35	17	0	19	12	0
43	20	15	0	25	7	0
44	15	3	0	18	5	0
>=45	7	8	0	14	2	0
Unknown	5	11	0	0	6	0
Total	6,059	1,541	2	5,722	1,119	4

Figure 5

Terminations Occurring in 2001 by Age of Woman

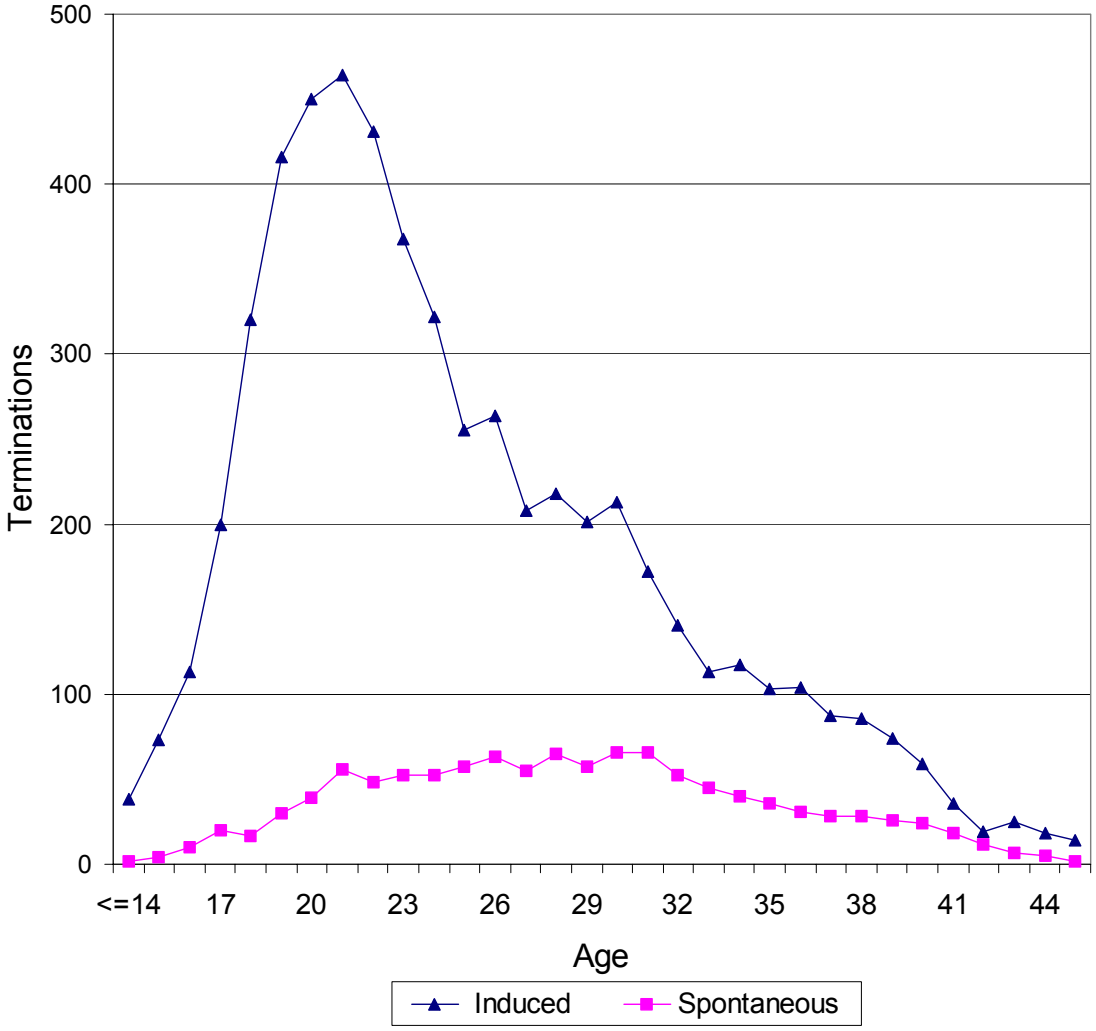


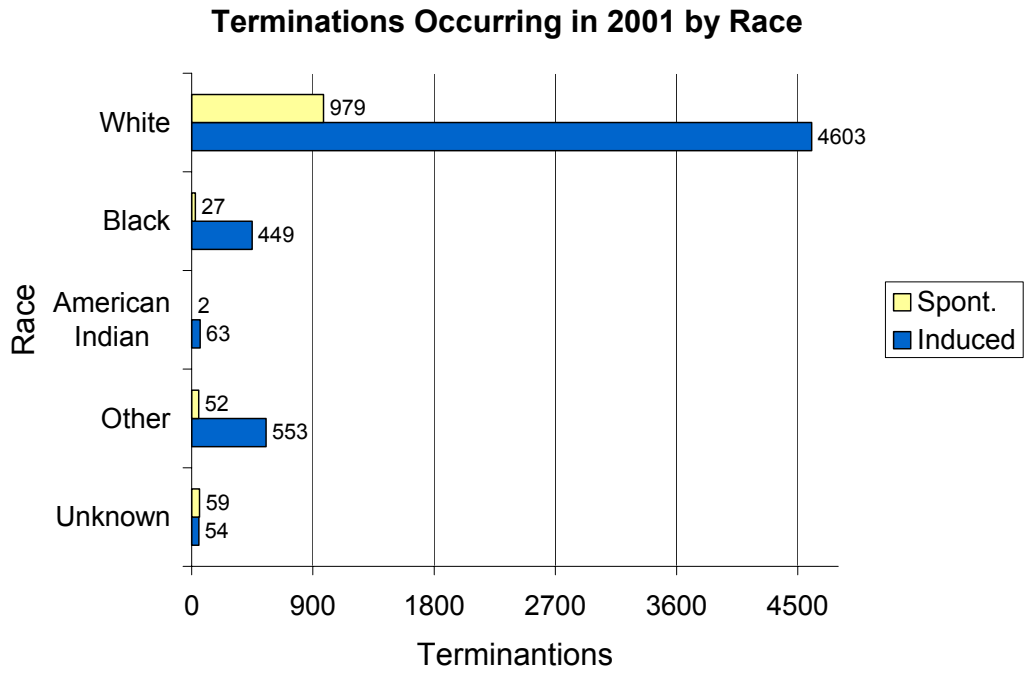
Table 7 and Figure 6 show the distribution of terminations of pregnancy by race. This pattern, while generally following the proportion of each racial group in the population, overrepresented blacks and other races, and underrepresented whites. While these disparities are present in figures for both induced and spontaneous terminations, they are most pronounced for the induced terminations. Small minority populations in Iowa make it difficult to conclude much from this finding.

Table 7

Terminations of Pregnancy by Race

Race	Population %	1999				2000				2001			
		Induced	%	Spont	%	Induced	%	Spont	%	Induced	%	Spont	%
White	96.4%	4,922	80.6%	1,395	88.2%	4,912	81.1%	1,377	89.4%	4,603	80.4%	979	87.5%
Black	2.0%	383	6.3%	41	2.6%	405	6.7%	39	2.5%	449	7.9%	27	2.4%
American Indian	0.3%	57	0.9%	10	0.6%	54	0.9%	6	0.4%	63	1.1%	2	0.2%
Other	1.3%	617	10.1%	86	5.4%	631	10.4%	81	5.3%	553	9.7%	52	4.7%
Unknown	0%	127	2.1%	49	3.1%	57	0.9%	38	2.5%	54	0.9%	59	5.3%
Total	100.0%	6,106	100.0%	1,581	100.0%	6,059	100.0%	1,541	100.0%	5,722	100.0%	1,119	100.0%

Figure 6



Maternal and Child Health (MCH) Regions

The state has been subdivided into Maternal and Child Health (MCH) regions so a geographic analysis of the data can be made. Twenty-six MCH regions have been created within the state for program planning, intervention, and outcome oriented research. The number of spontaneous and induced terminations occurring among women residing within each region is shown in Table 8. Figure 7 is a map showing the location of the regions within the state.

Table 9 provides a comparison of population, live births, fertility rates, pregnancy rates, termination rates, and termination ratios by MCH region (see Appendix for formula). The fertility rate is the total number of live births per 1,000 women of childbearing age. As previously noted, the fertility and birth data used in these calculations were actually from 2000. The fertility rate for the state as a whole was 62.6 per 1,000. Twelve regions were above this rate. The highest fertility rate was recorded in region 7; the lowest was recorded in region 12 (see Table 9). This matched 2000's report.

The pregnancy rate is the total number of live births, fetal deaths, and terminations of pregnancy per 1,000 women of childbearing age (see Appendix for formula). This rate was calculated using live births, fetal deaths, and estimated female population from 2000, but terminations of pregnancy that occurred in 2001. The state rate was 74.1 per 1,000. Seven regions were above this rate. The highest pregnancy rate was found in region 23; the lowest pregnancy rate was in region 16 (see Table 9).

