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ABORTION
SURVEILLANCE



PREFACE

Over the past 25 years, the term "surveillance" has broadened to include the collection, analysis, and dissemination of epidemiologic information related not only to infectious disease but also to such diverse public health concerns as air pollution, cancer, birth defects, Rh hemolytic disease, and abortion. Recognizing the emerging importance of abortion as a public health issue and the absence of national abortion statistics, the Family Planning Evaluation Division (FPED) initiated epidemiologic surveillance of abortion in 1969. Since then, FPED has been compiling, analyzing, and distributing data on abortion in the United States. The objectives of this surveillance are twofold: 1) to document the number and characteristics of women obtaining abortion, and 2) to eliminate preventable mortality and morbidity related to abortion. The present report documents the most current data available to CDC for the years 1969-1977 and updates previous Abortion Surveillance Reports. This issue provides: 1) demographic and epidemiologic data on legal abortions in 1977, 2) trends in the practice of legal abortion from 1974-1977, 3) abortion-related mortality data for the 6-year period 1972-1977, including types of procedures and death-to-case rates, 4) a comparison of risk factors and morbidity rates of suction curettage procedures associated with 2 types of cervical dilators--laminaria or rigid dilators--derived from CDC's 4-year multicenter study of abortion complications, the Joint Program for the Study of Abortion/CDC (JPSA/CDC), 5) an outline of the Abortion Monitoring in Sentinel Hospitals (AMSH) project designed to monitor the health impact of the restriction of public funding for legal abortion--as of August 4, 1977, and 6) international comparisons of legal abortion.

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Center for Disease Control William H. Foege, M.D., Director
Bureau of Epidemiology Philip S. Brachman, M.D., Director
Family Planning Evaluation Division. . . . Carl W. Tyler, Jr., M.D., Director
Roger W. Rochat, M.D., Deputy Director
Abortion Surveillance Branch Willard Cates, Jr., M.D., Chief
Julian Gold, M.B.B.S., Abortion Surveillance Officer
Richard M. Selik, M.D., Abortion Surveillance Officer
Statistical Services Branch Jack C. Smith, M.S., Chief
Martha R. Cowart, Statistical Assistant
Joyce M. Hughes, Statistical Assistant
Merrell H. Ramick, Statistical Assistant
Elaine P. Rhodenhiser, Statistical Assistant
Kenneth F. Schulz, M.B.A., Mathematical Statistician
Editorial and Graphic Services Frances H. Porcher, M.A., Chief
Norma W. Strawn, Writer-Editor

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Center for Disease Control
Bureau of Epidemiology
Family Planning Evaluation Division
Atlanta, Georgia 30333

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SUMMARY TABLE
CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS
UNITED STATES, 1972-1977

CHARACTERISTICS	PERCENT DISTRIBUTION*					
	1972	1973	1974	1975	1976	1977
<u>Residence</u>						
Abortion in-state	56.2	74.8	86.6	89.2	90.0	90.0
Abortion out-of-state	43.8	25.2	13.4	10.8	10.0	10.0
<u>Age</u>						
≤ 19	32.6	32.7	32.7	33.1	32.1	30.8
20-24	32.5	32.0	31.8	31.9	33.3	34.5
≥ 25	34.9	35.3	35.6	35.0	34.6	34.7
<u>Race</u>						
White	77.0	72.5	69.7	67.8	66.6	66.4
Black and others	23.0	27.5	30.3	32.2	33.4	33.6
<u>Marital Status</u>						
Married	29.7	27.4	27.4	26.1	24.6	24.3
Unmarried	70.3	72.6	72.6	73.9	75.4	75.7
<u>Number of Living Children</u>						
0	49.4	48.6	47.8	47.1	47.7	53.4
1	18.2	18.8	19.6	20.2	20.7	19.1
2	13.3	14.2	14.8	15.5	15.4	14.4
3	8.7	8.7	8.7	8.7	8.3	7.0
4	5.0	4.8	4.5	4.4	4.1	3.3
≥ 5	5.4	4.9	4.5	4.2	3.8	2.9
<u>Type of Procedure</u>						
Curettage	88.6	88.4	89.7	90.9	92.8	93.8
Intrauterine instillation	10.4	10.4	7.8	6.2	6.0	5.4
Hysterotomy/Hysterectomy	0.6	0.7	0.6	0.4	0.2	0.2
Other	0.5	0.6	1.9	2.4	0.9	0.7
<u>Weeks of Gestation</u>						
≤ 8	34.0	36.1	42.6	44.6	47.0	51.2
9-10	30.7	29.4	28.7	28.4	28.0	27.2
11-12	17.5	17.9	15.4	14.9	14.4	13.1
13-15	8.4	6.9	5.5	5.0	4.5	3.4
16-20	8.2	8.0	6.5	6.1	5.1	4.3
≥ 21	1.3	1.7	1.2	1.0	0.9	0.9

*Excludes unknowns

I. SUMMARY

In 1977 the 50 states and the District of Columbia reported 1,079,430 abortions to the Center for Disease Control, a 9% increase over 1976. The national abortion ratio rose by 4%, from 312 per 1,000 live births in 1976 to 325 per 1,000 live births in 1977, or almost 1 abortion for every 3 live births. The trend toward redistribution of abortions into states which had restrictive abortion laws before 1973 appears to have leveled off; the same proportion of women obtained procedures out of state (10%) as in 1976.

As in previous years, women who obtained abortions in 1977 were most often young, white, unmarried, and of low parity. Sixty-five percent were less than 25 years of age; 66% were white, and 34% were of black and other races. Seventy-six percent of all women obtaining abortions were unmarried at the time of the procedure, and 53% had no living children. Curettage continued to be the most widely used procedure for reported legal abortions, accounting for 94% of abortions performed in 1977. Women continued to seek abortions at earlier gestational ages; over half (51%) of all abortions were performed at less than 8 menstrual weeks of pregnancy, and 92% of abortions were induced within the first 12 weeks. Compared with 1976 the percentage of dilatation and evacuation (D&E) and hypertonic saline instillation procedures after 12 weeks' gestation decreased, while prostaglandin and other instillation procedures increased.

In 1977, 33 women died from abortion, compared with 27 in 1976, 47 in 1975, 53 in 1974, 56 in 1973, and 90 in 1972. Compared with 1976 there was a rise in the annual number of legal abortion deaths; 15 women died after legally induced abortion in 1977, compared with 11 in 1976, 29 in 1975, 25 in 1974, 25 in 1973, and 24 in 1972. In 1977 there were 4 deaths after illegally induced abortion and 14 deaths after spontaneous abortion. The death-to-case rate for legal abortions rose from 1.1 in 1976 to 1.4 per 100,000 abortions in 1977.

Analysis of 29,760 suction curettage abortions performed in-hospital at 12 menstrual weeks' gestation or less reported through the Joint Program for the Study of Abortion/CDC (JPSCA/CDC) revealed that rigid dilators and laminaria were almost equally safe methods to use in cervical dilatation. Rigid dilators were associated with significantly higher crude rates of febrile morbidity and uterine perforation, and laminaria were associated with slightly higher rates of cervical injury and retained products of conception. Although both cervical dilatation techniques appear to have a similar degree of overall safety, other factors besides short-term complications may be more relevant to the choice of the particular method used preceding a suction curettage abortion at 12 weeks' gestation or less.

In August 1977 federal funds for financing abortions of Medicaid-eligible women were restricted. At that time an estimated 295,000 abortions had been financed by federal funds through the Medicaid program in fiscal year 1977; thus, approximately 300,000 women might have been affected by this change in funding policy. The Abortion Monitoring in Sentinel Hospitals (AMSH) project, initiated by CDC, was designed to monitor any substantial increase in the number of Medicaid-eligible women seeking self-induced or non-physician-induced abortions, thus placing themselves at higher risk of abortion-related complications. Preliminary results indicated that the states where most Medicaid abortions had been performed before the federal funding cutoff were then using state funds for performing abortions; therefore, the projected excess morbidity and mortality of Medicaid-eligible women did not occur. The restriction of public funds was found to be significantly associated, however, with a later gestational age at the time of the abortion. In non-funded states Medicaid-eligible women with complications after legally induced abortions had a 1.9-week-later mean gestational age than their counterparts in funded states. Moreover, Medicaid-eligible women in non-funded states had a 2.4-week-later mean gestational age than non-Medicaid-eligible women in the same states. Thus, we conclude that the restriction of public funds for abortion did not cause large numbers of Medicaid-eligible women to choose non-physician-induced or self-induced abortions; however, they may have delayed their abortions to raise enough private funds for the procedure.

II. NUMBER AND CHARACTERISTICS OF WOMEN RECEIVING ABORTIONS

A. Surveillance Methods

CDC receives statistics on abortion by state of occurrence from 2 types of sources: 1) central health agencies, and 2) hospitals and/or facilities (see Figure 1). Table 1 summarizes the development of CDC's abortion reporting sources since the initiation of epidemiologic surveillance of abortion in 1969. The number of states (including the District of Columbia) from which statewide abortion data are reported has increased from 8 in 1969 to 45 in 1977. These 45 central health agencies have received their information either from direct reporting systems or from surveys of abortion facilities within their states. To obtain information for this report from the 6 states which do not collect statewide abortion data, CDC directed inquiries to the hospitals and facilities in those states.

B. Tabulation Methods

CDC tabulates data on the following variables where provided by the state: number of abortions, residence status, age, race, marital status, number of living children, method of abortion, weeks of gestation, procedure (curettage, etc.) by weeks of gestation, and previous induced abortions. Percentages shown in each table may differ slightly from those in the Summary Table, since in the latter the percentages were calculated to redistribute the unknowns. Because California collected its data by the variables listed above for 1976 but not for 1977, the percentage of all abortions for which CDC has variable-specific data is lower in 1977 than in 1976.

C. Number of Abortions by State of Occurrence

In 1977 the 50 states and the District of Columbia reported 1,079,430 legal abortions, an increase of 9% over the 988,267 legal abortions reported in 1976. New York and California reported the largest number of abortions, as they have consistently done since 1970 (Table 2). In 1977 these 2 states provided 29% of the national total, the same percentage as in 1976. Alaska, Idaho, New Hampshire, South Dakota, Vermont, and Wyoming each reported fewer than 2,000 abortions in 1977. The largest percentage increases were reported from Nevada (80%) and Mississippi (62%), while the largest decreases were reported from Kansas (19% decrease) and Arkansas (17% decrease).

The national abortion ratio rose in 1977 to 325 abortions per 1,000 live births, a 4% increase over 1976 (Table 1). The range of abortion ratios reported by states for 1977 was similar to that reported for 1976; the lowest ratio was reported by Mississippi (54), and the highest was reported by the District of Columbia (more than 1,000 abortions per 1,000 live births). Thirty-three of the 50 reporting states recorded an increase in the abortion ratio compared with 1976; the largest increase was reported by Nevada where the abortion ratio rose 70% from 240 in 1976 to 409 in 1977 (Table 3). The largest decline in the abortion ratio was in Vermont, where the ratio decreased 19%, from 344 in 1976 to 277 in 1977.

D. Residence Status

In 1977, 10% of abortions were performed for out-of-state residents (Table 4). The percentage of abortions performed for out-of-state residents appears to have leveled off, with about the same proportion being reported for each of the 3 years 1975, 1976, and 1977. In 1977 the residence status was known for 69% of women who had reported abortions. This is 17% less than the percentage in 1976 and is primarily accounted for by the non-reporting of residence status by California in 1977. The largest proportion of abortions for out-of-state women in 1977 was reported by the District of Columbia (55%). South Dakota and Washington were next highest, both reporting more than 40%. Declines in the percentages for out-of-state women were reported by 26 of the 43 states reporting residence status in 1977.

The greatest proportion of women obtaining abortions outside their state of residence resided in the East South Central Division (17%), and the smallest in the Pacific Division (1%), as shown in Table 5. This is consistent with information reported in both 1975 and 1976. States having the highest percentage of women

who left their states to obtain abortions were Wyoming (85%), West Virginia (56%), and Mississippi (47%). In New York, Minnesota, Colorado, Arizona, Nevada, and Hawaii less than 1% of the women who had abortions went outside their state of residence to obtain the procedure. Although specific residency data are not available for Californian women obtaining abortions in 1977, an estimated 0.4% had out-of-state abortions based on reporting in prior years.

E. Age

Thirty-six states and the District of Columbia included age in their abortion reports in 1977, comprising 62% of all reported abortions (Table 6). In 1977 approximately 31% of women obtaining abortions were age 19 or younger, 34% were 20-24 years old, and 35% were age 25 or older (Summary Table and Figure 2). Compared with 1976, this distribution shifted slightly from the group less than 19 years old toward the 20- to 24-year age group. In 1977 Kansas, Arkansas, Nebraska, and South Dakota had the largest percentage of women younger than 20, and Illinois, Hawaii, New York, and the District of Columbia had the largest percentage of women 25 and older. New York reported the largest number of abortions to teenagers. California did not report age in 1977.

A total of 159,093 abortions in 32 states were reported by specific years of age for women 13-19 years old (Table 6A). Over 55% of these legally induced abortions were obtained by women 18 years or older; 11% were obtained by 13- to 15-year-olds.

Women less than 15 years old had the highest ratio of legal abortions to live births, followed by women 40 years old and above (Tables 7 and 7A and Figure 3). Although abortion ratios varied widely from state to state, this bimodal distribution is evident in each reporting area, as it was in 1976. For the aggregated data from all 37 areas reporting in 1977, women under 15 years of age had more abortions than live births. The lowest abortion ratio was reported for the 25- to 29-year-old age group, 199 abortions per 1,000 live births, which was about the same as in 1976.

F. Race

Although the majority (66%) of abortions in 1977 involved white women, the percentage of abortions for women of black and other races continued to increase compared with previous years (Figure 4). Thirty-two states and the District of Columbia reported race in 1977, comprising 52% of all reported abortions (Table 8); largely because California did not report race in 1977, 110,000 (16%) fewer abortions were reported by race for this year. Both Hawaii and the District of Columbia reported a majority of abortions for women of black and other races, while Louisiana, New York City, South Carolina, and Illinois all reported more than 40% of abortions to women of black and other races.

Women of black and other races continued to have a higher abortion ratio than whites (Figure 5). The aggregate legal abortion ratio for black and other races in 1977 was 490 per 1,000 live births (Table 9). Compared with 1976 the abortion ratio for black and other races decreased from 530 to 490, and for whites it decreased from 289 to 268. Twenty-three of the 32 states reporting this information had a higher abortion ratio for black and other races than for whites. In the District of Columbia, the abortion ratio for whites was over 4 times higher than for black and other races; one possible explanation for this is that white women from suburbs of the District of Columbia go to the District to obtain abortions, but they do not go there to deliver infants, preferring their local hospitals. The abortion ratio for black and other races was at least twice as high as for whites in Illinois, Missouri, New Hampshire, Ohio, and Utah.

G. Marital Status

In 1977, 76% of women obtaining abortions in 33 states and the District of Columbia were unmarried at the time of their abortion (Table 10); this is a slightly higher proportion than the 74% unmarried reported in 1976. Since 1972 there has been a gradual increase in the percentage of reported legal abortions

obtained by unmarried women (Summary Table, Table 11, Figure 6). In 1977, 33 states and the District of Columbia reported the woman's marital status; California did not report this information.

In 1977 unmarried women continued to have much higher abortion ratios than their married counterparts (Table 12, Figure 7). In addition, in 21 of the 32 states reporting this information, unmarried women had more abortions than live births. The aggregate abortion ratio for unmarried women (1,480) was nearly 16 times higher than for married women (93). The large difference in abortion ratios between married and unmarried women does not take into account those women who conceived premaritally and subsequently gave birth while married. This situation would tend to shift live births from the unmarried to the married category, thereby increasing the abortion ratio for unmarried women to a greater degree than for married because of the large number of live births to the latter. In 1977 the lowest abortion ratio for unmarried women was in Mississippi (153 per 1,000 live births), and the highest was in the District of Columbia (4,422 per 1,000 live births).

H. Number of Living Children

An inverse relationship existed between the number of living children a woman had and the percentage of abortions obtained in 1977 (Figure 8). Fifty-two percent of abortions were for women with no living children, and 3% were for women with 5 or more children (Table 13). Compared with 1976 this is an increase of 7 percentage points in the former category and a decrease of 2 percentage points in the latter. Twenty-nine states in 1977 included in their reports the woman's number of living children; these comprised 46% of all reported abortions.

Women with 1 living child had the lowest abortion ratio (190) in 1977 and those with no living children had the highest (415) (Table 14). Compared with 1976 the largest decrease in the abortion ratio was for women with 3 or more living children (Figure 9). This large decrease in the ratio for women with 3 or more living children was primarily due to the non-reporting of this characteristic by California for 1977.

I. Methods of Abortion

In 1977 curettage (suction, sharp, and dilatation and evacuation) was the type of procedure used in 93% of abortions compared with 92% in 1976 (Table 15). Thirty-four states and the District of Columbia reported information on method of abortion in 1977, comprising 61% of all reported abortions. Saline and prostaglandin instillation procedures made up 4% and 1%, respectively, about the same proportions as in 1976. Hysterotomy and hysterectomy accounted for 0.2% of all procedures in 1977 reported by these states, the same as in 1976 (Figure 10).

In states where both saline and prostaglandin procedures were used, there appeared to be a clear preference for one over the other. For example, Colorado, District of Columbia, Kansas, Nebraska, New York, Ohio, Pennsylvania, Rhode Island, and Washington used mainly saline, whereas Hawaii, Illinois, Massachusetts, Minnesota, and Missouri used mainly prostaglandin.

J. Weeks of Gestation

In 1977, 49% of reported legal abortions were performed in the first 8 weeks of gestation (Table 16). Thirty-seven states and the District of Columbia reported information on gestation at the time of abortion, comprising 65% of all reported abortions. In 1977, 3% of women obtained abortions in the 13- to 15-week interval, 4% in the 16- to 20-week interval, and 1% at greater than 20 weeks; these proportions were about the same as reported in 1976.

In those states which have reported this information since 1972, the percentage of abortions performed at less than 13 weeks' gestation increased to 89% in 1977, compared with 87% in 1976 (Table 17). Arkansas, Colorado, Georgia, Mississippi, and Oregon reported a decrease between 1976 and 1977 in the percentage of legal abortions performed at less than 13 weeks.

Between 1974 and 1977 there was a continuous increase in the percentage of reported legal abortions performed at less than 9 weeks' gestation, with a corresponding decrease in the percentage of abortions performed at later gestations (Figure 11). This trend has been noted in aggregated national data since 1972 (Summary Table).

K. Procedure by Weeks of Gestation

In 1977 curettage (suction and sharp) continued to be the most common method used (99%) for pregnancy termination in the first 12 weeks of gestation (Table 18). Twenty-eight states reported information on type of procedure by weeks of gestation, accounting for 47% of all reported abortions in 1977. In the 13- to 15-week interval, 73% of all procedures were by curettage (either suction or sharp), followed by saline instillation (17%) and prostaglandin instillation (6%). Saline instillation was the most commonly used (53%) procedure at 16 or more weeks' gestation, with curettage procedures and instillation of prostaglandin or other agents (e.g., urea) accounting for about 16% and 30%, respectively, in 1977. Compared with 1976 the percentage of instillation of prostaglandin and other methods used after 16 weeks' gestation increased, whereas both dilatation and evacuation and saline instillation procedures decreased for this later gestation.

L. Previous Induced Abortions

In 1977, 22% of abortions reported in 29 states and the District of Columbia were obtained by women who reported having had at least 1 previous induced abortion (Table 19). This continued the increasing trend toward repeated induced abortions reported for 1975 (16%) and 1976 (18%). Of the women who had abortions in 1977, 17% had had 1 previous abortion; 3%, 2 abortions; and 1%, 3 or more. The District of Columbia reported the highest level (32%) of women having had previous induced abortions; Nebraska had the lowest level (9%).

M. Interpretation

Since legal abortion became available in 1970, the cumulative number of women who have had legal abortions has increased each year. In 1977 the number of legal abortions reported to CDC rose 9% over the number reported in 1976; the abortion ratio increased 4% in 1977, to 325 per 1,000 live births. These figures reveal a slowing of the percentage increase in the number and ratio of abortions, which may reflect: 1) the continued gradual replacement of non-physician (illegal) procedures by physician (legal) procedures, 2) more effective use of contraception by reproductive age women, 3) increasing use of sterilization, thus placing less women at risk of an unwanted pregnancy, 4) improvements in sex education and changes in attitude of reproductive age women and men, 5) changes in public funding policy for abortion, or 6) reporting artifact.

The number of abortions reported to CDC was probably less than the number actually performed in 1977. In public health surveillance, the number of reported cases is generally lower than the number obtained through surveys. The magnitude of underreporting can be estimated by comparing the total number of abortions reported to CDC with the total obtained through the Alan Guttmacher Institute (AGI) nationwide survey of abortion facilities (1). For 1977, as in previous years, CDC's total was approximately 17% lower than the AGI total. Thus underreporting could produce some biases in the CDC data. Abortions performed in physicians' offices are probably underreported more often than those performed in hospitals or facilities. Because physicians probably perform abortions in their offices at earlier gestational ages of pregnancy than other facilities do, the underreporting of these data may bias the gestational age distributions toward the later stages of pregnancy.

The general availability of abortion services since 1973 has progressively allowed more women to obtain abortions within their state of residence; between 1973 and 1975 many states performing abortions before 1973 reported decreases in the number of abortions performed for non-residents, while those states that began performing abortions after the Supreme Court decision of January 22, 1973, have progressively reported more abortions for state residents. Thus, in 1976 and 1977 90% of women obtaining induced abortions were able to have the procedure

in their state of residence. By obtaining abortions close to home, women had the advantages both of having their procedures performed at earlier gestational ages and of being in closer proximity to follow-up services provided by abortion facilities.

The age distribution of women obtaining abortions has not changed markedly since 1973. In 1977, as in earlier years, women under the age of 15 had more abortions than live births. In 1977 women in the 25- to 29-year-old age group continued to have the lowest legal abortion ratio, indicating that pregnancies of this group were most likely to be planned and therefore carried to term.

Women of black and other races again obtained abortions proportionately more frequently than white women; in 1977 a larger percentage increase occurred in their abortion ratio than in the ratio reported for white women. This may have been due to several factors: 1) women of minority racial groups may have unwanted pregnancies proportionately more often than white women, thus reflecting the need for family planning services for minority racial groups, and 2) women of minority racial groups may be more likely to obtain abortions in facilities where abortions are reported by race; for example, underreporting of abortions performed in physicians' offices may disproportionately reduce the number reported for white women.

Because the population at risk of having multiple abortions has increased, it would be expected that an increased percentage of abortions performed would be obtained by women who have undergone 1 or more previous procedures. This trend was noted in 1977; 22% of abortions were performed on women who had had at least 1 previous abortion, compared with 18% in 1976 and 16% in 1975.

In 1977 there was a continued trend toward women seeking abortions at earlier gestational ages, which should have a favorable health impact in terms of decreasing the morbidity and mortality associated with the abortion procedure. As of August 4, 1977, federal funds were restricted for Medicaid-eligible women seeking abortion. This decision and CDC's surveillance activity to monitor the public health effects are elaborated in Section IV, B.

III. ABORTION-RELATED MORTALITY

A. Surveillance Methods

In 1972 CDC began epidemiologic surveillance of abortion-related mortality. The purpose of this surveillance is to identify factors associated with abortion mortality, with the aim of eliminating preventable deaths resulting from abortion. Reports of abortion-related deaths have come primarily from the vital statistics sections of state health departments; however, additional data have been obtained from such sources as state medical or hospital associations, CDC investigations, published case histories, state maternal mortality committees, and records from the National Center for Health Statistics and other federal agencies. We review the medical records and contact the attending physicians to verify and expand the clinical details about each of the deaths. In addition, the social circumstances surrounding each death are ascertained through interviews with family, friends, and local health officials.

