

VITAL and HEALTH STATISTICS
DATA FROM THE NATIONAL VITAL STATISTICS SYSTEM

Methods and Response Characteristics

National Natality Survey

United States, 1963

Description of sources of information and methods used in the 1963 National Natality Survey and a discussion of response characteristics, nonresponse, and imputation of data.

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U.S. DEPARTMENT OF
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Public Health Service Publication No. 1000-Series 22-No. 3

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Public Health Service Publication No. 1000-Series 22-No. 3

Library of Congress Catalog Card Number 66-61820

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IN THIS REPORT the methods and procedures used in the 1963 National Natality Survey are described and selected findings on response and completeness of the data are presented. The 1963 survey was designed primarily to provide national estimates of the amount and type of exposure to ionizing radiation experienced by women during pregnancy. Information was also obtained on selected socioeconomic characteristics of families in which births occurred.

The national sample consisted of approximately 4,100 birth records selected from current shipments received in the National Center for Health Statistics from each of the birth registration areas of the United States. Information in addition to that on the birth record was obtained by mail survey of the mother, the hospital where the child was born, the attending physician, and other physicians and dentists who may have treated the mother during pregnancy. National estimates based upon the survey were prepared using a post-stratified ratio estimate procedure. Estimates of error due to sampling were prepared by means of a replication technique.

About 86 percent of the mothers included in the survey returned the questionnaire. The response rate by age of mother varied between 86 and 90 percent except among those under 20 years of age, of whom only 76 percent responded. Response of mothers varied markedly by color. Not only was the response rate lower for nonwhite than for white mothers, but more followup was required to achieve the level of response. An inverse relationship was observed between family income—as well as education of mother—and the number of attempts to obtain response.

Nonresponse to items on the questionnaires returned by mothers was minimal in most instances and accounted for no more than 3 percent for any single item. The principal problem of incompleteness in returned questionnaires arose from failure to obtain information about family income; this problem was found disproportionately among mothers under 25 years and among mothers having their first child or their fifth child or more.

The total response rate for physicians, dentists, and medical facilities was more than 90 percent. Response from sources questioned about white mothers was higher than that from sources reporting about nonwhite mothers. All items on the questionnaire returned by physicians, dentists, and medical facilities were complete with few exceptions.

SYMBOLS

Data not available-----	---
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05-----	0.0
Figure does not meet standards of reliability or precision-----	*

METHODS AND RESPONSE CHARACTERISTICS

NATIONAL NATALITY SURVEY, 1963

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INTRODUCTION

This is the first of a series of reports based on data obtained in the National Natality Survey from a probability sample of 4,000 families in which births occurred during the year 1963.

Annual birth statistics for the United States derived from information reported on the birth record alone are not sufficient to meet the increasing needs for natality and related data in public health, demography, and other related fields.¹ Data collected in the 1963 National Natality Survey should permit preparation of estimates of births and of families having births by characteristics not previously available in national statistics. As a result, answers to many social and economic questions about matters relating to the health of the population in the United States may be made available.

The 1963 natality survey, conducted by the Division of Health Records Statistics in part under contract with the Division of Radiological Health, Public Health Service, was designed primarily to provide national estimates of the amount and type of exposure to ionizing radiation, particularly X-ray, experienced by women during pregnancy. Information was also obtained on selected socioeconomic and demographic characteristics of the families in which births occurred during 1963.

This report describes the methods and procedures used in the 1963 National Natality Survey as well as selected findings on response and completeness of the data. The discussion which follows is divided into three main sections. The

first section describes the procedures and methods used in the survey; the second section discusses response characteristics; and the third deals with nonresponse and imputation of missing data.

SURVEY PROCEDURES AND METHODS

Sources of Data

Survey procedures included a questionnaire mailed to each mother selected in the sample, to the attendant at birth, and to the hospital reported as the place of birth. These sources of information are identified on the birth record itself and are referred to in this report as primary sources.

Each of these primary sources was requested to identify other physicians, dentists, or medical facilities from whom the mother received any care during the year prior to the birth of her child. These additional sources of information are referred to as secondary sources. Questionnaires were also mailed to these secondary sources. Regardless of whether they were primary or secondary, the same information was obtained from all medical and dental sources. Information on X-ray examinations or treatments was obtained from physicians, dentists, and medical facilities only; the questionnaire sent to each mother was limited to the identification of the physicians and dentists from

whom she received care and to selected socioeconomic and demographic information.

The Questionnaires

Facsimilies of the questionnaires used in the survey as well as of the birth certificate are shown in Appendix II.

The questionnaire sent to physicians differed only slightly from that sent to institutions. The respondent to this questionnaire was asked if the mother had received any examination or treatment by X-ray during the 12 months preceding the birth of her child. If so, he was asked to give the number of such examinations, the date on which each such examination was performed, the major class of equipment used, the type of examination, the primary body area exposed to radiation, the number of exposures taken, whether the examination was performed by the respondent or by some other physician or institution, and the name and address of such other physician or institution. Whether the mother had received an X-ray examination or not, the respondent to this questionnaire was asked to report the number of times the mother had been seen for medical care during the 12 months prior to the birth of the child and the dates of the first and the last visit during that period.

The questionnaire sent to dentists was similar to that sent to physicians and institutions, except that fewer questions were asked about the X-ray examinations, because dental X-rays are more easily classified without the need for additional questions.

The questionnaire sent to mothers was different in content from the questionnaire for dentists and physicians. This questionnaire asked for information on selected socioeconomic characteristics of the mother and the family, such as the educational attainment of the mother and father, the father's employment status at the time the child was born, the employment status of the mother during pregnancy, and the family income during the preceding calendar year. The mother was also asked to identify the attendant at birth as well as the physicians, dentists, clinics, and hospitals where she may have received care during the year prior to the birth of her child.

Collection of Data

Data for the 1963 National Natality Survey were collected primarily by mail.

For mothers, followup procedures consisted of a certified mailing 2 weeks after the initial mailing and a regular first-class mailing 3 weeks after the certified mail. Telephone or personal interviews were conducted by Bureau of the Census interviewers with mothers who did not respond after all three mailings and who lived in one of the field survey areas of the Current Population Survey program of the Bureau of the Census. These procedures resulted in a response rate of 86.4 percent from mothers included in the survey.

Followup procedures for physicians, dentists, and institutions were similar to those for mothers, with two differences: (1) The first followup was by first-class mail, and the second followup was by certified mail. (2) No telephone or personal interviews were conducted after the three mailings. The total response rate from these sources was more than 90 percent.

Processing of Data

The completed questionnaires were edited and coded in accordance with predetermined specifications. The questionnaires were checked for completeness and for consistency of response to eliminate "impossible" response for each item. If the reported data were inadequate for certain essential items, further mail inquiries were made specifically for these items. Approximately 13 percent of the questionnaires returned by mothers did not pass editing criteria for one or more items and required further inquiry. Acceptable response was increased from 87.3 percent to 92.7 percent as a result of these additional inquiries (table A).

Responses from physicians, dentists, and medical facilities were edited and evaluated in a manner similar to that used for questionnaires returned by mothers. In the process of editing these questionnaires, missing data on an X-ray examination from one respondent could sometimes be obtained from a report of the same examination provided by another responding physician or medical facility. Approximately 15 percent of the questionnaires returned by physicians and 20 percent of those returned by medical facilities

Table A. Proportion of responses considered acceptable before and after additional inquiries were made: 1963 National Natality Survey

Type of source	Total number of respondents	Percent of total response edited acceptable	
		Original response	Final response
Mothers-----	3,218	87.3	92.7
Physicians-----	4,164	85.1	90.4
Medical facilities-----	4,327	80.5	92.4
Dentists-----	1,320	96.9	97.1

required further inquiry. Acceptable response from physicians and medical facilities was increased to 90.4 percent and 92.4 percent, respectively, as a result of these additional inquiries. In contrast, almost all questionnaires received from dentists were acceptable (table A).

After the edited and coded data were transcribed on punchcards the data were processed on electronic computers. This included assignment of weights and carrying out internal edits, consistency checks to eliminate errors in editing, coding, or processing, and imputation for missing data.

Sample Design

The sampling frame for the 1963 National Natality Survey was the file of microfilms of birth records received each month by the National Center for Health Statistics from the 54 birth registration areas of the United States. As a general rule, for each registration area these microfilm images are assigned a number prior to or during filming of the birth record. Each thousand consecutive images are defined as a "reel" and assigned a reel number starting from zero. Within each reel, the images are numbered from 1 to 1,000.