The termination rate is the total number of terminations of pregnancy per 1,000 women of childbearing age (see Appendix for formula). In 2001, the state rate for induced terminations was 9.4 per 1,000. Six regions had a higher rate than this figure. The highest induced rate was in region 23; the lowest rate was in region 22 (see Table 9).

The total spontaneous termination rate for the state was 1.8 per 1,000 in 2001. Seven regions were higher than the state rate. Region 14 was the highest; regions 20, 21, and 25 were the lowest (see Table 9).

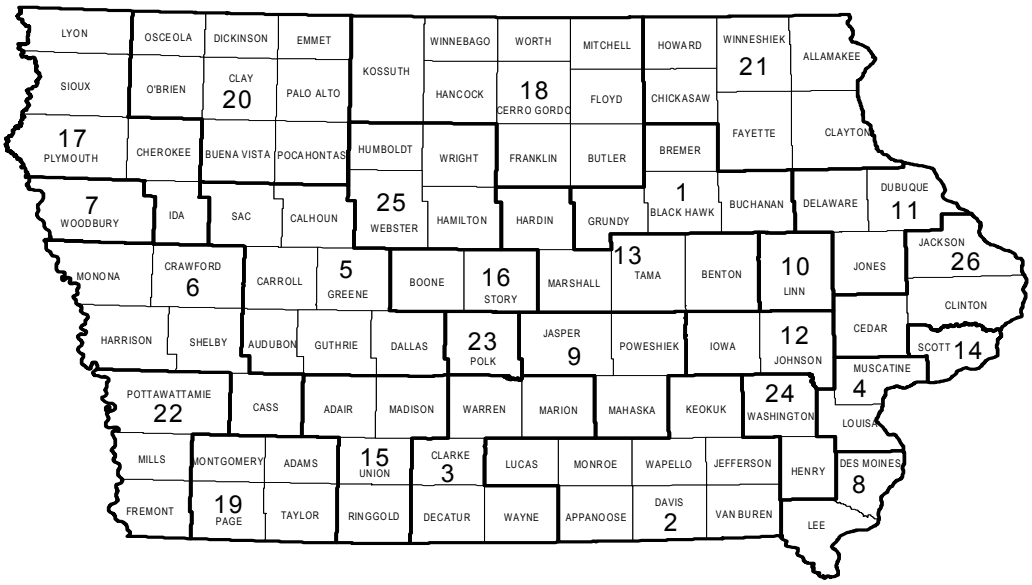
The statewide induced termination ratio (see Appendix for formula) for 2001 was 149.6 per 1,000. Seven regions were higher than this figure with region 12 being the highest. Region 22 was the lowest (see Table 9).

The statewide spontaneous termination ratio for 2001 was 29.3 per 1,000. Eight regions were higher than this figure. Region 14 was the highest; region 20 was the lowest (see Table 9).

Figure 8 shows the geographic distribution of induced and spontaneous termination rates. A lowest rate of induced terminations occurred in the western part of the state. While the geographic distribution of spontaneous terminations is more complex, a lowest rate was found in the northern and western parts of the state. Although not identical, the geographic pattern for termination ratios is very similar to that for termination rates. The geographic distribution is also very similar to that seen in previous years.

Figure 7

Location
Maternal and Child Health Regions
1999-2001



Discussion

Table 10 is provided to show how Iowa compares to other states regarding termination of pregnancy issues (1). Although there are no data for Iowa based on residence for a given year, the occurrence data show that for 1997 (the most current year of reporting for all states), Iowa had a ratio of 273 induced abortions per 1,000 live births, and an abortion rate of 16 per 1,000. The national ratio was 306 per 1,000 live births and an abortion rate of 20 per 1,000 (see Table 10). Since the methodology for obtaining Iowa's figures has changed significantly between 1997 and the present, it is not possible to compare these rates to the data now available. Comparing rates from 1999 to 2001 – when the same methodology was used – shows a decline in numbers. This may be exaggerated, however, since reports may trickle in for months or even years after the end of the reporting year. For a long-term perspective, Table 1 provides a review of changes in reported legal abortions, abortion rates, and abortion ratios for the nation from 1972 to 1997.