Mortality statistics are continually updated as reports are received. The delay in reporting abortion deaths to CDC has ranged from time of death to 6 years, with a median of 7 months. For those deaths reported in 1977, the delay has ranged from time of death to 24 months, with a median of 6 months. This report reflects the most current information available to CDC and updates previous Abortion Surveillance Reports and other CDC publications. In the future, as CDC learns of other abortion deaths, these deaths will be included in subsequent publications. For the most current information on abortion-related deaths, interested persons should contact CDC directly rather than relying solely on published data.

B. Definitions

The 1975 and 1976 Abortion Surveillance Reports described the process by which CDC convened a panel of experts to establish definitions used for abortion mortality surveillance. For the 1977 Abortion Surveillance Report, the definitions were reviewed by 18 experts*, and specific problem areas of classification were addressed. Based on this review, a consensus was obtained that deaths of women attributable to procedures to evacuate a fetal death in utero or a "missed abortion" should be categorized as abortion-related, within the spontaneous abortion category. The reason for categorizing the abortion as spontaneous is that the pregnancy terminated spontaneously, even though the products of conception had not been spontaneously expelled. Therefore, for the 1977 Abortion Surveillance Report, the following definitions were used:

1) Abortion: Any termination of pregnancy before completion of the 20th menstrual week of gestation, and those terminations after the 20th menstrual week which are intended to produce a nonviable fetus; also any intervention to terminate a suspected intrauterine pregnancy (whether or not the pregnancy is later confirmed). Molar and ectopic pregnancies are excluded.

2) Abortion Death: The death of a woman from any cause occurring within 42 days after spontaneous abortion or initiation of induced abortion.

a) Abortion-related Death--Death resulting from complications of the abortion itself, from the chain of events initiated by the abortion which led to the death, or from aggravation of an unrelated condition by the physiologic or pharmacologic effects of the abortion which subsequently caused the death.

b) Non-related Abortion Death--A death occurring during or after an abortion which was not causally associated with the abortion, its complications, or their management.

3) Categories of Abortion-related Deaths: Abortion-related deaths are categorized as spontaneous, induced, or unknown, according to the classification of the abortion.

An abortion is classified as spontaneous if

- the patient gave no history of induced abortion,
- no evidence of instrumentation could be found, and/or
- the pregnancy was terminated by a spontaneous fetal death in utero

An abortion is classified as induced if

- information obtained from the patient's medical history, family, or friends indicates that a deliberate attempt was made to terminate the pregnancy, or
- evidence suggests instrumentation of the cervix or uterus, or there are other signs that intervention occurred before physical examination, surgery, or pathologic examination, even if no attempt to induce the abortion was acknowledged by the patient, her family, or friends.

Induced abortions are further classified by their legal status according to the following criteria:

- If the patient's medical history indicates that the abortion was self-induced or induced by someone who was neither a licensed physician nor was acting under the supervision of a licensed physician, it is classified as "illegal."

*William E. Brenner, M.D., Mark Cheng, M.D., Mary E. Converse, RRA, Irvin M. Cushner, M.D., C. E. Gibbs, M.D., Sadja Goldsmith, M.D., Lester T. Hibbard, M.D., Jane E. Hodgson, M.D., Irwin H. Kaiser, M.D., Sue Meads, Ervin E. Nichols, M.D., Warren H. Pearse, M.D., Harold Schulman, M.D., Richard M. Soderstrom, M.D., Steele F. Stewart, Jr., M.D., Phillip G. Stubblefield, M.D., Christopher Tietze, M.D., and Louise B. Tyrer, M.D.

- If evidence of intervention is found but no history of physician-induced abortion is obtained, it is classified as "illegal."

- If the patient's medical history indicates that the abortion was performed by a licensed physician or someone acting under the supervision of a physician, it is classified as "legal."

An abortion is classified as unknown when a determination of the circumstances under which the abortion occurred cannot be made with these criteria. It should be noted that our terms "legal" and "illegal" do not necessarily correspond to legal status as defined by law.

4) Factors of Preventability: The preventability of abortion-related deaths is judged by "ideal" standards. This concept involves the following 5 assumptions. First, the patient possessed the knowledge and judgment necessary to make an early decision in a case of unwanted pregnancy. Second, the community in which the patient lived had family planning and abortion facilities within the community's usual system of medical care. Third, the attending health professionals possessed all the current collective knowledge available on factors involved in the death. Fourth, all personnel had reached a level of experience and technical ability sufficient to provide abortion services and manage complications secondary to the procedure. Fifth, the professionals had available all necessary facilities in a well-organized and properly equipped clinic or hospital.

This approach allows more specific analysis of each case in order to 1) identify areas for continued patient health education, 2) document regions with inadequate family planning-abortion facilities, 3) stimulate training of health professionals in patient management techniques, 4) improve the quality of abortion services, and 5) eventually help reduce the death-to-case rate from abortion.

5) Factors of Responsibility: Responsibility is determined wherever possible according to factors involving the patient, community, abortion facility, professional, or to any combination.

a) Patient Factors--These factors lead to fatal complications for which there is generally successful treatment, but which the patient willfully denied herself by denying symptoms of pregnancy, by actively postponing her initial visit to the physician, by refusing to obtain medical care after complications were obvious, or finally by rejecting the advice and instructions of her physician(s). These factors also include religious, socio-cultural, economic, and educational considerations relevant to the patient's course of action, but they should not be used as an excuse for professional inadequacy.

b) Community Factors--These factors involve deaths which could have been avoided if services were available in the immediate community for contraception, pregnancy testing and counseling, abortion referral, outpatient abortion facilities, and inpatient abortion and acute-care facilities. The Alan Guttmacher Institute's estimates of unmet contraceptive and abortion need (2,3) will be one standard used in assessing the adequacy of these services. Other factors include systems for subsidizing abortion costs, consent requirements, other legal restrictions, and the availability of abortion services in publicly supported hospitals.

c) Abortion Facility Factors--These factors involve an abortion facility's equipment, services, personnel, policies, or practices. The recommendations contained in the National Abortion Federation Standards (4) are useful guidelines.

d) Professional Factors--These factors include errors on the part of any individual medical provider in diagnosis, judgment, management, and technique and include failure to recognize the complication or to evaluate it properly. They also include instances of injudicious haste or delay in timing of operative intervention, and failure to utilize currently acceptable methods of treatment. Finally, they include those complications which could have been averted by proper and timely consultation or referral.

C. Total Abortion Mortality

Thirty-three women died from abortion in 1977, compared with 27 in 1976, 47 in 1975, 53 in 1974, 56 in 1973, and 90 in 1972 (Figure 12). For the first year since 1972, there was an increase in the total annual number of abortion-related deaths; there were increases in all 3 categories--legally induced, illegally induced, and spontaneous (Figure 13). The changes in definitions regarding fetal deaths in utero (described on page 7) did not influence the total number of abortion-related deaths; however, 4 deaths categorized as legally induced in the 1976 Abortion Surveillance Report have been classified as spontaneous in the present report.

Between 1972 and 1977, 6 women died from ectopic pregnancy after undergoing a legally induced abortion procedure. Because deaths from ectopic pregnancies are not considered abortion-related (see page 7), they have not been tabulated in Tables 20-23.

D. Legal Abortion Mortality

Fifteen women died after legally induced abortion in 1977, compared with 11 in 1976, 29 in 1975, 25 in 1974, 25 in 1973, and 24 in 1972 (Figure 13). In 1977 a total of 1,079,430 legal abortions were reported to CDC. With this figure used as the denominator, the overall death-to-case rate for legal abortion was 1.4 per 100,000 abortions in 1977, compared with 1.1 in 1976, 3.4 in 1975, 3.3 in 1974, and 4.1 in both 1973 and 1972. Although the death-to-case rate for legal abortion in 1977 was slightly higher than that for 1976, this increase was relatively small and could be accounted for by 1) chance fluctuation of a rare event, and 2) year-to-year variations in reporting.

The death-to-case rates for legal abortion in both 1976 and 1977 were markedly lower than in any earlier years. Possible reasons for the decline after 1975 are 1) the increasing percentage of abortions being performed during the earlier, safer gestational ages, 2) increasing experience with abortion by practicing physicians, 3) the increasing percentage of safer curettage procedures, including dilatation and evacuation, and 4) underreporting of legal abortion deaths during the most recent years.

The aggregated data for the years 1972-1977 show that the risk of death from legal abortion was lowest for women whose abortions were performed at less than 9 menstrual weeks' gestation, with a death-to-case rate of 0.6 per 100,000 procedures (Table 20). The death-to-case rate increased by approximately 40%-60% for each week of delay after the 8th week. Abortions performed at 9-10 weeks were nearly 3 times more dangerous in terms of mortality than those performed earlier. Abortions performed at more than 21 weeks carried the greatest risk, with a death-to-case rate 34 times that of abortions performed at less than 9 weeks.

For the years 1972-1977, mortality rates were highest for hysterotomy and hysterectomy abortions and lowest for curettage (including dilatation and evacuation), with instillation procedures intermediate (Table 21). Curettage procedures had a death-to-case rate of 1.5 per 100,000 abortions, compared with 13.5 for instillation procedures and 43.6 for hysterotomy-hysterectomy.

For purposes of subcategorizing the deaths associated with particular abortion methods, all curettage procedures performed at less than 13 weeks' gestation are referred to as "curettage," and all curettage procedures performed at more than 12 weeks' gestation are referred to as "dilatation and evacuation" (D&E). Instillation procedures are subdivided into saline, prostaglandin, and other, depending on the primary abortifacient used. From 1972 through 1977, 51 women died after curettage procedures, 15 after D&E, 37 after saline instillation, 8 after prostaglandin instillation, 3 after use of other abortifacients (oxytocin, urea, or Leunbach's paste), 9 after hysterotomy or hysterectomy, and 6 after other methods (3 intrauterine insertions of rubber catheters, 1 "mechanical packing," and 2 unknown) (Table 22).

Applying the type of procedure by weeks' gestation distributions from the reporting states (Table 18) to the total number of abortions reported from 1972-1977, we obtained denominators upon which to calculate procedure-gestation-specific death-to-case rates (Table 23). Because many states categorize prostaglandin instillation under the "other" category, for the purposes of this table our denominator distributions included the "other" category in the denominator of the instillation of prostaglandin agents. Because of this shift, we have also included deaths that occurred from instillation of other agents in the prostaglandin category. Deaths that occurred from other methods such as intrauterine insertion of rubber catheters or "mechanical packing" were not included in the calculation of specific methods in the body of Table 23, but were included in the row labeled "Total."

From 1972 through 1977, the risk of death for uterine evacuation procedures increased with gestational age. Curettage procedures had a death-to-case rate of 0.5/100,000 abortions at less than 9 weeks, 1.6 at 9-10 weeks, and 2.9 at 11-12 weeks; D&E procedures had a death-to-case rate of 6.7/100,000 abortions at 13-15 weeks, 12.9 at 16-20 weeks, and 16.7 at more than 20 weeks.

Although a woman's overall risk of dying is greater from D&E than it is from curettage procedures, it is less than from either of the 2 instillation procedures (last column, Table 23). From 1972-1977, D&E had an overall death-to-case rate of 8.3 per 100,000 abortions, compared with 10.8 for prostaglandin instillation (including other agents) and 15.5 for saline instillation. The marked variation within specific gestational age intervals between prostaglandin and saline instillation is probably caused by statistical artifact arising from the relatively small number of deaths and cases involved.

The following case history provides an example of various factors associated with abortion-related fatalities:

Case History--An 18-year-old woman, married but separated from her husband, with a history of 2 previous pregnancies and 1 living child had symptoms of breast tenderness and morning sickness approximately 4 months after her last normal menstrual period. She had a history of irregular menstrual periods, was using no method of contraception, and had been having sporadic sexual relations with her husband from whom she had been separated for approximately 1 year. At the time she noticed symptoms she visited a local hospital, but her pregnancy test was negative. Her symptoms suggesting pregnancy continued over the next 2 weeks, so she returned to the hospital; this time her pregnancy test was positive. She requested an abortion, and was referred by a local women's group to an outpatient abortion clinic located at a distance of approximately 2 hours' drive from the patient's home.

One week after her positive pregnancy test, and nearly 5 months after her last normal menstrual period, the woman was driven by her sister to the outpatient clinic. The clinic is located in a state which requires that all pregnancies later than 12 weeks' gestation be terminated in hospitals. The clinic is well equipped and well staffed, it had complied with state and local ordinances governing outpatient abortion facilities, it had no record of previous abortion-related fatalities, and an experienced obstetrician-gynecologist performed the abortion procedures. The clinic also had a laparoscope available for diagnostic use in managing abortion complications, if necessary.

According to clinic records, the woman stated that she had had a negative pregnancy test approximately 2 weeks earlier; she reported a pattern of irregular and light menstrual periods. The physician examined the patient, determined that she was pregnant, and because of her uterine size estimated the pregnancy to be 11 weeks' gestation.

A suction curettage was performed. Local anesthesia was used, the cervix was dilated to a size 41 Pratt, and a size 12 plastic suction cannula was used. The procedure took approximately 10 minutes, and gross examination of the post-abortion products of conception were consistent with the estimated gestational age of 11 weeks. The physician felt the procedure went well, and did not suspect any complications.

The patient stayed in the recovery room approximately 1 hour; her last blood pressure was 100/68, recorded approximately 45 minutes after the procedure. She attended a group post-abortion counseling session, where she was noted to be pale and complaining of lower abdominal cramping. She returned to the recovery room where she rested another 30 minutes. Approximately 2 hours after the abortion procedure, she announced that she was feeling better and wished to go home.

She was driven home by her sister. During the 2-hour drive, she fainted several times. She was lethargic after she got home, and appeared to sleep. Approximately 8 hours after her procedure, the woman attempted to stand, but she fainted. An ambulance was called, but she was dead on arrival at the local emergency room.

An autopsy found approximately 2,000 cc of fresh blood in the pelvic and retroperitoneal area. A 4-centimeter laceration was present in the anterior lower segment of the uterus. Fetal elements were still present within the uterus, with measurements consistent with a gestation of 16 menstrual weeks. The cause of death was listed as "rupture of the uterus with exsanguinating hemorrhage."

This case highlights several problems associated with performing dilatation and evacuation procedures at later than 12 weeks' gestation. First, there should be an accurate determination of gestational age. Recent data have shown that use of the last normal menstrual period provides a more reliable indicator of the length of gestation than does preoperative uterine size estimation, even by an experienced physician. In instances where there may be a discrepancy between the last normal menstrual period and the physician's estimate of uterine size, a sonogram is one way to more accurately determine gestational age. In this case, the history of a recent negative pregnancy test and the woman's pattern of irregular menstrual cycles made the history an unreliable source for determining gestational age. The physician estimated an 11 weeks' gestation and obtained uterine contents consistent with this determination. Thus, the uterus was incompletely evacuated and even if a perforation had not occurred, the woman would have been subject to higher risks of post-abortion hemorrhage and infection because of the retained products of conception.

Second, the appropriate role of outpatient abortion facilities in performing dilatation and evacuation procedures remains controversial. The state in which the abortion was performed requires that all abortions at 13 menstrual weeks of gestation or later be performed in hospitals. However, in other states where experienced operators are performing procedures at later than 12 menstrual weeks' gestation in outpatient clinics, they have reported low complication rates with dilatation and evacuation procedures. D&E procedures are used primarily because of the reduced costs and inconvenience to the patient. The facility where this procedure was performed was adequately staffed and equipped and had recently passed an inspection by the state licensing authorities. It appears, therefore, that the problem was due not so much to the facility in which the abortion was performed, but to the early recognition of the symptoms of uterine perforation.

Third, some uterine perforations occur at the time of cervical dilatation. For suction curettage procedures performed at 12 weeks and earlier, CDC studies of abortion morbidity have found that the use of laminaria to dilate the cervix

reduces the risk of uterine perforation (see Section IV, A). For dilatation and evacuation procedures at 13 weeks' gestation or later, some operators have found that use of laminaria allows a wider cervical os, thus facilitating complete removal of the uterine contents and reducing the risk of perforation.

Fourth, the woman was observed in the outpatient facility for 2 hours. Despite her symptoms suggestive of internal hemorrhage (syncope, lower abdominal cramping), no blood pressure measurements were recorded later than 45 minutes after the procedure. The woman was not re-examined by the physician before she left the facility. In part, this may have been because she claimed to feel better and was eager to leave. However, especially in instances when an abortion is performed at later gestational ages, it is important that the facility and staff remain alert to any signs of postoperative complications. In this instance, a laparoscope was available at the clinic for use in managing suspected perforations; the problem was that the perforation was not suspected.

E. Illegal Abortion Mortality

Four deaths were associated with illegally induced abortion in 1977, compared with 39 in 1972, 19 in 1973, 6 in 1974, 4 in 1975, and 2 in 1976. Therefore, for the first year since 1972, there was an increase in the annual number of illegal abortion deaths (Figure 13). In the past we have used the number of illegal abortion deaths as an index to reflect the number of illegal abortions actually being performed. Before 1977 the decline in the number of illegal abortion deaths was felt to reflect the increased availability of the safer legal procedures throughout the country; women who formerly terminated their pregnancies through illegal channels probably elected to use the safer legal facilities. However, in 1977, the Supreme Court ruled that states had the right to restrict the use of public funds for legal abortion services. In August 1977 federal funds for abortion for Medicaid-eligible women were restricted; over the next several months, 34 states similarly elected to restrict state funds for abortion for Medicaid-eligible women. Chance fluctuation of a rare event is a possible explanation for this increase in illegal abortion-related deaths. The role of these public policy decisions, if any, is unknown. For at least 1 woman, the non-availability of public funds led to a situation in which she was forced to choose the less-safe illegal abortion because of financial factors:

Case History--A 27-year-old single woman of Hispanic origin, with 3 previous pregnancies (2 prior legally induced abortions, 1 living child), whose last menstrual period occurred in August 1977, arrived at the emergency room of McAllen General Hospital, McAllen, Texas, on September 26, 1977, in imminent septic shock. She died 8 days later on October 3, despite intensive medical surgical care, of renal and cardiac failure as a result of disseminated intravascular coagulation caused by Clostridium perfringens septicemia.

This woman had had 1 live birth (normal delivery) in 1973. She had been receiving welfare payments and was Medicaid-eligible since the birth of her child. She began taking oral contraceptives in that year and discontinued them approximately 2 years later, on the advice of her physician, because of minor side effects. She then apparently used no contraception and became pregnant in May 1975. On July 15, 1975, she attended a private obstetric/gynecology practice in McAllen and had an induced abortion performed by suction curettage to terminate her pregnancy of approximately 9 menstrual weeks' gestation. The procedure was financed by Medicaid. After this abortion she attended a family planning facility in McAllen and began using oral contraceptives

again. In December 1976 she was again advised by her physician to stop using oral contraceptives because he felt that they would be detrimental to her future fertility.

In January 1977 the woman suspected that she was pregnant and had her pregnancy confirmed at the local Planned Parenthood facility. She was referred to an abortion facility in Harlingen, where her pregnancy of approximately 11 menstrual weeks' gestation was terminated by suction curettage. This abortion was also financed by Medicaid. There is no information as to whether she used contraception after this abortion, but she apparently had regular menstrual periods until August 1977.

In early September 1977 the woman again suspected that she was pregnant. In a discussion with her cousin and best friend, she learned that Medicaid would no longer pay if she desired to have an abortion. On September 1 she went to her family physician in McAllen complaining of sternal pain and general muscle fatigue. She was treated with intercostal injections of hydrocortisone and oral analgesics. The patient returned to this physician on September 19, again complaining of sternal pain. During this consultation she mentioned that she may be pregnant, and the physician informed her that Medicaid would no longer pay for an abortion if she wanted one. They did not discuss the pregnancy further; no pregnancy test was performed, and no appointment was made for follow-up.

In the week of September 19 the woman went to Reynosa, Mexico, on 2 occasions to have intramuscular injections in an attempt to induce an abortion. We do not know the substance used. Each injection cost \$5.00 and was administered at a single unnamed pharmacy in Reynosa. According to an interview with the cousin who accompanied her to Reynosa, no instruments were used on the woman's uterus on either of these occasions. After having the second injection, she experienced episodes of nausea, vomiting, and dizziness; she fainted once. By September 24 she had no signs of abortion onset and reportedly became more desperate to have the pregnancy terminated.

On September 25 she discussed this pregnancy with her cousin and expressed the need to find an inexpensive abortionist as soon as possible. At 7:00 that evening, accompanied by her cousin, she went to the house of a lay midwife in McAllen where she was told the abortion would be performed for \$120. The abortion was performed in 15 minutes and the patient left.

When the woman returned home, she began having lower abdominal pain with cramping; over the next 12 hours she became progressively febrile and had episodes of nausea, vomiting, chills, dizziness, and increasingly severe vaginal bleeding. By the next afternoon she was unable to get up from her bed. When visited by a friend she asked to be taken to a hospital. She was admitted to McAllen General Hospital at 5:00 p.m., approximately 22 hours after the abortion. On admission, she stated that she was having leg cramps and low abdominal pain and that she had started her menstrual period that day. She denied that any instruments had been used on her uterus. On examination, her temperature was 100.8 F, pulse 108/min, respiration 24/min, blood pressure 110/80. Physical examination revealed lower abdominal tenderness with some guarding. Her uterine cervix appeared soft with the os dilated enough to admit a ring forceps. Her uterus was enlarged and tender, but the actual size was difficult to ascertain

accurately because of guarding over the lower abdominal area. There was a dark bloody discharge in the vagina. The white blood cell count was 19,700, hemoglobin was 8 grams percent, and her red blood cell smear showed marked microcytosis and moderate polychromasia. Her admission diagnosis was septic incomplete abortion. Two blood cultures, taken on admission, grew C. perfringens organisms.

She was started immediately on intravenous penicillin (2 million units per day) and intravenous fluids. A dilatation and curettage was performed 2 hours after her admission, and endometrial cultures grew C. perfringens organisms. Pregnancy was confirmed by the presence of trophoblastic tissue. Despite antibiotic therapy, the patient's condition deteriorated over the next 12 hours. She was noted to be intensely jaundiced, she had a pulse rate of 160/min, and a rash developed that covered her trunk and upper thighs. Her hemoglobin dropped from 8 to 6 grams percent. Her urine output dropped to 300 ml over a 24-hour period, and acute renal failure was suspected. Further laboratory tests demonstrated a rise of fibrin degradation products, indicating the onset of disseminated intravascular coagulation. A total abdominal hysterectomy was performed on the second hospital day to remove the nidus of infection. Postoperatively her blood pressure was 90/60, pulse 120/min, respiration 30/min.

Cardiac failure occurred 6 hours postoperatively, and a consultant physician recommended rotating tourniquets, digitalization, and positive expiratory pressure to prevent edema. Over the next 3 days the patient's respiratory condition further deteriorated, necessitating a tracheotomy for supportive respiration. Despite intermittent transfusions of fibrinogen to treat the disseminated intravascular coagulation, high-dose antibiotics, and intensive supportive therapy, this patient died on October 3. The causes of death listed on the death certificate were septicemia caused by C. perfringens, resulting in disseminated intravascular coagulation, which in turn led to renal and cardiac failure. No autopsy was performed.

In summary, this woman had an unwanted pregnancy and no Medicaid assistance (that she had used twice before) to pay for a legal abortion. She sought a low-cost abortion on 2 occasions in Reynosa, Mexico, because of financial hardship. When these were unsuccessful, her third attempt, by a lay midwife in McAllen, resulted in instrumentation of her uterus and the probable introduction of C. perfringens organisms. These factors led to the fulminant endometritis and sepsis which eventually caused her death.

