ILLEGITIMATE BIRTHS IN CALIFORNIA

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The purpose of this paper is to estimate, for the first time directly from birth certificates, the extent of illegitimacy in California. Another purpose is to describe and make some preliminary evaluation of a new method for counting illegitimate births that became available and was adopted in California on a statewide basis beginning January 1, 1966.

METHOD FOR COUNTING ILLEGITIMATE BIRTHS

The new method for counting illegitimate births does not depend on the addition to the birth certificate of any question about legitimacy (see the copy of California birth certificate in the Appendix). Since about 1916, no such question has appeared on the California certificate, and strong opposition has been voiced against adding the question. Although the need for statistical information about illegitimacy has been recognized, the feeling has been that this need was subordinate to the need to protect the unwed mother and her child from stigma; and that further stigma would result from inclusion of an explicit question, particularly since birth records in California are available to the public. Efforts to make the medical and health section of the birth certificate confidential have not been successful. How, then, is it now possible to count illegitimate births? The

answer is that it has always been possible to identify certain of the illegitimate births just from the information given on the certificate, but a statewide count of such records was not practical and probably would not have been very accurate until legislation was passed in 1965, which provided for the identification in the local health department of a general category of births including, but not limited to, those apparently out of wedlock. The aim of the legislation was to protect from unwanted publicity and commercial solicitation not only unwed mothers, but also mothers of infants who die, who have congenital malformations, who have some similar type of problem or new mothers who simply do not want to be bothered by solicitors.

In most California counties, birth records are used to compile lists of families with new babies, and the families are then contacted by salesmen for a wide variety of baby products and services. The particular event that led to passage of the legislation was solicitation of a woman whose baby had died. She wrote to her state assemblyman describing the personal anguish this caused her, and asked that something be done to protect other mothers in a similar situation. Following that, her Assemblyman, George Deukmejian of Long Beach, contacted the State Health Department, and, in cooperation with State and local agencies, including the County Recorder of Los Angeles County, a method was devised whereby the margins of appropriate birth certificates would be stamped "Request omission from solicitation lists." This procedure was adopted on a trial basis in Los Angeles County for about the last eight months of 1964. It was found to work well on a voluntary basis, and was then incorporated into the Health and Safety Code in 1965, becoming a regular part of birth registration procedure in California. The legislative provision states:

10056.5. (a) If a certificate indicates that a mental, physical or social problem may exist, including but not limited to (1) the fetus was dead at the time of delivery, (2) the father of the child is not identified, (3) the infant died after birth, (4) congenital malformation, (5) maternal disability or death, or if a parent of the infant requests such action, the local registrar shall mark the certificate in a manner designated by the State Registrar to indicate that the certifi-

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cate is not to be used by any person compiling a business contact list.

(b) If the infant who is the subject of the certificate, or the mother of such infant, dies before the certificate is signed by the attending physician, the fact of such death shall be indicated on the certificate.

Although the stamping of the birth certificate in the local health department does not by itself identify an illegitimate birth, it makes possible a special statistical review and coding of stamped certificates. Thus, in the State Health Department offices in Sacramento, where all vital records are ultimately compiled, stamped certificates are reviewed to see if the reason for stamping is apparent, and they are then coded into the following categories:

- 1. Child apparently born out of wedlock.
- 2. Congenital malformation in Item 28 of the certificate.
- 3. Known infant death.
- 4. Child to be adopted.
- 5. Information indicates maternal death or disability.
- 6. Parents or hospital request omission from solicitation lists.
- 7. Reason not apparent.

The criteria used for coding a certificate "apparently out of wedlock" are as follows:

- 1. Omission of father's name.
- 2. Surname of child is different from surname of father.
- 3. Mother's maiden name is signed under "signature of parent or other informant" (Item 17a of certificate).
- 4. Mother's surname in Item 17a is different from surname of father.
- 5. Signature of someone other than father or mother appears in Item 17a.
- 6. Place of birth is an institution used primarily for unwed mothers.

Although the above procedures and the legislation providing for them are new on a statewide basis, they represent a formalization of practices that have been developing in hospitals and local health departments in California for a number of years. In California, hospitals are generally the source of birth notices that appear in the newspapers, and the hospitals have been careful to arrange their records and procedures so that illegitimate births, as well as the births of infants who die, and others in the general category are excluded from public announcements. Local health departments have been increasingly concerned with the problem of illegitimacy; a number of the departments have kept statistics, generally unpublished, compiled by means that approximate the same method now being used in the state. When the new legislation went into effect January 1, 1966, it was well received because it fitted into established practices aimed at protecting the privacy and anonymity of certain mothers.

THE SAMPLE OF BIRTH CERTIFICATES

The present study was undertaken in October, 1966, before the end of the first year of experience with the new legislation and with the attempt to code births apparently out of wedlock. When the study was undertaken, 14,824 certificates had been coded, key punched and verified; and, though not mechanically edited, were available for preliminary tabulation. These were about 30 per cent of the births that occurred in January and February, 1966, and were all of the certificates that local health departments had forwarded to the State Health Department in the first eight weeks of the year. Because of the long delay before data would be available from the regular tabulation of 1966 births (tabulations will not be completed until after January 1, 1968, and it is unlikely that data will be published before the end of 1968), and because of the interest in and outside the State Health Department in getting factual information about illegitimate births in California, it was decided that a preliminary study of the available sample of certificates would be worthwhile.

Because certificates are forwarded to the State Health Department from local areas when the local areas are finished with their own 476 processing of the records, and because procedures in some areas take longer than in others, the first step was to check the geographic distribution of the sample. It was found, not unexpectedly, that although the sample included births from almost all of the 58 counties in California, it did not, in comparison to previous years' births, have an adequate number from Los Angeles, Alameda and San Francisco counties. In an effort to make up for this deficiency, it was decided to add certificates for an additional week from these three counties. During week nine, 3,301 birth certificates had been received from the three counties, and the addition of these gave a final sample of 18,125 births. The addition could not be done mechanically from punched cards, but had to be performed by hand tally, which permitted review of a large number of individual certificates, giving a first-hand picture of the type of information being reported and how it was being coded.

The addition of births received during week nine from the three metropolitan counties improved the geographic distribution of the sample, but did not overcome completely the deficiency of records from Los Angeles County. As the rate of illegitimate births probably is relatively high in Los Angeles, it can be considered that the annual estimates of illegitimacy developed from the study sample probably understate what finally will be found when data for all of 1966 become available. A summary of the geographic distribution of the sample is given in Table 1.

Summary and Estimated Accuracy of Findings

In the sample of 18,125 live births, 1,688, or 9.3 per cent, were classified as apparently out of wedlock. The sample included 15,906 white births, 1,165 or 7.3 per cent out of wedlock; and 1,587 Negro births, 483 or 30.4 per cent out of wedlock. If the sample proportions are applied to the total of 338,000 births registered in California in 1966,¹ the result is a statewide estimate for the year of about 31,500 illegitimate births, of which about 22,000 were white, 9,000 Negro, and less than 1,000 other nonwhite groups.