Limitations of Data

The data used for this analysis are reported by health care providers. Data are reported by MCH regions rather than on a county basis. Furthermore, incidents handled by health care providers in neighboring states are not likely to be included in the report. It is necessary for fertility rate, pregnancy rate, and ratio calculations to use the live birth data, but the most current year available is 2000. In Iowa there is very little fluctuation in number of births from year to year, so using the

previous year's births should provide reasonably accurate figures by. Lastly, not all terminations are reported in a timely enough fashion to be included in the report.

Summary

Despite the limitations discussed above, an analysis of the data suggests the following:

1. Most of both types of pregnancy terminations (induced and spontaneous) in the state occur within the first trimester; specifically, in the second and third months of gestation.
2. Reports of induced terminations are much more prevalent than spontaneous terminations.
3. Single women experience more induced terminations than married women, while married women experience more spontaneous terminations.
4. Most of the induced terminations occur among women with 9-12 years of education, and most of the spontaneous terminations occur among women with 13-16 years of education.
5. The typical woman with induced termination is younger than the typical woman with spontaneous terminations.
6. Iowa is below the national average for both induced and spontaneous ratios of terminations to live births and for both induced and spontaneous rates of termination for women of childbearing age.
7. A lower rate of induced terminations occurs in the western than in the eastern part of the state, while a lower rate of spontaneous terminations occurs in the northern and western regions.
8. The national trend in induced terminations over the past decade seems to be downward. The numbers of both induced and spontaneous terminations reported within the state from 1999 to 2001 shows a similar pattern. This trend within the state may not be as prominent as it appears, due to incomplete reporting within the time allowed.

Although little may be determined from this data concerning the factors leading to either induced or spontaneous terminations of pregnancy, these reports provide planners and policymakers a baseline of knowledge about such matters.

