

# Surveillance of Abortions in Hospitals in the United States, 1970

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A RECENT dramatic change in family planning in the United States is the increase in the practice of legal abortions in hospitals. Evaluation of this change depends on the answers to a number of important questions. First, will the increasing use of hospital abortion services contribute to a reduction in birth rates? Second, will the legalization of abortion decrease the incidence of illicit abortions with their attendant morbidity and mortality? Finally, will readily available abortions become a frontline defense against unwanted births or a backup method of fertility control?

The effort to establish nationwide reporting of legal abortions began at the Family Planning

Evaluation Activity of the Center for Disease Control in early 1969. It stemmed from a joint need on the part of public health officials, demographers, and practicing physicians for reliable epidemiologic data on the rapidly changing phenomenon of legal abortions. Aside from the primarily long-term objective of collecting the information necessary to answer the preceding questions, the more immediate goal of establishing a surveillance network was met by initiating reporting of abortions from a few hospitals. These hospital studies, still underway, are providing detailed descriptions of the women treated, and attempts are being made to identify trends, account for changes in service volume, characterize the patient population, and evaluate the abortion methods employed.

The change from a modest enterprise of hospital sampling to a program that at present includes reports from health departments in all States where abortion is legal was largely in response to the burgeoning pressure to gather abortion statistics now, before health planners and practitioners alike are inundated by the advancing wave of liberal abortion legislation.

This report documents our findings in (a) the current status of abortion laws in all States, (b) statistics on hospital abortions from States now reporting abortions, and (c) statistics on hospital abortions in New York City. Because uniform reporting is only beginning to be established, statis-

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tics from State health departments are available only through June 1970; the status of legal changes and of abortion practices in New York City are reported as of October 2, 1970. Although abortions are legal when performed outside of hospitals in some places, notably New York State, this paper presents statistics only on legal abortions performed in hospitals. As used henceforth, the term hospital abortion refers only to abortions actually performed legally in hospitals.

### Current Status of Abortion Laws

The status of abortion legislation in all 50 States and the District of Columbia, as of October 2, 1970, is summarized in table 1. At one end of the current spectrum of State abortion laws, Louisiana legislation states that under no circum-

stances is "the crime of abortion" justifiable. At the other end, Hawaii, New York, and Alaska leave the decision concerning abortion to the pregnant woman and her physician. Although Hawaii and Alaska require that pregnant women requesting abortion meet certain residency requirements, the New York law does not. New York does require that the abortion be performed by a duly licensed physician and that it be done within the first 24 weeks of pregnancy.

The statistical substance of this report comprises abortion data from 10 States and a major metropolitan area, New York City; these were chosen because they have recently changed their abortion laws or their interpretations and also because they collect statistical information on legal abortions. One of these States, Alabama, permits

**Table 1. Major categories of American abortion laws, as of October 2, 1970**

Major categories of State abortion laws	States having similar abortion laws
I. State law permits no exceptions to the "crime of abortion"	Louisiana.
II. Abortion allowed only in instances where the life of the pregnant woman is threatened by continuation of the pregnancy	Arizona, Connecticut, Florida, Idaho, Indiana, Iowa, Kentucky, Maine, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, North Dakota, Ohio, Oklahoma, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Illinois, Wyoming.
III. "Unlawful" or "unjustifiable" abortions are prohibited	Massachusetts, New Jersey, Pennsylvania.
IV. Abortions allowed when continuation of the pregnancy threatens the woman's life or health	Alabama.
V. Indications for legal abortion include threats to the pregnant woman's life and forcible rape	Mississippi.
VI. American Law Institute Model Abortion Law: "A licensed physician is justified in terminating a pregnancy if he believes that there is substantial risk that continuance of the pregnancy would gravely impair the physical or mental health of the mother or that the child would be born with grave physical or mental defect, or that the pregnancy resulted from rape, incest or other felonious intercourse."	Arkansas, California (does not include fetal deformity), Colorado, Delaware, Kansas, Maryland (does not include incest), New Mexico, North Carolina, South Carolina, Virginia.
VII. Abortion law based on the May 1968 recommendations of the American College of Obstetricians and Gynecologists allows abortion when there is risk of fetal deformity, when the pregnancy resulted from felonious intercourse, and when there is risk that continuance of the pregnancy would impair the physical or mental health of the mother. "In determining whether or not there is substantial risk (to the woman's physical or mental health), account may be taken of the mother's total environment, actual or reasonably foreseeable."	Oregon.
VIII. No legal restriction on reasons for which an abortion may be obtained	Alaska, Hawaii, New York.
IX. Legal restrictions on reasons for which an abortion may be obtained were invalidated by court decision	Georgia, District of Columbia, Texas, Wisconsin. <sup>1</sup>