In terms of rates these figures mean an estimated 26.5 illegitimate births per 1,000 unmarried women age 15-44. Comparative data

TABLE I. GEOGRAPHIC DISTRIBUTION OF LIVE BIRTHS, STUDY SAMPLE AND CALIFORNIA

Live Births					
California	Study Sample				
1965	1966				
%	%				
38.2	26.0				
5.6	6.4				
6.2	6.1				
6.0	6.5				
15.9	19.1				
5.6	4.2				
22.5	31.7				
354,948	18,125				
	Live California 1965 % 38.2 5.6 6.2 6.0 15.9 5.6 22.5 354,948				

* Imperial, Riverside, San Bernardino Counties.

** Alameda, Contra Costa, Marin, San Francisco, San Mateo, Solano Counties. Source: State of California, Department of Public Health, birth records.

by race refer to women age 14-44,² and show a rate for white unmarried women of 17.6 per 1,000, compared to a rate of 101.9 per 1,000 for Negro unmarried women.

Before considering the study findings in further detail it is appropriate to ask whether the estimates of illegitimate births are real, or whether they result from some bias in the study sample. The sample was selected for administrative convenience and is not necessarily representative, though it is similar in race and age distributions to all 1965 births in the state. Although unknown biases may exist in the study sample, convincing evidence supports the view that the study findings do not overstate the true position. The reasons are as follows:

- 1. No evidence exists that indicates legitimate births have been counted as apparently out of wedlock, and at the same time it is logical to assume that many illegitimate births are still being overlooked. A review of half of the certificates for illegitimate births in the supplemental (week 9) sample in the three metropolitan counties showed that, in all cases, the basis for the classification was quite obvious.
- 2. The proportions found for the first eight-week sample and for the supplemental sample gave consistently high figures, the

highest being for the metropolitan counties. The consistency of findings between the various parts of the study sample is shown in Table 2.

- 3. Independent figures previously compiled by local health departments and by the County Recorder in Los Angeles County during the voluntary trial of the stamping method all indicate that the proportion of illegitimate births in California is in the neighborhood of ten per cent. A high and steadily rising per cent of illegitimate births in local health jurisdictions for which data have been compiled is shown in Appendix Table C.
- 4. Comparisons made with data for the United States present a consistent and reasonable picture, though they show California as having relatively high proportions and rates of illegitimate births.

TABLE 2. ILLEGITIMATE LIVE BIRTHS BY RACE, STUDY SAMPLE AND CALIFORNIA

				W	eek 9					
	Study	Weeks		Los		San				
Race	Sample	1–8	Total	Angeles	Alameda	Francisco				
			Per Cent	Illegitimate	9					
All races	9.3	8.9	11.1	10.2	11.8	14.1				
White	7.3	7.3	7.2	7.5	6.0	8.8				
Negro	30.4	28.9	33.9	28.4	41.0	42.6				
Chinese	2.5	3.8								
Japanese	.6	.7								
Other and unspecified	10.8	10.9	10.2	16.0	6.3	5.6				
			Number of	Live Birth	8					
All races	18,125	14,824	3,301	2,092	819	390				
White	15,906	13,238	2,668	1,740	645	283				
Negro	1,587	1,098	489	282	139	68				
Chinese	120	78	42	13	12	17				
Japanese	178	135	43	32	7	4				
Other and unspecified	334	275	59	25	16	18				
	Number of Illegitimate Live Births									
All races	1,688	1,322	366	214	97	55				
White	1,165	971	194	130	39	25				
Negro	483	317	166	80	57	29				
Chinese	3	3								
Japanese	1	1								
Other and unspecified	36	30	6	4	1	1				
9	and D									

Source: Appendix Tables A and B.

PER CENT ILLEGITIMATE CALIFORNIA AND THE UNITED STATES

The estimate that 9.3 per cent of all births in California in 1966 were illegitimate is substantially higher than the estimate for the United States of 7.7 per cent illegitimate in 1965, the most recent year for which national data are available. United States data are based on reports from 34 states and the District of Columbia. Nonreporting states are assumed to have the same experience as reporting states in the same region of the country.

The 1966 California per cent illegitimacy remains high when compared with the figure for the reporting states (8.2 per cent), or with figures for individual states including those in the West (Table 3). When they become available, national figures for 1966 will be higher than those for 1965, but they probably will still be below the final figures for California.

TABLE 3. ILLEGITIMATE LIVE BIRTHS, CALIFORNIA, STUDY SAMPLE UNITED STATES AND SELECTED STATES Total White Nonwhite

	1 oldi %	W hue %	1 onwine %
California	9.3	7.3	23.6
United States	7.7	4.0	26.3
Reporting states*	8.2	3.9	27.9
Southern states with highest percentages			
Alabama	12.4	2.3	29.8
Florida	11.7	4.6	30.4
Louisiana	11.8	2.4	25.8
Mississippi	16.5	2.3	28.7
South Carolina	13.8	2.9	28.8
Other states with highest percentages for white births			
Delaware	11.0	4.4	36.5
Hawaii	7.0	5.7	7.5
Indiana	5.9	4.0	26,6
Maine (4.5	4.5	5.7
Michigan	6.6	4.0	25.3
Minnesota	5.2	4.6	29.2
Nevada	6.4	4.0	22.7
Ohio	6.8	4.2	28.4
Oregon	6.2	5.7	17.9
Washington	6.0	5.3	16.6
West Virginia	7.9	6.4	35.7

* Thirty-four states and the District of Columbia. States not reporting are Arizona, Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Maryland, Massachusetts, Montana, Nebraska, New Hampshire, New Mexico, New York, Oklahoma, Vermont.

Source: Appendix Tables A and B. National Center for Health Statistics, Advance Report, Final Natality Statistics, 1965, prepublication copies of tables.

Because of the large differences in the proportion of illegitimate births between white and nonwhite groups, comparisons between states are not very meaningful unless this difference is taken into account. When this is done (Table 3) the California figures appear high only for white births. For white births, the percentage illegitimate is 7.3 in California and 4.0 in the United States, and for nonwhite births the percentages go slightly in the opposite direction (23.6 for California as compared to 26.3 for the United States). The latter comparison is misleading, however, mainly because the California nonwhite figure is diluted by Chinese and Japanese births, a very small part of which were reported as illegitimate in this study. For Negro births, the study found 30.4 per cent illegitimate, and this is more appropriate to compare with the United States figure of 26.3 per cent illegitimate for nonwhite births, national figures by specific race not being available. On this basis it appears that the California figure for Negro births probably is higher than the national figure, though the difference is not as striking as is the figure for white births.

Where white births are concerned, the comparison is influenced by the inclusion of babies partly or wholly of Mexican or Latin American origin, but even if these births are excluded, the California illegitimacy probably would remain high in comparison to white births in the United States. This conclusion is based on a count of Spanish surname births classified as illegitimate in the supplemental (week 9) sample of Los Angeles, Alameda and San Francisco counties. A count of such certificates for a larger sample of births should be made when final 1966 data are prepared.

Because they are of general interest, and because they give at least an initial basis for judging the reasonableness of figures derived from the new system for counting illegitimate births in California, this report includes a number of comparisons between California and the United States. It should be remembered, however, that all available data about illegitimate births have limitations. These are mainly that an unknown number of illegitimate births are recorded as legitimate and that some illegitimate births may not be registered at all. United States data are influenced by unevenness in the methFIGURE I. AGE DISTRIBUTION OF UNWED MOTHERS, CALIFORNIA, STUDY SAMPLE, 1966.



Source: Appendix Table B.

ods and inaccuracy of reporting among the 34 states that ask about legitimacy on their birth certificates, as well as by lack of information from nonreporting states.