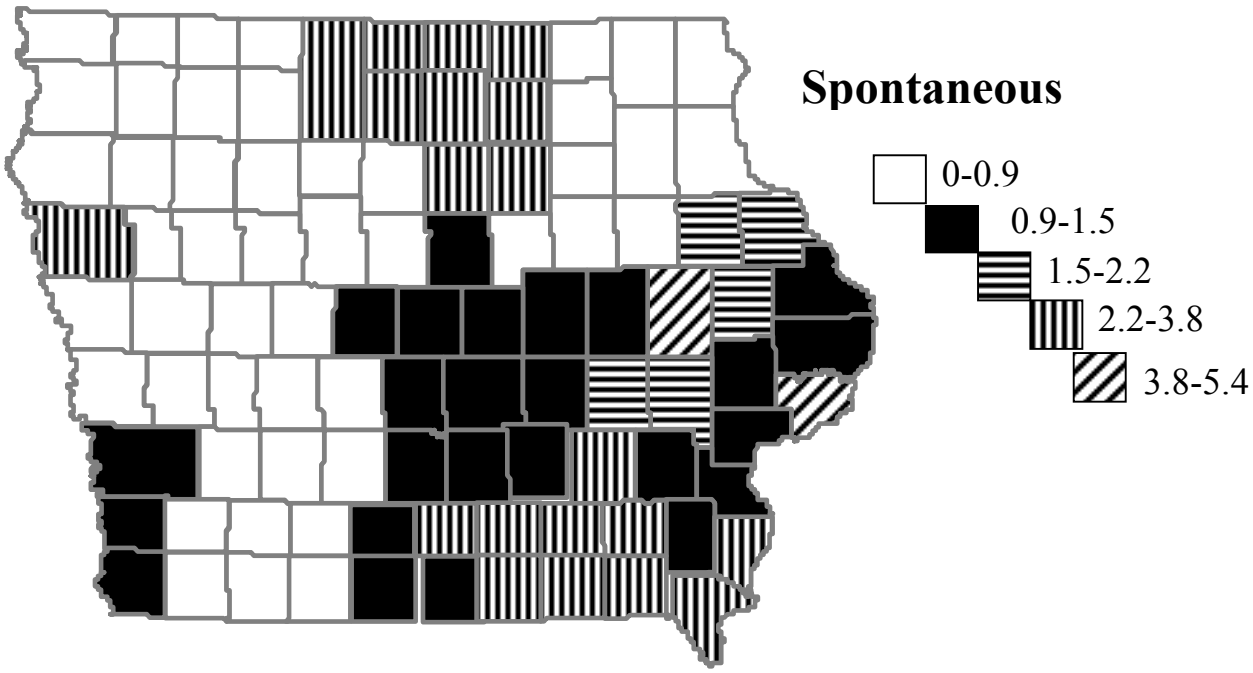
Table 8

Terminations of Pregnancy
by Maternal and Child Health (MCH) Region

MCH Region	1999		2000		2001	
	Induced	Spont.	Induced	Spont.	Induced	Spont.
1	381	48	437	28	352	30
2	157	61	150	71	157	48
3	148	43	132	30	133	26
4	123	20	127	24	113	13
5	110	35	103	40	120	11
6	27	9	14	5	25	7
7	198	123	214	95	137	82
8	118	70	87	65	147	46
9	112	34	97	30	99	23
10	555	146	528	180	509	169
11	192	92	205	87	160	55
12	566	97	521	104	436	63
13	153	39	150	36	147	28
14	387	222	468	211	406	187
15	50	29	44	11	47	5
16	234	32	224	32	233	26
17	25	14	35	18	40	11
18	143	69	164	104	144	84
19	11	8	10	6	10	6
20	61	7	53	6	63	3
21	114	12	129	11	96	3
22	9	56	4	25	9	24
23	1,294	226	1,227	213	1230	126
24	69	28	73	31	52	9
25	115	17	132	11	104	3
26	150	34	142	18	124	18
Out of State	547	41	559	19	591	9
Not Identified*	57	40	30	30	36	4
Total	6,106	1,652	6,059	1,541	5,722	1,119

Figure 8
Geographic Distribution of Terminations of Pregnancy

Spontaneous Termination Rate
Occurring in 2001



Induced Termination Rate
Occurring in 2001

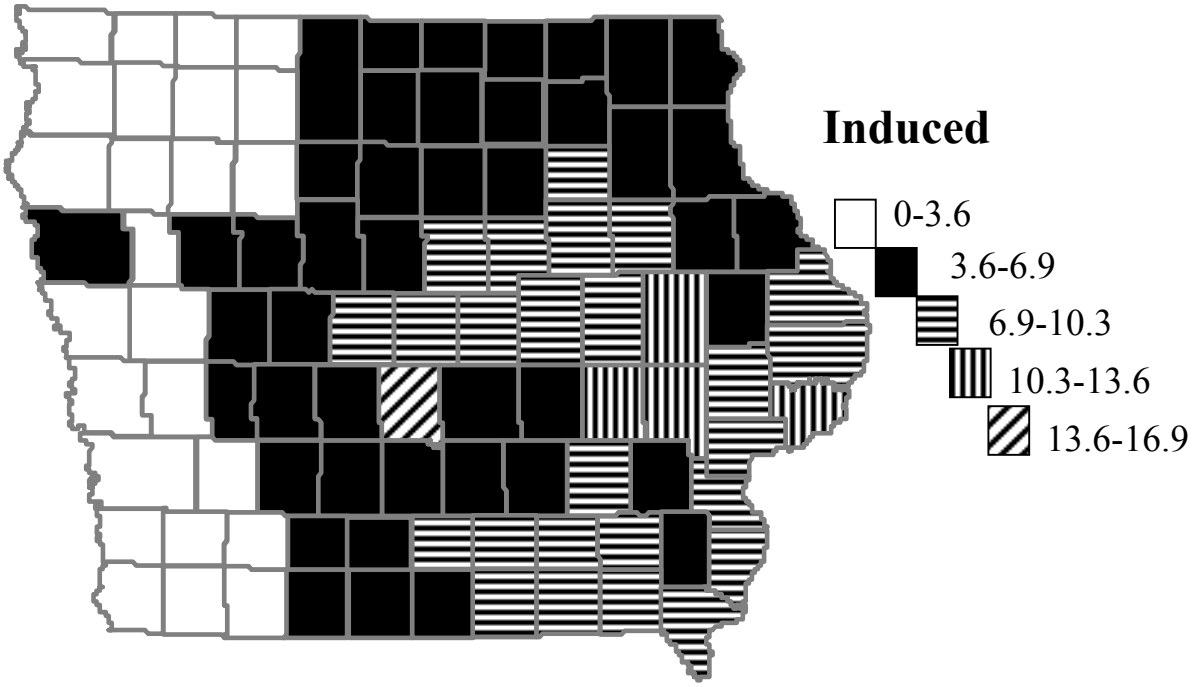


Table 9

Population, Live Births, Fertility Rate, Pregnancy Rate, and Termination Rates and Ratios by Maternal and Child Health MCH Regions