<sup>1</sup> The abortion laws of several other States have been ruled unconstitutional by lower State trial courts; however, these decisions are binding only in the county in which the decision was rendered.

**Table 2. Hospital abortion ratios for selected States, January-June 1970**

State	Hospital abortions	Live births <sup>1</sup>	Hospital abortions per 1,000 live births
Alabama <sup>2</sup> .....	234	49,092	5
Alaska <sup>3</sup> .....	106	1,100	96
California <sup>4</sup> .....	23,300	172,493	135
Colorado .....	842	20,743	41
Georgia .....	220	45,175	5
Maryland <sup>5</sup> .....	5,533	54,442	102
North Carolina <sup>6</sup> .....	426	63,463	7
Oregon .....	2,940	17,864	165
South Carolina <sup>7</sup> .....	140	19,050	7
Virginia .....	508	38,759	13
<b>Total .....</b>	<b>34,249</b>	<b>482,181</b>	<b>71</b>

<sup>1</sup> Live birth data provided by States for appropriate reporting period or taken from "Monthly Vital Statistics Report," Aug. 28, 1970, published by National Center for Health Statistics.

<sup>2</sup> January-September 1970 (live births for August and September were estimated).

<sup>3</sup> Preliminary data, July 29-Sept. 29, 1970.

<sup>4</sup> Provisional data.

<sup>5</sup> July 1, 1969-June 30, 1970.

<sup>6</sup> Jan. 1-Aug. 31, 1970 (live births for August were estimated).

<sup>7</sup> Feb. 1-June 30, 1970.

abortion only if continuation of the pregnancy threatens the life or health, or both, of the pregnant woman. The Alaska and New York legislative actions have removed almost all legal restrictions on abortion practice. (Data from Hawaii are

not included in this report since they had not been received at the time of its preparation.) The other eight State laws specify the indications for abortion in detail. Application of the provisions of these laws varies from State to State, however, depending in part on the attitudes of local physicians and health authorities.

### Hospital Abortions, Selected States

Table 2 presents abortion and live birth data for the 10 States which recently changed their abortion laws or practices and are collecting abortion statistics. This selection factor accounts in large part for the lack of uniform reporting periods among these States. In the reporting periods noted, there were 34,249 abortions in hospitals and 482,181 live births for an overall ratio of 71 abortions in hospitals per 1,000 live births.

Abortion ratios vary from five to 165 abortions per 1,000 live births. Alabama, Georgia, North Carolina, and South Carolina have ratios of 7 or less; yet, all but Alabama permit abortions for a variety of reasons. Both California and Maryland, which permit abortions for a similar number of reasons, have ratios of more than 100 per 1,000 live births. Oregon, with the highest ratio (165), allows abortion through the 150th day of pregnancy for a number of specific reasons, but limits abortion services to State residents. Oregon, by stipulating that account may be taken of a