The sampling for the survey was based on a probability design which made use of these pre-assigned reel and image numbers on the birth records. Each reel of the microfilm copies of the birth certificates constituted a primary sampling unit. Within each reel one record was chosen

on a random selection basis. Thus, a sample of 1 out of 1,000 births was selected from the monthly shipment of records from the registration areas.

The national sample included a total of 4,096 births for the year 1963. Of these 4,096 births, 214 were reported as illegitimate on the birth record. However, legitimacy is reported in only 35 of the 54 registration areas in the United States. Hence, a procedure was developed to infer legitimacy on the basis of indirect evidence on the birth certificate for the 19 registration areas not reporting this item. Thus, if on the birth record the surname of the father was different from the surname of the child or if the surname of the father was not reported on the birth record, the birth was imputed to be illegitimate. On the basis of this procedure 102 births in the sample were inferred to be illegitimate in addition to those mentioned above. Table 1 shows the distribution of the births selected in the sample by the legitimacy status (both reported and inferred), age of mother, and color.

These 316 illegitimate births plus an additional 54 births were excluded from the survey of mothers.^a Thus, the final sample included in

^aThe State of Missouri withdrew from the survey after June 1963. Thus, 45 births selected in the sample from Missouri for the period July through December 1963 were excluded from the survey. 9 additional births were excluded from the survey either because residence was outside the United States or because no usable mailing address was available.

Table B. Total number of births in the United States and the number in the survey of mothers: 1963 National Natality Survey.

Item	Size
Total count of births in the United States-----	4,098,000
Number of births selected in the sample-----	4,096
Number of births excluded from survey:	
Number of illegitimate births-----	316
Number of births from Missouri: July-December 1963-----	45
Other-----	9
Number of births included for the survey of mothers-----	3,726

the survey of mothers was 3,726 births. Table B shows the original sample and the final sample used for the survey of mothers.

In contrast with the survey of mothers, in which illegitimate births were excluded, medical inquiries were sent in all instances where a medical source of information was identified. Hence, statistics relating to radiation exposure which did not require information provided by the mother relate to all births selected in the sample.

Estimation

Statistics based on the survey are estimates prepared by the use of a post-stratified ratio estimation procedure. The purpose of ratio estimation is to take into account available relevant information in the estimation process, thereby reducing the variability of the estimate. This procedure was carried out for each of the following 24 groups:

Group	Age	Live-birth order	Group	Age	Live-birth order
	<u>White</u>			<u>Nonwhite</u>	
1	Under 20 years	1	15	Under 20 years	1
2	Under 20 years	2+	16	Under 20 years	2+
3	20-24 years	1	17	20-24 years	1-2
4	20-24 years	2	18	20-24 years	3+
5	20-24 years	3+	19	25-29 years	1-2
6	25-29 years	1	20	25-29 years	3-4
7	25-29 years	2	21	25-29 years	5+
8	25-29 years	3-4	22	30-34 years	1-4
9	25-29 years	5+	23	30-34 years	5+
10	30-34 years	1-2	24	35 years or more	ALL
11	30-34 years	3-4			
12	30-34 years	5+			
13	35 years or more	1-4			
14	35 years or more	5+			

For each group, the ratio of the number of births in the United States in 1963 based on a 50-percent sample to the number of births in the sample in that group was determined.² These 24 ratios comprised the sample weights used in estimating national totals for each of the 24 groups. The effect of this ratio adjustment was to make the estimates from the sample consistent with the complete count of births with respect to the population of all births as well as for the groups used in the estimation procedure.

Thus, estimates of characteristics from the sample are produced using the following formula:

$$X' = \sum_{i=1}^{24} \frac{x_i}{y_i} Y_i$$

where

X' is the estimate of the characteristic obtained by use of ratio estimation.

x_i is the count of sample births with the characteristic in the i th group.

y_i is the count of all sample births in the i th group, and

Y_i is the total number of births in the i th group based on the 50-percent sample.

Reliability of Estimates

Since the statistics derived from this survey are estimates based on a sample, they may differ from the figures that would have been obtained had a survey covering all births in 1963 been conducted using the same questionnaires and procedures. As in all surveys, in addition to sampling errors, survey results are subject to measurement errors which include, among others, those errors resulting from errors in conceptual formulation, ambiguities in definitions and in the questionnaire construction, coding errors, biases due to nonresponse or incomplete response, mistakes in editing, and tabulation errors.

The probability design of the sample for the survey makes possible the calculation of sampling

errors. The standard error is a measure of the sampling variation in the survey statistics that occurs by chance because only a sample rather than the entire population is surveyed. The chances are about 68 out of 100 that an estimate from the sample differs from the value obtained from a survey of the entire population by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error. The standard error of a difference between two sample estimates is approximately the square root of the sum of squares of each standard error considered separately. This formula represents the actual standard error quite accurately for the difference between separate and uncorrelated characteristics, although it is only a rough approximation in most other cases.

The variance of a statistic depends not only on the design of the sample, but also on the distribution of the statistic itself; the variance is greater for measurements which are highly variable from one individual to another, and lower for measurements which are less variable. Since the estimates of the sampling error are obtained from the sample data, they are themselves subject to sampling error, which may be large in some instances.

Estimates of sampling variability for the statistics derived from this survey were based on 20 random half-sample replications. This technique yields overall variability through observation of variability among random subsamples of the total sample. It reflects both the error that arises from sampling and a part of the measurement error, but it does not measure any systematic biases in the data. A general discussion of the development and evaluation of a replication technique for estimating variance has been published elsewhere.³ However, the procedures and computations required to estimate variances by this method in the 1963 natality survey are briefly described below.

For the survey, each record from the entire file of records was assigned systematically to a random group between 1 and 40. Twenty pairs of random groups were created from these 40 groups. A half sample was formed by randomly selecting one group from each of the 20 pairs. This process was repeated until 20 "replicate half samples"

Table C. Composition of the 20 half-sample replicates

Half-sample replicates	Random groups included																			
1	1	3	6	8	9	11	13	15	18	19	22	23	26	28	30	32	33	35	38	40
2	1	4	6	7	9	11	13	16	17	20	21	24	26	28	30	31	33	36	37	40
3	2	4	5	7	9	11	14	15	18	19	22	24	26	28	29	31	34	35	37	40
4	2	3	5	7	9	12	13	16	17	20	22	24	26	27	29	32	33	35	38	40
5	1	3	5	7	10	11	14	15	18	20	22	24	25	27	30	31	33	36	38	40
6	1	3	5	8	9	12	13	16	18	20	22	23	25	28	29	31	34	36	37	40
7	1	3	6	7	10	11	14	16	18	20	21	23	26	27	29	32	34	35	37	40
8	1	4	5	8	9	12	14	16	18	19	21	24	25	27	30	32	33	35	37	40
9	2	3	6	7	10	12	14	16	17	19	22	23	25	28	30	31	33	35	37	40
10	1	4	5	8	10	12	14	15	17	20	21	23	26	28	29	31	33	35	38	40
11	2	3	6	8	10	12	13	15	18	19	21	24	26	27	29	31	33	36	37	40
12	1	4	6	8	10	11	13	16	17	19	22	24	25	27	29	31	34	35	38	40
13	2	4	6	8	9	11	14	15	17	20	22	23	25	27	29	32	33	36	37	40
14	2	4	6	7	9	12	13	15	18	20	21	23	25	27	30	31	34	35	38	40
15	2	4	5	7	10	11	13	16	18	19	21	23	25	28	29	32	33	36	38	40
16	2	3	5	8	9	11	14	16	17	19	21	23	26	27	30	31	34	36	38	40
17	1	3	6	7	9	12	14	15	17	19	21	24	25	28	29	32	34	36	38	40
18	1	4	5	7	10	12	13	15	17	19	22	23	26	27	30	32	34	36	37	40
19	2	3	5	8	10	11	13	15	17	20	21	24	25	28	30	32	34	35	37	40
20	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40

were formed from which variance estimates were derived. The composition of the 20 half samples shown in table C was determined by an orthogonal plan.

After the composition of each of the half samples was determined, all the estimation procedures used to produce the final estimates from the entire sample were applied separately to each of the resulting half samples.

An estimated variance $S_{x'}^2$ of an estimated statistic x' of the parameter X is obtained by applying the following formula:

$$S_{x'}^2 = \frac{1}{20} \sum_{i=1}^{20} (x_i'' - x')^2$$

where

x' is the estimate of X based on the entire sample, and

x_i'' is the estimate of X based on the i th half sample.

Standard errors of published statistics will be presented along with the analysis of the data collected from the survey.