MCH	1999				2000										2001					
									Induced Termination			Spont. Termination			Induced Termination			Spont. Termination		
Region	Live Births	Female Aged 15-44	Fertility Rate	Pregnancy Rate	Live Births	Female Aged 15-44	Fertility Rate	Pregnancy Rate	N	Rate	Ratio	N	Rate	Ratio	N	Rate	Ratio	N	Rate	Ratio
1	2,232	38,434	58.1	70.1	2,235	40,937	54.6	64.2	437	11.4	195.8	28	0.7	12.5	352	8.6	157.5	30	0.7	13.4
2	1,229	21,133	58.2	68.6	1,312	20,731	63.3	73.4	150	7.1	122.1	71	3.4	57.8	157	7.6	119.7	48	2.3	36.6
3	1,187	19,896	59.7	67.6	1,173	20,093	58.4	66.5	132	6.6	111.2	30	1.5	25.3	133	6.6	113.4	26	1.3	22.2
4	783	11,014	71.1	85.1	802	11,102	72.2	83.9	127	11.5	162.2	24	2.2	30.7	113	10.2	140.9	13	1.2	16.2
5	1,320	20,422	64.6	71.4	1,343	21,610	62.1	68.3	103	5.0	78.0	40	2.0	30.3	120	5.6	89.4	11	0.5	8.2
6	795	12,255	64.9	66.6	788	12,830	61.4	64.1	14	1.1	17.6	5	0.4	6.3	25	1.9	31.7	7	0.5	8.9
7	1,627	21,472	75.8	89.6	1,692	22,060	76.7	87.0	214	10.0	131.5	95	4.4	58.4	137	6.2	81.0	82	3.7	48.5
8	986	15,782	62.5	72.1	965	15,357	62.8	75.9	87	5.5	88.2	65	4.1	65.9	147	9.6	152.3	46	3.0	47.7
9	934	15,106	61.8	70.3	953	15,352	62.1	70.5	97	6.4	103.9	30	2.0	32.1	99	6.4	103.9	23	1.5	24.1
10	2,745	42,167	65.1	81.9	2,715	42,455	64.0	80.3	528	12.5	192.3	180	4.3	65.6	509	12.0	187.5	169	4.0	62.2
11	1,546	25,646	60.3	71.7	1,675	25,945	64.6	73.1	205	8.0	132.6	87	3.4	56.3	160	6.2	95.5	55	2.1	32.8
12	1,510	33,302	45.3	63.8	1,565	34,587	45.2	59.8	521	15.6	345.0	104	3.1	68.9	436	12.6	278.6	63	1.8	40.3
13	1,313	19,086	68.8	78.5	1,340	19,345	69.3	78.5	150	7.9	114.2	36	1.9	27.4	147	7.6	109.7	28	1.4	20.9
14	2,264	35,987	62.9	81.0	2,348	34,703	67.7	85.2	468	13.0	206.7	211	5.9	93.2	406	11.7	172.9	187	5.4	79.6
15	468	7,426	63.0	70.0	460	7,486	61.4	68.8	44	5.9	94.0	11	1.5	23.5	47	6.3	102.2	5	0.7	10.9
16	1,203	24,838	48.4	58.3	1,257	26,494	47.4	57.4	224	9.0	186.2	32	1.3	26.6	233	8.8	185.4	26	1.0	20.7
17	1,054	16,932	62.2	65.0	1,141	17,459	65.4	68.5	35	2.1	33.2	18	1.1	17.1	40	2.3	35.1	11	0.6	9.6
18	1,641	27,675	59.3	69.0	1,658	27,484	60.3	69.0	164	5.9	99.9	104	3.8	63.4	144	5.2	86.9	84	3.1	50.7
19	455	6,955	65.4	68.0	430	7,048	61.0	63.4	10	1.4	22.0	6	0.9	13.2	10	1.4	23.3	6	0.9	14.0
20	1,184	18,876	62.7	65.9	1,165	19,604	59.4	63.3	53	2.8	44.8	6	0.3	5.1	63	3.2	54.1	3	0.2	2.6
21	1,050	18,289	57.4	65.3	1,055	19,089	55.3	60.7	129	7.1	122.9	11	0.6	10.5	96	5.0	91.0	3	0.2	2.8
22	1,470	22,794	64.5	66.0	1,421	22,698	62.6	64.3	4	0.2	2.7	25	1.1	17.0	9	0.4	6.3	24	1.1	16.9
23	5,954	87,858	67.8	83.3	6,216	86,419	71.9	88.0	1,227	14.0	206.1	213	2.4	35.8	1,230	14.2	197.9	126	1.5	20.3
24	552	7,978	69.2	82.1	554	7,922	69.9	77.8	73	9.2	132.2	31	3.9	56.2	52	6.6	93.9	9	1.1	16.2
25	999	14,709	67.9	76.9	951	14,992	63.4	70.9	132	9.0	132.1	11	0.7	11.0	104	6.9	109.4	3	0.2	3.2
26	1,048	17,070	61.4	71.0	1,036	17,412	59.5	68.2	142	8.3	135.5	18	1.1	17.2	124	7.1	119.7	18	1.0	17.4
Out of State	-	-	-	-	-	-	-	-	559	-	-	19	-	-	591	-	-	9	-	-
Not Identified	-	-	-	-	-	-	-	-	30	-	-	30	-	-	36	-	-	4	-	-
Total*	37,549	603,102	62.3	74.6	38,250	611,214	62.6	74.1	6,059	10.0	161.4	1,541	2.6	41.0	5,722	9.4	149.6	1,119	1.8	29.3

