Abortion Surveillance Program of the Center for Disease Control

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T HE FAMILY Planning Evaluation Branch of the Epidemiology Program, Center for Disease Control (CDC), Atlanta, Ga., began abortion surveillance in 1968. It first centered around a large municipal hospital in a State that had recently liberalized its abortion law. As more States adopted liberalized abortion laws, CDC's staff felt that there was a need to establish a system of abortion surveillance.

Traditionally, State and local health departments have reported events of national health importance to CDC. CDC periodically prepares surveillance reports on subjects ranging from acute infectious diseases, such as hepatitis and encephalitis, to reports on congenital birth defects. In light of the epidemiologic importance of timely surveillance and the historic function of CDC in establishing surveillance systems, the Family Planning Evaluation Branch began in 1969 to obtain

Mr. Smith is chief, Statistical Services, and Mrs. Bourne is a nurse epidemiologist, Family Planning Evaluation Branch, Epidemiology Program, Center for Disease Control. This paper is based on one given at the 14th National Meeting of the Public Health Conference on Records and Statistics, Washington, D.C., June 12–15, 1972. Tearsheet requests to Jack C. Smith, Family Planning Evaluation Branch, Center for Disease Control, Atlanta, Ga. 30333. the cooperation of State and local health departments in making data on abortions available for compilation and dissemination by means of a periodic surveillance report.

Objectives

At present the Abortion Surveillance Program has four major objectives. The first is to encourage State and local health departments to develop abortion reporting systems. From the public health point of view, we consider it important to establish reporting of all legally induced abortions, so that changes in performance of legal abortions will be documented and can be related to changes in fertility and maternal morbidity and mortality.

In some countries abortion reform was argued for years as a medical issue with the key proabortion and anti-abortion factions being led by physicians. Conversely, in the United States, the liberalization of abortion laws has been argued by the legal community on grounds of rights of the woman and rights of the fetus, while the health community, in large part, has been on the periphery of the changing abortion legislation. Thus, CDC has tried to create an awareness among public health personnel of the importance of including a provision for reporting any abortion legislation.

The second objective is to suggest minimum data items to be included on an abortion report-

ing document. The National Center for Health Statistics (NCHS) and CDC are jointly working on a suggested uniform reporting document for the States' consideration. CDC, in cooperation with NCHS, has agreed on the following items of information which should be collected for each abortion.

- 1. Hospital or facility
- 2. Woman's usual place of residence
- 3. Date of birth
- 4. Race
- 5. Marital status
- 6. Number of living children
- 7. Number of previous induced abortions
- 8. First day of last normal menstrual period
- 9. Physician's estimate of length of gestation
- 10. Date of abortion
- 11. Type of procedure

These items are in accord with those proposed by a WHO consultation (unpublished report) on uniformity of abortion reporting. All 11 items are also included on the list of data items for abortion reporting recommended by the APHA Task Force on Family Planning Methods.

The third objective is to encourage standardization of tabulations produced from reporting systems. Our abortion surveillance program relies totally on the cooperation of State and local health agencies to collect abortion information and to compile that information in tabular form that can be used by CDC for analysis and comparison with other reporting areas. Some of the categories of data for comparative purposes need to be in the same format as standard tabulations of birth and death statistics. Other data, such as length of gestation, need standardization of categories in order to satisfy valid medical considerations.

The fourth objective is to aggregate, analyze, and disseminate data from each reporting area in the form of a periodic surveillance report. The national abortion picture is changing rapidly. New legislation and court decisions in one State can often directly affect the availability of abortion services to residents of another State. In 1971, almost 40 percent of all abortions reported to CDC were performed on out-of-State residents. Changes in abortion policy and procedures in one State may alter patterns of fertility, morbidity, and mortality in another State; thus, the need for sharing information on a national basis is increasing.

Patterns of Abortion

Table 1 shows chronologically the status of abortion law changes, abortion reporting, and abortion ratios in the United States for 1960, 1970, and the first half of 1971. Reporting of legally induced abortions to CDC began in 1969. At the end of 1970, abortion information came to CDC from 13 State health departments and selected hospitals in six other States and the District of Columbia. In the first quarter of 1971, the reporting network was expanded to include statewide data from 17 States, as well as hospitals

			1	971
Variable .	1969	1970	January March	- April- June
Cumulative number of States with abortion				
laws enacted since 1967	9	16	16	16 1 23
States with partial or complete reporting Number of States reporting statewide	5	1 20	1 24	1 23
abortion data Additional States with 1 or more	4	13	17	16
hospitals reporting	1	17	17	17
Total abortions reported to CDC	12,584	180,119	99,721	² 88,474 ³ 112,354
National ratio of abortions per 1,000 live births	3.5	48	110	² 102 ³ 130

 Table 1. Status of abortion law changes, abortion reporting, and ratios of abortions to live births, United States, 1969–71

² Number of reported abortions and abortion ratio calculated with no data from California.

⁸ Number of abortions and abortion ratio which result from assuming that 23,880 abortions (number reported from California, January-March 1971) were performed in California during April-June.