RESPONSE CHARACTERISTICS

Response From Mothers

A total response rate of 86.4 percent was obtained from the 3,726 mothers included in the survey. Approximately 45.3 percent of the mothers responded to the original mailing. The certified mail followup added 29.0 percent, and the second

Table D. Response received from mothers, physicians, medical facilities, and dentists, by mailing waves: 1963 National Natality Survey

Response status	Mothers	Physicians	Medical facilities	Dentists
Number included in survey-----	3,726	4,474	4,432	1,360
	Percent			
Total response-----	86.4	93.1	97.6	97.0
Response to original mail-----	45.3	66.5	77.4	81.2
Response to second mail-----	29.0	17.6	15.3	11.5
Response to third mail-----	6.8	9.0	4.9	4.3
Response to interview-----	5.1	...	...	...
Nonresponse-----	13.6	6.9	2.4	3.0

mail followup brought in an additional 6.8 percent of the total response received. Personal visits or telephone followup by Bureau of the Census interviewers added another 5.1 percent to the total response (table D).

Age of Mother, Color, and Live-Birth Order

As certain key characteristics of the families included in the survey are available on the birth record itself and not from the survey questionnaire, it is possible to show the relationship of these variables to the response rate.

The response rate by age of mother varied between 85.8 and 89.8 percent except among those under 20 years of age, of whom only 76.4 percent responded. Mothers under 20 years of age, compared with the older mothers, also had a relatively low response to the first mail (table 2).

Response in the survey varied markedly by color. About 88 percent of the white mothers, compared with 78 percent of the nonwhite mothers, responded to the survey questionnaire. Not only was the response rate lower for nonwhite than for white mothers, but more followup was required to achieve this level of response (fig. 1). This color difference prevailed, in general, for all age

groups, but it was most pronounced for mothers 20-29 years of age.

Of the total response received, 54.7 percent for the white mothers, compared with 36.0 percent for the nonwhite mothers, was obtained by the first mail (table E). Only 5.1 percent of the total response for white compared with 12.1 percent

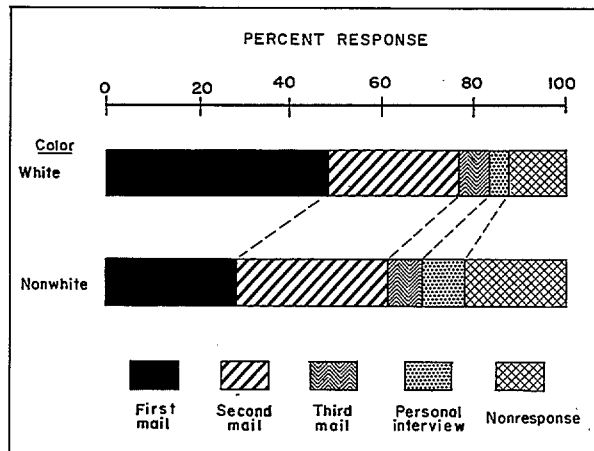


Figure 1. Cumulative percent response, by number of mailing for white and nonwhite mothers.

Table E. Cumulative percent of responding mothers, by number of mailing and color:
1963 National Natality Survey

Color	Number of respondents	Cumulative percent of respondents by mailing			
		First mail	Second mail	Third mail	Personal interview
All mothers-----	3,218	52.4	86.2	94.1	100.0
White-----	2,821	54.7	87.2	94.9	100.0
Nonwhite-----	397	36.0	78.6	87.9	100.0

for nonwhite mothers was obtained by personal interview after three attempts to obtain response by mail.

Differences in response rates by live-birth order were marginal (table 3). The response pattern by live-birth order for white mothers was similar to that observed for white and nonwhite combined. For nonwhite mothers, however, the response rate decreased as live-birth order increased to a low of 71.8 percent for third birth; it then increased slightly for fourth birth or more. Not only was the response rate lower for nonwhite mothers having their third child than for the other nonwhite mothers, but more followup was required (fig. 2).

Socioeconomic Characteristics

As stated earlier in this report, data were obtained in the survey on selected socioeconomic characteristics of families in which a birth occurred during 1963. Two such characteristics are the education of the mother and the income of the family during the preceding calendar year. A discussion of differences in response rates according to these socioeconomic characteristics is not possible since the data needed for such rates are contained in the questionnaire itself and are therefore unknown for families who did not respond to the survey questionnaire. However, a discussion of the relationship of these characteristics to the number of mailings required to obtain response to the survey is presented.

Table 4 shows a definite relationship between the income of the family and the number of attempts to obtain response. As the family income increased, the number of successive mailings required to obtain response decreased. Thus, 42.4 percent of the respondents with family income of less than \$3,000, compared with 61.4 percent of those with an income of \$7,000 or more, responded to the original mailing. At the other extreme, a personal interview after three attempts to obtain response by mail was required for 9.3 percent of the respondents with family income of

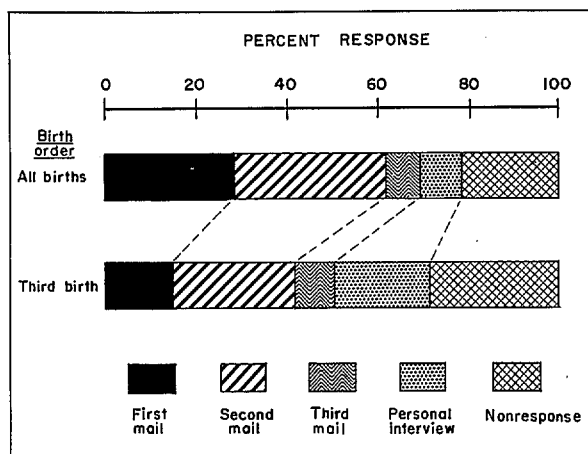


Figure 2. Cumulative percent response for nonwhite mothers, by number of mailing and live-birth order.

Table F. Percent distribution of surveyed mothers, by age for respondents and nonrespondents to the survey: 1963 National Natality Survey

Age of mother	Total		Respondents		Nonrespondents	
	Number	Percent	Number	Percent	Number	Percent
All ages-----	3,726	100.0	3,218	100.0	508	100.0
Under 20 years-----	488	13.1	373	11.6	115	22.6
20-24 years-----	1,252	33.6	1,074	33.4	178	35.0
25-29 years-----	1,056	28.3	948	29.5	108	21.3
30-34 years-----	549	14.7	486	15.1	63	12.4
35 years and over-----	381	10.2	337	10.4	44	8.7

less than \$3,000 as compared with only 2.5 percent of those with \$7,000 or more.

When respondents were further classified by age of mother, this relationship prevailed in all age groups. The difference in response by income, especially to the original mailing, became more pronounced as age of mother increased.

The number of successive mailings required to obtain response was also inversely related to the educational attainment of the mother (tables 5 and 6). This relationship prevailed over all age groups as well as over all birth-order groups.

Response From Medical and Dental Sources

A total response rate of 93.1 percent was obtained from the 4,474 physicians included in the survey. Of these physicians, 66.5 responded to the original mailing; an additional 17.6 percent responded to the second mailing, and 9.0 percent, to the third mailing. Response patterns from medical facilities and dentists were similar to the pattern observed for physicians. The response rate was 97.6 percent for the 4,432 facilities and 97.0 percent for the 1,360 dentists included in the survey (table D).

Reporting of the medical X-ray examinations was relatively independent of the mother. However, the identification of dentists as sources of information for dental X-ray examinations was completely dependent on the reports from mothers; as a result there was underreporting of dental X-ray visits due to the number of mothers not surveyed and to the number who did not respond.

Tables 7 and 8 show response rates from medical and dental sources by color and age of mother. Response rates from these sources varied by color of mother. Response from the physicians, medical facilities, and dentists questioned about white mothers was higher than that obtained from these sources reporting about nonwhite mothers. This color difference in response rates prevailed for each mailing. Variation in response by color was more pronounced for dentists than for physicians and medical facilities. Response rates from both physicians and dentists were about the same by the age of the mother for whom they were reporting. Slight differences were observed in response from dentists by age of mother.

NONRESPONSE AND IMPUTATION OF MISSING DATA

Failure to obtain response represents one of the main sources of error in a survey. The extent of nonresponse and imputation of missing data in the 1963 natality survey are discussed below in terms of the sources of information used in the survey to obtain information.

Mothers

A total of 508 mothers, or 13.6 percent, had not responded after all followup procedures were completed. A large proportion of this nonresponse was accounted for by mothers in the younger ages. Almost 57.6 percent of the 508 mothers not responding, compared with 45.0 percent of the respondents, were less than 25 years of age (table F).