ILLEGITIMATE BIRTHS

Age of Mother and Previous Live Births

The findings of this study about the ages of unwed mothers in California and the number of children they have previously borne, are quite similar to findings for the United States. Young women, as well as women who probably repeat a pattern of bearing children out of wedlock, account for a large share of the illegitimate births.

Based on the age distribution of the mothers in the study sample, it is estimated that in the approximate 22,000 white illegitimate births in California in 1966, 40 per cent, or about 8,800 births, were to mothers under age 20. In the 9,000 Negro illegitimate births, 49 per cent, or about 4,400 births, were to mothers in this age group (Figure 1).

For most, but not all, of the teenage unwed mothers, this was a first birth. One or more previous live births was recorded for about ten per cent of white unwed mothers under age 20, and for about 20 per cent of the Negro unwed mothers in this age group (Table 4). The study data on birth order were available for only the first eight-week sample. These data give the number of previous live births, but do not specify whether the previous births were legitimate or illegitimate. A high proportion of all births to teenage girls are now known to be either illegitimate or the result of premarital pregnancy.^{8,4} Illegitimate births in this study comprised one-fourth of all births to white mothers aged 15 to 17, and nearly two-thirds of all births to Negro mothers in these ages (Table 5). Studies have not yet been made of the extent of premarital pregnancy in California, but it is no doubt a great influence in teenage marriage and parenthood.

A study made in Detroit in 1960⁵ showed that premarital pregnancy had occurred in over half of the marriages of white couples, and in three-fourths of nonwhite couples, where the wife was under 18 years of age. This study also showed that premarital pregnancy was more likely to result in marriage before birth of the child for a white teenage girl than for a Negro teenage girl.

By the time they have reached age 25, most women have married and have started to raise families. As a result, as age increases, the relative contribution of illegitimate births to all births drops off. Nevertheless, women aged 20 to 24 account for almost as many illegitimate births as do women under age 20. If illegitimate births are related to the population of unmarried women, those in their twenties show the highest rate of illegitimate births.

	Number of					
Race and Age of Mother	Illegitimate Live Births	Total	None	One	Two	Three or More
•		%	%	%	%	%
All illegitimate live births	1,322	100.0	58.0	15.1	9.1	17.8
White, all ages	971	100.0	60.6	14.2	8.7	16.5
Under 20	383	100.0	89.8	9.4	.8	
20-24	353	100.0	57.8	20.1	12.8	9.3
25-29	116	100.0	22.4	12.9	17.3	47.4
30 and over	119	100.0	11.8	13.4	14.3	60.5
Negro, all ages	317	100.0	51.4	17.3	10.1	21.1
Under 20	153	100.0	81.8	13.1	3.9	1.3
20-24	95	100.0	32.7	28.4	15.8	23.2
25 and over	69	100.0	10.1	11.6	15.9	62.4

TABLE 4. 1	BIRTH	ORDER	DISTRIBUTION	BY R	ACE AN	D AGE OF	MOTHER,
ILLEGITIMAT	E LIVI	E BIRTH	IS CALIFORNIA	AND	STUDY	SAMPLE	

* Refers to previous live births of legitimate and illegitimate children still living (see footnote, Table B).

Source: Appendix Table B.

TABLE 5. ILLEGITIMATE LIVE BIRTHS BY AGE AND RACE OF MOTHER CALIFORNIA, STUDY SAMPLE, AND UNITED STATES

	Illegitimat	e Live Births	
Whi	le		Nonwhite
	United	Negro	United
California	States	California	States
%	%	%	%
7.3	4.0	30.4	26.3
70.6*	57.3	100.0*	86.4
16.5	11.4	51.5	49.2
24.9	17.3	62.7	62.5
13.4	9.1	43.0	38.9
7.1	3.8	26.8	23.0
3.7	1.9	19.6	16.3
3.8	1.6	12.1	14.9
4.1	1.9	14.9*	14.9
4.4	2.2	24.0	14.0
	Whi California % 7.3 70.6* 16.5 24.9 13.4 7.1 3.7 3.8 4.1 4.4	Illegitimat White United California States % % 7.3 4.0 70.6* 57.3 16.5 11.4 24.9 17.3 13.4 9.1 7.1 3.8 3.7 1.9 3.8 1.6 4.1 1.9 4.4 2.2	Illegitimate Live Births White United Negro California States California % % % 7.3 4.0 30.4 70.6* 57.3 100.0* 16.5 11.4 51.5 24.9 17.3 62.7 13.4 9.1 43.0 7.1 3.8 26.8 3.7 1.9 19.6 3.8 1.6 12.1 4.1 1.9 14.9* 4.4 2.2 24.0

* Percentage based on less than 100 births.

Source: Appendix Tables A and B. National Center for Health Statistics, Advance Report, Final Natality Statistics, 1965, prepublication copies of tables.

Women over age 25 account for slightly less than a quarter of both white and Negro illegitimate births, and for most of these women this is not a first birth. One or more previous live births were reported for more than three-fourths of the white unwed mothers over age 25, and 90 per cent of Negro unwed mothers over age 25. Three or more previous live births was the most frequent finding. Many of these unwed mothers over 25 probably had their first illegitimate child when they were in their teens or early twenties. For others this may be the first child born out of wedlock, though the woman has older children born of a marriage now dissolved. The birth certificate does not indicate whether previous births were legitimate or illegitimate.

Method of Estimation

By itself, the percentage of births that are illegitimate can be a misleading figure. Known as the illegitimacy ratio, and usually expressed per 1,000 births, the denominator of the figure is the total number of births. This number is a function of the number of women of childbearing age, the proportion of women married and the level of legitimate, as well as illegitimate, fertility. For this rea-484 son, a meaningful analysis of the extent of illegitimacy requires that age-specific rates be examined, and that these allow for rates of birth out of wedlock to be compared with rates for all births, and preferably also for births within marriage as a separate group.

For this paper an attempt was made to calculate rates of these various types, and to do this by age and race of mother. Age and race are important variables, and data about them were available. It should be remembered, however, that many other variables influence rates of legitimate and illegitimate births. It is particularly unfortunate that California birth certificates do not provide measures of social class independent of race or measures of migration.

To calculate rates, it was necessary first to estimate the number of legitimate and illegitimate births that occurred in California in 1966, by age of mother and race, and then to estimate the number of married and unmarried women also by age and race. A crucial point is how accurate these estimates are. Where births are concerned, it will be possible to check the accuracy of the estimates when final 1966 data become available. For the estimates of married and unmarried women, the data available were judged sufficient to give some idea of the size of the rates, and thus to allow a better analysis of the situation than could be obtained from ratios only.

To obtain annual estimates of legitimate and illegitimate births, the numbers found in the sample of 18,125 were multiplied by 18.65, the ratio of the sample size to the State Health Department estimate of 338,000 births in California in 1966.

To estimate the number of married and unmarried women, estimates by the California State Department of Finance were used as a starting point. These gave the number of women in California by detailed ages as of July 1, 1966. Census figures were then compiled on the distribution of each age group by marital status and race, and these 1960 proportions were applied to the 1966 Department of Finance estimates to derive denominators.