F. Spontaneous Abortion Mortality

There were 14 deaths from spontaneous abortion in the United States in 1977 (Figure 13). Because of the change which classified abortion-related deaths occurring after a fetal death in utero as spontaneous rather than legally induced, the number of spontaneous abortion deaths from 1972-1976 is somewhat higher than reported in the 1976 Abortion Surveillance Report. Different methods of evacuating the uterus after a fetal death in utero or a missed abortion are currently being investigated. In recent years, abortion-related deaths after a fetal death in utero have occurred after each of the following methods: dilatation and evacuation, saline instillation, intraamniotic instillation of prostaglandin F_{2α}, and prostaglandin E₂ vaginal suppositories.

As the following case shows, even routine dilatation and curettage for an uncomplicated early spontaneous abortion can cause complications which result in the death of the woman.

Case History--A 22-year-old married woman with 1 previous pregnancy and 1 living child, whose last normal menstrual period had been 7 weeks earlier, came to the local family practice clinic with symptoms of delayed menses and morning sickness. She had had an intrauterine device (IUD) inserted approximately 2 years earlier, after the birth of her first child. A pregnancy test was positive, and her uterus was estimated to be 7 weeks' gestation in size. The IUD string was visible. She was given pregnancy counseling, which included the discussion of a therapeutic pregnancy termination.

She chose to continue her pregnancy, returning 5 days later so that the IUD could be removed. She had no complaints 2 weeks later at her first formal prenatal visit. One week after this visit, she reported to the clinic with symptoms of abdominal cramping and spotting. Her vital signs were normal, her illness was diagnosed as a threatened abortion, and bed rest at home was advised. Four days later her vaginal hemorrhaging became heavier. Her family physician diagnosed an incomplete spontaneous abortion, and she was referred to the local hospital for complete evacuation of the products of conception.

At the time of her admission to the hospital, her vital signs were within normal limits and her hematocrit was 36, her cervix was observed to be "slightly opened," her uterus was estimated by the obstetrical consultant to be smaller than her last menstrual dates would have indicated, and a suction curettage was scheduled to insure that there was no residual tissue. The procedure was performed under general anesthesia. Her cervix was dilated to 14 Hegar. A suction curettage produced minimal tissue and because some products of conception were felt to be still present in the uterus, a sharp curettage was also performed. During the procedure, the surgeon noted tissue adherent to the left uterine wall. The patient did well after the procedure, maintaining a normal blood pressure while she was in the recovery room. She was transferred to the obstetrical floor, apparently in good condition.

Eight hours after the procedure, she was found unresponsive in her bed, apparently after a cardiac arrest. She was resuscitated, and her vital signs were stabilized. An exploratory laparotomy revealed approximately 3,000 cc of blood in her left broad ligament with laceration of the adjacent blood vessels. The woman never regained consciousness and eventually died 12 days after her admission.

The woman had an unplanned pregnancy with an IUD in situ. Because she elected to continue her pregnancy, the IUD was appropriately removed in order to 1) allow her pregnancy a better chance of being carried to term, and 2) reduce the risk of an infected spontaneous abortion.

When she suffered an incomplete spontaneous abortion at 11 weeks' gestation, a routine curettage using both suction and sharp instruments was performed to insure no retained products of conception. Although the procedure was more difficult than usual, uterine perforation was not suspected. Routine postoperative observation, first in the surgical recovery room and later on the obstetrical floor, did not reveal sufficient change in the patient's vital signs to warrant further evaluation. This case demonstrates that uterine perforation is a possibility anytime an instrument enters the uterus, even when partial dilatation has been previously achieved by the uterine contractions of the

spontaneous abortion. Moreover, unlike the case history involving a legal abortion death, this occurred in a hospital setting with full nursing and laboratory services. Again, the problem was in the physician's not suspecting a uterine perforation.

IV. ABORTION-RELATED MORBIDITY

A. The Joint Program for the Study of Abortion/CDC: Comparison of Laminaria and Rigid Cervical Dilators for Suction Curettage Abortion

The Joint Program for the Study of Abortion under the auspices of the Center for Disease Control (JPSA/CDC) is a multicenter study of the early and delayed medical complications of legally induced abortion. Initial analyses investigated the comparative risks of second-trimester abortion by 3 methods--intraamniotic prostaglandin F_{2α}, hypertonic saline, and dilatation and evacuation (D&E). Subsequent JPSA/CDC analyses have used data from 54,155 suction curettage abortions performed at 12 weeks' gestation or less in the United States from 1971 through 1975 to compare differences among types of anesthesia and cervical dilatation.

In our analysis of the methods of cervical dilatation, we defined procedures in which laminaria were used either alone or in combination with other dilators as dilatation by laminaria; we defined procedures in which Hanks, Hegar, Kelly, or Pratt dilators were used without laminaria as dilatation by rigid dilators. Because no outpatient clinics participating in JPSA/CDC used laminaria for dilatation before suction curettage, we included in the study only the data on abortions performed in hospitals. The data we analyzed were for 29,760 abortions by suction curettage performed in hospitals at 12 weeks' gestation or less--3,260 by laminaria dilatation and 26,500 by rigid dilation.

Rigid dilators were associated with significantly higher crude rates of febrile morbidity and uterine perforation; however, after we standardized for important differences between the study groups, the significant risk of febrile morbidity associated with rigid dilators was eliminated, and the risk of uterine perforation was accentuated. Rigid dilators were associated with a higher risk of uterine hemorrhage, but not at a statistically significant level. Conversely, laminaria were associated with slightly higher rates of cervical injury and retained products of conception. Although these complications occurred at generally higher frequencies than the others evaluated, the differences between laminaria and rigid dilators were not statistically significant.

We found 4 factors significantly ($p < 0.05$) associated with cervical injury. Operators still in training were associated with a 3.7-times higher risk than were those who had completed training, women on non-private services had a 1.9-times higher risk than those on private services, women given general anesthesia had a 1.8-times higher risk than those given local anesthesia, and nulliparous women had a 1.5-times higher risk than women with 1 or more live births. Method of dilatation, race, and preexisting conditions were not significantly related to cervical trauma. Standardization by level of operator training, which had the highest relative risk, did not affect the statistical association of any of the selected variables. Finally, using a linear trend analysis, we found that the risk of cervical injury increased slightly but statistically significantly with the length of gestation ($p < 0.05$).

Our data do not support current clinical tenets in at least 2 areas. First, laminaria use did not significantly lower the rate of cervical injury, even after we standardized for important variables. One possible explanation for this finding is that laminaria were used selectively for the most immature cervixes to produce slower dilatation. We found that lower levels of operator training, greater use of cervical anesthesia, longer gestation at the time of the abortion, and nulliparity had more influence on the rate of cervical injury than the type of dilator used. Second, although the risk of infection has been associated with laminaria, we found the opposite. However, this finding apparently resulted from the distorting influence of the type of anesthesia. Statistically, we found that

anesthesia played a more important role than the dilator in influencing the risk of infection. We conclude that other factors besides short-term safety may be more relevant to the choice of the particular method of dilatation used before suction curettage abortions at less than 13 weeks' gestation.

B. Monitoring the Health Impact of Restricting Federal Funds for Abortion

In August 1977 federal funds for abortion for Medicaid-eligible women were restricted. In fiscal year 1977, the AGI estimated that 295,000 abortions had been financed by federal funds through the Medicaid program; thus, approximately 300,000 women might have been affected by this change in funding policy. In order to monitor the health effects of this funding restriction, CDC is seeking to determine if Medicaid-eligible women have a higher incidence of abortion-related complications in states that restrict funds than they do in states that provide funds for this purpose.

Five options are available to a pregnant Medicaid-eligible woman in a state where there are no public funds for abortion: 1) she may carry her pregnancy to term, 2) she may seek and qualify for a Medicaid-funded legally induced procedure under the more restrictive regulations, 3) she may acquire adequate private funds for a legally induced abortion, 4) she may seek an abortion from an unlicensed practitioner, and/or 5) she may attempt to induce the abortion herself.

Of these 5 options, non-physician-induced or self-induced abortions would be most serious, since they have the greatest potential for causing morbidity and mortality. If a large percentage of Medicaid-eligible women should resort to the options of self-induced or non-physician-induced abortions, this might produce a measurable increase in abortion complications in states that have restricted public funding.

Data on women coming to gynecologic acute-care facilities were collected from 24 institutions located in the District of Columbia and 14 states across the country from October 10, 1977, through June 10, 1978. Ten institutions were located in states where, because of the absence of public funds, legal abortions might be less available; 14 were in states that were continuing to use state funds to finance legal abortions. Of the 3,157 abortion complications reported through this hospital surveillance project, 7 occurred after admitted illegally induced procedures. In 3 other instances in which complications occurred, the women did not name the source of the abortion; for analytic purposes, it was assumed that these women also had undergone illegal or self-induced abortions.

None of these 10 women in whom complications occurred was reported to be a Medicaid recipient. No abortion deaths related to either illegal or legal abortions were detected through the hospital surveillance. There was no significant difference between institutions in funded and non-funded states and the proportion of Medicaid women with abortion complications over the 8-month period.

The restriction of public funds was found to be significantly associated, however, with a later gestational age at the time of the abortion. In non-funded states Medicaid-eligible women with complications after legally induced abortions had a 1.9-week-later mean gestational age than their counterparts in funded states ($p=0.07$). Moreover, Medicaid-eligible women in non-funded states had a 2.4-week-later mean gestational age than non-Medicaid-eligible women in the same states ($p < 0.01$); in funded states, Medicaid-eligible and non-Medicaid-eligible women had similar mean gestational ages.

This investigation revealed that the restriction of public funds for abortion did not cause enough Medicaid-eligible women to choose non-physician-induced or self-induced abortion for us to detect such an occurrence through our hospital reporting system. The small number of complications (10) after illegally induced abortions did not occur in women reported to be Medicaid recipients. These data support the inference that Medicaid-eligible women in non-funded states are not resorting to self-induced or non-physician-induced abortions to any sizable degree. This could have at least 3 possible explanations. First, Medicaid-eligible women may be obtaining legally induced abortions through a combination of personal funds, public hospital services, philanthropic assistance, and/or

reduced clinic fees. Second, they may be choosing to continue their pregnancies to childbirth. Third, though unlikely, they may be having illegally induced abortions by non-physicians under relatively safe conditions.

C. A Cluster of Septic Complications Associated with Illegally Induced Abortions--McAllen, Texas

On October 17, 1977, a private obstetrician/gynecologist in McAllen, Texas, reported an unusual increase in the number of women who were being admitted to McAllen General Hospital because of abortion-related complications. One woman had died of clostridial septicemia (see Case History in Section III, E). CDC developed 2 hypotheses for this investigation: 1) that there might be 1 abortionist who served as a common source for the abortions associated with clostridial organisms, and 2) that the restriction of public funding for abortion had the effect of increasing the incidence of women hospitalized in McAllen with abortion-related complications.

We used 4 sources to ascertain the number of women hospitalized with complications after an illegally induced abortion: the 4 cases originally reported by the physician, a telephone survey of 34 family practitioners and 5 obstetricians/gynecologists who practice in the McAllen area, a review of medical records at hospitals peripheral to McAllen General Hospital, and a review of medical charts for abortion-related admissions at McAllen General Hospital. We identified 9 women who admitted that they had had an illegally induced abortion between January and October 1977. We were able to interview 2 women in person and 2 by telephone; 2 refused to be interviewed, 1 had moved leaving no forwarding address, 1 was a Mexican citizen, and 1 had died. Each of the 4 women we were able to contact directly stated that she had gone to Reynosa, Mexico, to obtain an illegal abortion, but each woman identified a different place where her abortion had been performed. We could not verify that these women did in fact have their procedures at the places they specified; however, based on these interviews, our investigation did not reveal a common abortionist.

To study the local effect of restricted public funds for abortion, we examined the medical records of all 230 women hospitalized in McAllen General Hospital with abortion-related complications from January 1977 through January 1978. The incidence of women admitted to the hospital with febrile abortion-related complications after August 5, 1977, did not differ from that of women admitted from January 1 through August 4, 1977. However, the incidence of hospitalization of Medicaid-eligible women with febrile abortion-related complications was greater after August 5 than in the earlier period.

V. INTERNATIONAL COMPARISONS

Differences in legal statutes, cultural traditions, and accessibility of medical services have continued to create a wide variation in the incidence of legal abortion throughout the world. Considering only the nations for which we have relatively reliable data (5), the United States reported the greatest number of abortions in 1977 (Table 24), but was midway among the international distribution of abortion rates and abortion ratios (Table 25).

In countries reporting the ages of women who had abortions the United States had the highest percentage of teenagers (30.8%) (Table 26), followed by Canada, Scotland, England and Wales, and Norway. Japan and Singapore had low percentages of teenagers among women obtaining legal abortions, despite having high abortion rates and ratios.

In countries reporting the marital status of women who had abortions, the United States had the highest percentage of unmarried women (75.7%) (Table 27), followed by Canada, Sweden, England and Wales, and Scotland. India and Singapore had low percentages (less than 10%) of unmarried women among women obtaining legal abortions.

In countries reporting the parity of women who had abortions, Canada had the highest percentage of women without living children (60.3%) (Table 28), followed

by the United States, England and Wales, Scotland, and Finland. These same nations had low percentages (less than 10%) of women with 4 or more children among women obtaining legal abortions. In contrast, India and Tunisia had low percentages of women without living children among women obtaining abortions, but high percentages of women with 4 or more children. Singapore had a similar distribution until 1975, when it abruptly began a trend resembling that of the more developed nations.

The pattern which emerges is that in economically developed, western nations with low birth rates, the typical woman obtaining a legal abortion is under 30 years of age, unmarried, and without living children. In economically developing nations with higher birth rates, especially Asia and Africa, the typical woman obtaining a legal abortion is 25 or older, married, and has several children.

Of the different procedures used to perform legal abortions, suction curettage has been the procedure most often used in recent years in the United States, Sweden, Denmark, Canada, England and Wales, and Scotland (Table 29). In Hungary and India, however, the majority of abortions were performed by sharp curettage. India's sizable percentage (10.8) of hysterotomies, usually combined with tubal sterilization, is consistent with the large percentage of women of high parity who obtained legal abortions.

VI. FOREIGN TRANSLATIONS OF SUMMARY

A. Resumen (Spanish)

En 1977 los cincuenta estados y el Distrito de Columbia informaron al Center for Disease Control que se realizaron 1,079,430 abortos legales en los E.E.U.U. lo que representa un aumento de 9% con respecto al año anterior. La tasa de abortos a nivel nacional aumentó un 4%, de 312 por 1000 nacidos vivos, a 325 por 1000 nacidos vivos, o sea casi a 1 aborto por cada 3 nacidos vivos. Parece ser que la tendencia que había antes de 1973 hacia la restricción de abortos en los estados con leyes muy rígidas se ha emparejado, con el mismo porcentaje de mujeres (10%) que se hicieron abortos fuera del estado en 1977 como 1976.

Como en los años anteriores, las mujeres que se hicieron abortos en 1977 eran por lo general jóvenes, de la raza blanca, solteras y de baja paridad. El 75% tenía menos de 25 años de edad; el 66% eran de la raza blanca; el 34% eran negra y de otras razas; 75% eran solteras cuando se hicieron los abortos y el 53% de las mujeres no tenían hijos vivos. En 1977 el método más comúnmente usado en los abortos legales fue el curetaje de succión, y que se empleó en el 94% de todos los abortos efectuados. Las mujeres siguieron haciéndose abortos legales en las primeras semanas de gestación; más de la mitad (51%) de todos los abortos se hicieron a las 8 semanas o menos de gestación, y 92% de los abortos fueron provocados durante las primeras doce semanas. Comparado con 1976, en 1977 la utilización del procedimiento de dilatación y evacuación (DyE) tanto como el procedimiento de la instilación salina hipertónica disminuyó, mientras que hubo un aumento en la utilización de la prostaglandina y otros procedimientos de instilación.

En 1977, murieron 33 mujeres a consecuencia de los abortos a que fueron sometidas mientras que la cifra comparativa para 1976 es de 27; de 47 para 1975; de 53 para 1974; de 56 para 1973 y de 90 para 1972. Comparando 1977 con 1976, en el primero hubo un aumento del número anual de muertes como resultante de los abortos legales. Quince mujeres murieron después de haberse hecho abortos inducidos legalmente en 1977, mientras que 11 murieron en 1976, 29 en 1975, 25 en 1974, 25 en 1973 y 24 en 1972. En 1977 hubo cuatro muertes después de haberse hecho abortos inducidos ilegalmente y 14 muertes después de abortos espontáneos. La tasa de muerte por caso, en abortos legales aumentó de 1.1 en 1976 a 1.4 por 100,000 abortos en 1977.

Un análisis de 29,760 casos de abortos por curetaje de succión efectuados a las 12 semanas o menos de gestación notificados a través del Joint Program for the Study of Abortion/CDC (JPSA/CDC) determinó que el uso de dilatadores rígidos y el uso de laminaria ofrecen un grado similar de seguridad. Los casos en que se usaron dilatadores rígidos se asociaron con tasas más altas de complicaciones con morbilidad febril y con perforación uterina, y en los que se usó laminaria se asociaron con tasas más altas de herida cervical y de retención de restos fetales. Aunque ambas técnicas de dilatación cervical aparentemente ofrecen un grado similar de seguridad, otros factores además de las complicaciones que aparecen poco después del aborto pueden tomarse en cuenta al decidir el método de dilatación que se va a emplear antes de realizar un aborto de curetaje de succión de 12 semanas o menos de gestación.

En agosto de 1977 se restringieron los fondos federales para los abortos a mujeres pobres. Se calculó en aquel momento que durante el año fiscal de 1977, 295,000 abortos fueron sufragados con este tipo de fondo por medio del programa de Medicaid; o sea que es posible que aproximadamente a 300,000 mujeres les afectó este cambio en el uso de los fondos federales. El proyecto de Abortion Monitoring in Sentinel Hospitals (AMSH), iniciado por el CDC, se concibió con la idea de vigilar cualquier aumento significativo en el número de mujeres elegibles para el Medicaid que deseaban provocarse abortos por si mismas, o sea abortos sin utilizar un médico para hacérselos y por lo tanto exponiéndose a riesgos más graves de complicaciones asociadas con el proceso. Los resultados preliminares indican que en los estados donde se habían realizado la mayoría de los abortos con

Medicaid antes de que se terminaran los fondos federales, ya emplearon fondos del estado para efectuar los abortos. No se registró el exceso de mortalidad proyectada entre las mujeres elegibles para Medicaid.

Sin embargo, se observó que en esos estados que no proveían fondos públicos había una relación entre la restricción de fondos públicos y los abortos realizados en etapas más avanzadas de gestación. En los estados sin fondos las mujeres elegibles para el plan de Medicaid que sufrieron complicaciones después de aborto inducido legalmente tenían un tiempo medio de gestación de 1.9-semanas más que las mujeres en los estados con fondos. Además las mujeres elegibles para el Medicaid en los estados sin fondos públicos tenían un período promedio de gestación de 2.4 semanas más que las mujeres que no podían participar en el plan de Medicaid en los mismos estados. Así que podemos llegar a la conclusión de que la restricción de los fondos públicos para abortos no ocasiona que un gran número de mujeres elegibles para el plan de Medicaid seleccione el aborto sin intervención médica, o sea el aborto provocado por ellas mismas. Sin embargo, pueden demorar para llevarlos a cabo hasta que obtengan fondos privados para hacerlos.

B. Résumé (French)

En 1977, aux Etats-Unis, le nombre total des avortements déclarés par les 50 états et le district fédéral de Columbia au "Center for Disease Control" (Centre de contrôle des maladies) a été de 1.079.430, ce qui représente une augmentation de 9% par rapport à 1976. Pour 1.000 naissances vivantes, il y a eu 312 avortements en 1976 et 325 en 1977 (soit presque un avortement pour trois naissances), ce qui représente une augmentation de 4%. La tendance--signalée l'année dernière--à la redistribution des avortements légaux vers les états qui avaient des lois restrictives jusqu'en 1973 semble avoir disparu, la proportion des femmes se faisant avorter en dehors de l'état de leur résidence étant la même (10%) qu'en 1976.

Comme dans les années précédentes, les femmes qui, en 1977, ont subi un avortement étaient pour la plupart jeunes, blanches, célibataires et avaient peu ou pas d'enfants. Soixante-cinq pour cent avaient moins de 25 ans; 66% étaient blanches et 34% étaient de race noire ou autre. Soixante-seize pour cent des femmes qui ont eu un avortement étaient célibataires au moment de l'intervention et 53% n'avaient pas d'enfants en vie. La méthode prédominante pour les avortements légaux était toujours le curettage (94% des interventions en 1977). Les femmes ont continué à chercher à se faire avorter au début de leur grossesse; plus de la moitié (51%) des avortements ont été effectués à moins de 8 semaines de grossesse, et 92% des avortements ont été provoqués dans les 12 premières semaines. Par rapport à 1976, le pourcentage des opérations par dilatation et évacuation et des méthodes d'instillation saline hypertonique après 12 semaines de grossesse, a diminué au profit de l'augmentation des méthodes d'instillation, et en particulier de prostaglandine.

En 1977, 33 femmes sont mortes à la suite d'avortements, contre 27 en 1976, 47 en 1975, 53 en 1974, 56 en 1973, et 90 en 1972. Par rapport à 1976, il y a eu une augmentation du nombre annuel des morts à la suite d'avortements légaux; en 1977, 15 femmes sont mortes à la suite d'avortements légalement provoqués, contre 11 en 1976, 29 en 1975, 25 en 1974, 25 en 1973, et 24 en 1972. En 1977, il y a eu 4 morts à la suite d'avortements illégaux et 14 morts à la suite d'avortements spontanés. Le taux de mortalité par 100.000 avortements légaux a augmenté de 1,0 en 1976 à 1,4 en 1977.

Une enquête portant sur 29.760 avortements effectués en milieu hospitalier par la méthode de curettage à aspiration à 12 semaines de grossesse ou moins, et déclarés par le "Joint Program for the Study of Abortion/Center for Disease Control" ("JSPA/CDC"--Programme mixte pour l'étude sur l'avortement/Centre de contrôle des maladies) a révélé que le faible risque associé à l'utilisation de dilateurs rigides pour la dilatation du col et à l'utilisation de lamineaires étaient pratiquement identiques; l'utilisation de dilateurs rigides était liée à des taux plus élevés de fièvre et de perforation utérine et l'utilisation de lamineaires était liée à des taux plus élevés de lésions cervicales et de rétention placentaire. Bien que les deux techniques de dilatation semblent offrir le même degré de sécurité, d'autres facteurs--en plus de complications à court terme--interviennent dans le choix de la méthode de dilatation à utiliser avant le curettage par aspiration à 12 semaines de grossesses ou moins.

En août 1977, les fonds fédéraux destinés à l'avortement des femmes qui par leur indigence, avaient droit à l'aide médicale du gouvernement--"Medicaid"--ont été considérablement réduits. Durant l'année fiscale 1977, environ 295.000 avortements avaient été ainsi subventionnés grâce au service "Medicaid"; 300.000 femmes ont probablement été touchées par ce changement dans la distribution des fonds. La surveillance des avortements, lancée par le "CDC" dans les hôpitaux ("The Abortion Monitoring in Sentinel Hospitals," "AMSH"), se proposait de surveiller l'augmentation du nombre de femmes qui, malgré leur droit au "Medicaid," recouraient cependant, pour leur avortement, à leurs propres ressources ou à celles d'une personne non-qualifiée, risquant ainsi des complications

ultérieures. Les premiers résultats de l'enquête indiquent que les états qui comptaient le plus d'avortements au titre du service "Medicaid" avant la restriction des fonds, utilisent à présent leurs propres fonds; les prévisions d'un excès de morbidité et de mortalité chez les femmes ayant droit au "Medicaid," ne se sont pas réalisées. La restriction des crédits est associée de façon significative à un stade de grossesse plus avancé lors de l'avortement. L'enquête a révélé que dans ces états non-subventionnés, les femmes qui subissaient des complications après un avortement légalement provoqué, étaient plus avancées dans leur grossesse (de 1,9 semaines en moyenne) que les femmes qui présentaient le même cas dans les états non-subventionnés. De plus, les femmes ayant droit à "Medicaid" dans les états non-subventionnés étaient plus avancées dans leur grossesse (de 2,4 semaines en moyenne) que les femmes du même état n'y ayant pas droit. Notre conclusion est que la restriction des fonds publics destinés aux avortements n'a pas poussé un nombre notable de femmes, ayant ordinairement droit au "Medicaid," à recourir à un avortement clandestin. Cependant, il est possible qu'elles aient du retarder leur avortement jusqu'à l'obtention des fonds nécessaires à l'intervention.