¹ Includes District of Columbia.

Table 2. Ratios of reported legal abortions to livebirths, 24 States and the District of Columbia,1971

State	Abor- tions ¹	Live births ²	Abortions per 1,000 live births
Alabama	3 494	66,386	7.4
Alaska	1,145	7,176	159.6
Arizona ⁴	3 380	19,161	19.8
Arkansas	637	35,120	18.1
California	116,749	339,113	344.3
Colorado	4,168	41,373	100.7
Connecticut	3 724	44,908	16.1
Delaware	1,129	9,904	114.0
District of Columbia	3 17,619	25,048	703.4
Georgia	1,579	95,287	16.6
Hawaii	4,135	5 15,857	260.8
Kansas	9,472	34,184	277.1
Maryland	8,306	57,363	144.8
Massachusetts	3 1,570	90,415	17.4
Mississippi 4	48	22,705	2.1
Mew Mexico	3 4,883	22,293	219.0
New York	257,055	285,218	901.3
Upstate New York	49,305	153,308	321.6
New York City	207,750	131,910	1,574.9
North Carolina	4,322	95,972	45.0
Oregon	6,997	33,999	205.8
Pennsylvania	3 4,839	181,134	26.7
South Carolina	727	53,131	13.7
Vermont	9	7,817	1.2
Virginia 4	1,919	40,126	47.8
Washington 4	5,519	26,009	212.2
Wisconsin	3 4,661	71,697	65.0
– Total	459,086	1,721,396	266.7

¹ Data from State health departments unless otherwise noted.

² Live birth data for all States except Hawaii taken from Monthly Vital Statistics Report Provisional Statistics, vol. 20, No. 12, February 28, 1972, and vol. 20, No. 6, August 25, 1971.

³ Reports from one or more hospitals in the State.

4 January-June 1971.

⁵ Hawaii live birth data from Hawaii Department of Health.

reporting in six other States and the District of Columbia.

At the end of 1971, 16 States had reformed abortion laws in effect, and 24 States and the District of Columbia were in the reporting network. As of May 30, 1972, 459,086 abortions for the year 1971 were reported to CDC from 24 States and the District of Columbia, giving a total abortion ratio of 266.7 abortions per 1,000 live births for these reporting areas (table 2).

Rates of morbidity and mortality can be expected to increase for women having abortions after the 12th week of gestation. Table 3 shows the number and percentage of abortions reported by length of gestation. Almost three-fourths of the abortions in the nine States that have data available were performed before the 12th week of gestation.

Abortions by age group for the 11 States that report data by age of women are shown in table 4. The numbers of abortions are approximately equal for teenagers and the age groups 20-24 years and 25 years and over.

Six States have reported data for 1971 on type of procedure. Table 5 shows that the suction dilatation and curettage method is preferred in four of the six States.

More than 175,000 of the abortions reported to CDC in 1971 were performed on women who resided outside of the State where the abortions occurred. The chart shows the ratios of abortions to live births for the second quarter of 1971, with abortions reallocated to place of residence.

The following is a summary of changing patterns of abortion in the United States.

There is an increase in the total number of legal abortions reported. In 1970, 180,000 abor-

Table 3.	Reported legal	abortions,	by menstrual	weeks of	gestation	and State, 1971

G 4-4-1	\leq	8	9-1	2	13-1	16	17–2	20	2	21	Unknown		Total
State 1	Num- ber	Per- cent	Total										
Alaska	271	23.7	577	50.4	214	18.7	50	4.4	7	0.6	26	2.3	1,145
Arkansas	302	47.4	224	35.2	97	15.2	11	1.7	3	.5	0		637
Colorado	366	8.8	1,550	37.2	844	20.2	635	15.2	173	4.2	600	14.4	4,168
Georgia	467	29.6	713	45.2	162	10.3	224	14.2	12	.8	1	.1	1,579
Hawaii	1,335	32.3	2,026	49.0	2 386	9.3	3 259	6.3	66	1.6	63	1.5	4,135
Kansas	3,284	34.7	5,109	53.9	732	7.7	257	2.7	22	.2	68	.7	9,472
Maryland	1,730	20.8	3,736	45.0	1,294	15.6	1,445	17.4	101	1.2	0		8,306
Oregon	1,666	23.8	3,536	50.5	871	12.4	795	11.4	129	1.8	0		6,997
South Carolina	202	27.8	300	41.3	122	16.8	64	8.8	14	1.9	25	3.4	[•] 727
- Total	9,623	25.9	17,771	47.8	4,722	12.7	3,740	10.1	527	1.4	783	2.1	37,166

¹ All States reporting length of gestation. ² 13–15 weeks. ³ 16–20 weeks.