**Table 3. Hospital abortions in selected States, by reasons for abortion, January-June 1970**

State	Total	Maternal mental health	Maternal physical health	Risk of fetal deformity	Rape or incest	Other	Unknown
Number							
California <sup>1</sup> .....	23,300	22,670	351	...	279	0	0
Colorado .....	842	730	52	11	38	0	11
Georgia .....	220	169	22	20	9	0	0
Oregon .....	<sup>2</sup> 3,082	2,838	170	44	25	5	0
South Carolina <sup>3</sup> .....	140	110	20	9	1	0	0
Virginia .....	508	357	9	13	0	0	129
<b>Total .....</b>	<b>28,092</b>	<b>26,874</b>	<b>624</b>	<b>97</b>	<b>352</b>	<b>5</b>	<b>140</b>
Percent							
California .....	100.0	97.3	1.5	...	1.2	0	0
Colorado .....	100.0	86.7	6.2	1.3	4.5	0	1.3
Georgia .....	100.0	76.8	10.0	9.1	4.1	0	0
Oregon .....	100.0	92.1	5.5	1.4	.8	.2	0
South Carolina .....	100.0	78.6	14.3	6.4	.7	0	0
Virginia .....	100.0	70.3	1.8	2.6	0	0	25.4
<b>Total .....</b>	<b>100.0</b>	<b>95.7</b>	<b>2.2</b>	<b>0.3</b>	<b>1.3</b>	<b>0</b>	<b>0.5</b>

<sup>1</sup> Provisional data.

<sup>2</sup> The total number of reasons is greater than the total number of abortions because more than one reason was stated for some abortions.

<sup>3</sup> Feb. 1-June 30, 1970.

woman's total environment in assessing her health, allows the broadest possible interpretation of this indication among all 10 States.

In States where reasons for the performance of a hospital abortion are stated in the report, the reasons most often given concern the woman's mental health. Table 3, which summarizes data from the six States that report this information, shows that, overall, almost 96 percent of the abortions performed were done for maternal mental health. Another 2 percent of the total were performed for the women's physical health. Therefore, almost 98 percent of the abortions in these States were done for the pregnant woman's physical or mental well-being. Only 1 percent were performed because of a history of rape or incest leading to the unwanted pregnancy, and well under 1 percent of the total were performed on

the indication of potential fetal deformity. Considering the States individually, it is readily apparent that those with the highest abortion ratios (California and Oregon) also have the highest percentages of total abortions performed for mental health reasons. The risk of fetal deformity seemed an important indication in only two States, Georgia and South Carolina, where 9 and 6 percent, respectively, of all hospital abortions were performed for that reason. Of course, California does not permit abortion on the grounds of potential fetal deformity.

Table 4 shows hospital abortions by maternal age for the States that report this statistic: California, Colorado, Georgia, Oregon, and South Carolina. Overall, only 4 percent of the women were under 15 or over 40 years of age. The majority (63 percent) of patients were between 15 and 24

**Table 4. Hospital abortions in selected States, by maternal age groups, January-June 1970**

State	Total	Age groups (years)							Unknown
		<15	15-19	20-24	25-29	30-34	35-39	≥40	
Number									
California <sup>1</sup>	23,399	329	7,018	7,536	3,721	2,238	1,388	624	545
Colorado	842	34	247	240	147	84	<sup>2</sup> 89	...	1
Georgia	220	7	53	52	50	27	18	13	0
Oregon	2,940	41	961	1,066	409	256	142	64	1
South Carolina <sup>3</sup>	140	1	34	46	26	9	13	11	0
Total	27,541	412	8,313	8,940	4,353	2,614	1,650	712	547
Percent									
California	100.0	1.4	30.0	32.2	15.9	9.6	5.9	2.7	2.3
Colorado	100.0	4.0	29.3	28.5	17.5	10.0	10.6	...	.1
Georgia	100.0	3.2	24.1	23.6	22.7	12.3	8.2	5.9	0
Oregon	100.0	1.4	32.7	36.3	13.9	8.7	4.8	2.2	0
South Carolina	100.0	0.7	24.3	32.9	18.6	6.4	9.3	7.9	0
Total	100.0	1.5	30.2	32.5	15.8	9.5	6.0	2.6	2.0

<sup>1</sup> Provisional data.

<sup>2</sup> Colorado reports highest age group as ≥35.

<sup>3</sup> Feb. 1-June 30, 1970.

**Table 5. Hospital abortions in selected States, by marital status, January-June 1970**

State	Total	Married		Unmarried		Unknown	
		Number	Percent	Number	Percent	Number	Percent
Alabama <sup>1</sup>	234	76	32.5	158	67.5	0	0
California <sup>2</sup>	23,338	5,949	25.5	17,298	74.1	91	.4
Georgia	220	101	45.9	119	54.1	0	0
Oregon	2,940	639	21.7	2,301	78.3	0	0
South Carolina <sup>3</sup>	140	58	41.4	82	58.6	0	0
Total	26,872	6,823	25.4	19,958	74.3	91	0.3

<sup>1</sup> January-September 1970.

