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Comparability of Reporting Between the Birth Certificate and the National Natality Survey

Describes comparability of reporting of selected items common to the birth certificate and National Natality Survey questionnaires. Items include age and education of parents, number of previous children, number of fetal deaths, plurality, birth weight, length of pregnancy, and receipt of prenatal care.

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COMPARABILITY OF REPORTING BETWEEN THE BIRTH CERTIFICATE AND THE NATIONAL NATALITY SURVEY

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INTRODUCTION

For nearly two decades more than 99 percent of all live births in the United States have been registered[1]; however, little information has been available on the quality of birth certificate reporting. One method of examining quality of reporting is by comparison with vital record followback survey data. This report was designed to measure the extent of agreement between the responses provided on the birth certificate and responses provided on a mailed questionnaire from the last National Natality Survey. Although the last National Natality Survey was conducted in 1972, there is little reason to believe that comparability of reporting changes enough from year to year at the national level for the findings of this report to be substantially affected.

Some comparability studies exist,[2-4] but most are limited in scope and often are confined to medical conditions of the mother and/or the child. One exception is a study[5] conducted in New York State in 1972 in which specific information on the birth certificates was compared with the same information on the hospital records. This study contains many of the same items that are compared in this report. Two important similar studies were conducted by the U.S. Bureau of the Census to assess the accuracy of the 1970 census reporting. One study matched responses to items on the census questionnaire with responses to the 1970 Current Population Survey.[6] The second study used reinterviews to evaluate census responses.[7]

The items considered in this study are common to both the birth certificate and the survey questionnaires and include the following: age and education of parents, plurality, birth weight, length of pregnancy, month of pregnancy that prenatal care began, number of prenatal visits, number of children born alive and still living, number of children born alive and now dead, live-birth order, and number of fetal deaths. Although it cannot be determined from this study which information is correct when the two documents differ on a particular item, in some instances it is possible to hypothesize which information is more accurate.

SOURCES AND LIMITATIONS OF DATA

The National Natality Survey (NNS) consisted of a 1-in-500 sample of births drawn from the microfilm file of birth certificates received by the National Center for Health Statistics (NCHS) for births occurring in the survey year. The original sample consisted of 6,505 births, 816 of which were eliminated because they were either reported as or inferred to be out-of-wedlock births. (See appendix I for method of inference.) The remaining 5,689 births were included in the survey. Each mother in the survey received a mother's (M) questionnaire that requested health and demographic information.

The name and address of the attending physician and the hospital where the delivery occurred are listed on the birth certificate, thereby making it possible to obtain additional information from these sources. This information includes a pregnancy history, information about prenatal and postpartum care, and information concerning the delivery episode. If the address of the attending physician was the same as that of the hospital where the delivery occurred, then one questionnaire, the long hospital (HL) questionnaire, was sent to the hospital. If the physician's address was different from that of the hospital where delivery occurred, then a physician (P) questionnaire was sent to the physician and a short hospital (HS) questionnaire was sent to the hospital. The HS and P questionnaires together contain the same information as the HL questionnaire. Information on the sample design and collection of data as well as samples of the questionnaires and the U.S. Standard Certificate of Live Birth are included in the appendixes.

Limitations of the data centered, for the most part, on various forms of nonreporting. The basic form of nonreporting was failure to respond to the questionnaire (unit nonresponse). Of survey mothers, 71.5 percent responded to the questionnaire; among physicians who received the P questionnaire, 72.2 percent responded; and among hospitals that received either the HL or HS questionnaire, 85.4 percent responded (table III). Because the questionnaires differ in the type of data requested, some but not necessarily all items may be available for a particular case.

As shown in table IV, mothers of white births had a much higher response rate (73.6 percent) than mothers of all other births (56.0 percent). Response rates for mothers varied greatly by age of mother, color of child, and live-birth order. They ranged from a high of 82.7 percent among 25-29-year-old mothers of white first births to a low of 39.1 percent among 20-24-year-old mothers of third or higher order births other than white.

Questionnaires that are returned may have one or more unanswered questions or an impossible or illegible response, all of which are classified as item nonresponse. Although missing data were imputed for other reports from the NNS, no imputation was done for this report, because the purpose of this study was to evaluate the items as they were reported. Appendix I contains a discussion of procedures that were used to improve response rates.