California and the United States

Using the above methods, it was estimated that the 31,500 illegitimate babies born in California in 1966 came mainly from a population of 1,186,000 unmarried women between the ages of 15 and 44—a rate of 26.5 illegitimate births per 1,000 unmarried women of childbearing age (Table 6). Unmarried women under age 20 showed a relatively low rate of 19.4 illegitimate births per 1,000, compared to rates of about 50 per 1,000 for unmarried women between 20 and 30, and a rate of about 25 per 1,000 for those between 30 and 34. Only for unmarried women age 40 and over does the rate of illegitimate births show a substantial drop.

How do these figures compare with those available for the United States? In general, California showed higher rates of illegitimate births for the age groups under 25, and lower rates for the age groups 25 and over (Figure 2). For the entire childbearing age span, the California rate of 26.5 for 1966 was 13 per cent above the United States rate of 23.4 for 1965. It should be noted that the illegitimate birth rate for the country as a whole has risen fairly steadily since 1940,⁶ though it remained the same in 1965 as it had been in 1964.⁷ Between 1960 and 1965, the illegitimacy ratio (proportion of all births that are illegitimate) rose much more rapidly than did the rate of illegitimate births, reflecting the fact that rates

FIGURE 2. ESTIMATED ILLEGITIMATE LIVE BIRTH RATES, CALIFORNIA AND THE UNITED STATES



Source: Table 6.

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		Legutimate	Births			Illegitimate	Births				
	ਠੱ	alifornia, 1966			Cal	ifornia, 1966				All Births	
	Nun	nber		United	Num	ber		United			United
	Married	Live		States.	Unmarried*	Live		States,	Califo	rnia	States,
Age of	Women	Births		1965	Women	Births		1965	1966	1965	1965
Woman	(thousands)	(thousands)	Rate	Rate	(thousands)	(thousands)	Rate	Rate	Rate	Rate	Rate
Total**	2,797.0	306.5	109.6	131.1	1,186.0	31.5	26.5	23.4	84.9	91.7	96.6
15-19	148.3	47.7	321.9	452.9	660.7	12.8	19.4	16.7	74.9	74.8	70.4
20-24	504.5	110.8	219.6	279.7	195.5	10.7	54.7	38.8	173.6	193.2	196.8
25-29	524.6	77.5	147.8	178.9	88.4	4.1	46.8	50.4	133.2	149.7	162.5
30-34	515.7	42.1	81.7	101.1	71.3	1.8	25.9	37.1	74.9	84.1	95.0
35-39	531.8	21.7	40.7	50.1	74.2	1.0	14.1	17.0	37.5	40.3	46.4
40-44	572.0	6.2	10.9	14.1	96.0	0.4	4.1	4.4	9.9	10.5	12.8
* Single, wi	dowed and divor-	red.									

TABLE 6. ESTIMATED LEGITIMATE AND ILLEGITIMATE LIVE BIRTH RATES, BY AGE OF WOMAN

Single, widowed and divorced.

** Rates computed by relating total births, regardless of age of mother, to women age 15-44.

Note: Rates per 1,000 married, unmarried, and total women. See text for method of estimating California rates.

Source: Appendix Tables A and B. State of Califórnia, Department of Finance, Revenue and Management Agency, California Propilation Projections, 1965–2000, Sacramento, March 1966, p. 13. National Center for Health Statistics, Advance Report, Final Natality Statistics, 1965, Monthly Vital Statistics Report, Vol. 15, No. 11, Supplement, Feb. 10, 1967, Table 6, and prepublication copies of tables. State of California, Department of Public Health, Birth Record, Vol. 15, No. 11, Supplement, Feb. 10, 1967, Table 6, and prepublication copies of tables. State of California, Department of Public Health, Birth Records, Vol. 15, No. 11, Supplement, Teb. 10, 1967, Table 6, and prepublication copies of tables. State of California, Department of Public Health, Birth

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of legitimate births and the relative contribution of legitimate births to total births have been falling.⁸

California shows a higher rate of illegitimate births than the United States, but the opposite appears to be true for legitimate births. California, in 1966, was estimated to have substantially lower age-specific rates of legitimate births than the United States in 1965. That the lower rate for California is not simply a result of comparing two different years in a period of falling rates, is indicated by looking at data for earlier years. Since the earlier data for California do not separate legitimate from illegitimate births, inferences must be made from age-specific rates of total births, legitimate and illegitimate combined. This approach has the advantage that the rates are based on final tabulations of births, and on official estimates of number of women by age group without the need to separate the married and unmarried.

A comparison of California and United States rates on this basis for 1965 (last two columns of Table 6) shows that, except in the age group under 20, California has lower age-specific birth rates than the country as a whole. This is consistent with the interpretation that fertility in California is generally low, but that young women in California have a relatively high rate of illegitimate births, as well as a high rate of births within marriage, probably reflecting a high rate of premarital pregnancy.

To explore this interpretation further, 1960 Census data (rates of children ever born, percentage of women ever married, and percentage of women currently married) and 1960 data on registered births were examined. These data are available by color for California and the United States, and they do not involve postcensal population estimates. The data were consistent with the above hypothesis (see Appendix Tables D and E). They showed that in 1960, fertility in California was similar to fertility in the United States, but with a tendency for birth rates in California to be higher than the United States under age 25, and the same or lower age 25 and over. The higher birth rates for young women were confined to white women. In all age groups, nonwhite women in California tended to show the same or lower birth rates than nonwhite women in the United States.

The birth rate pattern observed for white women in California is associated with high rates of early marriage and high rates of subsequent divorce. In comparison to white women in the United States, those in California showed larger proportions ever married (Appendix Table D), but, except in the age groups under 25, smaller proportions currently married (Appendix Table E).

Rates of Illegitimate Births by Race

Recently, a number of studies have been published concerning fertility differences in the United States by race or color. Although these studies disagree to some extent about the implication for the future of past trends, they do agree on the main features of what has happened. Nonwhite (mostly Negro) birth rates are very substantially above white birth rates, and the difference between the groups has tended to widen rather than to contract. Between 1947 and 1957, nonwhite birth rates climbed much faster, and since 1957 they have been declining more slowly, than have birth rates for the white population. This has occurred despite the migration of Negroes out of rural areas, and despite a rise in some measures of the socioeconomic status of Negroes.⁹⁻¹¹

Several influences have been identified as contributing to this picture. One important influence has been the control of venereal and other diseases affecting fecundity following World War II and accompanying the postwar migration of Negroes to cities. This meant that many more Negro couples were able to have children and to have more of them than would have been the situation had high venereal disease rates persisted.

Another very important influence was and remains social class. The 1960 Census and other studies have shown clearly that class differences in fertility have by no means disappeared, and much of what appears as a race difference is, in fact, a class difference. For the nonwhite population, the Census showed highest fertility in the lowest income, education and occupation groups. As social class rose, family size declined. Among college-educated women, family size was smaller for nonwhite than for white women.⁹

Does this mean that as social and economic conditions improve for the nonwhite population, family size will decrease? The answer to this question is not as simple as is frequently assumed.¹² Existing studies appear to agree in general that fertility will fall, but a serious question remains about whether this will happen if improvement for the nonwhite population is not much more rapid and much more substantial than it has been up to now compared to the improvement experienced by most segments of the white population.¹⁰

Another finding pertinent to any discussion of race or color differences in fertility comes from the Growth of American Families Study, a periodic nationwide survey that investigates actual family size in relation to family size desires and the use of contraception.¹³ This study is restricted to married women, but it provides the only comparative data of this type available separately for white and nonwhite women. The study found that nonwhite women were having more children than they wanted, and that, on the average, they wanted fewer children than did white women of comparable education. For both white and nonwhite women, the study found much wider class differences in number of children born or expected to be born than in the number of children desired. Women of lower social class did not want much larger families than middle- or upperclass women, but the women of lower social class used contraception less frequently and less successfully.