* Total termination rates and ratios include numbers where the region could not be identified. (see Appendix for formula)

Table 10

Reported Number,* Ratio, and Rate of Legal Abortions and Percentage of Abortions Obtained by Out-of-State Residents,† by State of Occurrence – United States, 1997

State	Residence			Occurrence			Percentage of Legal Abortions Obtained by Out-of-State Residents
	Number of Legal Abortions by Residence	Ratio§	Rate¶	Number of Legal Abortions by Occurrence	Ratio**	Rate††	
Alabama	12,208	200	12	13,063	214	13	15.0
Alaska	283§§	—	—	1,632	164	12	—
Arizona	11,402¶¶	151	12	11,266	149	11	1.9
Arkansas	5,905	162	11	5,782	159	11	10.4
California	567§§	—	—	275,739***	525	38	—
Colorado	8,497	150	10	9,183	162	10	9.3
Connecticut	13,895	322	19	13,802	320	19	3.4
Delaware	3,538	345	21	5,138	501	30	34.5
Dist. Of Columbia	5,468	690	42	8,771	—†††	68	42.1
Florida	452§§	—	—	81,692	425	27	—
Georgia	32,729	277	18	35,702	302	20	9.9
Hawaii	4,513	259	18	4,520	260	18	0.4
Idaho	1,639	88	6	878	47	3	4.3
Illinois	47,426¶¶	262	18	50,147	277	19	7.8
Indiana	15,004	180	11	13,208	158	10	4.1
Iowa	1,045§§	—	—	10,022§§§	273	16	—
Kansas	6,612	177	12	11,249	302	20	44.2
Kentucky	6,435	121	7	7,033	132	8	21.5
Louisiana	829§§	—	—	11,739	178	12	—
Maine	2,460	180	9	2,545	186	9	3.2
Maryland	13,764	196	12	9,869	141	8	4.0
Massachusetts	27,667¶¶	344	20	28,477	354	20	6.2
Michigan	28,988	217	13	29,528	221	13	3.9
Minnesota	13,542	210	13	14,229	221	13	8.6
Mississippi	7,257	175	12	4,325	104	7	5.2
Missouri	13,423	181	11	10,202	138	9	10.1
Montana	2,348	216	13	2,809	259	15	17.3
Nebraska	4,136	178	11	5,129	220	14	22.0
Nevada	6,142	228	17	6,887	256	19	11.3
New Hampshire	186§§	—	—	2,069§§§	145	8	—
New Jersey	31,896	282	18	30,654	271	17	2.4
New Mexico	6,058	225	16	5,382	200	14	5.1
New York	136,514	531	34	140,834	547	35	—
City	95,242	801	—	100,926¶¶¶	849	—	6.0****
State	41,272††††	298	—	39,908	288	—	6.3****
North Carolina	28,950	271	17	31,495	294	19	11.2
North Dakota	1,003	120	7	1,226	147	9	32.4
Ohio	36,623	241	15	38,242	252	15	6.6
Oklahoma	730§§	—	—	6,428§§§	133	9	—
Oregon	13,283	303	19	14,834	339	21	12.0
Pennsylvania	38,686	268	15	37,135	257	14	4.5
Rhode Island	4,555	366	21	5,478	440	25	18.9
South Carolina	11,482	220	13	9,212	176	11	6.3
South Dakota	1,116	110	7	919	90	6	23.9
Tennessee	16,793	225	14	18,283	245	15	18.3
Texas	81,608	244	18	84,680	254	19	3.9
Utah	3,331	77	7	3,408	79	7	8.0
Vermont	1,642	249	12	1,955	296	15	17.1
Virginia	27,260	297	17	26,089	284	16	5.7

(Table continued on next page.)