Although a birth certificate was available for each case, not all States use the U.S. Standard Certificate of Live Birth and some certificates do not contain all items on the standard birth certificate. Thus certain data may be available on the survey questionnaires, but not from all the birth certificates. Table II shows the reporting areas for these selected items. One item, the number of fetal deaths, is not reported consistently from State to State—some States include all fetal deaths and others include only those occurring after a specified period of gestation.

As with the questionnaires, an item contained on the birth certificate may have been left either unanswered or may have had an impossible or illegible response. Unlike the questionnaires, no followback could be done by NCHS to complete or correct the birth certificate item. Table V contains item nonresponse rates for the birth certificate and questionnaires.

Responses to selected items on the questionnaires were matched with the corresponding data from the birth certificate. The extent of agreement for each item was determined only for those births in the sample for which there was a response to the item on both the certificate and the questionnaire. For each item, both the text tables and the appendix tables should be consulted for an indication of the extent of exclusion of cases due to nonreporting and nonresponse. The agreement rate was obtained by computing the percent of cases for which an identical response was provided on both the questionnaire and the birth certificate by using the birth certificate and its response as the base.

Because not all births were utilized in the comparison, the results reported here may not be completely representative of all births to married women. It is not possible to determine whether accuracy of reporting among births omitted from this study either because of occurrence in nonreporting States or because of nonresponse to the survey differs from accuracy among those included in the survey. Thus comparability of reporting might differ from that shown in this report, but the direction and magnitude of these differences are unknown.

SELECTED FINDINGS

A great deal of variation was found in comparability of reporting for items common to the birth certificate and the National Natality Survey questionnaires. Comparability ranged from excellent to poor. Items that had an excellent level of agreement (90 percent or better) were age of mother (mother's questionnaire), plurality, number of children born alive and still living, number of children born alive and now dead, and live-birth order. Those items with good agreement (80 to 89 percent) included age of mother (long/short hospital questionnaire), age of father, birth weight, length of pregnancy, and number of fetal deaths. Comparability of reporting of parents' education was fair (70 to 79 percent), and reporting of prenatal care was poor (less than 50 percent).

A discrepancy of ±1 may be significant for certain items and not for others. For example, a discrepancy of one unit would not make a notable difference in the reporting of either prenatal visits or birth weight, but would make a significant difference in the reporting of either live-birth order or plurality. Although agreement of prenatal visits was poor, the discrepancy was often only one or two visits. If cases with a difference of one or two visits were included with those that have an identical number of visits, then agreement increased markedly, to 56 and 66 percent on the mother's and hospital/physician questionnaires, respectively.

The impact of discrepancies is reduced further in tabulations in which the data are presented in grouped form. Many items are most useful when tabulated in this manner. Age of mother and age of father are usually tabulated in 5-year age groups. Although reporting of identical age of mother was found for 90.7 percent of the comparison cases, age of mother was reported within the same 5-year age group for 96.9 percent of the cases. For age of father, agreement increased from 84.5 percent to 94.6 percent when 5-year-age-group tabulations were used. Data are shown in grouped form for other variables as well. Agreement of education of mother increased from 77.2 to 85.5 percent for grouped data. For birth weight, agreement within 500-gram weight groups was found for 96.0 percent of the comparison cases.

The results of this study compare favorably with those obtained from similar studies conducted by the Bureau of the Census and the New York State Department of Health. For example, agreement of age of mother between the birth certificate and the hospital record was 89.7 percent in the New York State study, which was very close to the 87.8 percent found in this study. In addition, agreement of reporting of age of mother within 5-year age groups was better in this study than in a study of comparability of reporting between the 1970 census and the 1970 Current Population Survey (CPS)—96.9 percent in this study compared with 93.3 percent in the census study.

Other items included in this and other studies were age of father, live-birth order, number of fetal deaths, education of parents, birth weight, gestation, and month of pregnancy that prenatal care began. Generally, comparability of reporting for these items was very similar in each of these studies.

In summary, this study shows that (1) the comparability of reporting of most items is good, (2) the impact of discrepancies is minimized further when data are presented in tabulations of grouped data, and (3) these findings are similar to those of other studies.

AGE OF MOTHER

Age of mother was available from the mother's questionnaire, the long/short hospital questionnaire, and the birth certificate. The birth certificate and the HL/HS questionnaire asked for the age of the mother at the time of the birth, that is, the age at her last birthday preceding the birth. The M questionnaire requested the mother's date of birth and from this date her age at time of delivery was determined. It is reasonable to expect that the mother's age that is based on a date of birth would be more accurate because the birth date is constant and therefore should be easier to recall. This also eliminates any tendency to report age as of the nearest birthday.