What role in this picture is played by illegitimate births? Less information is available about illegitimate than about total births, and it is assumed that concealment of illegitimacy is more frequent for white than for Negro women. But differences in concealment are not likely to account for the very great differences in illegitimate birth rates that appear in the data that are available. White women are not only more likely to conceal an illegitimate birth, but they are also more likely to use contraception in the first place. If conception occurs, white women are more likely either to marry before the baby is born or to have an abortion. For these reasons, the illegitimacy figures available from other sources, and the figures obtained in this 490



FIGURE 3. ESTIMATED LEGITIMATE AND ILLEGITIMATE LIVE BIRTH RATES BY AGE AND RACE, CALIFORNIA, 1966

study in California, though they have many limitations, can be considered to reflect a real situation.

For the United States, rates of illegitimate births have not regularly been published by race or color,¹⁴ but illegitimacy ratios are published by color, and it is clear from these ratios that the nonwhite rate must be very high. A recent article analyzing whitenonwhite fertility differences in the United States concludes: "A reduction in nonwhite illegitimacy would have the effect of lowering total nonwhite fertility . . . bringing it much closer to the white birth rate."¹⁵

The 1966 rates estimated in this study show large differences

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TABLE 7. ESTIMATED LEGITIMATE AND ILLEGITIMATE LIVE BIRTH RATES BY AGE AND RACE, CALIFORNIA, 1966

Age of	Legi Mar	timate B per 1,000 rried Wo	Sirths) men	Illeg Unm	itimate per 1,00 arried 1	Births 10 Vomen	AU Ta	Live Bi per 1,000 stal Worn	rths) ven
Women	Total	White	Negro	Total	White	Negro	Total	White	Negro
Total, 15–44*	109.6	107.2		26.5	20.2		84.9	81.5	
Total, 14–44*	109.4	107.1	125.8	23.2	17.6	101.9	81.3	78.1	117.4
14-19	318.2	310.3	424.2	16. 0	11.4	96.1	62.2	57.3	150.7
20-24	219.6	217.8	228.3	54.7	44.6	195.9	173.6	170.6	218.6
25-34	114.9	112.3	122.6	37.7	29.8	113.2	104.7	101.8	120.9
35-44	25,2	24.1	25.7	8.5	7.2	20.1	28.0	22. 0	24.6

* Rates computed by relating total births, regardless of age of mother, to women aged 15-44 and 14-44.

Source: Appendix Tables A and B. State of California, Department of Finance, Revenue and Management Agency, California Population Projections 1965-2000, Sacramento, March 1966, p. 13. 1960 Census of Population, Volume 1, Characteristics of the Population, Part 6, California, Table 105. 1960 Census of Population, Nonwhite Population by Race, PC(2)-1C, Table 19.

between white and Negro women in both illegitimate and legitimate fertility (Figure 3), and they indicate that in California, as in the country generally, the gap between white and Negro birth rates has not been closing. For California, in 1966, illegitimate births were estimated as more than five times more frequent among Negro than among white women. The Negro rate was 101.9 illegitimate births per 1,000 unmarried women ages 14–44, compared to 17.6 for white women (Table 7). In the age group under 20, the Negro rate was almost ten times the white rate (96.1 compared to 11.4).

For legitimate births, Negro rates also exceeded white rates, but not nearly by as wide a margin (Table 7). Legitimate births per 1,000 married women age 14-44 were estimated as about 17 per cent higher for Negro than for white women (125.8 compared to 107.1). In the youngest age group the Negro rate was one-third higher. Over age 20, Negro and white legitimate birth rates were quite similar.

What is most striking about the estimates is the indication that in the Negro population, among women aged 20 and over, the rate of illegitimate births is almost as high as the rate of legitimate births. It is possible that the Negro illegitimate birth rate has been overstated because more of the Negro than white illegitimate births are likely to be births to separated women who are not included in the denominator of the rate. Although the birth certificate itself asks no question about the marital status of the mother, from what is known of the much greater extent of separation among Negro women, frequently of long duration, and from the fact that probably less concealment of illegitimacy occurs in the Negro group, it seems likely that a separated Negro woman is more likely to have her illegitimate birth counted as such than is a white separated woman. If rates of illegitimate births are recalculated to include separated women among those at risk of bearing an illegitimate child, the rate of Negro illegitimate births drops by about one-fourth, but the rate of Negro legitimate births increases correspondingly. It appears then that even if adjustments in denominators are made, a high rate of illegitimate births is apparent for Negro women who also have high rates of births within marriage.

That the gap between white and Negro rates has not been closing in California is indicated by a comparison between actual 1960 and estimated 1966 age-specific rates of total births, legitimate and illegitimate combined (Table 8). For Negro women, as for white

						10, 00,00	1000 00000
						1966 Fr	om 1960
			All Liv	e Bırths		1	Rate
		Per 1	1,000	Per 1	1,000	Rate	Per 1,000
		Wo	men	Married	Women	Per 1,000	Married
Age		1966*	1960	1966*	1960	Women	Women
. •	÷ .			Wh	ite		
Total		78.1	108.4	115.5	152.3	28.0	24.2
14-19		57.3	81.1	373.2	527.7	29.3	29.3
20-24		170.6	262.6	234.5	360.9	35.0	35.0
25-34	•·	101.8	140.5	116.7	161.1	27.5	27.6
35-44		22.0	30.5	25.2	35.0	27.9	28.0
				Neg	ro		
Total		117.4	147.2	180.8	216.9	20.2	16.6
14-19		150.7	160.5	905. 7	965.7	6.1	6.2
20-24		218.6	314.5	311.7	449.1	30.5	30.6
25-34		120.9	164.9	147.6	201.3	26.7	26.7
35-44		24.6	40.6	30.8	50.8	39.4	39.4

TABLE 8. LIVE BIRTH RATES BY AGE AND RACE, CALIFORNIA, 1960 AND 1966 Per Cent Decrease

* Estimated; see text for method of estimation.

Source: Table 7. 1960 Census of Population, Characteristics of the Population, Vol. 1, Part 6, Table 105; and Nonwhite Population by Race, PC (2)-1C, Table 19, State of California, Department of Public Health, Birth Records.

women, the age-specific birth rates decreased in the six-year period, but the decrease for Negro women was smaller, except in the age group 35–44. A similar pattern, but with the smaller decreases for nonwhite women occurring in all age groups, can be seen in United States data, comparing 1965 with 1960.¹⁶

How Accurate Is the Classification of Illegitimate Births?

From the way in which the illegitimacy data are being obtained, and from a review of a 50 per cent sample of the 366 certificates classified as apparently out of wedlock in the supplementary sample of three metropolitan counties, the conclusion was reached that the probability is small that births within marriage are erroneously being counted as illegitimate.

The findings of the review are shown in Table 9. It is seen that the main basis for the classification, in addition to the fact that the certificate was stamped in the local area, is that the mother signed her maiden name in Item 17a of the birth certificate. This was true for nearly 70 per cent of the certificates reviewed.