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Table 1
CHRONOLOGICAL RECORD OF THE STATUS OF ABORTION LAW CHANGES,
ABORTION REPORTING, AND ABORTION RATIOS IN THE UNITED STATES
1969-1977

	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
Cumulative No. of states with reform abortion laws enacted since 1967	9	16	16	17	.. ¹	.. ¹	.. ¹	.. ¹	.. ¹
No. of states from which statewide abortion data are reported ²	8	17	18	20	25	36	38	40	45
Additional states from which abortion data are reported from individual hospitals or facilities	2	7	7	8	26	15	13	11	6
Total No. of states from which partial or complete abortion data are reported ²	10	24	25	28	51	51	51	51	51
Total No. of abortions reported to CDC	22,670	193,491	485,816	586,760	615,831	763,476 ⁴	854,853 ⁵	988,267 ⁶	1,079,430
National abortion ratio (abortions per 1,000 live births ³)	6.3	51.9	136.6	180.1	196.3	241.6	271.9	312.0	324.5

¹On January 22, 1973, the U.S. Court ruled that the Texas and Georgia abortion laws were unconstitutional, thereby nullifying all restrictive abortion laws. Interpretation of, and legislative response to, the Supreme Court decision varied from state to state.

²Beginning 1970 includes District of Columbia

³Live birth data are total United States births by year as reported by the National Center for Health Statistics, Monthly Vital Statistics Reports.

⁴Does not include 17,348 abortions for 1974 reported to the CDC after publication of the 1974 Abortion Surveillance Report. Statistics on these 17,348 abortions are not incorporated into the current report, except in Table 3.

⁵Does not include 9,828 abortions for 1975 reported to the CDC after publication of the 1975 Abortion Surveillance Report. Statistics on these 9,828 abortions are not incorporated into the current report, except in Table 3.

⁶Does not include 3,284 abortions for 1976 reported to the CDC after publication of the 1976 Abortion Surveillance Report. Statistics on these 3,284 abortions are not incorporated into the current report, except in Table 3.

Table 2
REPORTED NUMBER OF LEGAL ABORTIONS BY STATE OF OCCURRENCE,
ABORTION RATIOS, AND ABORTION RATES, 1977

State	Abortions ¹	Live Births ¹	Ratios ²	Females 15-44 ³	Rate ⁴
Alabama	11,042 ⁵	61,970 ⁶	178	815,200	14
Alaska	1,074	8,378	128	103,700	10
Arizona	6,130	41,827	147	506,200	12
Arkansas	2,726	33,351	82	483,100	6
California	164,729	347,817 ⁶	474	5,012,700	33
Colorado	12,913	43,056	300	645,700	20
Connecticut	14,997	36,658 ⁶	409	680,300	22
Delaware	2,299	8,630 ⁶	266	134,000	17
Dist. of Col.	29,545	9,885	*	171,300	172
Florida	41,571	110,883	375	1,724,000	24
Georgia	29,905	84,432	354	1,184,700	25
Hawaii	5,249	16,983	309	205,500	26
Idaho	1,060	18,291	58	183,500	6
Illinois	71,326	177,148	403	2,485,300	29
Indiana	9,508	85,144	112	1,192,400	8
Iowa	5,097 ⁵	44,945 ⁶	113	604,700	8
Kansas	7,413 ⁶	36,994 ⁶	200	508,800	15
Kentucky	10,392 ⁵	58,544	178	772,000	13
Louisiana	8,644	74,989	115	910,000	9
Maine	2,318 ⁵	16,147 ⁶	144	229,800	10
Maryland	22,241	55,828	398	990,700	22
Massachusetts	34,382	67,973 ⁶	506	1,245,200	28
Michigan	41,086 ⁵	138,473 ⁶	297	2,166,300	19
Minnesota	15,532	60,284	258	888,700	17
Mississippi	2,446	45,532	54	517,600	5
Missouri	13,532	72,957	185	1,052,300	13
Montana	2,539	13,054	195	168,200	15
Nebraska	4,534 ⁶	25,209 ⁶	180	344,100	13
Nevada	4,297	10,516	409	147,500	29
New Hampshire	1,735	12,074	144	188,000	9
New Jersey	30,702	93,786	327	1,617,400	19
New Mexico	4,568	23,100	198	281,700	16
New York	147,647	241,533	611	4,049,800	36
(City)	(102,459) ⁷	(110,486) ⁷	(927)		
(Upstate)	(45,188) ⁶	(131,047) ⁸	(345)		
N. Carolina	25,020	84,562	296	1,267,400	20
N. Dakota	2,005	11,421 ⁶	176	138,400	14
Ohio	47,715	161,239	296	2,368,800	20
Oklahoma	8,220	45,457 ⁶	181	612,700	13
Oregon	13,163 ⁶	37,519 ⁶	351	538,600	24
Pennsylvania	57,880	153,415	377	2,512,600	23
Rhode Island	4,106	11,617	353	197,200	21
S. Carolina	8,799	47,967	183	662,300	13
S. Dakota	1,384	12,069	115	144,100	10
Tennessee	16,463	66,632	247	970,500	17
Texas	54,517	229,194 ⁶	238	2,929,500	19
Utah	3,033	37,956	80	284,700	11
Vermont	1,945 ⁶	7,024 ⁶	277	108,500	18
Virginia	26,829	71,532	375	1,211,400	22
Washington	26,939	57,237 ⁶	471	840,400	32
West Virginia	2,147 ⁵	30,111 ⁶	71	396,700	5
Wisconsin	15,586	68,607 ⁶	227	1,032,600	15
Wyoming	500	8,278	60	91,000	5
Total	1,079,430	3,318,228	325	48,517,800	22

¹Abortion and resident live birth data from central health agency unless otherwise noted

²Abortions per 1,000 live births

³Estimated by Family Planning Evaluation Division, CDC, based on data from Current Population Reports, Series P-20, No. 334, and Series P-25, No. 794

⁴Abortions per 1,000 females aged 15-44

⁵Reported from hospitals and/or facilities in state

⁶Data from Vital Statistics Division, National Center for Health Statistics

⁷Abortion and occurrence live birth data from New York City Health Department

⁸Occurrence live birth data from central health agency

*Greater than 1,000 abortions per 1,000 live births

Table 3
NUMBER OF ABORTIONS AND PERCENT INCREASE*
FOR EACH FULL YEAR OF REPORTING, SELECTED STATES**, 1972-1977

State	1972	1973		1974 ¹		1975 ²		1976 ³		1977	
	No. Abortions	No. Abortions	% Increase	No. Abortions	% Increase	No. Abortions	% Increase	No. Abortions	% Increase	No. Abortions	% Increase
Alaska	1,172	1,165	- 0.6	1,025	-12.0	1,248	21.8	1,213	- 2.8	1,074	-11.5
Arizona	..	..	..	..	..	..	..	5,202	..	6,130	17.8
Arkansas	793	1,138	43.5	1,694	48.9	1,925	13.6	3,286	70.7	2,726	-17.0
California	138,584	131,870	- 4.8	135,762	3.0	142,067	4.6	142,593	0.4	164,729	15.5
Colorado	5,260	7,451	41.7	9,027	21.2	9,744	7.9	11,539	18.4	12,913	11.9
Connecticut	..	..	..	..	..	10,820	..	13,447	24.3	14,997	11.5
Delaware	..	..	..	..	..	2,322	..	2,519	8.5	2,299	- 8.7
Dist. of Col.	38,868	40,812	5.0	22,688	-44.4	31,519	38.9	31,407	- 0.4	29,545	- 5.9
Florida	..	16,156	..	15,212	- 5.8	16,745	10.1	37,340	123.0	41,571	11.3
Georgia	2,509	12,301	390.3	22,009	78.9	23,733	7.8	25,586	7.8	29,905	16.9
Hawaii	4,547	4,534	- 0.3	4,158	- 8.3	4,545	9.3	5,163	13.6	5,249	1.7
Illinois	..	..	..	50,718	..	58,743	15.8	66,356	13.0	71,326	7.5
Indiana	..	..	..	6,029	..	7,859	30.4	8,610	9.6	9,508	10.4
Kansas	12,248	12,612	3.0	10,171	-19.4	9,160	- 9.9	9,154	- 0.1	7,413	-19.0
Louisiana	..	..	..	..	..	4,180	..	6,350	51.9	8,644	36.1
Maryland	9,093	9,871	8.6	15,975	61.8	18,865	18.1	20,641	9.4	22,241	7.8
Massachusetts	..	..	..	27,800	..	29,940	7.7	32,801	9.6	34,382	4.8
Minnesota	..	..	..	8,732	..	10,565	21.0	14,124	33.7	15,532	10.0
Mississippi	61	96	57.4	140	45.8	315	125.0	1,510	379.4	2,446	62.0
Missouri	..	..	..	..	..	10,244	..	12,881	25.7	13,532	5.1
Montana	..	..	..	..	..	1,535	..	1,803	17.5	2,539	40.8
Nebraska	..	..	..	3,094	..	3,406	10.1	3,977	16.8	4,534	14.0
Nevada	..	..	..	1,614	..	1,807	12.0	2,382	31.8	4,297	80.4
New Hampshire	..	..	..	668	..	1,396	109.0	1,958	40.3	1,735	-11.4
New Jersey	..	..	..	..	..	26,291 ⁴	..	29,572 ⁴	12.5	30,702	3.8
New York	299,891	203,358	- 32.2	161,521	-20.6	147,229	- 8.8	147,860	0.4	147,647	- 0.1
N. Carolina	8,365	11,935	42.7	16,463	37.9	19,960	21.2	23,561	18.0	25,020	6.2
N. Dakota	..	..	..	137	..	812	492.7	1,752	115.8	2,005	14.4
Ohio	..	..	..	..	..	..	..	37,192	..	47,715	28.3
Oregon	7,143	7,447	4.3	8,794	18.1	10,641	21.0	12,590	18.3	13,163	4.6
Pennsylvania	..	..	..	38,110	..	43,319	13.7	53,425	23.3	57,880	8.3
Rhode Island	..	..	..	2,867	..	3,253	13.5	3,863	18.8	4,106	6.3
S. Carolina	854	2,102	146.1	3,760	78.9	4,511	20.0	5,702	26.4	8,799	54.3
S. Dakota	..	..	..	1,601	..	1,475	- 7.9	1,561	5.8	1,384	-11.3
Tennessee	..	..	..	7,406	..	11,081	49.6	16,967	53.1	16,463	- 3.0
Utah	..	..	..	..	..	2,146	..	2,542	18.5	3,033	19.3
Vermont	231	1,402	506.9	1,930	37.7	2,100	8.8	2,322	10.6	1,945	-16.2
Virginia	4,496	7,318	62.8	14,372	96.4	18,010	25.3	22,635	25.7	26,829	18.5
Washington	17,767	17,319	- 2.5	18,185	5.0	20,963	15.3	22,790	8.7	26,939	18.2
Wisconsin	..	..	..	10,920	..	12,319	12.8	14,243	15.6	15,586	9.4

¹Includes 17,348 abortions for 1974 reported to the CDC after publication of the 1974 Abortion Surveillance Report. See Table 1, footnote 4.

²Includes 9,828 abortions for 1975 reported to the CDC after publication of the 1975 Abortion Surveillance Report. See Table 1, footnote 5.

³Includes 3,284 abortions for 1976 reported to the CDC after publication of the 1976 Abortion Surveillance Report. See Table 1, footnote 6.

⁴Reported from state health department and hospitals and/or facilities in state

*Percent increase over previous year

**States with data reported by central health agency (40)

..Not applicable

Table 4
REPORTED LEGAL ABORTIONS PERFORMED ON OUT-OF-STATE RESIDENTS, 1977

State	Total Abortions Performed	No. of Abortions with Residence Known ¹	No. of Abortions on Out-of-State Residents	Percent of Abortions with Residence Known-- Performed on Out-of-State Residents					
				1972 ²	1973 ²	1974 ²	1975 ²	1976 ²	1977
Alabama ³	11,042	9,961	635	0.3	9.1	10.2	8.0	11.6	6.4
Alaska	1,074	1,074	31	1.2	1.1	1.1	0.6	2.1	2.9
Arizona	6,130	6,051	125	--	0.8	0.4	0.9	1.8	2.1
Arkansas	2,726	--	--	--	--	--	--	--	--
California	164,729	--	--	16.0	9.4	2.4	1.9	1.3	--
Colorado	12,913	12,857	1,148	7.7	5.2	5.8	9.2	8.5	8.9
Connecticut	14,997	14,623	99	0.1	1.3	1.9	1.6	1.3	0.7
Delaware	2,299	--	--	4.7	--	1.0	--	--	--
Dist. of Col.	29,545	27,949	15,231	74.5	64.7	59.7	55.2	56.7	54.5
Florida	41,571	--	--	--	--	--	--	--	--
Georgia	29,905	29,788	3,232	0.0	14.5	18.7	15.3	11.5	10.9
Hawaii	5,249	5,225	182	0.5	1.0	2.5	5.0	4.1	3.5
Idaho	1,060	1,060	67	--	2.6	2.6	1.9	1.6	6.3
Illinois	71,326	69,621	5,243	--	11.2	10.0	7.5	6.2	7.5
Indiana	9,508	9,508	101	--	2.0	1.9	1.5	1.4	1.1
Iowa ³	5,097	2,634	126	--	9.3	--	6.7	9.7	4.8
Kansas	7,413	7,413	2,719	63.2	61.0	44.3	39.0	37.8	36.7
Kentucky ³	10,392	7,322	2,218	--	12.4	40.1	31.3	28.0	30.3
Louisiana	8,644	8,642	693	--	--	11.9	9.5	9.7	8.0
Maine ³	2,318	2,278	133	--	0.8	1.0	2.1	1.9	5.8
Maryland	22,241	22,241	866	2.0	2.8	4.7	6.5	6.4	3.9
Massachusetts	34,382	--	--	--	--	--	--	--	--
Michigan ³	41,086	27,834	676	--	12.6	11.6	10.0	9.3	2.4
Minnesota	15,532	15,372	2,336	--	9.3	18.1	13.4	15.5	15.2
Mississippi	2,446	2,440	140	0.0	0.0	5.0	17.5	7.7	5.7
Missouri	13,532	13,376	1,973	--	25.6	25.8	20.8	17.6	14.8
Montana	2,539	2,539	62	--	0.0	2.0	2.1	3.2	2.4
Nebraska	4,534	4,534	1,278	--	20.7	19.2	22.9	26.9	28.2
Nevada	4,297	4,236	563	--	0.0	4.6	29.8	7.5	13.3
New Hampshire	1,735	1,683	207	--	9.7	11.5	6.3	8.6	12.3
New Jersey	30,702	19,503	187	--	--	4.2	1.4	2.2	1.0
New Mexico ⁴	4,568	4,568	261	68.9	37.3	15.5	7.3	12.0	5.7
New York	147,647	145,287	12,640	60.8	39.5	20.9	16.4	11.8	8.7
(City)	(102,459)	(100,099)	(8,435)	(61.2)	(39.9)	(21.8)	(15.9)	(10.4)	(8.4)
(Upstate)	(45,188)	(45,188)	(4,205)	(59.7)	(38.6)	(18.3)	(17.7)	(14.9)	(9.3)
N. Carolina	25,020	24,916	1,466	0.6	0.5	5.6	6.2	6.3	5.9
N. Dakota	2,005	--	--	--	--	18.2	--	52.9	--
Ohio	47,715	46,321	3,004	--	9.6	9.0	6.6	7.3	6.5
Oklahoma	8,220	--	--	--	0.0	29.1	11.4	11.3	--
Oregon	13,163	13,163	604	0.2	5.2	6.0	5.4	6.3	4.6
Pennsylvania	57,880	57,880	6,459	--	7.8	11.3	12.2	11.2	11.2
Rhode Island	4,106	4,106	257	--	8.8	8.4	7.9	6.7	6.3
S. Carolina	8,799	8,799	238	0.6	8.6	6.7	4.1	4.4	2.7
S. Dakota	1,384	1,372	570	--	43.7	41.9	42.9	42.9	41.5
Tennessee	16,463	16,430	3,173	--	2.8	8.4	15.9	19.7	19.3
Texas	54,517	54,517	825	--	3.6	--	6.5	5.5	1.5
Utah	3,033	3,033	201	--	10.0	5.1	5.5	5.8	6.6
Vermont	1,945	1,945	432	16.5	22.2	27.7	31.1	29.1	22.2
Virginia	26,829	26,829	1,461	0.1	2.6	5.4	5.3	4.8	5.4
Washington	26,939	7,288	2,987	--	--	--	--	--	41.0
West Virginia ³	2,147	2,147	247	--	--	--	19.4	9.5	11.5
Wisconsin	15,586	--	--	13.0	9.9	6.6	--	6.6	--
Wyoming ³	500	115	2	--	0.0	3.9	1.9	0.0	1.7
Total	1,079,430	748,480	75,098	43.8	25.2	13.4	10.8	10.0	10.0

¹Refers to in-state and out-of-state residence status

²Source: 1976 Abortion Surveillance Report

³Abortions for 1977 are reported from hospitals and/or facilities in state. Residence data are based on percents and actual numbers as reported by hospitals and/or facilities in the state.

⁴Distribution of data from state health department, partial year reporting, applied to total abortions reported

--Not reported

Table 5
REPORTED LEGAL ABORTIONS WITH STATE OF RESIDENCE KNOWN,* 1977

State of Residence by Census Division	Abortions Performed in State of Residence		Abortions Performed Outside State of Residence		Total
	No.	%	No.	%	
NEW ENGLAND	(57,889)	(96.1)	(2,336)	(3.9)	(60,225)
Maine	2,145 ¹	93.1	158	6.9	2,303
New Hampshire	1,476	93.2	107	6.8	1,583
Vermont	1,513	93.2	111	6.8	1,624
Massachusetts	34,382 ²	98.2	620	1.8	35,002
Rhode Island	3,849	97.7	90	2.3	3,939
Connecticut	14,524	92.1	1,250	7.9	15,774
MIDDLE ATLANTIC	(203,384)	(94.3)	(12,278)	(5.7)	(215,662)
New York	132,647	99.5	673	0.5	133,320
New Jersey	19,316	67.2	9,422	32.8	28,738
Pennsylvania	51,421	95.9	2,183	4.1	53,604
EAST NORTH CENTRAL	(159,846)	(93.2)	(11,675)	(6.8)	(171,521)
Ohio	43,317	97.3	1,195	2.7	44,512
Indiana	9,407	59.5	6,405	40.5	15,812
Illinois	64,378	96.5	2,334	3.5	66,712
Michigan	27,158 ¹	98.2	486	1.8	27,644
Wisconsin	15,586 ²	92.5	1,255	7.5	16,841
WEST NORTH CENTRAL	(37,704)	(84.6)	(6,839)	(15.4)	(44,543)
Minnesota	13,036	99.5	62	0.5	13,098
Iowa	2,508 ¹	64.8	1,365	35.2	3,873
Missouri	11,403	75.3	3,740	24.7	15,143
N. Dakota	2,005 ²	81.1	468	18.9	2,473
S. Dakota	802	55.4	645	44.6	1,447
Nebraska	3,256	92.9	250	7.1	3,506
Kansas	4,694	93.8	309	6.2	5,003
SOUTH ATLANTIC	(163,798)	(87.9)	(22,597)	(12.1)	(186,395)
Delaware	2,299 ²	73.8	815	26.2	3,114
Maryland	21,375	68.9	9,627	31.1	31,002
Dist. of Col.	12,718	98.2	238	1.8	12,956
Virginia	25,368	84.1	4,813	15.9	30,181
W. Virginia	1,900 ¹	43.6	2,456	56.4	4,356
N. Carolina	23,450	94.6	1,338	5.4	24,788
S. Carolina	8,561	78.0	2,408	22.0	10,969
Georgia	26,556	97.7	632	2.3	27,188
Florida	41,571 ²	99.4	270	0.6	41,841
EAST SOUTH CENTRAL	(29,987)	(83.5)	(5,923)	(16.5)	(35,910)
Kentucky	5,104 ¹	73.6	1,835	26.4	6,939
Tennessee	13,257	95.6	613	4.4	13,870
Alabama	9,326 ¹	86.9	1,401	13.1	10,727
Mississippi	2,300	52.6	2,074	47.4	4,374
WEST SOUTH CENTRAL	(72,587)	(98.3)	(1,288)	(1.7)	(73,875)
Arkansas	2,726 ²	78.0	770	22.0	3,496
Louisiana	7,949	98.4	128	1.6	8,077
Oklahoma	8,220 ²	97.4	218	2.6	8,438
Texas	53,692	99.7	172	0.3	53,864
MOUNTAIN	(32,030)	(95.4)	(1,537)	(4.6)	(33,567)
Montana	2,477	88.1	334	11.9	2,811
Idaho	993	78.0	280	22.0	1,273
Wyoming	113	15.0	642	85.0	755
Colorado	11,709	99.7	41	0.3	11,750
New Mexico	4,307 ³	98.0	88	2.0	4,395
Arizona	5,926	99.1	52	0.9	5,978
Utah	2,832	97.4	77	2.6	2,909
Nevada	3,673	99.4	23	0.6	3,696

(Continued)

Table 5 (Continued)

State of Residence by Census Division	Abortions Performed in State of Residence		Abortions Performed Outside State of Residence		Total
	No.	%	No.	%	
PACIFIC	(187,675)	(99.2)	(1,509)	(0.8)	(189,184)
Washington	4,301	90.6	446	9.4	4,747
Oregon	12,559	97.8	283	2.2	12,842
California	164,729 ²	99.6	705	0.4	165,434
Alaska	1,043	94.1	65	5.9	1,108
Hawaii	5,043	99.8	10	0.2	5,053
TOTAL (1977)	944,900 ⁴	93.5	65,982	6.5	1,010,882
TOTAL (1976)	863,722	92.3	71,891	7.7	935,613 ⁵
TOTAL (1975)	731,666	92.0	63,858	8.0	795,524 ⁵
TOTAL (1974)	643,875	89.9	72,073	10.1	715,948 ⁵
TOTAL (1973)	440,202	79.9	110,443	20.1	550,645 ⁵
TOTAL (1972)	303,934	60.4	199,489	39.6	503,423 ⁵

¹Abortions reported from hospitals and/or facilities in state. Residence data based on percents and actual numbers as reported by hospitals and/or facilities in the state

²Residency information not available; all abortions reported are assumed to have been performed on residents of the state

³Distribution of data from state health department, partial year reporting, applied to total abortions reported

⁴Total number of abortions performed in state of residence is greater than total number of abortions with residence known shown on Table 4 because the 8 states with unknown residence data (see Table 4) are included in Table 5 with all abortions assumed to have been performed on residents of the state (see footnote 2).