<sup>2</sup> Provisional data.

<sup>3</sup> Feb. 1-June 30, 1970.

**Table 6. Hospital abortions in selected States, by race, January-June 1970**

State	Total	White		Black		Other		Unknown	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama <sup>1</sup> . . . . .	234	151	64.5	83	35.5	0	0	0	0
California <sup>2</sup> . . . . .	23,399	19,281	82.4	2,225	9.5	739	3.2	1,154	4.9
Georgia . . . . .	220	192	87.3	28	12.7	0	0	0	0
South Carolina <sup>3</sup> . . . . .	140	128	91.4	12	8.6	0	0	0	0
Total . . . . .	23,993	19,752	82.3	2,348	9.8	739	3.1	1,154	4.8

<sup>1</sup> January-September 1970.

<sup>2</sup> Provisional data.

<sup>3</sup> February-June 1970.

years of age at the time of abortion. There is a direct correlation between a given State's overall abortion ratio and the percentage of its abortion patients who are 24 years and under. Thus, Oregon, with the highest abortion ratio (165) had the highest percentage (70 percent) of its abortion patients in the under-24 group. Georgia, with the lowest abortion ratio (5), had the lowest percentage (51 percent) in that age group.

Table 5 shows hospital abortions by marital status in the five States that report this information. The definition of "unmarried" is comprehensive; it includes never married (single), abandoned, separated, divorced, and widowed women. Of the nearly 27,000 patients for whom data were available, slightly more than 25 percent were listed as married. Georgia with 46 percent and South Carolina with 41 percent of the abortions

performed on married women head the list of States in this regard. Oregon, on the other hand, reported that only 22 percent of the abortions were performed on married women.

Table 6 shows hospital abortions by race in the four States with complete data: Alabama, California, Georgia, and South Carolina. Overall, 82 percent of the patients were white and 10 percent were black. Alabama and South Carolina defined the percentage extremes: in Alabama, 36 percent of the women were black, while in South Carolina only 9 percent were black. A comparison of the racial distribution of hospital abortions with the racial distribution of live births for the same four States (table 7) shows that in California the calculated result is only slightly greater than unity, while in South Carolina white women obtained hospital abortions at a rate more than five times greater than that for black women.

**Table 7. Hospital abortion ratios<sup>1</sup> in selected States, by race, January-June 1970**

State	White ratio	Black ratio	White to Black ratio
Alabama <sup>2</sup> (January-September 1970) . . . . .	31	29	1.1
California <sup>3</sup> . . . . .	135	106	1.3
Georgia <sup>4</sup> . . . . .	6	2	3.0
South Carolina <sup>3</sup> (February-June 1970) . . . . .	11	2	5.5

<sup>1</sup> Ratios calculated as the number of race-specific abortions per 1,000 race-specific live births.

<sup>2</sup> Virtually all Alabama hospital abortions are done in Jefferson County, and race-specific live birth data from that county rather than the entire State are used. Jefferson County live birth data are calculated from natality statistics for January-September 1969, Jefferson County Health Department.

<sup>3</sup> California and South Carolina live birth data are from corresponding months in 1967, Vital Statistics of the United States.

<sup>4</sup> Georgia live birth data are calculated from 1969 natality statistics for January-December 1969, Georgia State Department of Public Health.

### Hospital Abortions, New York City

On July 1, 1970, the New York State abortion law went into effect, thus providing for the legal availability of hospital abortion services to any woman up through the 24th week of her pregnancy. A survey conducted in late June established that 74 hospitals intended to provide these services in New York City. Reports to the New York City Health Department showed that by October 2 at least 91 New York City hospitals had performed at least one abortion since the law became operative. In addition, outpatient facilities are also performing abortions in New York City, but as of October 2, 1970, reporting of legal abortions on outpatients is incomplete, and the data are not included in this paper.