Practices in completing certificates for illegitimate births are

TABLE 9. BASIS FOR CODING STAMPED RECORDS "APPARENTLY OUT OF WEDLOCK"

Basis for Classification	Total	White	Negro
Total certificates reviewed:*			
Number	184**	97	84
Per cent	100.0	100.0	100.0
Father's name withheld	16.7	27.8	2.4
Mother signs maiden name in Item 17a, total	67.2	58. 3	78.6
Child's surname same as mother's maiden name	19.8	25.0	13.1
Child's surname same as name of father reported	47.4	33.3	65.5
Signature of nun in Item 17a and mailing address of mother is an institution for unwed mothers	2.6	4.6	
Mother signs surname different from both her maiden name and name of father reported (presumably divorced,			
widowed, or separated)	13.5	9.3	19.0

¹ In addition to fact that certificate was stamped for omission from solicitation lists.

* Fifty per cent of week 9 sample.

** Includes three births of "other and unknown" race.

Source: Review of every other certificate coded "apparently out of wedlock," week 9, Lo3 Angeles, Alameda, San Francisco Counties. known to vary by area, by hospital and by the race and social status of the mother. This is evident from the data. Not quite two-thirds of the Negro births fall into one category: the mother signs her maiden name, but at the same time gives to the child the surname of the father she has reported. For the white illegitimate births the basis for the classification is more varied. A white mother of an illegitimate child is more likely to withhold the name of the father than is a Negro mother. This reflects the fact that white babies are much more frequently adopted. Residence in a home for unwed mothers is not an important basis for classifying births as illegitimate.

In a very considerable portion of the certificates reviewed, the mother did give the name of a father, though the accuracy of what was reported cannot be determined.

Although it is clear that legitimate births are not being counted as illegitimate, the important question of how many illegitimate births are still being missed cannot be answered from this study. To determine this, a sample of illegitimate births would have to be obtained independently, possibly through cooperation of physicians, as was done by Vincent in his study of young unwed mothers in Alameda County.¹⁷ The independent sample would then be checked to see what had been reported on the birth certificate. Performed in connection with a more general study of illegitimacy, this type of validation should be possible in the future.

SUMMARY

This report has been concerned mainly with describing a new method for counting illegitimate births in California; with determining that this method is not overestimating the incidence of illegitimate births in the state; and with making a preliminary annual estimate of numbers, proportions and rates of illegitimate births by age and race of mother. An effort was made to look at rates for births out of wedlock against the background of rates for the combined total of legitimate and illegitimate births, and rates for births within marriage.

The study has documented some known facts about illegitimacy

as they apply to California, and has shown that the size of the problem in California is larger than has generally been assumed.

A question that should be considered is whether the California method for counting illegitimate births is yielding generally higher estimates than have been made for the country and for other states, mainly because the California method is better at identifying illegitimate births. Although no definite answer can be given to this question, better identification must be assumed. National statistics on illegitimacy derive from direct questions that invite concealment. Most states ask simply "Legitimate" (yes or no), while a few states phrase their question "Is mother married?" or "Is mother married to father?" The method now being used in California does not depend on this type of question, and even though it still may be missing illegitimate births, it probably is identifying a larger part of the total. At the same time it seems probable that, compared to the United States, California does have high rates of illegitimate births, particularly for young white women. The finding that total fertility (legitimate and illegitimate combined) is relatively low in California, except in the younger ages, supports this view, and is a finding unrelated to counts of illegitimate births. Also supporting the view is the type of population in the state-more mobile and less bound to traditional controls.

In addition to showing high rates of illegitimate births in California, the data presented in this paper begin to indicate the types of analyses it will be possible to make on a continuing statewide basis in the future. Though it has not been possible to analyze past trends of illegitimacy in California, this will be possible from now on, and will tell whether progress is made in reducing such births in the future. Because the years ahead until about 1980 will see increasing numbers of girls entering the childbearing years, they will, unless illegitimate birth rates are reduced substantially, also see increasing numbers of illegitimate children.

This study and all other studies made of illegitimacy in the United States arrive at the general finding that, though they occur in all parts of the population, illegitimate births are by far most common in poor, minority groups. The importance of the finding should not 496 be minimized, but it is also clear that much more knowledge is needed, particularly about the influence of socioeconomic status independent of race. Unfortunately, some real problems exist in obtaining this kind of information from the birth certificate, though more can and probably will be derived from that source. For that reason, and also because attitudinal, true residence, cohort and other types of information are needed that are not obtainable from the birth certificate, it is likely that special studies of particular groups in the population will receive increasing attention. Such studies in California will be more conclusive than they have been in the past because it will be possible to plan them and to see their results against a background of continuing statistical indices of illegitimacy in the state.

This paper has been largely statistical and will attempt only briefly to consider the larger question of the social meaning and social consequences of illegitimate births. Kingsley Davis has emphasized that illegitimate births are an inevitable result of the existence of marriage as an institution. As long as a social norm exists, to some extent it will be violated.¹⁸ But extremely widespread violation of a norm is another matter. What does it mean that large parts of the Negro population and probably also of the population of Latin American origin have rates of illegitimate births of a different order of magnitude from the rest of the population? Most sociologists take the view that widespread illegitimacy is evidence of widespread family disorganization, the consequences of which are extremely serious from the standpoint of perpetuating poverty by failing to provide elements in family structure that are essential to the development of children.

With some exceptions, the fact is that most illegitimate children were not wanted in the first place by mothers who themselves were immature. Unless adopted, or unless the mother later has a relatively stable marriage or lives in a relationship much more lasting than the average common-law association, most illegitimate children will lack a father substitute.

In approaching the subject of illegitimate births, many feel that Victorian moralistic views should be rejected, and that cultural patterns different from the dominant one should be accepted. But the concern to be broadminded should not obscure the fact that illegitimate birth is today a serious, if not overwhelming, handicap to the growth and development of increasing numbers of children.

Easy answers to the problems posed by illegitimate birth cannot be found, but, as recently recommended by a California Population Study Commission,¹⁹ a logical beginning is to prevent at least some of these births by expanding family planning services, and making these services equally available to all sections of the population.