⁵Does not agree with Table 1 because abortions with state of residence unknown are excluded

*Excludes 68,548 abortions with state of residence unknown (2,575 out-of-country residents were classified as state of residence unknown)

Table 6
REPORTED LEGAL ABORTIONS BY AGE AND STATE OF OCCURRENCE,
SELECTED STATES,* 1977

State	< 15		15-19		20-24		25-29		30-34		35-39		≥ 40		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alaska	8	0.7	316	29.4	386	35.9	234	21.8	84	7.8	31	2.9	7	0.7	8	0.7	1,074	100.0
Arizona	64	1.0	1,904	31.1	2,191	35.7	1,066	17.4	415	6.8	182	3.0	63	1.0	245	4.0	6,130	100.0
Arkansas	60	2.2	1,071	39.3	819	30.0	408	15.0	212	7.8	113	4.1	43	1.6	0	0.0	2,726	100.0
Colorado	138	1.1	4,082	31.6	4,636	35.9	2,397	18.6	1,005	7.8	432	3.3	160	1.2	63	0.5	12,913	100.0
Connecticut	156	1.0	4,593	30.6	5,176	34.5	2,540	16.9	1,348	9.0	662	4.4	272	1.8	250	1.7	14,997	100.0
Dist. of Col.	453	1.5	7,185	24.3	10,134	34.3	6,944	23.5	3,027	10.2	1,413	4.8	367	1.2	22	0.1	29,545	100.0
Georgia	466	1.6	9,117	30.5	10,271	34.3	5,656	18.9	2,618	8.8	1,186	4.0	406	1.4	185	0.6	29,905	100.0
Hawaii	48	0.9	1,165	22.2	1,843	35.1	1,135	21.6	608	11.6	293	5.6	147	2.8	10	0.2	5,249	100.0
Idaho ¹	18	1.7	356	33.6	347	32.7	195	18.4	79	7.5	39	3.7	20	1.9	6	0.6	1,060	100.0
Illinois	455	0.6	17,429	24.4	24,574	34.5	13,755	19.3	7,264	10.2	3,776	5.3	1,554	2.2	2,519	3.5	71,326	100.0
Indiana	125	1.3	3,208	33.7	3,209	33.8	1,613	17.0	765	8.0	411	4.3	164	1.7	13	0.1	9,508	100.0
Kansas	135	1.8	2,893	39.0	2,294	30.9	1,115	15.0	543	7.3	297	4.0	113	1.5	23	0.3	7,413	100.0
Kentucky ²	188	1.8	3,537	34.0	3,813	36.7	1,685	16.2	634	6.1	396	3.8	135	1.3	4	0.0	10,392	100.0
Louisiana	129	1.5	2,558	29.6	2,983	34.5	1,701	19.7	776	9.0	361	4.2	106	1.2	30	0.3	8,644	100.0
Maryland	401	1.8	8,061	36.2	7,283	32.7	3,717	16.7	1,690	7.6	809	3.6	280	1.3	0	0.0	22,241	100.0
Minnesota	137	0.9	5,860	37.7	5,367	34.6	2,247	14.5	1,023	6.6	489	3.1	240	1.5	169	1.1	15,532	100.0
Mississippi	63	2.6	821	33.6	817	33.4	415	17.0	195	8.0	97	4.0	37	1.5	1	0.0	2,446	100.0
Missouri	206	1.5	4,086	30.2	4,607	34.0	2,334	17.2	1,193	8.8	656	4.8	290	2.1	160	1.2	13,532	100.0
Montana	19	0.7	862	34.0	926	36.5	435	17.1	165	6.5	95	3.7	37	1.5	0	0.0	2,539	100.0
Nebraska	54	1.2	1,840	40.6	1,532	33.8	605	13.3	268	5.9	157	3.5	77	1.7	1	0.0	4,534	100.0
Nevada	41	1.0	1,296	30.2	1,513	35.2	815	19.0	361	8.4	170	4.0	41	1.0	60	1.4	4,297	100.0
New Hampshire	18	1.0	649	37.4	586	33.8	258	14.9	112	6.5	50	2.9	23	1.3	39	2.2	1,735	100.0
New Mexico ¹	40	0.9	1,430	31.3	1,568	34.3	824	18.0	410	9.0	191	4.2	77	1.7	28	0.6	4,568	100.0
New York	1,465	1.0	35,176	23.8	48,082	32.6	31,189	21.1	18,336	12.4	9,437	6.4	3,206	2.2	756	0.5	147,647	100.0
(City)	(965)	(0.9)	(21,183)	(20.7)	(33,307)	(32.5)	(23,645)	(23.1)	(13,775)	(13.4)	(6,908)	(6.7)	(2,129)	(2.1)	(547)	(0.5)	(102,459)	(100.0)
(Upstate)	(500)	(1.1)	(13,993)	(31.0)	(14,775)	(32.7)	(7,544)	(16.7)	(4,561)	(10.1)	(2,529)	(5.6)	(1,077)	(2.4)	(209)	(0.5)	(45,188)	(100.0)
N. Carolina	406	1.6	8,375	33.5	8,286	33.1	4,301	17.2	2,054	8.2	997	4.0	377	1.5	224	0.9	25,020	100.0
Ohio	341	0.7	13,068	27.4	17,460	36.6	8,449	17.7	3,918	8.2	2,076	4.4	937	2.0	1,466	3.1	47,715	100.0
Oregon	146	1.1	4,501	34.2	4,544	34.5	2,378	18.1	983	7.5	426	3.2	160	1.2	25	0.2	13,163	100.0
Pennsylvania	791	1.4	18,814	32.5	20,256	35.0	9,769	16.9	4,792	8.3	2,476	4.3	895	1.5	87	0.2	57,880	100.0
Rhode Island	30	0.7	1,111	27.1	1,491	36.3	769	18.7	409	10.0	198	4.8	78	1.9	20	0.5	4,106	100.0
S. Carolina	120	1.4	3,097	35.2	3,102	35.3	1,402	15.9	635	7.2	317	3.6	106	1.2	20	0.2	8,799	100.0
S. Dakota	14	1.0	572	41.3	409	29.6	176	12.7	79	5.7	45	3.3	19	1.4	70	5.1	1,384	100.0
Tennessee	259	1.6	5,596	34.0	5,758	35.0	2,688	16.3	1,282	7.8	596	3.6	221	1.3	63	0.4	16,463	100.0
Utah	29	1.0	884	29.1	1,065	35.1	553	18.2	269	8.9	124	4.1	48	1.6	61	2.0	3,033	100.0
Vermont	12	0.6	574	29.5	775	39.8	351	18.0	149	7.7	59	3.0	25	1.3	0	0.0	1,945	100.0
Virginia	477	1.8	9,104	33.9	9,184	34.2	4,340	16.2	2,188	8.2	1,095	4.1	407	1.5	34	0.1	26,829	100.0
Washington	302	1.1	9,428	35.0	9,070	33.7	4,559	16.9	2,194	8.1	1,002	3.7	357	1.3	27	0.1	26,939	100.0
Wyoming ¹	5	1.0	170	34.0	191	38.2	69	13.8	40	8.0	16	3.2	7	1.4	2	0.4	500	100.0
Total	7,819	1.2	194,789	29.3	226,548	34.1	123,087	18.5	62,123	9.4	31,170	4.7	11,502	1.7	6,691	1.0	663,729	100.0

¹Distribution of data from state health department, partial year reporting, applied to total abortions reported

²Distribution of data from hospitals and/or facilities reporting approximately 47% of total abortions reported

*All states with data available (37)

Table 6A
REPORTED LEGAL ABORTIONS OBTAINED BY TEENAGERS,
SELECTED STATES,* 1977

State	13	14	15	16	17	18	19	Total
Alaska	3	5	19	55	65	88	89	324
Arizona	10	52	140	297	391	570	506	1,966
Arkansas	8	50	99	195	221	311	245	1,129
Connecticut	23	125	278	637	898	1,423	1,357	4,741
Georgia	101	314	776	1,271	1,641	2,739	2,690	9,532
Hawaii	8	38	79	150	214	336	386	1,211
Idaho ¹	3	15	22	60	75	108	91	374
Indiana ²	-- ³	124 ³	254	520	602	964	837	3,301
Kansas	36	96	261	508	658	800	666	3,025
Louisiana	29	91	184	370	530	766	708	2,678
Maryland	91	292	703	1,327	1,744	2,167	2,120	8,444
Minnesota	15	119	400	891	1,336	1,635	1,598	5,994
Mississippi	11	48	78	129	166	219	229	880
Missouri	43	157	340	620	843	1,175	1,108	4,286
Montana	2	17	62	104	148	293	255	881
Nebraska	11	40	161	290	399	492	498	1,891
Nevada	7	34	103	172	223	421	377	1,337
New Hampshire	3	15	53	108	163	176	149	667
New Mexico ¹	17	21	110	181	325	414	400	1,468
New York	288	1,124	2,433	4,503	6,590	11,028	10,622	36,588
(City)	(206)	(724)	(1,521)	(2,687)	(4,068)	(6,398)	(6,509)	(22,113)
(Upstate)	(82)	(400)	(912)	(1,816)	(2,522)	(4,630)	(4,113)	(14,475)
N. Carolina	79	303	792	1,312	1,620	2,424	2,227	8,757
Ohio	-- ³	341 ³	723	1,612	2,551	3,744	4,438	13,409
Oregon	24	117	408	754	1,008	1,215	1,116	4,642
Pennsylvania ¹	131	631	1,326	2,806	3,876	5,424	5,382	19,576
Rhode Island	4	25	69	112	165	376	389	1,140
S. Carolina	23	94	241	524	720	812	800	3,214
S. Dakota	0	14	36	116	132	153	135	586
Tennessee	52	192	440	758	990	1,765	1,643	5,840
Utah	13	16	58	99	139	319	269	913
Vermont	1	11	33	80	98	185	178	586
Virginia	97	360	795	1,450	1,841	2,669	2,349	9,561
Wyoming ¹	2	2	12	16	29	33	58	152
Total	1,135	4,883	11,488	22,027	30,401	45,244	43,915	159,093
% Distribution	0.7	3.1	7.2	13.8	19.1	28.4	27.6	100.0

¹Distribution of data from state health department, partial year reporting, applied to total teenage abortions reported

²Residents only

³Reported as < 15

*All states with data available (32)

Table 7
LEGAL ABORTION RATIOS BY AGE,* SELECTED STATES, 1977

State	< 15	15-19	20-24	25-29	30-34	35-39	≥ 40	Total
Alaska	444	285	121	94	75	96	132	128
Arizona	604	270	153	91	81	118	168	147
Arkansas	251	137	66	49	67	111	165	82
Colorado	2,242	649	312	173	163	314	648	300
Connecticut ¹	2,065	1,027	495	192	224	454	841	409
Dist. of Col.	5,207	3,312	3,158	2,720	2,242	3,351	4,218	2,989
Georgia	769	499	353	246	268	458	750	354
Hawaii	2,400	543	326	209	213	406	1,148	309
Idaho	643	137	50	36	35	56	129	58
Illinois	784	617	438	258	299	540	1,095	403
Indiana	453	199	102	66	79	166	298	112
Kansas ²	2,045	472	164	99	128	300	500	200
Kentucky	780	278	175	111	105	190	315	178
Louisiana	304	155	111	86	97	146	182	115
Maryland	1,806	884	422	206	195	373	841	398
Minnesota	2,482	842	267	106	116	233	508	258
Mississippi	146	73	50	38	42	63	84	54
Missouri	850	315	184	107	132	256	507	185
Montana	905	445	186	105	111	247	514	195
Nebraska ²	1,543	566	169	70	84	191	450	180
Nevada	1,312	742	397	272	267	479	506	409
New Hampshire	2,571	447	146	62	65	139	329	144
New Mexico	702	328	191	127	143	219	681	198
New York	2,508	1,171	667	384	440	772	1,347	611
(City)	(2,812)	(1,410)	(1,042)	(673)	(705)	(1,048)	(1,627)	(927)
(Upstate)	(2,074)	(932)	(368)	(163)	(206)	(449)	(1,005)	(345)
N. Carolina	951	475	278	185	211	404	654	296
Ohio	775	493	319	172	202	411	878	296
Oregon ²	2,116	848	329	193	209	399	884	351
Pennsylvania	2,237	802	395	197	222	435	780	377
Rhode Island	1,765	696	375	198	257	482	1,013	353
S. Carolina	407	301	181	107	117	224	387	183
S. Dakota	750	336	96	49	57	110	189	115
Tennessee	684	397	242	147	173	299	485	247
Utah	857	213	76	49	49	70	127	80
Vermont ²	1,500	614	316	151	144	289	417	277
Virginia	1,726	755	389	199	208	414	864	375
Washington ³	2,696	1,056	433	248	319	622	1,072	471
Wyoming	833	122	60	28	44	62	167	60
Total	1,123	568	326	199	230	424	755	325

¹Live births are based on 1976 distribution of live births by age of mother from central health agency.

²Live births by age of mother are from Vital Statistics Division, National Center for Health Statistics.

³Live births are based on 1975 distribution of live births by age of mother from central health agency.

*Calculated as the number of legal abortions for women of a given age group per 1,000 live births to women of the same age group. For sources of data, see Table 6 for abortions by age and Table 2 for total 1977 live births. ("Unknown" age for each state is redistributed according to known age distribution of that state.) Live births by age of mother are from central health agencies unless otherwise noted.

Table 7A
LEGAL ABORTION RATIOS FOR TEENAGERS,* SELECTED STATES, 1977

<u>State</u>	<u>< 15</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>Total</u>
Alaska	444	442	466	339	276	205	288
Arizona	604	386	340	267	292	211	275
Arkansas	251	191	190	128	152	98	140
Connecticut ¹	2,065	1,258	1,054	1,014	1,170	878	1,044
Georgia	769	584	469	419	567	491	508
Hawaii	2,400	963	721	588	551	439	560
Idaho	643	217	224	157	155	86	142
Indiana	449	292	260	183	215	152	201
Kansas ²	2,045	1,016	762	562	445	298	489
Louisiana	304	166	160	157	168	139	159
Maryland	1,806	1,180	1,086	954	881	705	906
Minnesota	2,482	1,719	1,273	1,009	833	584	855
Mississippi	146	81	74	70	74	70	75
Missouri	850	457	363	303	338	261	325
Montana	905	816	528	418	551	328	450
Nebraska ²	1,543	1,201	812	638	512	425	577
Nevada	1,312	1,280	849	713	831	586	752
New Hampshire	2,571	2,000	810	553	403	265	457
New Mexico	702	505	341	351	355	263	333
New York	2,508	1,615	1,248	1,125	1,316	994	1,196
(City)	(2,812)	(1,747)	(1,340)	(1,345)	(1,552)	(1,301)	(1,441)
(Upstate)	(2,074)	(1,433)	(1,132)	(890)	(1,087)	(724)	(950)
N. Carolina	951	744	545	429	508	398	487
Ohio	775	568	500	479	507	476	497
Oregon ²	2,116	1,976	1,284	1,004	801	560	864
Pennsylvania	2,237	1,089	1,035	836	818	652	823
Rhode Island	1,765	1,302	706	550	813	626	707
S. Carolina	407	339	364	329	298	247	304
S. Dakota	750	559	555	397	319	220	341
Tennessee	684	462	390	334	467	368	404
Utah	857	322	233	179	282	164	218
Vermont ²	1,500	892	755	570	685	509	621
Virginia	1,726	1,080	952	774	818	565	777
Total	1,070	718	612	529	581	457	551

¹Live births are based on 1976 distribution of live births by age of mother from central health agency and total 1977 live births from Vital Statistics Division, National Center for Health Statistics.

²Live births are based on 1977 distribution of live births by state of occurrence and age of mother.

*Calculated as the number of legal abortions for women of a given age per 1,000 live births to women of the same age. See Table 2 for source of 1977 live births. ("Unknown" age for each state is distributed according to known age distribution of that state.)

Table 8
REPORTED LEGAL ABORTIONS BY RACE AND STATE OF OCCURRENCE,
SELECTED STATES,* 1977

State	White		Black & Other		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%
Alaska	712	66.3	227	21.1	135	12.6	1,074	100.0
Arizona	4,771	77.8	963	15.7	396	6.5	6,130	100.0
Arkansas	2,205	80.9	520	19.1	1	0.0	2,726	100.0
Colorado	6,992	54.1	627	4.9	5,294	41.0	12,913	100.0
Dist. of Col.	11,466	38.8	17,657	59.8	422	1.4	29,545	100.0
Georgia	16,904	56.5	10,340	34.6	2,661	8.9	29,905	100.0
Hawaii	1,719	32.7	2,926	55.7	604	11.5	5,249	100.0
Idaho ¹	1,006	94.9	33	3.1	21	2.0	1,060	100.0
Illinois	39,230	55.0	30,137	42.3	1,959	2.7	71,326	100.0
Indiana	7,552	79.4	1,898	20.0	58	0.6	9,508	100.0
Kansas	6,102	82.3	1,253	16.9	58	0.8	7,413	100.0
Kentucky ²	9,183	88.4	1,198	11.5	11	0.1	10,392	100.0
Louisiana	4,467	51.7	3,977	46.0	200	2.3	8,644	100.0
Maryland	13,236	59.5	8,779	39.5	226	1.0	22,241	100.0
Minnesota	13,180	84.9	810	5.2	1,542	9.9	15,532	100.0
Mississippi	1,531	62.6	907	37.1	8	0.3	2,446	100.0
Missouri	8,877	65.6	4,474	33.1	181	1.3	13,532	100.0
Montana	1,846	72.7	128	5.0	565	22.3	2,539	100.0
Nebraska	4,062	89.6	442	9.7	30	0.7	4,534	100.0
Nevada	3,763	87.6	483	11.2	51	1.2	4,297	100.0
New Hampshire	1,403	80.9	298	17.2	34	2.0	1,735	100.0
New Mexico ¹	3,982	87.2	529	11.6	57	1.2	4,568	100.0
New York	92,564	62.7	53,526	36.3	1,557	1.1	147,647	100.0
(City)	(55,777)	(54.4)	(46,682)	(45.6)	(0)	(0.0)	(102,459)	(100.0)
(Upstate)	(36,787)	(81.4)	(6,844)	(15.1)	(1,557)	(3.4)	(45,188)	(100.0)
N. Carolina	15,483	61.9	8,979	35.9	558	2.2	25,020	100.0
Ohio	29,467	61.8	11,724	24.6	6,524	13.7	47,715	100.0
Oregon	12,505	95.0	530	4.0	128	1.0	13,163	100.0
Rhode Island	3,499	85.2	432	10.5	175	4.3	4,106	100.0
S. Carolina	4,974	56.5	3,786	43.0	39	0.4	8,799	100.0
S. Dakota	1,170	84.5	189	13.7	25	1.8	1,384	100.0
Tennessee	12,297	74.7	3,675	22.3	491	3.0	16,463	100.0
Utah	2,688	88.6	321	10.6	24	0.8	3,033	100.0
Vermont	1,924	98.9	14	0.7	7	0.4	1,945	100.0
Virginia	17,184	64.1	9,645	35.9	0	0.0	26,829	100.0
Total	357,944	63.5	181,427	32.2	24,042	4.3	563,413	100.0

¹Distribution of data from state health department, partial year reporting, applied to total abortions reported

²Distribution of data from hospitals and/or facilities reporting approximately 47% of total abortions reported

*All states with data available (33)

Table 9
LEGAL ABORTION RATIOS BY RACE*
SELECTED STATES,** 1977

<u>State</u>	<u>White</u>	<u>Black and Other</u>	<u>White/Black and Other</u>
Alaska ¹	136	109	1.2
Arizona	142	175	0.8
Arkansas ¹	89	61	1.5
Dist. of Col.	8,491	2,104	4.0
Georgia	346	368	0.9
Hawaii	334	296	1.1
Idaho	57	76	0.8
Illinois	294	772	0.4
Indiana	101	198	0.5
Kansas ²	184	356	0.5
Kentucky	173	219	0.8
Louisiana	102	135	0.8
Maryland	344	523	0.7
Minnesota	257	267	1.0
Mississippi	66	41	1.6
Missouri	147	386	0.4
Nebraska ²	173	288	0.6
Nevada	420	339	1.2
New Hampshire	120	1,900	0.1
New Mexico	210	138	1.5
New York	502	988	0.5
(City)	(803)	(1,138)	(0.7)
(Upstate)	(324)	(528)	(0.6)
N. Carolina	276	339	0.8
Ohio	246	611	0.4
Oregon ²	356	262	1.4
Rhode Island	340	517	0.7
S. Carolina	177	193	0.9
S. Dakota	114	122	0.9
Tennessee	243	261	0.9
Utah	74	266	0.3
Vermont ²	277	298	0.9
Virginia	323	525	0.6
Total	268	490	0.5

¹Live births are based on 1977 distribution of live births by age of mother from Vital Statistics Division, National Center for Health Statistics.

²Live births are from Vital Statistics Division, National Center for Health Statistics.

*Calculated as the number of legal abortions for women of a given race per 1,000 live births to women of the same race. For sources of data see Table 8 for abortions by race and Table 2 for total 1977 live births. ("Unknown" race for each state is redistributed according to known race distribution of that state.) Live births by race of mother are from central health agencies unless otherwise noted.

**Excludes all states reporting more than 15% of abortions as race "unknown"

Table 10
REPORTED LEGAL ABORTIONS BY MARITAL STATUS
AND STATE OF OCCURRENCE, SELECTED STATES,* 1977

State	Married		Unmarried ¹		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%
Alaska	244	22.7	809	75.3	21	2.0	1,074	100.
Arizona	1,234	20.1	4,590	74.9	306	5.0	6,130	100.
Arkansas	679	24.9	2,046	75.1	1	0.0	2,726	100.
Colorado	2,650	20.5	6,492	50.3	3,771	29.2	12,913	100.
Dist. of Col.	6,133	20.8	22,368	75.7	1,044	3.5	29,545	100.
Georgia	7,844	26.2	21,659	72.4	402	1.3	29,905	100.
Hawaii	1,854	35.3	3,395	64.7	0	0.0	5,249	100.
Idaho ²	307	29.0	726	68.5	27	2.5	1,060	100.
Illinois	15,286	21.4	54,539	76.5	1,501	2.1	71,326	100.
Indiana	2,274	23.9	7,140	75.1	94	1.0	9,508	100.
Kansas ³	1,848	24.9	5,548	74.8	17	0.2	7,413	100.
Kentucky ⁴	2,269	21.8	8,041	77.4	82	0.8	10,392	100.
Louisiana	1,829	21.2	6,247	72.3	568	6.6	8,644	100.
Maryland	4,266	19.2	17,754	79.8	221	1.0	22,241	100.
Minnesota	2,369	15.3	12,522	80.6	641	4.1	15,532	100.
Mississippi	682	27.9	1,762	72.0	2	0.1	2,446	100.
Missouri	3,503	25.9	9,749	72.0	280	2.1	13,532	100.
Montana	462	18.2	1,513	59.6	564	22.2	2,539	100.
Nebraska ³	860	19.0	3,661	80.7	13	0.3	4,534	100.
Nevada	951	22.1	3,290	76.6	56	1.3	4,297	100.
New Hampshire	302	17.4	1,379	79.5	54	3.1	1,735	100.
New Mexico ²	1,120	24.5	3,410	74.6	38	0.8	4,568	100.
New York	41,257	27.9	106,390	72.1	0	0.0	147,647	100.
(City)	(28,025)	(27.4)	(74,434)	(72.6)	(0)	(0.0)	(102,459)	(100.
(Upstate)	(13,232)	(29.3)	(31,956)	(70.7)	(0)	(0.0)	(45,188)	(100.
N. Carolina	6,403	25.6	18,126	72.4	491	2.0	25,020	100.
Ohio	9,353	19.6	37,181	77.9	1,181	2.5	47,715	100.
Oregon ³	3,450	26.2	9,506	72.2	207	1.6	13,163	100.
Rhode Island	1,258	30.6	2,753	67.0	95	2.3	4,106	100.
S. Carolina	2,204	25.0	6,526	74.2	69	0.8	8,799	100.
S. Dakota	285	20.6	1,058	76.4	41	3.0	1,384	100.
Tennessee	3,261	19.8	11,500	69.9	1,702	10.3	16,463	100.
Utah	611	20.1	2,412	79.5	10	0.3	3,033	100.
Vermont ³	449	23.1	1,489	76.6	7	0.4	1,945	100.
Virginia	5,790	21.6	21,019	78.3	20	0.1	26,829	100.
Washington	6,541	24.3	19,936	74.0	462	1.7	26,939	100.
Total	139,828	23.7	436,536	73.9	13,988	2.4	590,352	100.