Table 10 (continued):

Reported Number,* Ratio, and Rate of Legal Abortions and Percentage of Abortions Obtained by Out-of-State Residents,† by State of Occurrence – United States, 1997

State	Residence			Occurrence			Percentage of Legal Abortions Obtained by Out-of-State Residents
	Number of Legal Abortions by Residence	Ratio§	Rate¶	Number of Legal Abortions by Occurrence	Ratio**	Rate††	
Washington	27,363	350	22	26,932	344	21	4.6
West Virginia	3,170	153	8	2,808	135	7	11.7
Wisconsin	13,618	205	12	13,218	199	11	4.1
Wyoming	1,000	157	10	192	30	2	9.4
Other Residence§§§§	3,452	—	—	NA¶¶¶¶	NA	NA	NA
Total Known	**788,493**	—	—	**1,186,039**	**306**	**20**	**8.1**
Unknown Residence*****	8,225						
Not Reported by Residence†††††	389,321						
Total	**1,186,039**						

* Abortion data reported by central health agencies, unless otherwise specified.
† Based on number of abortions for which residence of women was known.
§ Number of abortions per 1,000 live births, by state of residence of women. Number of live births was obtained from CDC's National Center for Health Statistics. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Births: final data for 1997. Atlanta, GA: US Department of Health and Human Services, CDC, National Center for Health Statistics, 1999. Natl Vital Stat Rep; vol 47, no. 18.
¶ Number of abortions per 1,000 women aged 15-44 years, by state of residence. The number of women in this age group was obtained from the U.S. Census Bureau. Table ST-98-39: Population estimates for states by age, sex, race, and Hispanic origin: July 1, 1997 (includes revised population counts). Washington, DC: US Census Bureau, Population Division, Population Estimates Program.
** Number of abortions per 1,000 live births, by state where the abortion occurred. Number of live births was obtained from CDC's National Center for Health Statistics. Ventura SJ, Martin JA, Curtin SC, Mathews TJ. Births: final data for 1997. Atlanta, GA: US Department of Health and Human Services, CDC, National Center for Health Statistics, 1999. Natl Vital Stat Rep; vol 47, no. 18.
†† Number of abortions per 1,000 women aged 15-44 years, by state where the abortion occurred. The number of women in this age group was obtained from the U.S. Census Bureau. Table ST-98-39: Population estimates for states by age, sex, race and Hispanic origin: July 1, 1997 (includes revised population counts). Washington, DC: US Census Bureau, Population Division, Population Estimates Program.
§§ Data reported from other reporting areas. The state did not report abortions by residence; therefore, no information is available on abortions obtained by in-state residents.
¶¶ Reported numbers of abortions for in-state residents only; no detailed information was provided regarding out-of-state residents.
*** CDC estimate.
††† > 1,000 abortions per 1,000 live births.
§§§ Data reported by hospitals and/or other medical facilities in state.
¶¶¶ Reported by the New York City Department of Health.
**** Percentage based on number of abortions reported as "out-of-reporting area."
†††† Includes abortions for women whose state of residence was listed as New York.
§§§§ Includes women whose residence was listed as Canada, Mexico or "other."
¶¶¶¶ Not applicable.
***** Reported as unknown residence (2,365) or out-of-state (or area) residence but not otherwise specified (5,860).
††††† Includes states that did not report abortions by residence.
— Not available.

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Appendix

Formulas

1. Termination Rate = $\frac{\text{\# of Terminations}}{\text{Female Population (age 15 – 44)}} \times 1{,}000$

2. Termination Ratio = $\frac{\text{\# of Terminations}}{\text{\# Total Live Births}} \times 1{,}000$

3. Fertility Rate = $\frac{\text{\# Total Live Births}}{\text{Female Population (age 15 – 44)}} \times 1{,}000$

4. Pregnancy Rate = $\frac{\text{\#(Live Births + Fetal Deaths + Abortions)}}{\text{Female Population (age 15 – 44)}} \times 1{,}000$