Table G. Percent of respondents for whom specified items were not ascertained, by age of mother and live-birth order: 1963 National Natality Survey

Age of mother and live-birth order	Total number of respondents	Family income	Education of mother	Education of father	Mother's employment status	Father's employment status
		Percent not ascertained				
Total-----	3,218	3.1	0.2	0.8	0.1	0.7
<u>Age of mother</u>						
Under 20 years-----	373	6.2	-	0.3	-	0.8
20-24 years-----	1,074	3.0	0.1	0.6	-	0.8
25-29 years-----	948	1.8	0.3	0.8	0.1	0.3
30-34 years-----	486	3.3	0.6	1.0	0.4	1.4
35 years and over--	337	3.9	0.3	1.2	-	0.3
<u>Live-birth order</u>						
First-----	864	4.2	-	0.2	-	0.6
Second-----	777	2.1	-	0.4	-	0.4
Third-----	595	2.4	0.2	1.3	-	1.0
Fourth-----	409	2.2	0.5	1.0	-	0.7
Fifth birth and over-----	573	4.5	0.9	1.4	0.5	1.0

Besides these mothers who represented "unit nonresponse" in the survey, missing information on returned questionnaires also affects the quality of data derived from the survey.^b Non-response to items on questionnaires returned by mothers was minimal in most instances and accounted for no more than 3.1 percent for any single item. Table G shows the percent not ascertained for specified items by age of mother and live-birth order. The principal problem of incompleteness in the returned questionnaires arose from failure to obtain information about the total income of the family, a problem which was found disproportionately among mothers under 25 years of age and among mothers who were having their first child or their fifth child or more.

In order to reduce the effect of nonresponse on the estimates, statistics derived from the survey of mothers were adjusted for unit non-response by imputing to nonrespondents the

^b28 of the 3,218 respondents returned the questionnaires substantially incomplete; for the purposes of processing the data, these respondents were treated in the same manner as unit nonrespondents.

characteristics of "similar" respondents. Similar respondents were mothers who responded to later mailings within each of the 24 age-of-mother, color, and live-birth-order groups shown on page 4. Two assumptions are inherent in this imputation procedure. The three birth record characteristics—age of mother, color, and live-birth order—are available for responding as well as nonresponding mothers and are related to the socioeconomic variables on the questionnaire sent to mothers; and the nonrespondents would be more like those who responded to the later mailings than those to the first mail. The latter assumption is based on the pattern of response by mailing waves observed in relation to the education and income level of the respondents.

Thus, an array of known values was established in the computer using the respondents to later mailings within the 24 homogeneous groups as the known population of similar respondents from which values were imputed to the non-response records. Values in the cells of the array were continually replaced by successive known values as the file of records was processed; as a nonresponse record was read, values from the

appropriate cell of the array were imputed to the nonresponse record.

Data are also adjusted for item nonresponse. Imputation procedures for missing data on questionnaires returned by mothers were based on the premise that "the presence of several correlated variables permits a reasonably good prediction of the missing variable...."⁴

Thus, missing data for items on employment of father, education of father, and family income were imputed on the computer on the same principle as for unit nonresponse, that is, imputation was made by assigning within homogeneous groups the characteristics of respondents to later mailings with known data to those respondents with missing data. The array by age of mother, color, and live-birth order used for imputation of unit nonresponse was also used for imputation of missing data on employment of father. Missing information on education of father and family income was imputed using the following arrays:

1. For education of father:

Age of father	Years of school completed by mother				
	Under 8	8-11	12	13-15	16+
Under 20 years--					
20-29 years-----					
30-39 years-----					
40+ years-----					

2. For family income:

Age of father	Years of school completed by father				
	Under 8	8-11	12	13-15	16+
Under 20 years--					
20-29 years-----					
30-39 years-----					
40+ years-----					

Missing data on employment status of mother during pregnancy for three cases and on education of mother for eight cases were imputed arbitrarily.

Physicians, Dentists, and Medical Facilities

The nonresponse rate for medical and dental sources was much lower than that for mothers. Only 6.9 percent of the physicians, 2.9 percent of the dentists, and 2.4 percent of the medical facilities included in the survey did not respond after all followup procedures were completed (table 7).

All items on the questionnaires returned by physicians, dentists, and medical facilities were complete with the exception of 1 instance for type of equipment used, 2 relating to the primary body area, and 12 relating to the number of films.

No imputation for unit nonresponse was undertaken because of the relatively low nonresponse rate and the high probability of a given X-ray examination's being reported by more than one source. The few cases enumerated above for which information was missing were adjusted manually with the aid of professional medical opinion.

Birth Records

With the exception of color of child for births selected from New Jersey, age of father, and completed weeks of pregnancy, information on the birth record was in most cases complete. During 1962, the item on color of child was removed from the New Jersey birth record. Although this item was replaced in late 1962, almost all births occurring during 1963 were registered on birth records not containing the question on color. Thus, information on color of child was missing on approximately 100 records from New Jersey selected in the sample. Imputation for color of child was carried out by means of a procedure using detailed geographic information on place of residence of mother and proportion of nonwhite population in that location according to the 1960 census.

In addition, information on completed weeks of pregnancy was unknown on 214 birth records; number of previous fetal deaths was unknown for 92 records; and age of father was missing

on 255 records. Imputation for these items was also carried out on the computer by substituting known values within the homogeneous groups created by the age, color, and live-birth-order

array described earlier. For items such as birth weight, sex of child, and birthplace of mother, where the number of unknown cases was small, imputation was made arbitrarily.

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Table 1. Number of births selected in the sample, by legitimacy status, color, and age of mother:
1963 National Natality Survey

Color and age of mother	Total in sample	Legitimate			Illegitimate		
		Total	Reported	Inferred	Total	Reported	Inferred
<u>Total</u>		Number of births					
All ages-----	4,096	3,780	2,529	1,251	316	214	102
Under 20 years-----	640	498	346	152	142	102	40
20-24 years-----	1,375	1,276	850	426	99	63	36
25-29 years-----	1,103	1,067	714	353	36	25	11
30-34 years-----	578	551	354	197	27	17	10
35 years and over-----	400	388	265	123	12	7	5
<u>White</u>							
All ages-----	3,391	3,268	2,166	1,102	123	79	44
Under 20 years-----	482	432	297	135	50	33	17
20-24 years-----	1,150	1,111	735	376	39	25	14
25-29 years-----	935	918	613	305	17	11	6
30-34 years-----	480	468	296	172	12	6	6
35 years and over-----	344	339	225	114	5	4	1
<u>Nonwhite</u>							
All ages-----	705	512	363	149	193	135	58
Under 20 years-----	158	66	49	17	92	69	23
20-24 years-----	225	165	115	50	60	38	22
25-29 years-----	168	149	101	48	19	14	5
30-34 years-----	98	83	58	25	15	11	4
35 years and over-----	56	49	40	9	7	3	4

Table 2. Percent distribution of surveyed mothers, by response status according to color and age of mother: 1963 National Natality Survey

Color and age of mother	Number of mothers included in survey	Respondents by number of mailing					Non-respondents
		Total respondents	First mail	Second mail	Third mail	Personal interview	
<u>Total</u>		Percent distribution					
All ages-----	3,726	86.4	45.3	29.2	6.8	5.1	13.6
Under 20 years-----	488	76.4	35.0	27.7	6.6	7.2	23.6
20-24 years-----	1,252	85.8	45.6	27.6	6.5	6.1	14.2
25-29 years-----	1,056	89.8	48.5	30.2	7.7	3.4	10.2
30-34 years-----	549	88.5	45.5	32.2	5.8	4.9	11.5
35 years and over-----	381	88.5	48.0	29.1	6.8	4.5	11.5
<u>White</u>							
All ages-----	3,218	87.7	48.0	28.5	6.7	4.4	12.3
Under 20 years-----	423	77.1	35.0	27.2	7.3	7.6	22.9
20-24 years-----	1,088	87.7	48.4	27.7	6.5	5.1	12.3
25-29 years-----	910	91.8	51.9	29.8	7.4	2.7	8.2
30-34 years-----	465	88.2	49.7	29.5	5.4	3.7	11.8
35 years and over-----	332	89.2	50.0	28.3	6.6	4.2	10.8
<u>Nonwhite</u>							
All ages-----	508	78.1	28.1	33.3	7.3	9.4	21.9
Under 20 years-----	65	72.3	35.4	30.8	1.5	4.6	27.7
20-24 years-----	164	73.2	26.8	26.8	6.7	12.8	26.8
25-29 years-----	146	77.4	27.4	32.9	9.6	7.5	22.6
30-34 years-----	84	90.5	22.6	47.6	8.3	11.9	9.5
35 years and over-----	49	83.7	34.7	34.7	8.2	6.1	16.3