¹Includes widowed, separated, divorced, and never married unless otherwise noted

²Distribution of data from state health department, partial year reporting, applied to total abortions reported

³Married includes separated

⁴Distribution of data from hospitals and/or facilities reporting approximately 47% of total abortions reported

*All states with data available (34)

Table 11
PERCENT OF REPORTED LEGAL ABORTIONS PERFORMED ON MARRIED WOMEN*
BY STATE OF OCCURRENCE, 1972-1977**

State	1972 ¹	1973 ¹	1974 ¹	1975 ¹	1976 ¹	1977 ²
Alaska	35.4	29.6	27.7	30.3	27.4	23.2
Arkansas	32.3	32.5	30.8	30.4	27.1	24.9
Colorado	26.6	29.8	29.2	27.3	27.6	29.0
Georgia	34.9	25.7	17.1	28.6	28.3	26.6
Hawaii	37.5	37.3	38.6	39.1	37.9	35.3
Kansas	25.2	21.1	21.4	22.5	21.2	25.0
Maryland	29.6	28.3	24.0	22.0	20.3	19.4
Mississippi	55.7	54.2	45.7	41.0	32.9	27.9
New York	31.1	31.9	31.9	29.8	28.6	27.9
(City)	(27.9)	(30.3)	(32.6)	(29.9)	(28.5)	(27.4)
(Upstate)	(40.5)	(34.4)	(29.9)	(29.5)	(28.9)	(29.3)
N. Carolina	34.7	35.0	32.0	29.9	27.7	26.1
Oregon	23.7	25.0	24.0	22.3	20.9	26.6
S. Carolina	40.5	30.4	24.7	23.3	21.8	25.2
Vermont	30.1	23.8	21.9	22.1	20.5	23.2
Virginia	34.0	28.7	27.1	25.0	25.1	21.6
Washington	26.6	26.5	27.0	25.9	25.0	24.7
Total	30.7	30.3	29.1	28.0	26.9	26.2

¹Source: 1976 Abortion Surveillance Report, Table 11

²Source: 1977 Abortion Surveillance Report, Table 10

*Percent based on total with marital status known

**Includes only states with data available for all 6 years (15)

Table 12
LEGAL ABORTION RATIOS BY MARITAL STATUS*
SELECTED STATES,** 1977

<u>State</u>	<u>Married</u>	<u>Unmarried</u>	<u>Total</u>
Alaska	34	794	128
Arizona	37	774	147
Arkansas	25	334	82
Dist. of Col.	1,370	4,422	2,989
Georgia	110	1,841	354
Hawaii	127	1,395	309
Idaho	19	541	58
Illinois	110	1,568	403
Indiana	31	606	112
Kansas ¹	56	1,428	200
Kentucky	45	1,114	178
Louisiana	34	399	115
Maryland	99	1,462	398
Minnesota	46	2,176	258
Mississippi	20	153	54
Missouri	58	857	185
Nebraska ¹	38	1,493	180
Nevada	104	2,761	409
New Hampshire	28	1,375	144
New Mexico	59	872	198
New York	214	2,201	611
(City)	(377)	(2,056)	(927)
(Upstate) ²	(111)	(2,634)	(345)
N. Carolina	93	1,301	296
Ohio ²	69	1,656	296
Oregon ¹	106	2,098	351
Rhode Island	128	1,787	353
S. Carolina	59	644	183
S. Dakota	28	728	115
Tennessee	65	1,157	247
Utah	17	1,340	80
Vermont ²	72	1,908	277
Virginia	97	1,754	375
Washington ³	129	3,526	471
Total	93	1,480	321

¹Live births are from Vital Statistics Division, National Center for Health Statistics.

²Live births are based on 1976 distribution of live births by legitimacy from central health agency.

³Live births are based on 1975 distribution of live births by legitimacy from central health agency.

*Calculated as the number of legal abortions for women of a given marital status per 1,000 live births of the corresponding legitimacy status. For sources of data, see Table 10 for abortions by marital status and Table 2 for total 1977 live births. ("Unknown" marital status for each state is redistributed according to known marital status distribution of of that state.) Live births by legitimacy are from central health agencies unless otherwise noted.

**Excludes states reporting more than 15% of abortions as marital status "unknown"

Table 15
REPORTED LEGAL ABORTIONS BY TYPE OF PROCEDURE AND STATE OF OCCURRENCE,
SELECTED STATES,* 1977

State	Curettage		Intrauterine Saline Instillation		Intrauterine Prostaglandin Instillation ¹		Hysterotomy		Hysterectomy		Other ²		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alaska	1,049	97.7	1	0.1	--	--	--	--	--	--	17 ³	1.6	7	0.7	1,074	100.0
Arizona	5,661	92.3	285	4.6	65	1.1	1	0.0	6	0.1	1	0.0	111	1.8	6,130	100.0
Colorado	11,637	90.1	1,089	8.4	11	0.1	40	0.3	136	1.1	0	0.0	0	0.0	12,913	100.0
Connecticut	14,183	94.6	433 ⁴	2.9	-- ⁴	--	1	0.0	7	0.0	41	0.3	332	2.2	14,997	100.0
Dist. of Col.	27,302	92.4	2,022 ⁵	6.8	--	--	2	0.0	4	0.0	215	0.7	0	0.0	29,545	100.0
Georgia	27,708	92.7	289	1.0	472	1.6	22	0.1	104	0.3	1,279 ³	4.3	31	0.1	29,905	100.0
Hawaii	4,762	90.7	0	0.0	407	7.8	3	0.1	6	0.1	18	0.3	53	1.0	5,249	100.0
Idaho ⁶	1,026	96.8	9	0.8	--	--	1	0.1	3	0.3	--	--	21	2.0	1,060	100.0
Illinois	68,292	95.7	261	0.4	1,199	1.7	12	0.0	19	0.0	34	0.0	1,509	2.1	71,326	100.0
Indiana	9,401	98.9	2	0.0	--	--	+	+	4 ⁷	0.0	101	1.1	0	0.0	9,508	100.0
Kansas	6,317	85.2	601	8.1	39	0.5	5	0.1	19	0.3	422	5.7	10	0.1	7,413	100.0
Louisiana	8,587	99.3	1	0.0	--	--	--	--	--	--	10	0.1	46	0.5	8,644	100.0
Maryland	20,648	92.8	640	2.9	203	0.9	20	0.1	26	0.1	704	3.2	0	0.0	22,241	100.0
Massachusetts	32,761	95.3	48	0.1	1,562	4.5	6	0.0	2	0.0	3	0.0	0	0.0	34,382	100.0
Minnesota	15,234	98.1	0	0.0	298	1.9	0	0.0	0	0.0	0	0.0	0	0.0	15,532	100.0
Mississippi	2,394	97.9	9	0.4	12	0.5	3	0.1	28	1.1	0	0.0	0	0.0	2,446	100.0
Missouri	13,118	96.9	0	0.0	241	1.8	1	0.0	10	0.1	0	0.0	162	1.2	13,532	100.0
Montana	2,446	96.3	0	0.0	86	3.4	2	0.1	2	0.1	3	0.1	0	0.0	2,539	100.0
Nebraska	4,292	94.7	238	5.2	0	0.0	0	0.0	4	0.1	0	0.0	0	0.0	4,534	100.0
Nevada	4,106	95.6	32	0.7	--	--	0	0.0	4	0.1	18	0.4	137	3.2	4,297	100.0
New Hampshire	1,705	98.3	--	--	--	--	--	--	--	--	4	0.2	26	1.5	1,735	100.0
New Mexico ⁶	4,313	94.4	72	1.6	81	1.8	0	0.0	0	0.0	62	1.4	40	0.9	4,568	100.0
New York	131,502	89.1	12,294	8.3	1,598	1.1	140	0.1	39	0.0	684	0.5	1,390	0.9	147,647	100.0
(City)	(92,519)	(90.3)	(8,672)	(8.5)	(807)	(0.8)	(68)	(0.1)	(21)	(0.0)	(372) ⁸	(0.4)	(--) ⁸	(--)	(102,459)	(100.0)
(Upstate)	(38,983)	(86.3)	(3,622)	(8.0)	(791)	(1.8)	(72)	(0.2)	(18)	(0.0)	(312)	(0.7)	(1,390)	(3.1)	(45,188)	(100.0)
N. Carolina	22,459	89.8	1,222	4.9	1,019	4.1	49	0.2	103	0.4	161	0.6	7	0.0	25,020	100.0
Ohio ³	46,524	93.5	2,527	5.1	--	--	19	0.0	12	0.0	71	0.1	627	1.3	49,780	100.0
Oregon	12,313	93.5	149	1.1	645	4.9	10	0.1	40	0.3	5	0.0	1	0.0	13,163	100.0
Pennsylvania	54,568	94.3	2,410	4.2	326	0.6	31	0.1	49	0.1	495	0.9	1	0.0	57,880	100.0
Rhode Island	3,676	89.5	352	8.6	1	0.0	1	0.0	0	0.0	1	0.0	75	1.8	4,106	100.0
S. Carolina	8,493	96.5	30	0.3	161	1.8	2	0.0	23	0.3	31	0.4	59	0.7	8,799	100.0
S. Dakota	1,225	88.5	121	8.7	--	--	--	--	1	0.1	11	0.8	26	1.9	1,384	100.0
Tennessee	15,985	97.1	273	1.7	15	0.1	2	0.0	11	0.1	--	--	177	1.1	16,463	100.0
Utah	2,971	98.0	0	0.0	47	1.5	0	0.0	4	0.1	0	0.0	11	0.4	3,033	100.0
Vermont	1,937	99.6	1	0.1	6	0.3	0	0.0	1	0.1	0	0.0	0	0.0	1,945	100.0
Washington	25,517	94.7	1,266	4.7	65	0.2	+	+	31 ⁷	0.1	29	0.1	31	0.1	26,939	100.0
Wyoming ⁶	458	91.6	2	0.4	11	2.2	2	0.4	1	0.2	1	0.2	25	5.0	500	100.0
Total	614,570	93.1	26,679	4.0	8,570	1.3	+	+	1,074 ⁷	0.2	4,421	0.7	4,915	0.7	660,229	100.0

¹Includes intrauterine prostaglandin instillation if reported as a specific category. See footnote 2.

²Includes intrauterine prostaglandin only if not reported as a specific category or with other instillation procedures

³Includes combination procedures

⁴Intrauterine prostaglandin instillation included with intrauterine saline instillation

⁵Includes 1,515 abortions reported as "aspiration, D & C, and saline injection"

⁶Distribution of data from state health department, partial year reporting, applied to total abortions reported

⁷Hysterotomy/Hysterectomy

⁸Reported as other and unknown

⁹Does not add to total abortions due to the reporting of combination procedures

--Not reported

*All states with data available (35)

Table 16
REPORTED LEGAL ABORTIONS BY WEEKS OF GESTATION*
AND STATE OF OCCURRENCE, SELECTED STATES,** 1977

State	≤ 8		9-10		11-12		13-15		16-20		≥ 21		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alaska	305	28.4	524	48.8	206	19.2	6	0.6	1	0.1	0	0.0	32	3.0	1,074	100.0
Arizona ¹	2,410	39.3	1,863	30.4	1,075	17.5	217	3.5	334	5.4	1	0.0	230	3.8	6,130	100.0
Arkansas	1,514	55.5	567	20.8	237	8.7	37	1.4	365	13.4	2	0.1	4	0.1	2,726	100.0
Colorado	2,901	22.5	2,655	20.6	1,644	12.7	933	7.2	855	6.6	300	2.3	3,625	28.1	12,913	100.0
Connecticut ¹	6,957	46.4	4,732	31.6	2,358	15.7	146	1.0	411	2.7	27	0.2	366	2.4	14,997	100.0
Dist. of Col.	19,399	65.7	5,453	18.5	1,823	6.2	855	2.9	856 ²	2.9	181 ²	0.6	978	3.3	29,545	100.0
Georgia	13,464	45.0	9,886	33.1	4,421	14.8	601	2.0	776	2.6	722	2.4	35	0.1	29,905	100.0
Hawaii	1,941	37.0	1,542	29.4	861	16.4	411	7.8	303	5.8	86	1.6	105	2.0	5,249	100.0
Idaho ^{1,3}	554	52.3	282	26.6	186	17.5	15	1.4	7	0.7	3	0.3	13	1.2	1,060	100.0
Illinois	42,729	59.9	15,791	22.1	7,891	11.1	863	1.1	1,415	2.0	21	0.0	2,616	3.7	71,326	100.0
Indiana	6,061 ²	63.7	2,607 ²	27.4	713 ²	7.5	116 ²	1.2	11	0.1	0	0.0	0	0.0	9,508	100.0
Kansas	2,695	36.4	1,894	25.5	1,309	17.7	698	9.4	685	9.2	115	1.6	17	0.2	7,413	100.0
Kentucky ⁴	3,400	32.7	3,474	33.4	3,518	33.9	0	0.0	0	0.0	0	0.0	0	0.0	10,392	100.0
Louisiana	4,179	48.3	2,428	28.1	1,734	20.1	156	1.8	79	0.9	8	0.1	60	0.7	8,644	100.0
Maryland	10,808	48.6	6,063 ²	27.3	3,116 ²	14.0	715 ²	3.2	1,350 ²	6.1	188	0.8	1	0.0	22,241	100.0
Massachusetts	18,749	54.5	9,185	26.7	3,962	11.5	696	2.0	1,575	4.6	215	0.6	0	0.0	34,382	100.0
Minnesota	5,395	34.7	4,822	31.0	2,717	17.5	1,348	8.7	1,197	7.7	53	0.3	0	0.0	15,532	100.0
Mississippi	937	38.3	770	31.5	452	18.5	156	6.4	28	1.1	7	0.3	96	3.9	2,446	100.0
Missouri ¹	4,685	34.6	4,136	30.6	3,906	28.9	412	3.0	206	1.5	10	0.1	177	1.3	13,532	100.0
Montana	1,022	40.3	799	31.5	369	14.5	94	3.7	27	1.1	1	0.0	227	8.9	2,539	100.0
Nebraska	1,283	28.3	1,481	32.7	1,082	23.9	411	9.1	230	5.1	20	0.4	27	0.6	4,534	100.0
Nevada	3,240	75.4	731	17.0	130	3.0	22	0.5	57	1.3	2	0.0	115	2.7	4,297	100.0
New Hampshire	541	31.2	706	40.7	362	20.9	27	1.6	19	1.1	0	0.0	80	4.6	1,735	100.0
New Mexico ³	2,278	49.9	1,192	26.1	450	9.9	315	6.9	227	5.0	2	0.0	104	2.3	4,568	100.0
New York	72,732	49.3	38,093	25.8	17,025	11.5	6,041	4.1	8,790	6.0	2,853	1.9	2,113	1.4	147,647	100.0
(City)	(53,312)	(52.0)	(25,289)	(24.7)	(10,813)	(10.6)	(3,629)	(3.5)	(5,494)	(5.4)	(2,115)	(2.1)	(1,807)	(1.8)	(102,459)	(100.0)
(Upstate)	(19,420)	(43.0)	(12,804)	(28.3)	(6,212)	(13.7)	(2,412)	(5.3)	(3,296)	(7.3)	(738)	(1.6)	(306)	(0.7)	(45,188)	(100.0)
N. Carolina	8,832	35.3	7,646	30.6	3,962	15.8	1,596	6.4	1,493	6.0	253	1.0	1,238	4.9	25,020	100.0
Ohio	26,235	55.0	5,017	10.5	1,462	3.1	972	2.0	820 ²	1.7	323 ²	0.7	12,886	27.0	47,715	100.0
Oregon	4,888	37.1	4,437	33.7	2,351	17.9	702	5.3	678	5.2	80	0.6	27	0.2	13,163	100.0
Pennsylvania	29,084	50.2	17,410	30.1	6,657	11.5	1,835	3.2	2,292	4.0	420	0.7	182	0.3	57,880	100.0
Rhode Island ¹	1,599	38.9	1,582	38.5	500	12.2	113	2.8	304	7.4	6	0.1	2	0.0	4,106	100.0
S. Carolina	5,249	59.7	1,842	20.9	1,102	12.5	76	0.9	157	1.8	3	0.0	370	4.2	8,799	100.0
S. Dakota ¹	568	41.0	219	15.8	185	13.4	161	11.6	192	13.9	46	3.3	13	0.9	1,384	100.0
Tennessee	5,808	35.3	5,490	33.3	3,250	19.7	658	4.0	193	1.2	38	0.2	1,026	6.2	16,463	100.0
Utah	1,315	43.4	926	30.5	443	14.6	246	8.1	58	1.9	3	0.1	42	1.4	3,033	100.0
Vermont	932	47.9	641	33.0	280	14.4	76	3.9	14	0.7	1	0.1	1	0.1	1,945	100.0
Virginia ¹	12,837	47.8	8,253	30.8	3,222	12.0	669	2.5	1,486	5.5	150	0.6	212	0.8	26,829	100.0
Washington	15,452	57.4	6,837	25.4	2,731	10.1	523	1.9	1,112	4.1	131	0.5	153	0.6	26,939	100.0
Wyoming ³	217	43.4	182	36.4	59	11.8	22	4.4	10	2.0	0	0.0	10	2.0	500	100.0
Total	343,195	49.2	182,158	26.1	87,751	12.6	22,940	3.3	28,613	4.1	6,271	0.9	27,183	3.9	698,111	100.0

¹Weeks of gestation based on physician's estimate

²Reallocation of reported abortions into comparable categories based on percentage distribution of abortions by single weeks of gestation reported from 28 states

³Distribution of data from state health department, partial year reporting, applied to total abortions reported

⁴Distribution of data from hospitals and/or facilities reporting approximately 47% of total abortions reported

*Weeks from last menstrual period

**All states with data available (38)

Table 17
PERCENT OF REPORTED LEGAL ABORTIONS AT LESS THAN 13
WEEKS OF GESTATION,* SELECTED STATES,** 1972-1977

<u>State</u>	<u>1972¹</u>	<u>1973¹</u>	<u>1974¹</u>	<u>1975¹</u>	<u>1976¹</u>	<u>1977²</u>
Alaska	78.4	79.5	86.3	95.6	97.1	99.3
Arkansas	89.5	87.2	94.8	91.3	87.2	85.2
Colorado	59.1	71.0	77.0	77.8	78.1	77.5
Dist. of Col.	96.7	96.5	96.3	96.4	93.0	93.4
Georgia	68.4	89.7	93.2	90.0	95.3	93.0
Hawaii	84.4	85.1	84.5	83.3	83.9	84.4
Kansas	89.1	82.7	81.4	76.2	78.3	79.7
Maryland	67.9	74.9	83.1	86.8	89.0	89.9
Mississippi	75.9	76.7	84.8	89.8	95.5	91.9
New York	82.6	81.1	83.0	85.3	87.1	87.8
(City)	(82.7)	(80.1)	(83.0)	(86.2)	(88.6)	(88.8)
(Upstate)	(82.4)	(83.8)	(83.0)	(82.7)	(83.7)	(85.6)
N. Carolina	71.7	74.3	83.7	83.9	86.0	85.9
Oregon	81.3	87.7	89.2	91.3	91.3	88.9
S. Carolina	85.6	91.3	92.3	90.8	91.2	97.2
Virginia	63.5	77.1	87.6	89.7	90.5	91.3
Washington	95.3	94.6	93.3	92.2	93.0	93.4
Total	83.3	83.2	85.7	87.0	88.6	89.2

¹Source: 1976 Abortion Surveillance Report, Table 17

²Source: 1977 Abortion Surveillance Report, Table 16

*Based on total number with menstrual weeks of gestation known

**Includes only states with data available for all 6 years (15)

Table 18
REPORTED LEGAL ABORTIONS BY TYPE OF PROCEDURE
AND WEEKS OF GESTATION,* 1977

Type of Procedure	Weeks of Gestation															
	≤ 8		9-10		11-12		13-15		16-20		≥ 21		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Curettage	237,192	98.7	133,886	98.6	66,867	97.4	13,190	73.3	3,796	16.7	604	12.7	11,416	89.5	466,951	92.8
Intrauterine saline instillation	290	0.1	395	0.3	771	1.1	3,001	16.7	11,385	50.1	3,055	64.3	418	3.3	19,315	3.8
Intrauterine prostaglandin instillation	112	0.0	98	0.1	246	0.4	1,089	6.0	5,845	25.7	600	12.6	195	1.5	8,185	1.6
Hysterotomy	48	0.0	38	0.0	45	0.1	73	0.4	85	0.4	20	0.4	9	0.1	318	0.1
Hysterectomy	179	0.1	95	0.1	84	0.1	80	0.4	124	0.5	17	0.4	23	0.2	602	0.1
Other	700	0.3	355	0.3	230	0.3	454	2.5	1,287	5.7	429	9.0	33	0.3	3,488	0.7
Unknown	1,870	0.8	886	0.7	411	0.6	119	0.7	221	1.0	27	0.6	662	5.2	4,196	0.8
Total	240,391	100.0	135,753	100.0	68,654	100.0	18,006	100.0	22,743	100.0	4,752	100.0	12,756	100.0	503,055	100.0

*Based on data from 28 states

Table 19
REPORTED LEGAL ABORTIONS BY
NUMBER OF PREVIOUS INDUCED ABORTIONS, SELECTED STATES,* 1977

State	0		1		2		≥ 3		Unknown		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Alaska	691	64.3	203	18.9	33	3.1	12	1.1	135	12.6	1,074	100.0
Arizona	4,951	80.8	966	15.8	175	2.9	38	0.6	0	0.0	6,130	100.0
Colorado	7,181	55.6	1,571	12.2	243	1.9	74	0.6	3,844	29.8	12,913	100.0
Dist. of Col.	17,624	59.7	7,081	24.0	1,883	6.4	567	1.9	2,390	8.1	29,545	100.0
Georgia	21,138	70.7	5,321	17.8	941	3.1	2,505	8.4	0	0.0	29,905	100.0
Idaho ¹	894	84.3	126	11.9	12	1.1	6	0.6	22	2.1	1,060	100.0
Illinois	53,978	75.7	14,062	19.7	2,490	3.5	794	1.1	2	0.0	71,326	100.0
Indiana	6,986	73.5	1,332	14.0	189	2.0	40	0.4	961	10.1	9,508	100.0
Kansas	6,088	82.1	1,039	14.0	141	1.9	37	0.5	108	1.5	7,413	100.0
Kentucky ²	8,127	78.2	1,898	18.3	314	3.0	51	0.5	2	0.0	10,392	100.0
Maryland	16,436	73.9	4,661	21.0	885	4.0	216	1.0	43	0.2	22,241	100.0
Massachusetts	24,815	72.2	6,425	18.7	1,760	5.1	318	0.9	1,064	3.1	34,382	100.0
Minnesota	12,853	82.8	2,168	14.0	302	1.9	44	0.3	165	1.1	15,532	100.0
Mississippi	2,145	87.7	258	10.5	21	0.9	4	0.2	18	0.7	2,446	100.0
Missouri	9,498	70.2	2,315	17.1	362	2.7	74	0.5	1,283	9.5	13,532	100.0
Montana	2,093	82.4	360	14.2	40	1.6	2	0.1	44	1.7	2,539	100.0
Nebraska	4,115	90.8	347	7.7	36	0.8	11	0.2	25	0.6	4,534	100.0
Nevada	3,077	71.6	973	22.6	193	4.5	54	1.3	0	0.0	4,297	100.0
New Hampshire	637	36.7	172	9.9	25	1.4	5	0.3	896	51.6	1,735	100.0
New Mexico ¹	3,440	75.3	707	15.5	130	2.8	34	0.7	257	5.6	4,568	100.0
New York Upstate	28,200	62.4	5,578	12.3	1,032	2.3	302	0.7	10,076	22.3	45,188	100.0
N. Carolina	19,721	78.8	3,490	13.9	463	1.9	74	0.3	1,272	5.1	25,020	100.0
Oregon	9,211	70.0	2,802	21.3	472	3.6	111	0.8	567	4.3	13,163	100.0
Rhode Island	2,935	71.5	748	18.2	135	3.3	30	0.7	258	6.3	4,106	100.0
S. Carolina	7,117	80.9	1,210	13.8	159	1.8	28	0.3	285	3.2	8,799	100.0
S. Dakota	1,106	79.9	172	12.4	33	2.4	2	0.1	71	5.1	1,384	100.0
Tennessee	12,283	74.6	2,632	16.0	413	2.5	77	0.5	1,058	6.4	16,463	100.0
Utah	2,410	79.5	494	16.3	77	2.5	13	0.4	39	1.3	3,033	100.0
Vermont	1,545	79.4	314	16.1	51	2.6	12	0.6	23	1.2	1,945	100.0
Wyoming ¹	403	80.6	59	11.8	8	1.6	2	0.4	28	5.6	500	100.0
Total	291,698	72.1	69,484	17.2	13,018	3.2	5,537	1.4	24,936	6.2	404,673	100.0