When data were available from both the birth certificate and the M questionnaire, an identical age was reported for 90.7 percent of the mothers (table 1). In cases where disagreement was found, it was most likely to be

Table A. Percent of cases reporting identical age of mother and percent reporting age of mother within the same age group on the birth certificate and National Natality Survey questionnaires, by age of mother reported on the birth certificate, 1972

Agreement of age of mother	Total	Age of mother reported on birth certificate				
		Under 20 years	20-24 years	25-29 years	30-34 years	35 years and over
Mother's questionnaire						
Certificate same as questionnaire	90.7	91.6	90.8	91.7	89.4	86.5
Within same age group on certificate and questionnaire	96.9	96.1	97.3	97.6	96.6	94.0
Long/short hospital questionnaire						
Certificate same as questionnaire	87.8	93.6	88.2	85.6	87.0	83.2
Within same age group on certificate and questionnaire	96.2	98.1	96.8	95.7	95.1	93.1

because a lower age was determined from the birth certificate than from the M questionnaire: 6.6 percent reported a younger age at delivery on the birth certificate compared with 2.7 percent reporting a younger age on the M questionnaire. In most cases the discrepancy was only 1 year, with 2.5 percent having a discrepancy of 2 years or more.

The amount of agreement of the age item varied only slightly with the age of the mother that was reported on the birth certificate. Agreement was lowest (86.5 percent) among mothers aged 35 years and over; among younger mothers it was approximately 90 percent.

As shown in table 1, agreement between the birth certificate and the HL/HS questionnaire was only slightly lower. The comparison, limited to the 84.0 percent with response on both records, showed that 87.8 percent reported an identical age on both records. Unlike the comparison of the birth certificate and the M questionnaire, the discrepant cases usually reported a higher age on the birth certificate than on the HL/HS questionnaire (7.9 percent with a higher age on the birth certificate compared with 4.3 percent with a higher age on the questionnaire). Only 2.9 percent showed a discrepancy of 2 years or more. The proportion of cases with exact agreement ranged from 93.6 percent among mothers under 20 years old to 83.2 percent among mothers aged 35 years and older. The New York State study[5] found that 89.7 percent reported an identical age on both the birth certificate and the hospital record—comparable to the 87.8 percent in this study.

Since natality data are generally tabulated by 5-year age groups for analytical purposes, an error of 1 year on the birth certificate would result in a difference in the tabulations only when the correct age fell within another age interval. The proportion of mothers with reported age within the same 5-year age group on both the birth certificate and the mother's questionnaire was 96.9 percent and varied by age as shown in table A. Agreement between the birth certificate and the long/short hospital questionnaire by 5-year age groups was similar, with age reported within the same 5-year age category for 96.2 percent of the cases.

These results compare favorably with those obtained from a study[6] conducted by the Bureau of the Census which matched mothers' ages that were reported in the 1970 census with those reported in the 1970 CPS. This study found that 93.3 percent of the respondents reported their age to be within the same 5-year age group in both the 1970 census and the 1970 CPS.

AGE OF FATHER

Survey data on age of the father are available only from the mother's questionnaire. The questionnaire asked for father's date of birth, but the birth certificate asked for father's age at time of delivery. Agreement between these

Table B. Percent of cases reporting identical age of father and percent reporting age of father within the same age group on the birth certificate and National Natality Survey mother's questionnaire, by age of father reported on the birth certificate, 1972

Agreement of age of father	Total	Age of father reported on birth certificate					
		Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40 years and over
Certificate same as questionnaire	84.5	81.8	86.7	86.9	82.8	78.8	75.9
Within same age group on certificate and questionnaire	94.6	94.4	95.3	95.8	93.6	92.3	90.7

documents was not as good for the father's age as for the mother's age. Of the comparison cases, 84.5 percent showed exact agreement for this item (table 2). Only 3.7 percent had a discrepancy of 2 years or more. A larger proportion (9.1 percent) reported a younger age on the birth certificate than on the M questionnaire (6.4 percent). Similar results, with 88.6 percent reporting identical age, were found for the New York State study.