Table 4. Reported legal abortions,

	<1	15	15–	19	20-	24
State ¹	Num- ber	Per- cent	Num- ber	Per- cent	Num- ber	Per- cent
Alaska	24	2.1	369	32.2 38.8	334 193	29.2 30.3
Arkansas	20 1.276	3.1 1.1	247 35,372	30.8 30.3	39,992	34.3
California ²	67	1.1	1.381	33.1	1,306	31.3
Colorado	3 81	7.2	4 368	32.6	5 249	22.1
Georgia	64	4.1	418	26.5	429	27.2
Hawaii	43	1.0	811	19.6	1,598	38.6
Kansas	169	1.8	2,879	30.4	3,216	34.0
Maryland	256	3.1	2,539	30.6	2,458	29.6
Oregon	108	1.5	2,625	37.5	2,300	32.9
South Carolina	54	7.4	191	26.3	174	23.9
Total	2,162	1.4	47,200	30.4	52,249	33.7

¹ All States reporting age. ² Number of abortions in each age group based on age distribution of abortions reported for January–March 1971 and total number of abortions reported for the entire year.

	I	Dilatation a	Amniotic			
State 1	Sh	arp	Suction		fluid replacement t Number Perc	
	Number	Percent	Number	Percent	Number	Percent
Alaska	878	76.7	175	15.3	69	6.0
Georgia	553	35.0	400	25.3	234	14.8
Kansas	2,193	23.2	6,447	68.1	579	6.1
Maryland	549	.66	4,785	57.6	2,292	27.6
Oregon		18.0	4.328	61.9	1.111	15.9
South Carolina	111	15.3	315	43.3	120	16.5
Total	5,542	19.6	16,450	58.3	4,405	15.6

Table 5. Reported legal abortions,

¹ All States reporting type of procedure.

tions were reported to CDC from 19 States and the District of Columbia. In 1971, 459,000 abortions were reported from 24 States and the District of Columbia.

There has been an increase in the national ratio of abortions to live births. Based on reported data, the abortion ratio has increased from 3.5 in 1969 to 48 in 1970, and now to 128.5 in 1971. For the 13 States that reported statewide abortion data for both 1970 and 1971, all showed an increase in the abortion ratio.

There has been an increase in the percentage of women having abortions outside their State of residence. Of the 459,000 abortions in 1971, 39.1 percent were reported to have been performed on out-of-State women. This compares with 29.8 percent in the last half of 1970.

There is a trend toward abortions being performed earlier in gestation. Of the five States with gestational data for 1970 and 1971, four show an increase in the percentage of abortions performed before the 13th week; in one State the percentage remained constant.

The type of procedure used has changed toward a larger proportion of suction dilatation and curettages. The States that reported informa-

by age groups and State, 1971	by	age	groups	and	State,	1971
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25–29		30–34		35–39		≥40		Unknown		Total
Num- ber	Per- cent	Total								
177	15.5	135	11.8	74	6.5	31	2.7	1	0.1	1,145
85	13.3	35	5.5	33	5.2	24	3.8	0		637
19,458	16.7	11,572	9.9	6,498	5.6	2,498	2.1	83	.1	116,749
670	16.1	377	9.0	264	6.3	102	2.4	1		4,168
187	16.6	113	10.0	90	8.0	41	3.6	0		1,129
258	16.3	201	12.7	140	8.9	69	4.4	0		1,579
743	18.0	468	11.3	333	8.1	131	3.2	8	.2	4,135
1,322	14.0	932	9.8	642	6.8	295	3.1	17	.2	9,472
1,374	16.5	909	10.9	545	6.6	225	2.7	0		8,306
912	13.0	559	8.0	351	5.0	142	2.0	0		6,997
115	15.8	79	10.9	77	10.6	31	4.3	6	.8	727
25,301	16.3	15,380	9.9	9,047	5.8	3,589	2.3	116	0.1	155,044

⁸ Less than 16.

⁴ 16–20. ⁵ 21–24.

° 21–24.

by type of procedure and State, 1971

Total	cnown	Unk	Other		Hysterectomy		otomy	Hyster	
	Percent	Number	Percent	Number	Percent	Number	Percent	Number	
1,145	0.2	2	0.5	6	0.5	6	0.8	9	
1,579	16.2	256	.3	4	6.3	99	2.1	33	
9,472		0	.5	44	.4	42	1.8	167	
8,306		^	1.4	120	3.1	256	3.7	304	
6,997		0	.1	4	3.8	266	.4	30	
727	.3	2	5.0	36	16.8	122	2.9	21	
28,226	0.9	260	0.8	214	2.8	791	2.0	564	

tion on type of procedure, in both 1970 and 1971, reported an increase from 46.9 percent to 53.3 percent of abortions being done with the suction method.

Conclusion

Although the current abortion surveillance program at the Center for Disease Control is in its formative stages, we believe that it is already proving valuable and will become increasingly more important as more States alter their abortion laws. The program is totally reliant on the cooperation of State and local health agencies, and in particular the vital registrars and health statisticians in these agencies. We feel certain that through continued cooperation the abortion surveillance program will provide current information on a topic of critical interest to persons involved in public health.

ADDENDUM

Final 1971 legal abortion statistics reported to the Center for Disease Control (480,359 abortions from 24 States and the District of Columbia) will be published in the 1971 Abortion Surveillance Report, Annual Summary.