Table 3. Percent distribution of surveyed mothers, by response status according to color and live-birth order: 1963 National Natality Survey

Color and live-birth order	Number of mothers included in survey	Respondents by number of mailing					Non-respondents
		Total respondents	First mail	Second mail	Third mail	Personal interview	
<u>Total</u>		Percent distribution					
All birth orders---	3,726	86.4	45.3	29.2	6.8	5.1	13.6
First birth-----	986	87.6	50.0	27.4	5.5	4.9	12.4
Second birth-----	906	85.8	45.1	29.7	6.4	4.5	14.2
Third birth-----	676	88.0	44.5	28.7	8.4	6.4	12.0
Fourth birth-----	475	86.1	46.3	28.8	5.7	5.3	13.9
Fifth birth and over----	683	83.9	38.8	31.8	8.3	5.0	16.1
<u>White</u>							
All birth orders---	3,218	87.7	48.0	28.5	6.7	4.4	12.3
First birth-----	898	88.3	50.9	26.9	5.6	4.9	11.7
Second birth-----	814	86.6	46.4	29.7	6.8	3.7	13.4
Third birth-----	598	90.1	48.3	28.9	8.4	4.5	9.9
Fourth birth-----	403	87.8	48.9	29.0	5.2	4.7	12.2
Fifth birth and over----	505	85.1	44.2	28.5	7.9	4.6	14.9
<u>Nonwhite</u>							
All birth orders---	508	78.1	28.1	33.3	7.3	9.4	21.9
First birth-----	88	80.7	39.8	31.8	4.5	4.5	19.3
Second birth-----	92	78.3	33.7	29.3	3.3	12.0	21.7
Third birth-----	78	71.8	15.4	26.9	9.0	20.5	28.2
Fourth birth-----	72	76.4	31.9	27.8	8.3	8.3	23.6
Fifth birth and over----	178	80.3	23.6	41.0	9.6	6.2	19.7

Table 4. Percent distribution of respondents in the survey of mothers, by number of mailing according to age of mother and family income during preceding year: 1963 National Natality Survey

Age of mother and family income	Number of respondents	Respondents by number of mailing				
		Total respondents	First mail	Second mail	Third mail	Personal interview
<u>All ages</u>		Percent distribution				
All incomes-----	3,218	100.0	52.4	33.8	7.9	5.9
Under \$3,000-----	632	100.0	42.4	37.5	10.8	9.3
\$3,000-\$4,999-----	814	100.0	50.0	35.5	7.2	7.2
\$5,000-\$6,999-----	794	100.0	58.1	30.5	7.4	4.0
\$7,000 and over-----	849	100.0	61.4	30.9	5.3	2.5
Not available-----	129	...	...	...	...	...
<u>Under 20 years</u>						
All incomes-----	373	100.0	45.8	36.2	8.6	9.4
Under \$3,000-----	165	100.0	44.2	36.4	8.5	10.9
\$3,000-\$4,999-----	124	100.0	50.8	33.1	9.7	6.5
\$5,000-\$6,999-----	43	100.0	55.8	34.9	-	9.3
\$7,000 and over-----	13	100.0	*	*	*	*
Not available-----	28	...	...	...	...	...
<u>20-24 years</u>						
All incomes-----	1,074	100.0	53.2	32.1	7.6	7.1
Under \$3,000-----	231	100.0	45.0	35.1	11.7	8.2
\$3,000-\$4,999-----	323	100.0	54.5	31.3	5.9	8.4
\$5,000-\$6,999-----	284	100.0	59.9	29.2	5.6	5.3
\$7,000 and over-----	193	100.0	57.5	33.7	5.7	3.1
Not available-----	43	...	...	...	...	...
<u>25-29 years</u>						
All incomes-----	948	100.0	54.0	33.6	8.5	3.8
Under \$3,000-----	116	100.0	36.2	42.2	12.9	8.6
\$3,000-\$4,999-----	223	100.0	48.0	38.6	8.1	5.4
\$5,000-\$6,999-----	268	100.0	58.2	29.5	10.4	1.9
\$7,000 and over-----	318	100.0	63.2	29.6	5.7	1.6
Not available-----	23	...	...	...	...	...
<u>30-34 years</u>						
All incomes-----	486	100.0	51.4	36.4	6.6	5.6
Under \$3,000-----	66	100.0	37.9	39.4	12.1	10.6
\$3,000-\$4,999-----	93	100.0	43.0	41.9	6.5	8.6
\$5,000-\$6,999-----	128	100.0	55.5	33.6	7.0	3.9
\$7,000 and over-----	183	100.0	60.7	33.3	3.3	2.7
Not available-----	16	...	...	...	...	...
<u>35 years and over</u>						
All incomes-----	337	100.0	54.3	32.9	7.7	5.0
Under \$3,000-----	54	100.0	44.4	38.9	7.4	9.3
\$3,000-\$4,999-----	51	100.0	41.2	43.1	7.8	7.8
\$5,000-\$6,999-----	71	100.0	56.3	31.0	8.5	4.2
\$7,000 and over-----	142	100.0	66.9	23.2	6.3	3.5
Not available-----	19	...	...	...	...	...

Table 5. Percent distribution of respondents in the survey of mothers, by number of mailing according to age and years of school attended by mother: 1963 National Natality Survey

Age and years of school attended by mother	Number of respondents	Respondents by number of mailing				
		Total respondents	First mail	Second mail	Third mail	Personal interview
<u>All ages</u>		Percent distribution				
Total-----	3,218	100.0	52.4	33.8	7.9	5.9
None or elementary-----	326	100.0	35.9	40.8	13.5	9.8
High school:						
1-3 years-----	694	100.0	42.9	37.5	8.9	10.7
4 years or more-----	1,454	100.0	56.8	32.1	6.8	4.3
College-1 year or more-----	708	100.0	62.2	30.2	5.5	2.1
Not available-----	36	...	...	...	...	...
<u>Under 20 years</u>						
Total-----	373	100.0	45.8	36.2	8.6	9.4
None or elementary-----	37	100.0	*	*	*	*
High school:						
1-3 years-----	160	100.0	39.4	40.6	7.5	12.5
4 years or more-----	152	100.0	52.6	32.9	8.6	5.9
College-1 year or more-----	19	100.0	*	*	*	*
Not available-----	5	...	...	...	...	...
<u>20-24 years</u>						
Total-----	1,074	100.0	53.2	32.1	7.6	7.1
None or elementary-----	54	100.0	31.5	42.6	16.7	9.3
High school:						
1-3 years-----	218	100.0	45.1	30.0	11.1	13.8
4 years or more-----	534	100.0	56.2	32.2	6.0	5.6
College-1 year or more-----	257	100.0	59.9	31.5	5.4	3.1
Not available-----	11	...	...	...	...	...
<u>25-29 years</u>						
Total-----	948	100.0	54.0	33.6	8.5	3.8
None or elementary-----	98	100.0	33.7	40.8	14.3	11.2
High school:						
1-3 years-----	175	100.0	40.0	45.1	8.0	6.9
4 years or more-----	434	100.0	57.8	31.6	8.5	2.1
College-1 year or more-----	232	100.0	66.8	25.9	6.0	1.3
Not available-----	9	...	...	...	...	...
<u>30-34 years</u>						
Total-----	486	100.0	51.4	36.4	6.6	5.6
None or elementary-----	72	100.0	33.3	44.4	13.9	8.3
High school:						
1-3 years-----	85	100.0	45.9	35.3	8.2	10.5
4 years or more-----	195	100.0	56.9	32.8	5.1	5.1
College-1 year or more-----	131	100.0	58.0	37.4	3.8	0.8
Not available-----	3	...	...	...	...	...
<u>35 years or over</u>						
Total-----	337	100.0	54.3	32.9	7.7	5.0
None or elementary-----	65	100.0	36.9	40.0	13.8	9.2
High school:						
1-3 years-----	57	100.0	49.1	36.8	8.8	5.3
4 years or more-----	139	100.0	60.4	30.9	5.0	3.6
College-1 year or more-----	69	100.0	66.7	24.6	4.3	4.3
Not available-----	7	...	...	...	...	...