The proportion of cases showing exact agreement varied with the age of the father as determined from the birth certificate—increasing from 81.8 percent for fathers under 20 years of age to 86.9 percent for fathers 25-29 years and then decreasing with age to 75.9 percent for fathers 40 years and over. Among fathers under 35 years, the discrepancy was most likely the result of a lower age given on the birth certificate than the one determined from the questionnaire; among fathers 35 years and over the discrepancy was more likely to be in the opposite direction.

As noted previously, natality data most often are tabulated by 5-year age groups and small discrepancies generally will not distort these tabulations. Father's age was reported to be within the same 5-year age group for 94.6 percent of the sample cases for which this information was provided on both documents. Agreement by age of father is shown in table B.

NUMBER OF CHILDREN BORN ALIVE AND STILL LIVING

The number of previous children "born alive and still living" (BASL) was available from the birth certificate, the mother's questionnaire, and the long/short hospital questionnaire. The birth certificate simply requested the number of children still living from previous deliveries. The HL/HS questionnaire asked for the number of children now living, and a check box was provided for those cases requiring the response "none." The mother's questionnaire, which probably obtained the most accurate questionnaire response, asked for the total number of children (including the present birth) born to the mother and the name, sex, and dates of birth and death of any deceased child to determine the number still living.

This item and the number of children born alive, but now dead, are used to determine live-birth order from the certificate. Although the correct response in cases where there had been no previous children would be "0" or the word "none," an X, dash, or blank sometimes was used. These may have been used to indicate that the answer was unknown; however, in cases where a numeric response was given for one item and an X, dash, or blank given for the other, the non-numeric entry was treated as "00." In addition, if an X or dash response was given to both items, then the response was considered "00" for both. The format for the mother's and the long/short hospital questionnaires, which differed from that of the birth certificates, made such an edit unnecessary for the survey data.

No discrepancy was found for 97.0 percent of the cases with responses on the certificate and the M questionnaire (see table 3), and less than 1 percent disagreed by more than one child. Agreement was greatest among those reporting no children BASL on the birth certificate (98.2 percent) and least among those reporting five children or more BASL (91.7 percent or less). Among those reporting two children or more BASL on the birth certificate, deviation was

more likely to be that a higher number (most often a deviation of one) was reported on the birth certificate than on the M questionnaire. Mothers who did not carefully read the instructions on the M questionnaire may have excluded the present birth and included only previous births. This could account for the discrepancy.

Comparability was slightly lower between the birth certificate and the HL/HS questionnaire (92.1 percent) than it was between the certificate and the M questionnaire (97.0 percent). Only 1 percent disagreed by more than one child (table 3). Agreement ranged from 78.3 percent for those reporting eight children or more BASL on the birth certificate to 96.8 percent for those reporting no children BASL. Among those reporting two children or less BASL on the birth certificate, disagreement was most likely the result of fewer children being reported on the birth certificate; among those reporting three children or more, most often fewer children were reported on the questionnaire.

NUMBER OF CHILDREN BORN ALIVE AND NOW DEAD

The mother's questionnaire, the long/short hospital questionnaire, and the birth certificate all contained an item for determining the number of previous children "born alive and now dead" (BAND).

As evidenced in table 4, comparability was very high with 98.3 percent of the certificates and the M questionnaires showing exact agreement. This was largely a result of the high proportion of agreement among those reporting "none" on the birth certificate (99.1 percent). This category accounted for 96.5 percent of all births. However, agreement was not as good among those reporting one or more previous children BAND (77.5 percent). For this category there was a definite bias toward a greater number reported on the birth certificate than on the M questionnaire (21.7 percent). This is surprising because the M questionnaire probed further than the birth certificate, asking name, sex, and dates of birth and death of any children BAND, thereby encouraging the reporting of some cases on the questionnaire that the birth certificate might miss.

Agreement between the HL/HS questionnaire and the birth certificate was similar to that between the M questionnaire and the birth certificate (table 4). Identical reporting was found for 97.5 percent of the cases, mainly a result of 99.0-percent agreement among those reporting no children BAND on the birth certificate—the category in which the vast majority of cases fell. There was less consistency with those reporting one child or more BAND on the birth certificate when compared with the HL/HS questionnaire than when compared with the M questionnaire—only 57.3 percent were in exact agreement. As with the M questionnaire, there was a bias toward a greater number reported on the birth certificate (42.0 percent).