In New York City a modified fetal death certificate is used to report detailed information on abortions in individual hospitals. A less detailed statistical reporting system provides current infor-

mation weekly for the city's health planners and includes case counts by the abortion technique employed and by the gestational age of the fetus. The New York City statistics in this report are taken from these weekly data and represent a total of 82 different hospitals which reported between July 1 and October 2, 1970.

Table 8 compares abortions and abortion ratios for 1968 and July to October 1970. In 1970 the abortion ratio for ward patients (women dependent on public support for their hospital care) increased 40-fold from its 1968 level. The ratio for private patients increased 85-fold. The overall increase under the new law was 74-fold.

Of all the women who received abortion services from July 1 to October 2, 1970, 79 percent were in the first 12 weeks of pregnancy. In terms of the type of service, however, there was a marked difference: 82 percent of the private patients were in their first trimester, while the corresponding figure for ward patients was 67 percent. There was also a difference in methods employed—91 percent of the private patients had either sharp or suction dilatation and curettage; the corresponding figure for ward patients was 61 percent. Thirty-two percent of the ward patients had amniocentesis with hypertonic saline exchange, the abortion method of choice for women in the second trimester of pregnancy.

Almost 40 percent of the abortions reported to the New York City Health Department in July and August 1970 were performed on women who

**Table 8. Hospital abortions in New York City, by type of service, 1968 and July 1–October 2, 1970<sup>1</sup>**

Service	Abortions		Abortions per 1,000 live births <sup>2</sup>	
	1968	July 1–Oct 2, 1970	1968	July 1–Oct 2, 1970
Municipal and voluntary, ward ..	315	2,956	5	198
Proprietary and voluntary, private .....	575	14,715	9	766
Total .....	890	17,671	7	518

<sup>1</sup> 1968 data represent a total of 79 different hospitals; 1970 data represent 82 different hospitals.

<sup>2</sup> Live birth data from the first 6 months of 1970 were used to calculate abortions per 1,000 live birth ratios for July 1–Oct. 2, 1970. No account was taken of the probable seasonal variations in live birth rates for the city because of the increase in abortion ratios between 1968 and the 1970 reporting period.

**Table 9. Hospital abortion ratios<sup>1</sup> in selected States, by place of abortion, July–August 1970<sup>2</sup>**

State	Place of abortion	
	State of residence	New York City
Alabama .....	5	1
Alaska .....	96	0
California .....	135	0
Colorado .....	41	3
Georgia .....	5	5
Maryland .....	102	3
North Carolina .....	7	2
Oregon .....	165	0
South Carolina .....	7	4
Virginia .....	13	1

<sup>1</sup> Calculated as the number of abortions at place of occurrence per 1,000 live births in State of residence.

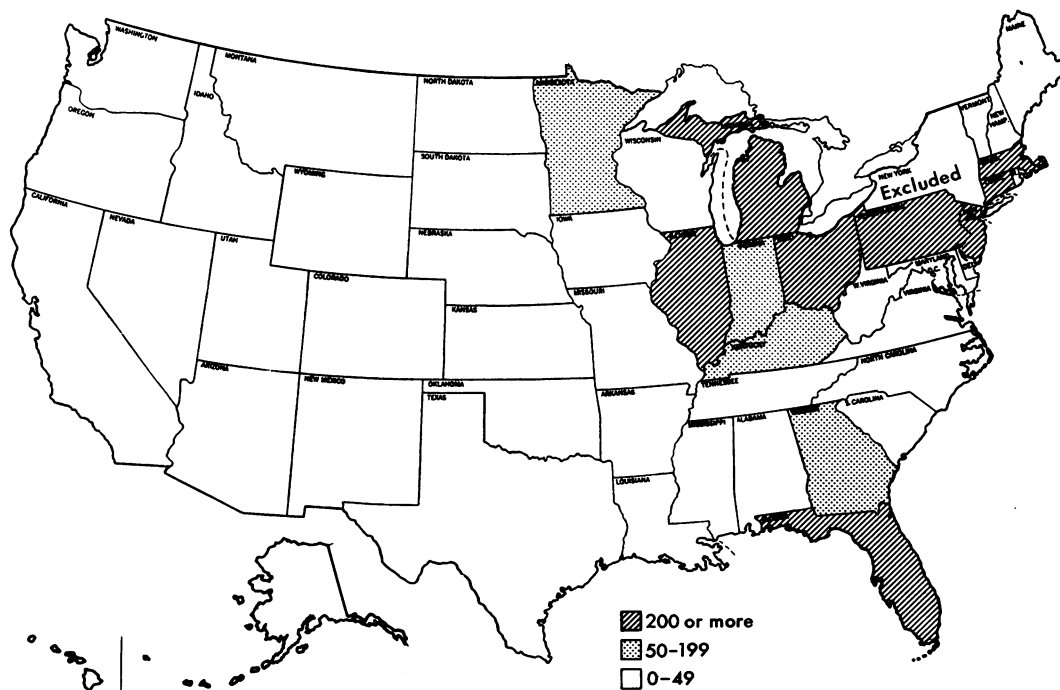
<sup>2</sup> Dates apply only to New York City data. Periods of time covered by data in the column "State of residence" are identical to those in table 2.