Table 6. Percent distribution of respondents in the survey of mothers, by number of mailing according to live-birth order and years of school attended by mother: 1963 National Natality Survey

Live-birth order and years of school attended by mother	Number of respondents	Respondents by number of mailing				
		Total respondents	First mail	Second mail	Third mail	Personal interview
<u>All live births</u>		Percent distribution				
Total-----	3,218	100.0	52.4	33.8	7.9	5.9
None or elementary-----	326	100.0	35.9	40.8	13.5	9.8
High school:						
1-3 years-----	694	100.0	42.9	37.5	8.9	10.7
4 years or more-----	1,454	100.0	56.8	32.1	6.8	4.3
College-1 year or more-----	708	100.0	62.1	30.2	5.5	2.1
Not available-----	36	...	...	...	...	...
<u>First birth</u>						
Total-----	864	100.0	56.9	31.3	6.3	5.6
None or elementary-----	32	100.0	*	*	*	*
High school:						
1-3 years-----	145	100.0	40.7	38.6	7.6	13.1
4 years or more-----	429	100.0	60.1	30.1	5.1	4.7
College-1 year or more-----	250	100.0	63.2	28.4	6.4	2.0
Not available-----	8	...	...	...	...	...
<u>Second birth</u>						
Total-----	777	100.0	52.6	34.6	7.5	5.3
None or elementary-----	44	100.0	38.6	40.9	9.1	11.4
High school:						
1-3 years-----	152	100.0	40.1	38.8	10.5	10.5
4 years or more-----	372	100.0	54.8	33.9	7.3	4.0
College-1 year or more-----	200	100.0	62.5	31.5	4.5	1.5
Not available-----	9	...	...	...	...	...
<u>Third birth</u>						
Total-----	595	100.0	50.6	32.6	9.6	7.2
None or elementary-----	62	100.0	22.6	45.2	16.1	16.1
High school:						
1-3 years-----	142	100.0	43.0	36.6	10.6	9.8
4 years or more-----	262	100.0	56.9	29.4	8.0	5.7
College-1 year or more-----	126	100.0	60.3	29.4	7.1	3.2
Not available-----	3	...	...	...	...	...
<u>Fourth birth</u>						
Total-----	409	100.0	53.8	33.5	6.6	6.1
None or elementary-----	40	100.0	52.5	27.5	12.5	7.5
High school:						
1-3 years-----	104	100.0	51.9	27.9	6.7	13.5
4 years or more-----	198	100.0	53.0	37.4	6.6	3.0
College-1 year or more-----	64	100.0	60.9	32.8	3.1	3.1
Not available-----	3	...	...	...	...	...
<u>Fifth birth and over</u>						
Total-----	573	100.0	46.2	37.9	9.9	5.9
None or elementary-----	148	100.0	32.4	43.9	14.9	8.8
High school:						
1-3 years-----	151	100.0	41.7	42.4	8.6	7.3
4 years or more-----	193	100.0	57.0	31.1	8.3	3.6
College-1 year or more-----	68	100.0	61.8	32.3	4.4	1.5
Not available-----	13	...	...	...	...	...

Table 7. Percent distribution of surveyed physicians, medical facilities, and dentists, by response status according to age of mother: 1963 National Natality Survey

Type of source and age of mother	Number in the survey	Respondents by number of mailing				Non-respondents
		Total respondents	First mail	Second mail	Third mail	
<u>Physician</u>		Percent distribution				
All ages-----	4,474	93.1	66.5	17.6	9.0	6.9
Under 20 years-----	597	94.0	66.5	17.6	9.9	6.0
20-24 years-----	1,484	92.5	66.5	17.6	8.4	7.5
25-34 years-----	1,926	93.2	66.7	17.6	8.9	6.8
35 years and over-----	467	93.1	65.7	18.0	9.4	6.9
<u>Medical facility</u>						
All ages-----	4,432	97.6	77.4	15.3	4.9	2.4
Under 20 years-----	681	98.1	76.5	15.7	5.9	1.9
20-24 years-----	1,522	97.2	76.3	15.7	5.2	2.8
25-34 years-----	1,813	97.8	79.3	14.1	4.4	2.2
35 years and over-----	416	97.4	74.5	18.3	4.6	2.6
<u>Dentist</u>						
All ages-----	1,360	97.1	81.2	11.5	4.4	2.9
Under 20 years-----	101	94.1	72.3	18.2	8.0	5.9
20-24 years-----	445	96.9	79.6	12.1	5.2	3.1
25-34 years-----	676	97.3	83.6	10.5	3.2	2.7
35 years and over-----	138	98.6	81.9	12.3	4.4	1.4

Table 8. Percent distribution of surveyed physicians, medical facilities, and dentists, by response status according to color of mother: 1963 National Natality Survey

Type of source and color of mother	Number in the survey	Respondents by number of mailing			Non-respondents	
		Total respondents	First mail	Second mail		Third mail
<u>Physician</u>		Percent distribution				
Total-----	4,474	93.1	66.5	17.6	9.0	6.9
White-----	4,012	93.5	67.8	17.0	8.7	6.5
Nonwhite-----	462	89.2	55.2	22.7	11.3	10.8
<u>Medical facility</u>						
Total-----	4,432	97.6	77.4	15.3	4.9	2.4
White-----	3,685	98.0	78.5	15.0	4.5	2.0
Nonwhite-----	747	95.7	72.0	17.0	6.7	4.3
<u>Dentist</u>						
Total-----	1,360	97.1	81.2	11.5	4.4	2.9
White-----	1,275	97.7	82.4	11.2	4.1	2.3
Nonwhite-----	85	87.1	63.5	15.3	8.3	12.9

APPENDIX I

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Age of mother.—Age of mother is recorded or derived from entries on the birth certificate.

Color.—Color is recorded or derived from entries on the birth certificate for color or race as white or nonwhite. The category "white" includes births to parents classified as white, Mexican, or Puerto Rican. Nonwhite births include births to parents classified as Negro, American Indian, Chinese, Japanese, Aleut, Eskimo, Hawaiian, or part-Hawaiian.

Live-birth order.—Live-birth order is derived from entries on the birth certificate and refers to the number of children born alive to the mother.

Legitimacy status.—For States reporting legitimacy data on the birth record, legitimacy status of a birth is recorded from entries on the birth certificate; for States not reporting legitimacy on the birth record, it is inferred from other evidence on the birth certificate. The following 16 States did not report legitimacy statistics on the birth record in 1963: Arizona, Arkansas,

California, Colorado, Connecticut, Georgia, Idaho, Maryland, Massachusetts, Montana, Nebraska, New Hampshire, New Mexico, New York, Oklahoma, and Vermont.

Family income.—Family income refers to the total of all income received during the preceding year by all persons related to each other by blood, marriage, or adoption and living in the household when the baby was born. Income from all sources is included, such as wages, salaries, unemployment compensation, and help from relatives.

Educational attainment.—The categories of educational attainment shown in this report refer to the highest grade of regular school attended.

Medical facility.—Medical facility refers to a hospital, clinic, or other institution where the mother may have received care during the year prior to the birth of her child.

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APPENDIX II
SOURCE FORMS

Standard Certificate of Live Birth

Form approved.
Budget Bureau No. 69-R374.2.

CERTIFICATE OF LIVE BIRTH

STATE OF _____ BIRTH No. _____

1. PLACE OF BIRTH a. COUNTY		2. USUAL RESIDENCE OF MOTHER (Where does mother live?) a. STATE		b. COUNTY	
b. CITY, TOWN, OR LOCATION		c. CITY, TOWN, OR LOCATION			
c. NAME OF HOSPITAL OR INSTITUTION (If not in hospital, give street address)		d. STREET ADDRESS			
d. IS PLACE OF BIRTH INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>		e. IS RESIDENCE INSIDE CITY LIMITS? YES <input type="checkbox"/> NO <input type="checkbox"/>		f. IS RESIDENCE ON A FARM? YES <input type="checkbox"/> NO <input type="checkbox"/>	
CHILD	3. NAME (Type or print) First Middle Last				
	4. SEX	5a. THIS BIRTH SINGLE <input type="checkbox"/> TWIN <input type="checkbox"/> TRIPLET <input type="checkbox"/>	5b. IF TWIN OR TRIPLET, WAS CHILD BORN 1ST <input type="checkbox"/> 2d <input type="checkbox"/> 3d <input type="checkbox"/>		6. DATE OF BIRTH Month Day Year
FATHER	7. NAME First Middle Last			8. COLOR OR RACE	
	9. AGE (At time of this birth) YEARS	10. BIRTHPLACE (State or foreign country)	11a. USUAL OCCUPATION		11b. KIND OF BUSINESS OR INDUSTRY
MOTHER	12. MAIDEN NAME First Middle Last			13. COLOR OR RACE	
	14. AGE (At time of this birth) YEARS	15. BIRTHPLACE (State or foreign country)	16. PREVIOUS DELIVERIES TO MOTHER (Do NOT include this birth) a. How many OTHER children were born alive but are now living? b. How many OTHER children were born alive but are now dead? c. How many fetal deaths (fetus born dead at ANY time after conception)?		
17. INFORMANT					
18. MOTHER'S MAILING ADDRESS					
I hereby certify that this child was born alive on the date stated above.	18a. SIGNATURE		18b. ATTENDANT AT BIRTH M. D. <input type="checkbox"/> D. O. <input type="checkbox"/> MIDWIFE <input type="checkbox"/> OTHER (Specify)		
	18c. ADDRESS		18d. DATE SIGNED		
19. DATE RECD. BY LOCAL REG.	20. REGISTRAR'S SIGNATURE		21. DATE ON WHICH GIVEN NAME ADDED BY _____ (Registrar)		
FOR MEDICAL AND HEALTH USE ONLY (This section MUST be filled out)					
22a. LENGTH OF PREGNANCY COMPLETED WEEKS	22b. WEIGHT AT BIRTH LB. OZ.	23. LEGITIMATE YES <input type="checkbox"/> NO <input type="checkbox"/>			
(SPACE FOR ADDITION OF MEDICAL AND HEALTH ITEMS BY INDIVIDUAL STATES)					