APPENDIX TABLE A. LIVE BIRTHS BY RACE, AGE OF MOTHER AND PREVIOUS LIVE BIRTHS*

			10	7	0			Weel	6 9 ()	
	Total		Pi	eeks 1–8 evious L	s vive Birt	hs*			Sounty	San
Race by Age of Mother	Study Sample	Total	None	One	Two	Three or More	Total	Los Angeles	Ala- meda	Fran- cisco
Total live births	18,125	14,824	5,169	3,826	2,451	3,378	3,301	2,092	819	390
White, Total Under 20 Under 15	$15,906 \\ 2,792 \\ 17$	13,238 2,365 17	4,641 1,862 17	3,466 435	2,211 60	2,920 8	2,668 427	1,740 277	645 120	283 30
15 16 17 18 20–24 25–29 30–34 35–39 40–44	62 219 470 871 1,153 5,810 3,863 2,049 1,064 316	54 189 401 742 962 4,853 3,177 1,691 891 249	52 173 351 572 697 2,013 552 136 63 14	2 15 45 150 223 1,708 895 289 111 28	1 20 35 775 803 373 166 34	1 357 927 893 551 173	8 30 69 129 191 957 686 358 173 67	6 19 41 87 124 631 447 230 111 44	2 9 25 32 224 161 84 43 13	2 3 10 15 102 78 44 19 10
45 and over Negro, Total Under 20 Under 15	12 1,587 442 15	12 1,098 305 10	1 369 225 9	237 66 1	152 11	340 3	489 137 5	282 69 1	139 49 4	68 19
15 16 17 18	33 56 96 117 125	20 48 66 80	20 43 51 55 47	4 14 19 28	1 1 4 5	2	13 8 30 37 44	5 3 11 19 30	6 4 15 12 8	2 1 4 6
20–24 25–29 30–34 35–39 40–44	545 327 174 74 23	381 220 125 52 14	114 25 5	105 51 7 7 1	77 48 14 2	85 96 99 43 13	164 107 49 22 9	97 65 35 11 4	42 27 9 9 3	25 15 5 2 2
45 and over Chinese. Total	2 120	1 78	25	16	22	15	42	13	12	17
Under 20 20–24 25–29 30–34 35–39 40–44	2 27 42 29 16	2 13 31 19 11 2	2 6 11 3 2 1	4 7 4 1	2 9 7 4	1 4 5 4 1	14 11 10 5 2	2 4 3 4	3 3 1 2	9 4 4
Japanese, Total	178	135	48	43	18	26	43	32	7	4
20-24 25-29 30-34 35-39 40-44	6 31 54 51 32 4	22 42 36 26 3	6 12 15 11 4	9 15 12 6 1	1 7 5 5	$5\\8\\11\\2$	9 12 15 6 1	6 10 11 4 1	1 1 3 2	2 1 1
Other and un- known,** Total Under 20 20-24 25-29 30-34 35-39 40-44	334 39 102 94 56 32 8	275 31 85 77 48 25 6	86 25 34 15 8 3	64 5 30 15 11 3	48 1 14 21 8 4	77 26 21 15 6	59 8 17 17 8 7 2	25 2 6 9 4 3 1	16 6 3 2 2 2 1	18 8 6 2 2
45 and over Age unknown	1 2	1 2	1			1				

* Tabulated for weeks 1-8 only. Refers to previous live births of children still living at the time of this birth (total previous live births not available until end of processing year), legitimate and illegitimate.

** Includes Indian, Filipino, Eskimo, Hawaiian and other.

Source: State of California, Department of Public Health, Birth Records.

APPENDIX TABLE B. LIVE BIRTHS APPARENTLY OUT OF WEDLOCK BY RACE, AGE OF MOTHER, AND PREVIOUS LIVE BIRTHS*

			V	Veeks 1-	8			We	ek 9	
	Total		P	revious l	Live Bir	the			Count	V
Race by Age	Study					Three		Los	Ala-	San
of Mother	Sample	Total	None	One	Two	от Моте	Total	Angeles	meda	Franci sc o
Total live births	1,688	1,322	767	200	120	235	366	214	97	55
White, Total	1,165	971	588	138	85	160	194	130	39	25
Under 20	471	383	344	36	3		88	55	21	12
Under 15	12	12	12							
15	28	22	21	1			6	5	1	
16	65	53	49	4			12	5	5	2
17	94	77	71	5	1		17	9	7	1
18	135	107	94	11	2		28	20	4	4
19	137	112	97	15			25	16	4	5
20-24	414	353	204	71	45	33	61	43	8	10
25-29	144	116	26	15	20	55	28	22	4	2
3034	78	67	6	11	11	39	11	6	4	1
35-39	44	40	7	5	4	24	4	3	1	
40-44	14	12	1		2	9	2	1	1	
Negro, Total	483	317	163	55	32	67	166	80	57	29
Under 20	235	153	125	20	6	2	82	36	31	15
Under 15	15	10	9	1			5	1	4	
15	27	16	16				11	4	5	2
16	36	33	31	1	1		3	1	1	1
17	53	30	26	3	1		23	8	11	4
18	54	33	24	7	1	1	21	10	7	4
19	50	31	19	8	3	1	19	12	3	4
20-24	146	95	31	27	15	22	51	29	14	8
25-29	64	41	7	7	9	18	23	12	8	3
30-34	21	16		1	2	13	5	1	1	3
35-39	11	8				8	3	1	2	
40-44	5	4				4	1		1	
45 and over	1						1	1		
Chinese, Total	3	3			1	2				
20-24	1	1			1					
35-39	1	1				1				
40-44	1	1				1				
Japanese, Total	1	1	1							
Under 20	1	1	1							
Other and up	-	•								
known ** Total	26	20	15	7	9	6	6	4	1	1
Under 90	00	30 0	61 10	1 9	4	U	1	*	1	I
20-24	9 19	11	6	2	9	1	1	r	1	
25-29	14	11	3	23	÷	5	3 T	2		1
40-44	14	11	0	U		5	J 1	4		
10 11	+						*			

* Tabulated for weeks 1-8 only. Refers to previous live births of children still living at the time of this birth (total previous live births not available until end of processing year), legitimate and illegitimate.

** Includes Indian, Filipino, Eskimo, Hawaiian and other.

Source: State of California, Department of Public Health, Birth Records.

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APPENDIX TABLE C. ILLEGITIMATE LIVE BIRTHS IN SELECTED LOCAL HEALTH JURISDICTIONS

Local Health		Number of	Per Cent
Jurisduction	Year	Live Births	Illegitimate
San Francisco City and County	1958	15,104	7.5
	1959	14,634	7.9
	1960	14,728	8.9
	1961	14,703	8.5
	1962	14,177	8.7
	196 3	13,177	10.2
	1964	13,239	11.6
	1965	12,322	13.7
	1966	11,223	13.8
Alameda County health jurisdiction			
Total health jurisdiction	1963	19,099	9.7
	1965	17,397	12.1
Oakland City	1954	8,432	6.3
	1963	7,796	13.1
	1965	10,801	17.1
Berkeley City	1964	2,067	9.8
Contra Costa County		•	8.0-9.0*

* Estimate of Local Health Department Statistician. Source: Local Health Department Records.

APPENDIX TABLE D. CHILDREN EVER BORN AND PER CENT OF WOMEN EVER MARRIED BY AGE AND COLOR FOR URBAN POPULATION*

		Children .	Ever Born**		Per C	ent of				
	Per 1	,000	Per 1,000	Women	Won	nen				
	Women		Ever M	Ever Married						
		United		United		United				
Age	California	States	California	States 5 4 1	California	States				
	All Races									
Total	1,659	1,637	2,108	2,179	78.7	75.1				
15-24	576	514	1,261	1,249	45.7	41.2				
25-34	2,098	2,104	2,283	2,330	91.9	90.3				
35-44	2,196	2,269	2,305	2,436	95.3	93.2				
			Whi	te						
Total	1,648	1,604	2,093	2,132	78.8	75.2				
15-24	563	483	1,231	1,175	45.7	41.1				
25-34	2,089	2,059	2,268	2,269	92.1	90.7				
35-44	2,189	2,245	2,297	2,408	95.3	93.2				
			Nonwi	hite						
Total	1,768	1,860	2,255	2,513	78.4	74.0				
15-24	709	732	1,575	1,759	45.0	41.6				
25-34	2,181	2,397	2,411	2,738	90.7	87.6				
35-44	2,277	2,442	2,384	2,631	95.5	92.8				

* Comparison restricted to urban population because much larger proportion of California than United States population is urban.