did not claim to be New York residents. A preliminary five-hospital survey, conducted under the supervision of the New York City Health Department, suggested that the figure for abortions performed on nonresidents in proprietary hospitals might be as high as 90 percent.

No official figures are available on the States of residence of women who had abortions in physicians' offices or private clinics, but a recent survey of nonhospital abortion clinics in New York City showed that most of their patients were not residents of New York State.

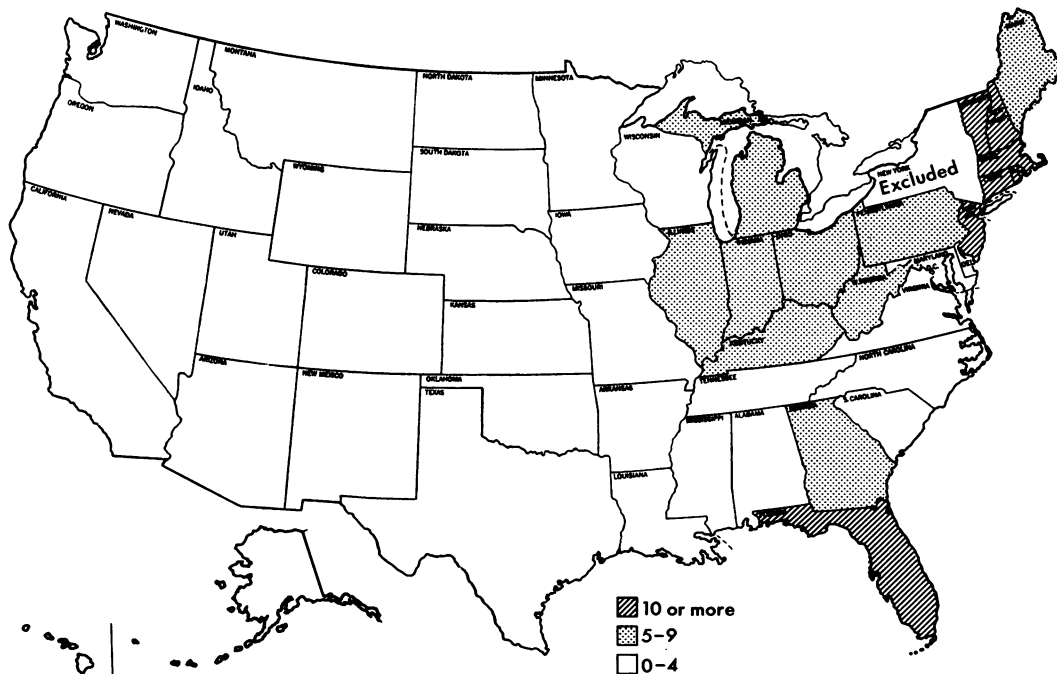
Figure 1 shows hospital abortions done on nonresidents by their States of residence. Figure 2 shows the calculated abortion ratios for the same States. These ratios were derived by using as the denominator the number of live births in the States of residence during the months specified. The charts show that although more than 200 women came to New York City for abortions in July and August 1970, from States as far west as Illinois and as far south as Florida, when the estimated population at risk is considered by using live births as a denominator, the abortion ratios are highest for the States closest to New York City. Florida is the lone exception. Figure 2 can be illustrated more explicitly with data from a specific State: for every 1,000 live births in the State of Connecticut, for example, 23 Connecticut residents had abortions in New York City hospitals. Ratios for other States are New Jersey 42, Massachusetts 22, New Hampshire 17, Rhode Island 16, Florida 15, Vermont 14, Illinois 9, Ohio 7, Kentucky 6, West Virginia 6, and Georgia 5.