¹Distribution of data from state health department, partial year reporting, applied to total abortions reported

²Distribution of data from hospitals and/or facilities reporting approximately 47% of total abortions reported

*All states with data available (30)

Table 20
DEATH-TO-CASE RATE FOR LEGAL ABORTIONS
BY WEEKS OF GESTATION, UNITED STATES, 1972-1977

<u>Weeks of Gestation</u>	<u>Deaths</u>	<u>Cases</u> ¹	<u>Rate</u> ²	<u>Relative Risk</u> ³
≤ 8	12	2,145,802	0.6	1.0
9-10	23	1,393,551	1.7	2.8
11-12	20	741,536	2.7	4.5
13-15	19	253,890	7.5	12.5
16-20	43	295,196	14.6	24.3
> 21	12	58,642	20.5	34.2
Total	129	4,888,617	2.6	

¹Based on distribution of 3,547,194 abortions (72.6%) with weeks of gestation known

²Deaths per 100,000 abortions

³Based on index rate for ≤ 8 menstrual weeks' gestation of 0.6 per 100,000 abortions

Table 21
DEATH-TO-CASE RATE FOR LEGAL ABORTIONS BY TYPE OF PROCEDURE
UNITED STATES, 1972-1977

<u>Type of Procedure</u>	<u>Deaths</u>	<u>Cases</u> ¹	<u>Rate</u> ²	<u>Relative Risk</u> ³
Curettage/ Dilatation & evacuation	66	4,455,468	1.5	1.0
Intrauterine instillation	48	354,972	13.5	9.0
Hysterotomy/ Hysterectomy	9	20,629	43.6	29.1
Other ⁴	6	57,548	10.4	6.9
Total	129	4,888,617	2.6	

¹Based on 3,576,097 abortions (73.2%) with type of procedure known

²Deaths per 100,000 abortions

³Based on index rate for curettage/dilatation & evacuation of 1.5 per 100,000 abortions

⁴Includes 2 deaths with type of procedure unknown

Table 22
LEGAL ABORTION DEATHS BY TYPE OF PROCEDURE AND
WEEKS OF GESTATION, UNITED STATES, 1972-1977

Type of Procedure	Weeks of Gestation						Total
	≤ 8	9-10	11-12	13-15	16-20	≥ 21	
Curettage	11	21	19				51
Dilatation and evacuation				9	5	1	15
Instillation				5	34	9	48
Saline				1	30	6	37
Prostaglandin				3	4	1	8
Other agents				1	0	2	3
Hysterotomy/ Hysterectomy	0	2	1	3	2	1	9
Other ¹	1	0	0	2	2	1	6
Total	12	23	20	19	43	12	129

¹Includes 2 deaths with unknown type of procedure, 1 at 13-15 weeks and 1 at 16-20 weeks of gestation

Table 23
DEATH-TO-CASE RATE* FOR LEGAL ABORTIONS
BY TYPE OF PROCEDURE AND WEEKS OF GESTATION
UNITED STATES, 1972-1977

Type of Procedure	Weeks of Gestation						Total
	≤ 8	9-10	11-12	13-15	16-20	≥ 21	
Curettage	0.5	1.6	2.9				1.2
Dilatation & evacuation				6.7	12.9	16.7	8.3
Instillation	0.0	0.0	0.0	9.6	15.4	24.7	14.1
Saline	0.0	0.0	0.0	2.5	19.3	20.6	15.5
Prostaglandin and other agents ¹	0.0	0.0	0.0	32.6	6.1	40.5	10.8
Hysterotomy/ Hysterectomy	0.0	58.8	39.7	70.8	47.8	157.5	45.3
Total ²	0.5	1.7	3.0	9.9	16.3	27.9	2.6

¹Denominators for rates include abortions reported as type of procedure "other" (1% of all abortions with procedure known)

²Includes deaths with type of procedure "other" (4) and unknown (2)

*Deaths per 100,000 abortions; based on distributions of abortions with type of procedure and weeks of gestation known

Table 24
SELECTED NATIONS RANKED BY NUMBER OF
LEGAL ABORTIONS IN 1976 AND/OR 1977

<u>Nation</u>	<u>Year</u>	<u>Number of Abortions</u>
United States	1976	988,300
	1977	1,079,430
Japan	1976	664,100
	1977	641,200
India	1976	214,200
	1977	278,000
France	1976	133,900
Cuba	1976	121,400
Bulgaria	1976	121,100
England ¹ and Wales	1976	101,900
	1977	102,700
Hungary	1976	94,700
	1977	89,100
Czechoslovakia	1976	84,600
German Democratic Republic	1976	81,900
Canada	1976	54,500
	1977	57,600
German Federal Republic	1977	54,300
Sweden	1976	32,400
	1977	31,200
Denmark	1976	26,800
	1977	25,700
Tunisia	1976	20,300
	1977	21,200
Finland	1976	19,800
Netherlands	1976	16,000
Singapore	1976	15,500
	1977	16,400
Norway	1976	14,800
	1977	15,500
Scotland	1976	7,200
	1977	7,300
New Zealand	1976	4,700

¹Residents only

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

Table 25
LEGAL ABORTION RATES¹ AND RATIOS², SELECTED NATIONS, 1976, 1977

<u>Nation</u>	<u>Year</u>	<u>Abortion Rate</u>	<u>Abortion Ratio</u>
Bulgaria	1976	64.5	854
Cuba	1976	61.0	—
Hungary	1976	41.5	520
	1977	39.2	—
Singapore	1976	27.5	371
	1977	28.4	—
Czechoslovakia	1976	26.8	294
Denmark	1976	25.8	427
	1977	24.4	—
Japan	1976	24.9	372
	1977	24.1	—
German Democratic Republic	1976	23.3	392
United States	1976	20.6	303
	1977	22.2	329
Sweden	1976	20.0	334
	1977	19.2	325
Norway	1976	19.0	275
	1977	19.7	—
Finland	1976	18.6	300
Tunisia	1976	16.8	98
	1977	16.8	—
France	1976	12.4	183
England and Wales	1976	10.6	180
	1977	10.6	179
Canada	1976	10.3	151
	1977	10.6	—
New Zealand	1976	7.3	83
Scotland	1976	6.9	116
	1977	6.9	—
Netherlands	1976	5.5	—
German Federal Republic	1977	4.1	93
India	1976	1.7	9
	1977	2.2	11

¹ Abortion rate = number of abortions per 1,000 women aged 15-44

² Abortion ratio = number of abortions per 1,000 live births

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

Table 26
PERCENT DISTRIBUTION OF LEGAL ABORTIONS BY WOMAN'S AGE,
SELECTED NATIONS, 1976 AND/OR 1977

Nation	Year	Age of Woman					
		19 or less	20-24	25-29	30-34	35-39	40 or more
Canada	1976	30.7	29.6	19.8	10.9	6.1	2.9
	1977	30.8	30.3	19.4	11.2	5.8	2.5
Czechoslovakia	1976	6.9	23.7	28.7	22.3	13.2	5.2
Denmark	1976	17.5	21.4	21.9	20.4	12.6	6.2
	1977	18.0	21.6	20.6	20.9	13.0	5.9
England and Wales	1976	27.3	24.1	19.4	14.4	9.9	4.9
	1977	27.8	23.7	19.1	14.2	10.2	5.0
Finland	1976	19.8	25.6	19.0	13.8	12.1	9.7
German Democratic Republic	1976	13.5	20.5	19.2	19.5	19.8	7.5
German Federal Republic	1977	11.3	18.8	22.0	18.8	18.8	10.3
Hungary	1976	10.3	23.8	21.8	19.4	16.8	7.9
	1977	10.7	23.3	22.2	19.3	16.5	8.0
Japan	1976	2.0	16.3	28.7	25.5	18.3	9.2
	1977	2.1	15.5	27.4	25.9	19.3	9.8
Norway	1976	23.2	24.4	19.4	15.7	10.8	6.5
	1977	24.6	24.1	18.1	16.1	10.8	6.3
Scotland	1976	29.6	23.3	16.8	12.8	11.3	6.2
Singapore	1976	7.5	26.1	27.3	17.3	13.6	8.2
	1977	8.1	27.6	27.5	17.9	11.9	7.0
Sweden	1976	22.9	22.6	20.3	17.6	11.0	5.6
	1977	21.6	22.5	20.8	18.0	11.1	6.0
Tunisia	1976	2.1	16.4	25.6	23.4	21.9	10.6
United States	1976	32.1	33.3	18.7	9.3	4.8	1.8
	1977	30.8	34.5	18.5	9.4	4.7	1.7

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

Table 27
PERCENT DISTRIBUTION OF LEGAL ABORTIONS BY
MARITAL STATUS, SELECTED NATIONS AND YEARS

<u>Nation</u>	<u>Year</u>	<u>Currently Married</u>	<u>Previously Married</u>	<u>Never Married</u>
Canada	1977	30.1	9.7	60.2
Czechoslovakia	1976	77.8	7.0	15.2
Denmark	1977	48.5	9.8	41.7
England and Wales	1977	38.6	10.9	50.5
Finland	1975	44.0	10.2	45.8
German Federal Republic	1977	61.6	8.7	29.7
Hungary	1977	69.7	7.5	22.8
India	1972-75	92.8	1.3	5.9
Norway	1977	45.6	8.0	46.4
Scotland	1976	40.0	12.1	47.9
Singapore	1973	92.7	1.0	6.3
Sweden	1974	35.8	10.5	53.7
United States	1977	24.3	—	75.7

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

Table 28
PERCENT DISTRIBUTION OF LEGAL ABORTIONS BY PARITY, SELECTED NATIONS AND YEARS

<u>Nation</u>	<u>Year</u>	<u>Parity</u>					
		<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5 or more</u>
Canada	1977	60.3	15.9	14.3	5.9	2.2	1.4
Czechoslovakia	1976	13.9	16.8	42.9	18.4	5.0	3.0
Denmark	1977	34.8	17.0	27.6	14.0	4.6	2.0
England and Wales	1975	49.7	12.4	18.8	11.1	5.0	3.0
Finland	1976	46.3	17.3	20.5	9.6	4.3	2.0
German Federal Republic	1977	34.6	17.6	23.9	13.1	5.9	4.9
Hungary	1977	23.0	22.2	37.6	11.6	3.1	2.5
India	1972-75	11.1	13.6	22.4	20.0	—	32.0
Scotland	1976	46.6	13.2	18.6	12.0	5.9	3.7
Singapore	1973	4.2	10.6	21.8	20.2	14.8	28.4
	1977	26.5	17.8	25.9	13.5	6.9	9.4
Sweden	1976	40.1	18.2	24.7	11.8	3.6	1.6
Tunisia	1976	5.4	9.9	13.8	13.9	17.0	40.0
United States	1977	53.4	19.1	14.4	7.0	3.3	2.9

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

Table 29
PERCENT DISTRIBUTION OF LEGAL ABORTIONS BY PROCEDURE, SELECTED NATIONS AND YEARS

<u>Nation</u>	<u>Year</u>	<u>Procedure</u>							<u>Total</u>
		<u>Suction Curettage</u>	<u>Sharp Curettage</u>	<u>Saline</u>	<u>PG*</u>	<u>Hyster- otomy</u>	<u>Hyster- ectomy</u>	<u>Other</u>	
Canada	1977	82.2	9.1	4.0	2.8	0.9	0.2	0.8	100
Denmark	1976	85.4	10.9	0.8	1.0	0.9	1.0	—	100
England and Wales	1975	75.5	15.9	—	6.6	1.6	0.3	0.1	100
German Federal Republic	1977	48.9	43.9	—	3.9	1.8	1.5	0.0	100
Hungary	1975	2.7	96.8	—	0.4	—	0.1	—	100
India (Karnataka State)	1972-74	23.8	52.2	11.6	—	10.8	1.6	—	100
Scotland	1976	70.0	10.6	—	—	2.9	16.5	—	100
Sweden	1977	92.4	0.5	—	6.2	—	0.9	—	100
United States	1976	84.4	9.4	4.8	1.2	0.2	—	0.4	100
	1977	—	93.8	3.8	1.6	0.1	0.1	0.7	100

Source: For the United States, CDC Abortion Surveillance 1977; for all other statistics, C. Tietze: Induced Abortion: 1979, A Population Council Fact Book (3rd ed). New York, The Population Council, 1979

*prostaglandin

Fig. 1 SOURCES OF REPORTED LEGAL ABORTION DATA, 1977

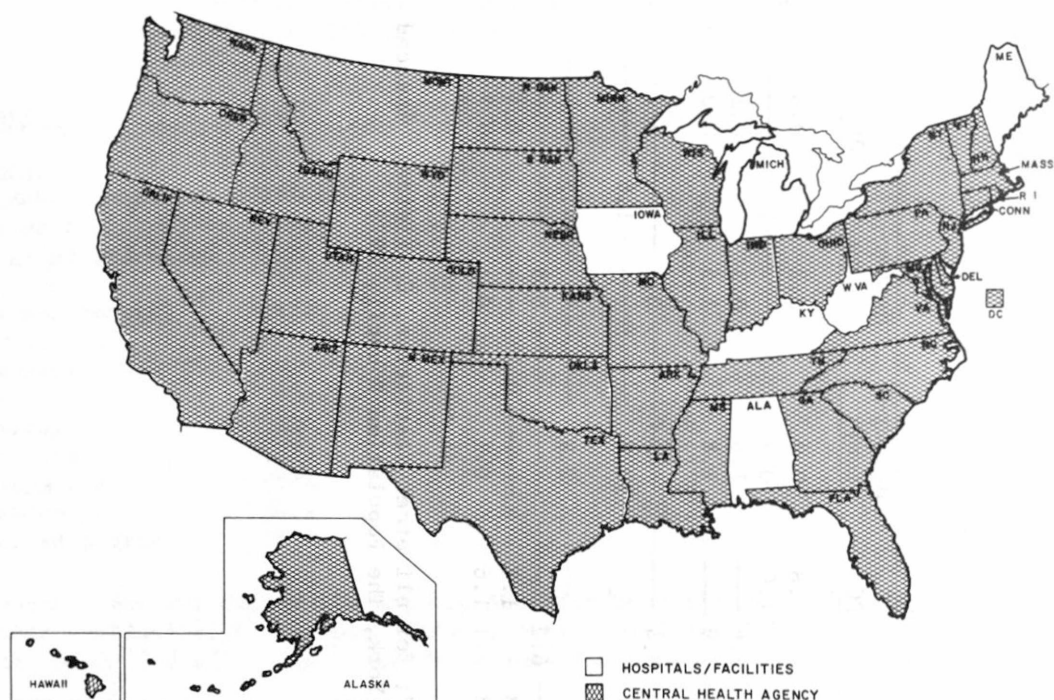
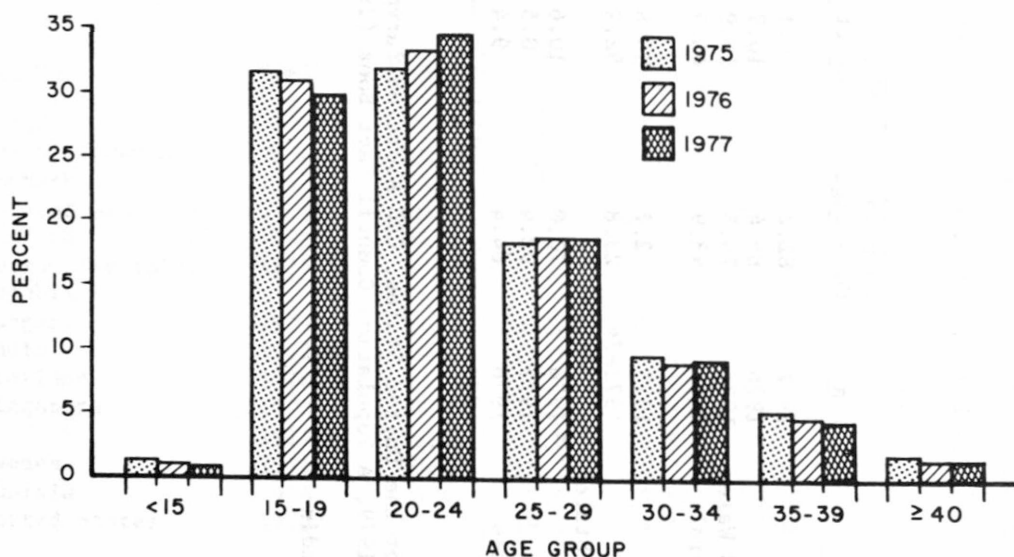


Fig. 2 PERCENT DISTRIBUTION^a OF REPORTED LEGAL ABORTIONS, BY AGE, SELECTED STATES,^b 1975-1977

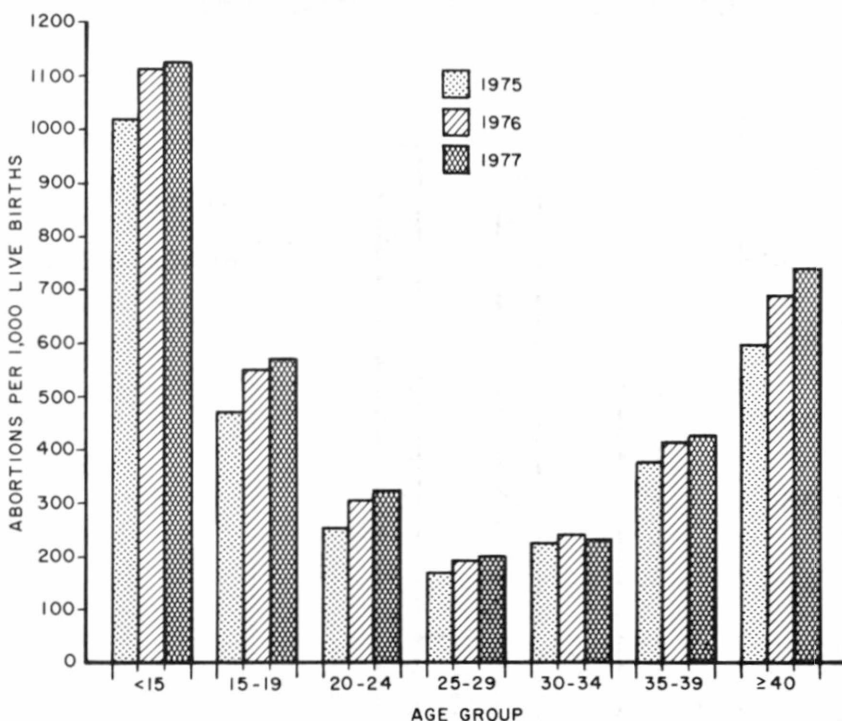


^a BASED ON TOTAL NUMBER WITH AGE KNOWN

^b ALL STATES WITH DATA AVAILABLE FOR 1975 (34 STATES), 1976 (36 STATES), AND 1977 (37 STATES)

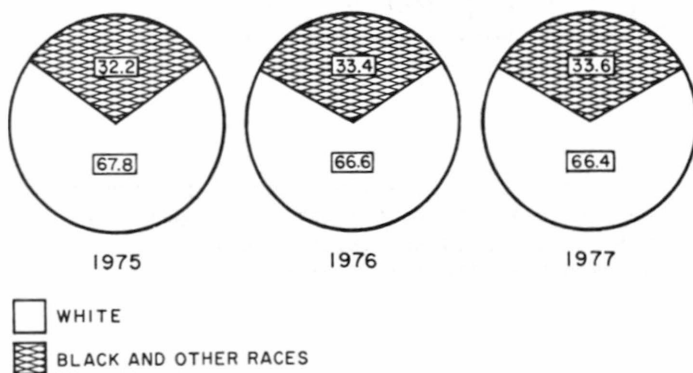
SOURCE: TABLE 6 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig. 3 LEGAL ABORTION RATIOS, BY AGE, UNITED STATES, 1975-1977



NOTE: RATIOS BASED ON PERCENT DISTRIBUTION SHOWN IN FIGURE 2 APPLIED TO TOTAL LEGAL ABORTIONS REPORTED TO CDC, 1975-1977, AND TOTAL U.S. LIVE BIRTHS BY AGE OF MOTHER, 1975-1977, FROM MONTHLY VITAL STATISTICS REPORTS, NATIONAL CENTER FOR HEALTH STATISTICS

Fig. 4 PERCENT DISTRIBUTION^a OF REPORTED LEGAL ABORTIONS, BY RACE, SELECTED STATES,^b 1975-1977

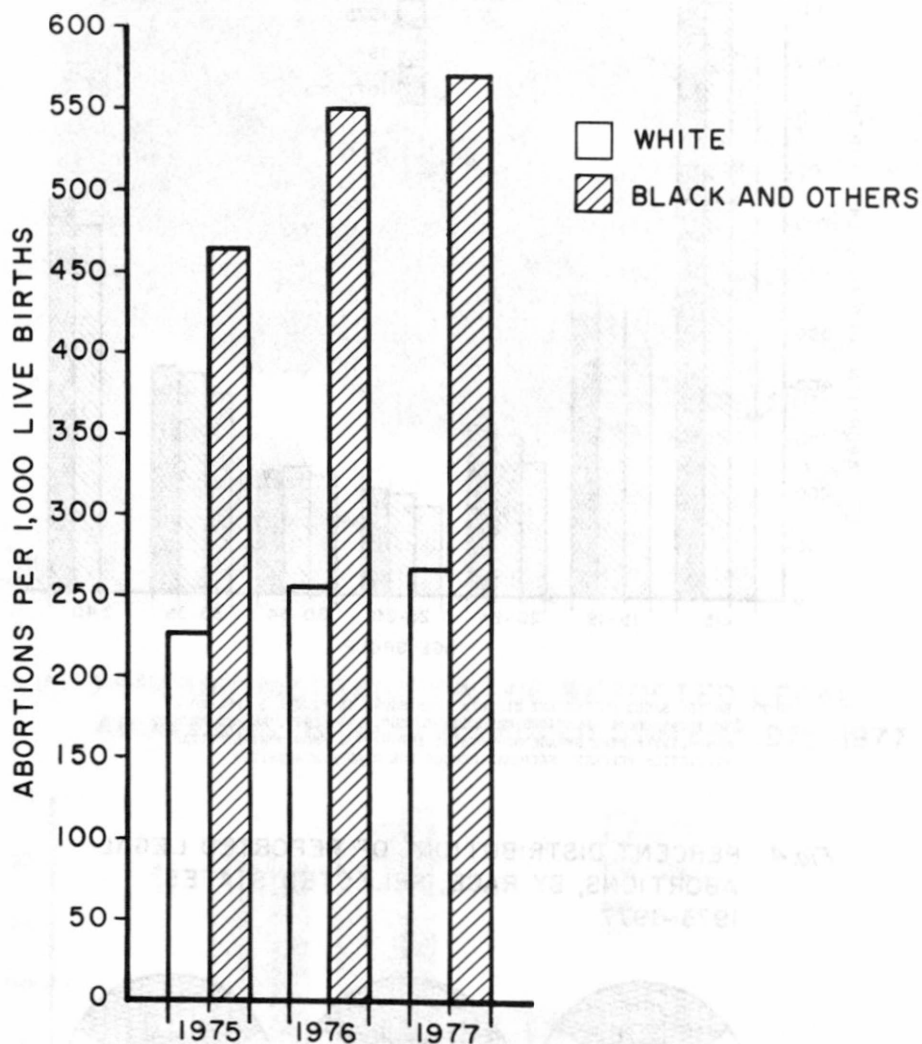


^a BASED ON TOTAL NUMBER WITH RACE KNOWN

^b ALL STATES WITH DATA AVAILABLE FOR 1975 (31 STATES), 1976 (33 STATES), AND 1977 (33 STATES)