LIVE-BIRTH ORDER

Live-birth order is defined as the total number of children born alive to the mother, including those still living, those now dead, and the current birth. Reporting of live-birth order showed a high degree of comparability between the mother's questionnaire and the birth certificate (96.1 percent) as shown in table 5. Fewer than 1 percent were discrepant by more than one birth. Comparability was greatest among births reported as first and second order on the birth certificate (98 percent). Among higher order births agreement ranged from 73.3 to 94.8 percent. When a discrepancy was found, the birth certificate generally reported a higher birth order than the questionnaire, as expected on the basis of the direction of difference for the two components (BASL and BAND).

Comparability for this item was slightly lower between the long/short hospital questionnaire and the birth certificate (91.1 percent) than it was between the M questionnaire and the birth certificate. Even so, only 1.3 percent showed a discrepancy of two births or more. Agreement was less than 90 percent for all birth orders except the first. Among discrepant cases of fourth and higher orders, the birth certificate was much more likely to report a higher birth order than the questionnaire.

The New York State study found similar results: 94.8 percent of the sample cases showed no discrepancy in reporting live-birth order. A study[7] done by the Bureau of the Census

comparing census responses with responses to a reinterview survey found comparability to be lower with 89.8 percent reporting the same number of live-born children.

NUMBER OF FETAL DEATHS

Each of the survey questionnaires as well as the birth certificate contained a question asking for the number of previous fetal deaths. Unfortunately, the wording of the item differed among the data sources and even though all birth certificates required reporting of previous fetal deaths, the reporting requirements were not consistent for all areas. Although 42 States required reporting of previous fetal deaths at any gestational age, 1 State required reporting only after 16 weeks, and an additional 7 States and the District of Columbia required reporting only after 20 weeks. The States with limited reporting accounted for 28 percent of all births in 1972. Thus some discrepancies would be expected because of these differences.

A comparison can be made of the response on the birth certificate item concerning the number of fetal deaths with the responses given both on the mother's and the long/short hospital questionnaires. The M questionnaire used two questions to obtain the number of fetal deaths; the first asked for the number of stillbirths, and the second asked for the number of miscarriages. Although a stillbirth was defined as a baby born dead, there was no definition of miscarriage, but only an indication that any previously included stillbirths should be excluded. Although the two questions do not clearly indicate which gestational ages apply to which category, the sum of stillbirths and miscarriages should be a good indication of the total number of fetal deaths.

Agreement was found for 89.2 percent of the comparison cases (table 6). The discrepant cases were more likely to have fewer fetal deaths reported on the birth certificate than on the questionnaire (9.7 percent). About 90 percent of those reporting no fetal deaths on the birth certificate (the category containing the great majority of cases) also reported none on the questionnaire.

Birth certificates that reported one previous fetal death were in agreement with the survey questionnaire 80.1 percent of the time. Among those reporting two or three or more fetal deaths on the birth certificate, the agreement rates were 86.8 and 75.0 percent, respectively. Within categories, there was no consistent bias in either direction in those cases where a discrepancy was found.

The HL/HS questionnaire was much more specific in its request for the number of fetal deaths by asking for all pregnancies that did not end in a live birth, including all miscarriages, abortions, stillbirths, and so forth.

As shown in table 6, exact agreement among matched cases was 88.7 percent. Discrepancies were more likely the result of fewer fetal deaths reported on the birth certificate than on the questionnaire. This is due solely to the large number of cases reporting no fetal deaths on the certificate for which this is the only possible discrepancy that could occur.

In cases where the birth certificate reported no fetal deaths, agreement was 90.3 percent, which is almost identical to that between the M questionnaire and the birth certificate for that category. Among cases reporting two fetal deaths or more on the birth certificate, there was a greater amount of discrepancy between the birth certificate and the HL/HS questionnaire than between the birth certificate and the M questionnaire. Of those reporting one, two, or three or more fetal deaths on the birth certificate, 77.2, 73.4, and 55.2 percent, respectively, reported consistently on the two forms. Each of these categories showed a bias toward a greater number reported on the birth certificate than on the HL/HS questionnaire. The direction of this bias might be unexpected because in some reporting areas, fetal deaths of early gestational age do not have to be reported on the birth certificate.

Agreement for this item in the New York study was 81.0 percent, somewhat lower than the 88.7 percent agreement between the HL/HS questionnaire and the birth certificate.