**Figure 1. Hospital abortions performed in New York City, by patients' States of residence, July-August 1970**



NOTE: Data reported by New York City Health Department.

**Figure 2. Hospital abortion ratios<sup>1</sup> in New York City, by patients' States of residence, July-August 1970**



<sup>1</sup> Live births for States of residence taken from provisional data, Monthly Vital Statistics Report, National Center for Health Statistics.

NOTE: Data reported by New York City Health Department.

Simply and geographically stated, the States with ratios of 5 or higher are east of the Mississippi.

Table 9 shows abortion ratios by the place of occurrence for the 10 States that reported abortion statistics. For example, for every 1,000 live births in Georgia, five Georgia women had abortions in Georgia hospitals while another five Georgia women had abortions in New York City hospitals.

## Conclusions

From the data gathered so far, the following conclusions are warranted.

- The status of a given law regulating the performance of abortions does not bear a predictable relationship to the actual number of abortions performed. States with similarly worded laws have widely divergent performances as measured by the ratio of abortions per 1,000 live births.

- States with high abortion ratios tend, as a rule, to allow more abortions for mental health indications and tend to report abortions for more women who are young and not married at the time of abortion.

- The racial data presented indicate that the race-specific abortion ratios for a given State are not always equal. In some States white women have obtained abortions in hospitals at a rate

more than five times greater than that for their black counterparts.

- The highly significant rise in the New York City abortion ratio between pre-law 1968 and the first post-law reporting period of 1970 was more than twice as great for private than for ward patients. The large influx of out-of-State women documented as having obtained abortion services in New York City helps to account for this disparity in abortion ratios. The large number of out-of-State residents also suggests that, at least for women with enough motivation and money to make the trip, there is an unmet need for accessible abortion services and for more tolerant attitudes toward legal abortion in their States of residence.

- The increase in less-restrictive abortion laws and the number of abortions performed in New York City over a 3-month period on women from many States other than New York indicates that abortion is an acceptable alternative to an unwanted birth for many U.S. women. What influence this more widespread practice of abortion will have on use of contraceptives, unwanted pregnancies, and mortality associated with illicit abortions remains to be determined. Continued intensive efforts to collect reliable statistics on the practice of abortion are essential to the solution of these problems.

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This report summarizes the status of U.S. abortion laws as of October 2, 1970. Although the laws differ markedly from State to State, 15 laws have been revised since 1967. All the changes permit women greater latitude in making the decision as to whether or not to have an abortion.

The reporting of legal abortions in hospitals is not complete for all States. This paper is based on statistics available from 10 States and one major metropolitan area, New York City, which reported their abortion data to the Family Planning Evaluation

Activity, Center for Disease Control.

More than 34,000 abortions in hospitals, or 71 abortions per 1,000 live births, were reported by the 10 States. Six States stated the reasons given for performing abortions; maternal mental health problems were cited as the medical indication for more than 95 percent. In the five States which reported the ages of the women who had abortions, more than 60 percent of the patients were between 15 and 24 years old. Unmarried patients outnumbered married patients in the five States that reported marital status.

More than 80 percent of the women who had their pregnancies terminated were white in three of four States that reported racial data. In the fourth State, Alabama, almost 65 percent were white.

On July 1, 1970, New York City began to permit abortions up to and including the 24th week of pregnancy. By October 2, the New York City Health Department had received reports of 17,671 abortions. Residents of States other than New York accounted for almost 40 percent of these abortions.