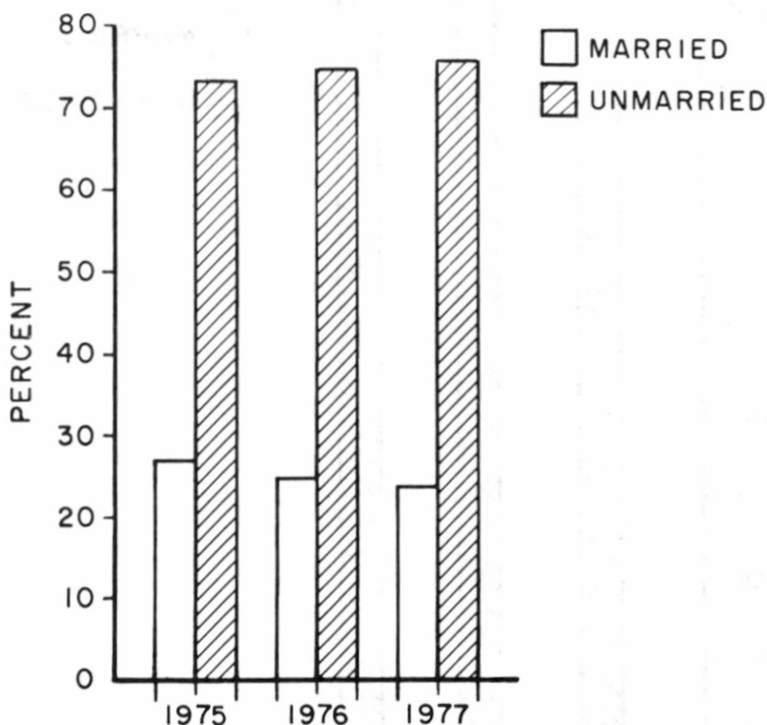
SOURCE: TABLE 8 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig. 5 LEGAL ABORTION RATIOS, BY RACE,
UNITED STATES, 1975-1977



NOTE: RATIOS BASED ON PERCENT DISTRIBUTION SHOWN IN FIGURE 4 APPLIED TO TOTAL LEGAL ABORTIONS REPORTED TO CDC, 1975-1977, AND TOTAL U.S. LIVE BIRTHS BY RACE, 1975-1977, FROM MONTHLY VITAL STATISTICS REPORTS, NATIONAL CENTER FOR HEALTH STATISTICS

Fig. 6 PERCENT DISTRIBUTION^a OF REPORTED
LEGAL ABORTIONS, BY MARITAL STATUS,
SELECTED STATES,^b 1975-1977

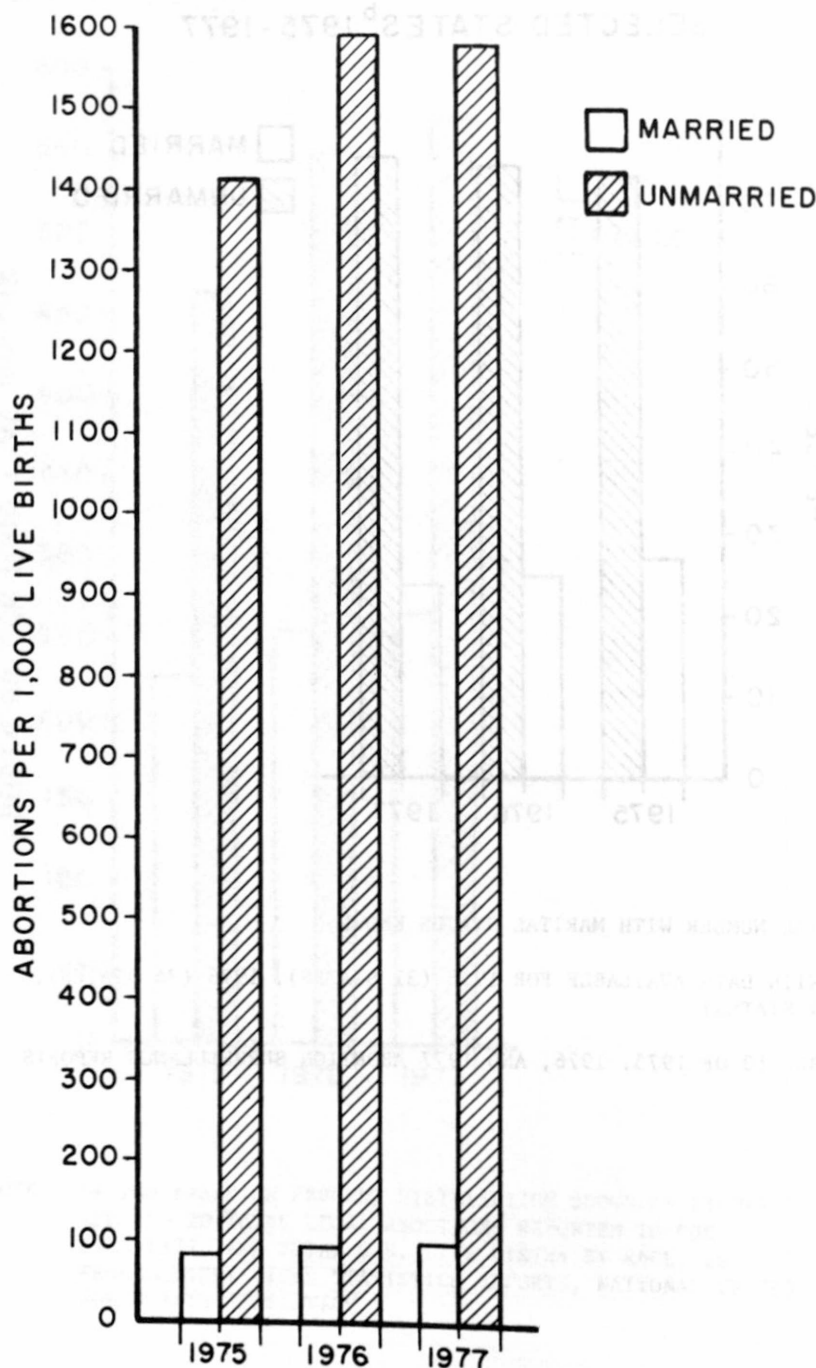


^aBASED ON TOTAL NUMBER WITH MARITAL STATUS KNOWN

^bALL STATES WITH DATA AVAILABLE FOR 1975 (31 STATES), 1976 (34 STATES),
AND 1977 (34 STATES)

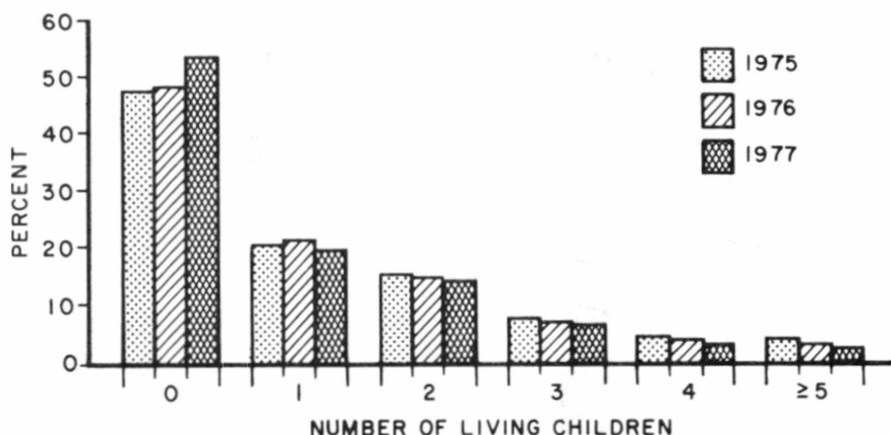
SOURCE: TABLE 10 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig.7 LEGAL ABORTION RATIOS, BY MARITAL STATUS, UNITED STATES, 1975-1977



NOTE: RATIOS BASED ON PERCENT DISTRIBUTION SHOWN IN FIGURE 6 APPLIED TO TOTAL LEGAL ABORTIONS REPORTED TO CDC, 1975-1977, AND TOTAL U.S. LIVE BIRTHS BY LEGITIMACY, 1975-1977, FROM MONTHLY VITAL STATISTICS REPORTS, NATIONAL CENTER FOR HEALTH STATISTICS

Fig. 8 PERCENT DISTRIBUTION^a OF REPORTED LEGAL ABORTIONS, BY NUMBER OF LIVING CHILDREN, SELECTED STATES^b, 1975-1977

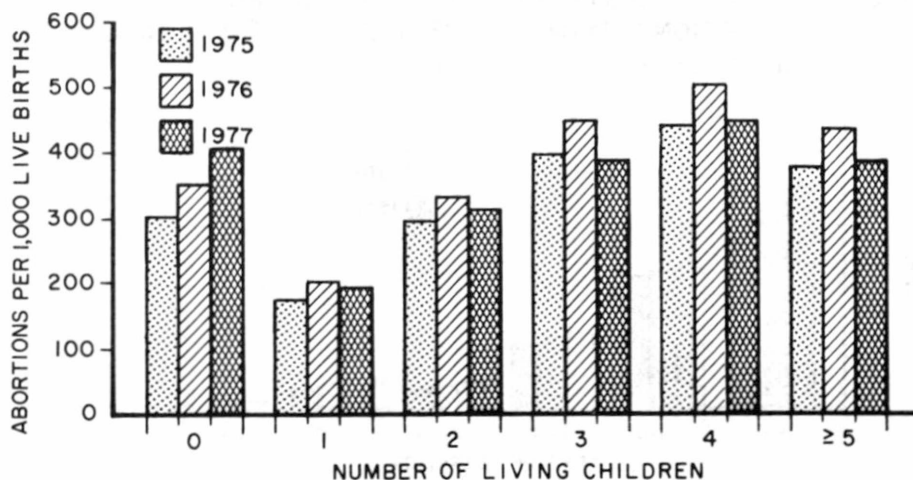


^aBASED ON TOTAL NUMBER WITH NUMBER OF LIVING CHILDREN KNOWN

^bALL STATES WITH DATA AVAILABLE FOR 1975 (24 STATES), 1976 (28 STATES), AND 1977 (29 STATES)

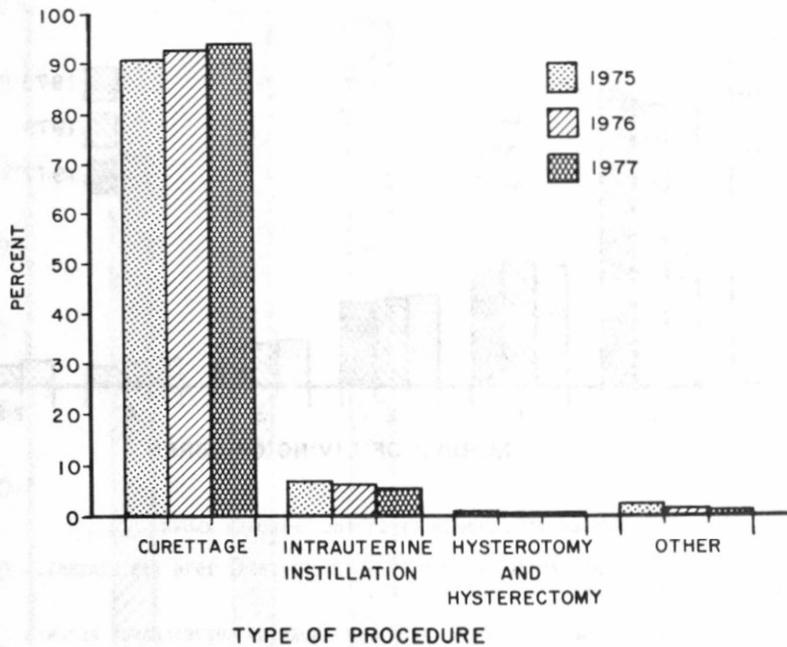
SOURCE: TABLE 13 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig. 9 LEGAL ABORTION RATIOS, BY NUMBER OF LIVING CHILDREN, UNITED STATES, 1975-1977



NOTE: RATIOS BASED ON PERCENT DISTRIBUTION SHOWN IN FIGURE 8 APPLIED TO TOTAL LEGAL ABORTIONS REPORTED TO CDC, 1975-1977, AND TOTAL U.S. LIVE BIRTHS BY LIVE BIRTH ORDER, 1975-1977, FROM MONTHLY VITAL STATISTICS REPORTS, NATIONAL CENTER FOR HEALTH STATISTICS

Fig. 10 PERCENT DISTRIBUTION^a OF LEGAL ABORTIONS, BY TYPE OF PROCEDURE, SELECTED STATES,^b 1975 -1977

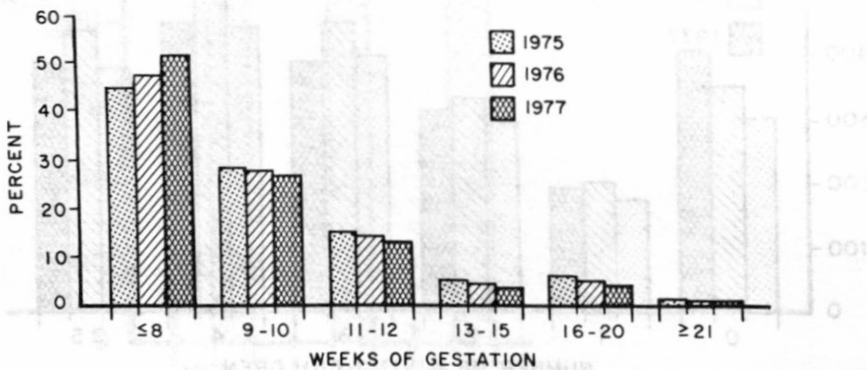


^a BASED ON TOTAL NUMBER WITH TYPE OF PROCEDURE KNOWN

^b ALL STATES WITH DATA AVAILABLE FOR 1975 (32 STATES), 1976 (34 STATES), AND 1977 (35 STATES)

SOURCE: TABLE 15 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig. 11 PERCENT DISTRIBUTION^a OF REPORTED LEGAL ABORTIONS, BY WEEKS OF GESTATION,^b SELECTED STATES;^c 1975 -1977



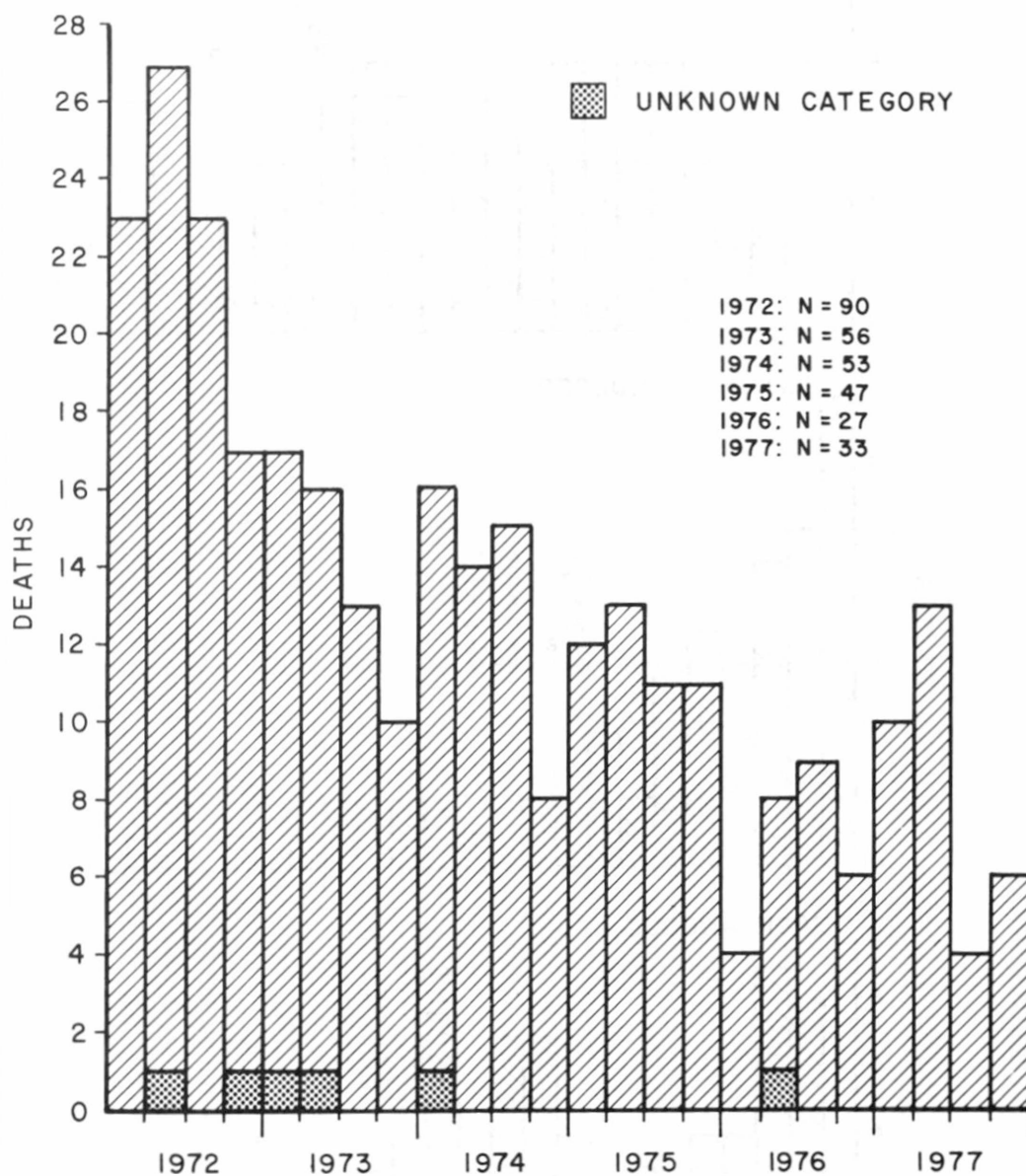
^a BASED ON TOTAL NUMBER WITH WEEKS OF GESTATION KNOWN

^b WEEKS FROM LAST MENSTRUAL PERIOD

^c ALL STATES WITH DATA AVAILABLE FOR 1975 (35 STATES), 1976 (37 STATES), AND 1977 (38 STATES)

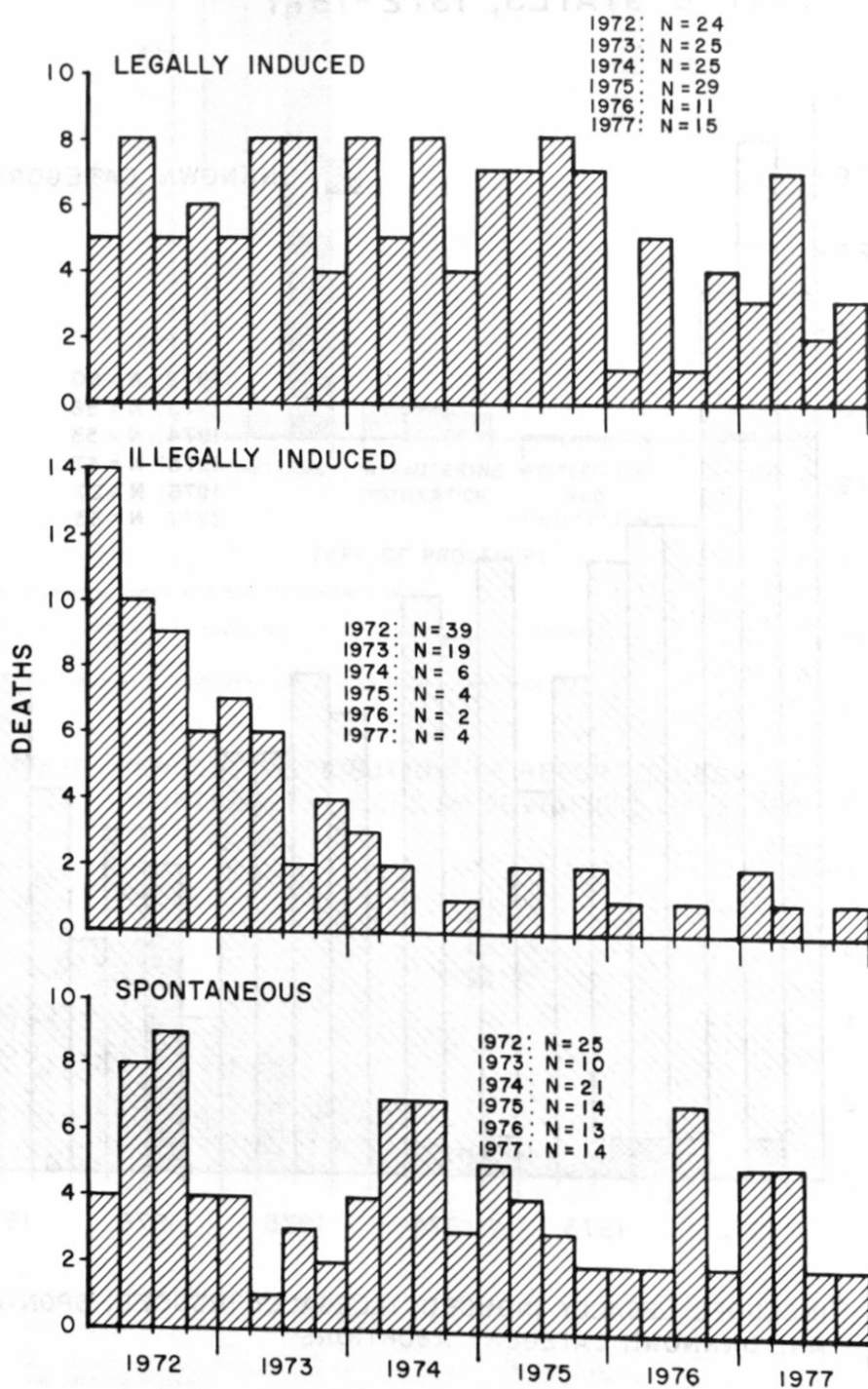
SOURCE: TABLE 16 OF 1975, 1976, AND 1977 ABORTION SURVEILLANCE REPORTS

Fig. 12 ABORTION-RELATED DEATHS*, BY QUARTER,
UNITED STATES, 1972-1977



* INCLUDES LEGALLY INDUCED, ILLEGALLY INDUCED, SPONTANEOUS,
AND UNKNOWN CATEGORY ABORTIONS

**Fig. 13 ABORTION-RELATED DEATHS,
BY CATEGORY* AND QUARTER,
UNITED STATES, 1972-1977**



* EXCLUDES UNKNOWN CATEGORY