EDUCATION OF PARENTS

The mother's questionnaire was the only source of survey data on educational attainment of parents. The questionnaire requested the highest grade of regular school completed and

that any specialized training such as beauty-barber college and hospital schools be listed separately. The standard birth certificate requested the highest grade of regular school completed with no provision for specialized training. Inclusion of specialized training with the years of regular school reported on the birth certificate could result in an upward bias in the data. In 1972, 39 States followed the standard birth certificate and required the reporting of educational attainment of parents. Generally, the item was worded on the State birth certificates the same as on the standard birth certificate except for the Illinois certificate that had a provision similar to the M questionnaire for reporting specialized training.

As shown in table 7, among mothers for whom this information was provided on both sources, 77.2 percent reported an identical amount of education on both forms. An additional 15.6 percent showed a discrepancy of only 1 year. A wide variation in agreement rates was found when the data were tabulated by years of education recorded on the birth certificate. The proportion with identical education reported on the two forms varied from 55.4 percent among those with 13-15 years of school to 90.0 percent among those with 12 years. Because completion of 12 years is usually marked by receipt of a diploma, this category is probably one of the easiest to identify and recall; therefore, it is not surprising that a high rate of agreement was found.

The large proportion of disagreement found for the category 13-15 years might be the result of an upward bias on the birth certificate caused by adding specialized training to the regular schooling by those with 12 years of education. For example, a mother who had finished high school and later attended business school may have included the latter with her regular schooling on the birth certificate, in which case she would be erroneously included in the category 13-15 years. However, because the mother's questionnaire contained a separate category for reporting specialized training, only regular schooling would be included, and her education would be correctly reported as 12 years. The type of discrepancies found support this contention: 35.0 percent of those included in the category 13-15 years reported a greater number of years of schooling on the birth certificate than on the M questionnaire compared with only 9.6 percent reporting a greater number on the M questionnaire. Because natality tabulations for the most part show education data in grouped form, a difference of only 1 year (and sometimes more) often would not result in misclassification in the tabulation. In tabulations of grouped data, 12 years of schooling was the only category not combined with the other years—this was the category with the least discrepancy (10.0 percent). Although 77.2 percent of the records reported identical education on both forms, 85.5 percent would be in agreement in tabulations of grouped data (table C).

As shown in table 8 a bias existed in the reporting of education of the father, with the greatest nonresponse to the questionnaire (43.1 percent) among those reporting the least education on the birth certificate and the least nonresponse (14.0 percent) among those reporting the most education on the certificate.

Comparability was slightly lower for education of father than of mother; 72.3 percent reported an identical number of years of schooling for fathers on both forms compared with 77.2 percent for mothers. An additional 17.7 percent was discrepant by 1 year for education of father. The discrepancy was equally divided between a higher and lower number reported on the birth certificate when compared with the questionnaire.

After classifying the data by the amount of education of father reported on the birth certificate, it was found that comparability was greatest among high school and college graduates (85.8 and 74.7 percent, respectively). Agreement for each of the other three categories was low, around 55 percent. For the category 13-15 years, there was a slight bias toward reporting more education on the birth certificate than on the questionnaire, but this bias was smaller than that found among mothers in this education category. Discrepancies in other categories were not biased in a particular direction except for the category 0-8 years where 31.7 percent of the sample mothers reported the fathers as having less education on the birth certificate than on the questionnaire when compared with the 13.5 percent who reported more. In this category a substantial proportion (29.6 percent)

Table C. Percent of cases reporting identical education of mother and percent reporting education of mother within the same education group on the birth certificate and National Natality Survey mother's questionnaire, by education of mother reported on the birth certificate, 1972

Agreement of education of mother	Total	Education of mother reported on birth certificate				
		0-8 years	9-11 years	12 years	13-15 years	16 years or more
Certificate same as questionnaire	77.2	65.7	66.1	90.0	55.4	74.7
Within same education group on certificate and questionnaire	85.5	78.4	85.3	90.0	70.4	90.7

differed by 2 years or more. However, only a small proportion of comparison cases (6 percent) was included in the category 0-8 years.

These findings for comparability of reporting of parents' education were better than in the CPS-Census Match Study in which 65.2 percent of the respondents reported the same amount of education on both the census and CPS. However, they were lower than the results in the New York State study: for mother's and father's education, 95.2 percent and 94.5 percent, respectively, had identical education reported on both forms.