1956 REVISION OF STANDARD CERTIFICATE

CPH: 1955 O - 11111

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—PUBLIC HEALTH SERVICE
PHS-76 REV. 11-54

Survey Questionnaire for Mothers



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

WASHINGTON 25, D. C.

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The U. S. Public Health Service is doing a national study to find out how much and what kinds of medical and dental care women are receiving during the year before the birth of a child. Nothing is known about the extent of the care received by expectant mothers, even though such care is of the greatest importance for the future health of both mother and baby. A knowledge of what is actually happening throughout the Nation will go a long way in helping to improve the health of mothers and babies.

The information needed for this study will be based on the experience of the mothers of 4,000 babies out of the 4 million born during 1963. These mothers were selected as a random sample of all mothers who have a baby, and you are one of those so selected. We are therefore asking you to answer the questions on the following pages of this form, and to return it to us in the enclosed envelope which requires no postage.

Please notice that in the first part of the form the questions ask about every doctor, dentist, hospital, or clinic from which you received any care during the entire year before your baby was born. Your answers should not be just for the care connected with pregnancy, but for any and all medical and dental care or checkups during these 12 months.

All information about you and your baby will be kept completely confidential. Your answers will be used for health research only and for no other purpose. As you might expect, it is particularly important that we receive your answers and those of all the other 4,000 mothers, since each of you really represents 1,000 mothers.

Your cooperation in this study is deeply appreciated.

Sincerely yours,

O. K. Sagen, Ph. D., Chief
National Vital Statistics Division
National Center for Health Statistics

Name of Child	
Date of Birth	File Number

SURVEY OF MEDICAL AND DENTAL CARE

PART I. SOURCES OF MEDICAL AND DENTAL CARE DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH																						
<p>1. Please provide the information requested below about the physician, chiropractor or midwife who attended you at the recent birth of your child.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this doctor during the one-year period?</td></tr> </table>	Name	Address	City (town) and State	How many times were you seen by this doctor during the one-year period?	<p>3. Were you seen by a dentist during this one-year period?</p> <p style="text-align: center;"> <input type="checkbox"/> YES <input type="checkbox"/> NO (Go on to Question 4) </p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Complete a section below for each dentist.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">I City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this dentist during the one-year period?</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">II City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this dentist during the one-year period?</td></tr> </table>	Name	Address	I City (town) and State	How many times were you seen by this dentist during the one-year period?		Name	Address	II City (town) and State	How many times were you seen by this dentist during the one-year period?								
Name																						
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I City (town) and State																						
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Name																						
Address																						
II City (town) and State																						
How many times were you seen by this dentist during the one-year period?																						
<p>2. Were you seen by any other physician or chiropractor during the one-year period before the recent birth of your child?</p> <p style="text-align: center;"> <input type="checkbox"/> YES <input type="checkbox"/> NO (Go on to Question 3) </p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Complete a section below for each doctor or chiropractor.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">I City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this doctor during the one-year period?</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">II City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this doctor during the one-year period?</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">III City (town) and State</td></tr> <tr><td style="padding: 2px;">How many times were you seen by this doctor during the one-year period?</td></tr> </table>	Name	Address	I City (town) and State	How many times were you seen by this doctor during the one-year period?		Name	Address	II City (town) and State	How many times were you seen by this doctor during the one-year period?		Name	Address	III City (town) and State	How many times were you seen by this doctor during the one-year period?	<p>4. During this one-year period, were you treated or examined in a clinic or hospital not reported above? (Include health checkups at work, visits to mobile health units, etc.)</p> <p style="text-align: center;"> <input type="checkbox"/> YES <input type="checkbox"/> NO (Go on to next page) </p> <p style="text-align: center;">↓</p> <p style="text-align: center;">Complete a section below for each place where you were treated or examined.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">I City (town) and State</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">II City (town) and State</td></tr> </table>	Name	Address	I City (town) and State		Name	Address	II City (town) and State
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Survey Questionnaire for Physicians



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

WASHINGTON 25, D. C.

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Your assistance is needed in a small but important sample survey conducted by the U. S. Public Health Service with the approval of your State Health Department. The primary purpose of this survey is to estimate how often mothers are exposed to ionizing radiation in the year preceding a birth. The survey will also provide useful data on the extent to which expectant mothers avail themselves of medical care. The mothers on whom data are being collected were identified from a random sample of about 4,000 births out of the 4 million occurring in the United States during 1963.

According to our records, the mother named below was seen or treated by you at some time during the year prior to the recent birth of her child. We ask your cooperation in answering the questions on the following pages, which relate to the medical care she received during the one-year period preceding childbirth. The exact dates covered by this period are shown below. Information is needed on each exposure to ionizing radiation this woman experienced during this period, irrespective of its relationship to pregnancy.

Since the survey is based on only a small sample of mothers, it is particularly important that we obtain full information on each. A postage-free envelope is enclosed for your convenience in replying. You may be assured that your report will be held in strictest confidence and used only for statistical research.

Your cooperation in this study is deeply appreciated.

Sincerely yours,

O. K. Sagen, Ph. D., Chief
National Vital Statistics Division
National Center for Health Statistics

P

Name of Mother	Maiden Name	
Address	Place of Birth of Child	
City-State	Date of Birth	File Number
PERIOD COVERED BY THIS SURVEY: FROM _____ TO _____		

SURVEY OF RADIOLOGICAL EXAMINATIONS

PART I. RADIOLOGICAL EXAMINATIONS OR TREATMENTS DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

To your knowledge, was the mother examined or treated by X-ray or fluoroscope at any time during the one-year period before childbirth as specified at the bottom of the preceding page?

NO (Skip to Part II on last page)

YES → How many radiological examinations or treatments did she receive during this one-year period?

_____ (number) (Complete section(s) below, then go on to last page)

- ▶ Complete a separate section below for EACH radiological examination or treatment performed during the ONE-YEAR PERIOD, whether or not related to pregnancy.
- ▶ If the SAME TYPE of procedure was performed MORE THAN ONCE, please report EACH SEPARATELY.
- ▶ If more than one procedure was performed on the SAME DATE, please report EACH SEPARATELY.
- ▶ In reporting NUMBER OF EXPOSURES, please include those which may have been technically unsatisfactory.
- ▶ If necessary, continue on a separate sheet.

SECTION 1. FIRST RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY <input type="checkbox"/> X-RAY THERAPY	
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> OTHER (specify) _____ <input type="checkbox"/> ROUTINE CHEST	
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT MY OWN OFFICE OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

SECTION 2. SECOND RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT MY OWN OFFICE OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

SECTION 3. THIRD RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT MY OWN OFFICE OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

SECTION 4. FOURTH RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT MY OWN OFFICE OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

PART II. MEDICAL CARE RECEIVED BY MOTHER DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

1. How many times did you see this patient during the one-year period? (If exact number not known, please give best estimate)

Number of times

--

2. On what date did you see her for the first time during the one-year period?

<i>Month</i>	<i>Day</i>	<i>Year</i>
		19__

3. On what date did you see her for the last time during the one-year period?

<i>Month</i>	<i>Day</i>	<i>Year</i>
		19__

4. If this patient was referred to you, please give names and addresses of referring physicians, clinics or hospitals.

<i>Name</i>
<i>Address</i>
<i>City-State</i>

<i>Name</i>
<i>Address</i>
<i>City-State</i>

5. If you referred this patient to another physician, or to a hospital or clinic, please give names and addresses of physicians or institutions to which referred.