** Question on children ever born asked only of women reported as having been married; includes some but not all illegitimate births; excludes stillbirths, stepchildren and adopted children.

Source: 1960 Census of Population, Vol. 1, Characteristics of the Population, Part 1, United States Table 81; and Part 6, California Table 51.

APPENDIX TABLE E. LIVE BIRTHS AND PER CENT OF WOMEN MARRIED, BY AGE AND COLOR

		Live	Births			
	Per 1,	,000	Per 1	,000	Per Ce	nt of
	Total W	⁷ omen	Married	Women	Women 1	Married
		United		United		United
Age	California	States	California	States	California	States
			All Re	ices		
Total	115.5	118.0	157.5	165.0	73.4	71.5
15-19	102.4	89.1	558.7	567.5	18.3	15.7
20-24	265.7	258.1	368.7	371.4	72.1	69.5
25-29	189.4	197.4	221.3	229.0	85.6	86.2
30-34	103.2	112.7	117.4	127.0	87.9	88.7
35-39	48.3	56.2	55.0	63.7	87.8	88.2
40-44	12.8	15.5	14.9	18.0	85.6	85.9
			Whi	te		
Total	112.2	113.2	152.4	156.6	73.6	72.3
15-19	97.8	79.4	530.9	505.7	18.4	15.7
20-24	262.6	252.8	360.9	358.6	72.8	70.5
25-29	185.1	194.9	215.8	223.5	86.0	87.2
30-34	100.2	109.6	113.6	122.3	88.2	89.6
35-39	46.7	54.0	52.9	60.7	88.1	89.0
40-44	12.3	14.7	14.3	17.0	86.1	86.7
			Nonw	hite		
Total	150.3	153.6	213.3	235.6	70,5	65. 2
15-19	158.6	158.2	918.8	1001.3	17.2	15.8
20-24	296.0	294.2	453.4	473.0	65.2	62.2
25-29	223.5	214.6	274.1	272.0	81.6	78.9
30-34	131.0	135.6	155.2	164.8	84.2	82.3
35-39	66.0	74.2	79.1	90.8	83.5	81.7
40-44	18.8	22.0	23.3	27.8	80.6	79.0

Source: National Vital Statistics Division, Vital Statistics of the United States, 1960, Vol. 1, Natality, Table 1-E, p. 19; 1960 Census of Population, Vol. 1, Characteristics of the Population, Part 1, United States, Table 176, pp. 424-428; and Part 6, California, Table 105, pp. 639-641; State of California, Department of Public Health, Birth Records.

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CERTIFICATE
BIRTH
CALIFORNIA
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FIGURE
APPENDIX

Q	E NUMBER	NAME	AR 46 HOUR M	I RURAL ADDRESS OR LOCATION DO NOT USE P. O. BOX NUMBERS	CUSEDERATE CHARGORAFET		7. COLOR OR RACE OF MOTHER	I DI	IF OUTSIDE CITY CORPORATE LIMITS CHECK ONE ON A FARM ON ON A FARM	IIE STATE	13. COLOR OR RACE OF FATHER	ON 168. KIND OF INDUSTRY OR BUSINESS	TE SIGNED BY INFORMANT	DRESS	E RECEIVED BY LOCAL REGISTRAR
LIVE BIRTH DISTRICT AN	ENI UF PUBLIC HEALTH CERTIFICATI	1c LAST	LD 44. DATE OF BIRTH-MONTH DAY. YE	58. STREET ADDRESS (GIVE STREET OR		56. COUNTY	GC. LAST NAME	10. MAILING ADDRESS OF MOTHER	118 IF INSIDE CORPORATE LIMITS	110. COUNTY	12c. last name	164. PRESENT OR LAST OCCUPATIC	IGNATURE MARNES CON, 178. DAT	ADE BIRTHI SIGNATURE-DECREE OR TITLE 188 ADE	21. DATE
CERTIFICATE OF	SIALE OF CALIFORNIA-DEPARIME	18 MIDDLE NAME	R TRIPLET? 38. IF TWIN OR TRIPLET. THIS CHI BORN 1ST. ZND. 3RD'				IB. MIDDLE NAME	. BIRTHPLACE (STATE OR FOREIGN COUNTRY)	DDRESS 56 46 1 45 1 46 1 40 40 40 40 40 40 40 40		28 MIDDLE NAME	5 BIRTHPLACE (STATE OR FOREIGN COUNTRY)	7A. PARENT OR OTHER INFORMANT-SI	8A PHYSICIAN 1.08 OTHER PERSON WHO ATTENDED TH	0. LOCAL REGISTRAR-SIGNATURE
FILE	NUMBER	A NAME OF CHILD-FIRST NAME	SEX 34. THIS BIRTH. SINGLE. TWIN. O	A PLACE OF BIRTH-NAME OF HOSPITAL		ic. CITY OR TOWN	A MAIDEN NAME OF MOTHER-FIRST NAME	I. AGE OF MOTHER (AT TIME OF THIS BIRTH) 9	IA. USUAL RESIDENCE OF MOTHER-STREET A	IC CITY OR TOWN	2A NAME OF FATHER-FIRST NAME 11	4. AGE OF FATHER (AT TIME OF THIS BIRTH) 11 YEARS	HAVE REVIEWED THE ABOVE STATED INFORMA I TION AND HEREBY CERTIFY THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.	HEREBY CERTIFY THAT I ATTENDED THIS BIRTH I AND THAT THE CHILD WAS BORN ALIVE AT THE HOUR. DATE AND PLACE STATED ABOVE	 DATE ON WHICH NAME ADDED BY SUPPLE- MENTAL NAME REPORT
		THIS	CHILD	2	PLACE	BIRTH	MOTHER	CHILD B	USUAL	UP MULHER II (WHERE DOES II MOTHER LIVE?)	FATHER	CHILD	INFORMANT'S	ATTENDANT'S	REGISTRAR'S CERTIFICATION

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APPENDIX FIGURE I. (CONTINUED)

22c. how many fetuses born dead after 20 weeks gestation?	26. LENGTH AT BIRTH (CROWN-HEEL)	INCHES							
REVIOUS DELIVERIES TO THIS 22A. HOW MANY OTHER CHILDREN ARE NOW LIVING? 228. HOW MANY OTHER CHILDREN WERE BORN DTHER 100 NOT MICLUDE THIS CHILD?	T DAY OF LAST NORMAL MENSES - TCMA-ICENTER ONLY WHEN BETWIE DATE IS ROOMNI 2 PREMATAL CARE BEGUNT IN Y NOVE, SO STATE) 25. WEIGHT AT BIRTH	LBS. 025.	TH INJURY TO CHILD VES IF YES OF DESCRIBE:	GENITAL MALFORMATIONS	to Tytes Descrates:	APLICATIONS OF PREGNANCY. LABOR AND DELIVERY	IF YES DESCRIBE:	RATION FOR DELIVERY tormer than ensionowy to Types IFYES: to Describe:	ER DATA
	23 FIR		27. BII	28. CC		HEALTH DATA 29. CC		30. 0	31. 071

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¹⁵ Lunde, A. S., op. cit., p. 35.

¹⁶ National Vital Statistics Division, VITAL STATISTICS OF THE UNITED STATES, 1960, Vol. 1, NATALITY, Table 1-E; National Center for Health Statistics, op. cit., Table 4.

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