<i>Name</i>
<i>Address</i>
<i>City-State</i>

<i>Name</i>
<i>Address</i>
<i>City-State</i>

6. If this patient was seen or treated during the one-year period by any other physician, hospital or clinic not reported above or on the previous page, please give names and addresses.

<i>Name</i>
<i>Address</i>
<i>City-State</i>

<i>Name</i>
<i>Address</i>
<i>City-State</i>

(Name of person completing this form)

COMMENTS

SURVEY OF RADIOLOGICAL EXAMINATIONS

PART I. RADIOLOGICAL EXAMINATIONS OR TREATMENTS DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

To your knowledge, was the mother examined or treated by X-ray or fluoroscope at any time during the one-year period before childbirth as specified at the bottom of the preceding page?

- NO (Skip to Part II on last page)
- YES → How many radiological examinations or treatments did she receive during this one-year period?

_____ (number) (Complete section(s) below, then go on to last page)

- ▶ Complete a separate section below for EACH radiological examination or treatment performed during the ONE-YEAR PERIOD, whether or not related to pregnancy.
- ▶ If the SAME TYPE of procedure was performed MORE THAN ONCE, please report EACH SEPARATELY.
- ▶ If more than one procedure was performed on the SAME DATE, please report EACH SEPARATELY.
- ▶ In reporting NUMBER OF EXPOSURES, please include those which may have been technically unsatisfactory.
- ▶ If necessary, continue on a separate sheet.

SECTION 1. FIRST RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed? _____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> OTHER (specify) _____ <input type="checkbox"/> ROUTINE CHEST
	4. Number of exposures? _____	_____ (include those technically unsatisfactory) (number)
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT THIS INSTITUTION OR Name of physician, hospital or clinic _____ Address _____ City-State _____

SECTION 2. SECOND RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT THIS INSTITUTION OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

SECTION 3. THIRD RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT THIS INSTITUTION OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

SECTION 4. FOURTH RADIOLOGICAL EXAMINATION OR TREATMENT DURING ONE-YEAR PERIOD

Date of examination or treatment? _____ (month) _____ (day) _____ (year)	1. Type of radiological equipment used? (check one)	<input type="checkbox"/> DIAGNOSTIC RADIOGRAPHY <input type="checkbox"/> DIAGNOSTIC PHOTOFLUOROGRAPHY	<input type="checkbox"/> DIAGNOSTIC FLUOROSCOPY <input type="checkbox"/> X-RAY THERAPY
	2. Primary area of body exposed?	_____	
	3. Type of service rendered to mother? (check one)	<input type="checkbox"/> PELVIMETRY <input type="checkbox"/> PLACENTOGRAPHY <input type="checkbox"/> ROUTINE CHEST	<input type="checkbox"/> INTRAVENOUS PYELOGRAM <input type="checkbox"/> OTHER (specify) _____
	4. Number of exposures?	_____ (include those technically unsatisfactory) (number)	
	5. Place where examination or treatment was performed?	<input type="checkbox"/> DONE AT THIS INSTITUTION OR Name of physician, hospital or clinic _____ Address _____ City-State _____	

PART II. MEDICAL CARE RECEIVED BY MOTHER DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

1. How many times was the patient seen at your institution during the one-year period?
(If exact number not known, please give best estimate)

Number of times

--

2. On what date was she seen for the first time during the one-year period?

Month	Day	Year
		19__

3. On what date was she seen for the last time during the one-year period?

Month	Day	Year
		19__

4. If this patient was referred to your institution, please give names and addresses of referring hospitals, clinics or private physicians.

Name
Address
City-State

Name
Address
City-State

5. If your institution referred this patient to another hospital or clinic or to a private physician, please give names and addresses of physicians or institutions to which referred.

Name
Address
City-State

Name
Address
City-State

6. If this patient was seen or treated during the one-year period by any other hospital, clinic or physician not reported above or on the previous page, please give names and addresses.

Name
Address
City-State

Name
Address
City-State

(Name of person completing this form)

COMMENTS

Survey Questionnaire for Dentists



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

WASHINGTON 25, D. C.

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Your assistance is needed in a small but important sample survey conducted by the U. S. Public Health Service with the approval of your State Health Department. The primary purpose of this survey is to estimate how often mothers are exposed to ionizing radiation in the year preceding a birth. The survey will also provide useful data on the extent to which expectant mothers avail themselves of dental care. The mothers on whom data are being collected were identified from a random sample of about 4,000 births out of the 4 million occurring in the United States during 1963.

According to our records, the mother named below was seen or treated by you at some time during the year prior to the recent birth of her child. We ask your cooperation in answering the questions on the back of this letter, which relate to the dental care she received during the one-year period preceding childbirth. The exact dates covered by this period are shown below.

Since the survey is based on only a small sample of mothers, it is particularly important that we obtain full information on each. A postage-free envelope is enclosed for your convenience in replying. You may be assured that your report will be held in strictest confidence and used only for statistical research.

Your cooperation in this study is deeply appreciated.

Sincerely yours,

O. K. Sagen, Ph. D., Chief
National Vital Statistics Division
National Center for Health Statistics

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Name of Mother	Maiden Name	
Address	Place of Birth of Child	
City-State	Date of Birth	File Number
PERIOD COVERED BY THIS SURVEY: FROM _____ TO _____		

SURVEY OF DENTAL X-RAY EXAMINATIONS

PART I. DENTAL X-RAY EXAMINATIONS DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

To your knowledge, did the patient receive any dental X-ray examinations during the one-year period before childbirth as specified at the bottom of the preceding page?

NO (Skip to Part II below)

YES → How many dental X-ray examinations did she receive during this one-year period?

_____ (number)

- ▶ Complete a separate section below for EACH dental X-ray examination that the patient received during the ONE-YEAR PERIOD before the birth of her child.
- ▶ In reporting NUMBER OF EXPOSURES, include those which may have been technically unsatisfactory.
- ▶ If necessary, continue on a separate sheet.

Date of Examination	Type(s) of X-ray Exposures (check all that apply)	Number of Exposures
_____ (month-day-year)	<input type="checkbox"/> FULL MOUTH <input type="checkbox"/> BITE WING <input type="checkbox"/> OTHER → (specify type) _____	_____ (number)
_____ (month-day-year)	<input type="checkbox"/> FULL MOUTH <input type="checkbox"/> BITE WING <input type="checkbox"/> OTHER → (specify type) _____	_____ (number)
_____ (month-day-year)	<input type="checkbox"/> FULL MOUTH <input type="checkbox"/> BITE WING <input type="checkbox"/> OTHER → (specify type) _____	_____ (number)

PART II. DENTAL CARE RECEIVED BY MOTHER DURING ONE-YEAR PERIOD BEFORE CHILDBIRTH

<p>1. About how many times did you see the patient during the one-year period?</p> <div style="border: 1px solid black; width: 100px; height: 20px; margin-left: 100px; text-align: center;">Number of times</div> <p>2. When did you see her for the first time during the one-year period?</p> <table border="1" style="margin-left: 100px; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;">Month</td> <td style="width: 30%; text-align: center;">Day</td> <td style="width: 40%; text-align: center;">Year</td> </tr> <tr> <td> </td> <td> </td> <td style="text-align: right;">19__</td> </tr> </table> <p>3. When did you see her for the last time during the one-year period?</p> <table border="1" style="margin-left: 100px; border-collapse: collapse;"> <tr> <td style="width: 30%; text-align: center;">Month</td> <td style="width: 30%; text-align: center;">Day</td> <td style="width: 40%; text-align: center;">Year</td> </tr> <tr> <td> </td> <td> </td> <td style="text-align: right;">19__</td> </tr> </table>	Month	Day	Year			19__	Month	Day	Year			19__	<p>4. If the patient was seen by another dentist or dental clinic during the one-year period, please give names and addresses below.</p> <table border="1" style="margin-left: 100px; border-collapse: collapse; width: 100%;"> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">City-State</td></tr> <tr><td style="padding: 2px;"> </td></tr> <tr><td style="padding: 2px;">Name</td></tr> <tr><td style="padding: 2px;">Address</td></tr> <tr><td style="padding: 2px;">City-State</td></tr> </table>	Name	Address	City-State		Name	Address	City-State
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(Name of person completing this form)

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