PLURALITY

Reporting of plurality on the birth certificate, as required by all registration areas, has a response rate of nearly 100 percent. The long/short hospital questionnaires were the only survey questionnaires that requested this information. Among comparison cases 99.8 percent reported an identical number at birth on both data sources. Of those births reported as single births on the birth certificate, 99.9 percent were also reported as single births on the HL/HS questionnaire with the remainder reported as twin births (table 9). When a birth was classified as twin on the birth certificate, it was also classified as twin on the questionnaire in 94.4 percent of the cases. The remaining 5.6 percent were reported as single births. Perhaps the disagreement occurred in cases where only one twin was live born and the existence of the second twin was not transcribed from the hospital record to the survey questionnaire. Both cases of triplets or higher plurality were reported as such on the questionnaire.

BIRTH WEIGHT

Reporting of birth weight was required by all registration areas and included on the long/short hospital questionnaires. Birth weight was reported either in grams or pounds and ounces on both forms, but all weights were converted to grams for comparison.

As shown in table 10, there was no discrepancy in the reported birth weight for 86.5 percent of the comparison cases. Only 2.4 percent differed by 250 grams (8.8 ounces) or more. Because birth-weight data are usually tabulated in 500-gram intervals, many of the discrepant cases would be correctly classified in the grouped data tabulations. There was agreement within 500-gram intervals for 96.0 percent of the births.

The level of exact agreement was lower (77.3 percent) among births determined from the birth certificate to be low birth weight (2,500 grams or less) than among heavier weight births (87.3 percent). When a discrepancy appeared, births determined as low birth weight from the birth certificate were more likely to have a higher weight reported on the HL/HS questionnaire than on the birth certificate, whereas heavier weight babies were more likely to have a lower weight reported on the questionnaire.

The New York State study found a similar comparability—91.7 percent had identical birth weight (within 1 once) reported both on the birth certificate and on the hospital record.

LENGTH OF PREGNANCY

The length of pregnancy was determined from the date the last menstrual period (LMP)

began as reported on both the birth certificate and the long/short hospital questionnaires. In 1972, 39 States and the District of Columbia included the required LMP date on their birth certificates. The remaining States asked for length of pregnancy in completed weeks. This results in considerable heaping at 40 weeks, probably because many babies weighing 6-9 pounds would be considered full term and were reported as 40 weeks' gestation.

Nonresponse to the questionnaire seemed to be biased toward infants reported as premature (less than 37 weeks' gestation) on the birth certificate (table 11). Among births for which data were provided on the birth certificate but not on the questionnaire, 11.0 percent were classified as premature, compared with 9.2 percent among cases for which gestation was available from both sources.

Comparability of response could be determined for less than half of the survey cases. Of these, 85.8 percent reported identical length of gestation on both forms; an additional 6.8 percent differed by only 1 week.

Births determined to be premature from the birth certificate were less likely to have identical gestation reported on the questionnaire than were those of longer gestation (74.8 percent compared with 86.9 percent). There appeared to be a bias toward the reporting of longer gestation on the questionnaire among those births that were reported as premature on the birth certificate with nearly 14 percent reporting a gestation period 4 weeks or more longer on the questionnaire. Among births with gestation reported as 37 weeks or more on the birth certificate, only 3.0 percent differed by 4 weeks or more in either direction on the questionnaire.

MONTH OF PREGNANCY PRENATAL CARE BEGAN

In 1972, 40 States and the District of Columbia required reporting of the month of pregnancy that prenatal care began on the birth certificate. The information was obtained for the birth certificate by querying either the mother or the attending physician. The mother's response was most likely based on recall. Although the physician has access to medical records concerning the care that he provided, he might be unaware of any additional care provided by other physicians and could report care as beginning later than it actually did.

A comparison can be made between this information on the birth certificate with that on the long hospital and physician's questionnaires. However, the questionnaire, unlike the birth certificate, specifically asked that care reported be limited to that provided by the attending physician, causing discrepancies in cases where more than one physician was consulted.

On the birth certificates where a comparison could be made, 42.9 percent reported care beginning in the same month of pregnancy both on the questionnaire and the birth certificate (table 12). Another 36.9 percent disagreed by only 1 month. Discrepancies of 1 month often do not affect classification by the trimester care began, the form in which the data are generally most useful, further minimizing disagreement. Thus, the proportion showing agreement when tabulated by trimester (including those reporting no care) rather than by single month was increased to 75.7 percent.

The rate of agreement among those reporting no care on the birth certificate was 72.7 percent. Among those reporting some prenatal care, a wide variation in agreement existed by the month that the care began as reported on the birth certificate. The HL/P questionnaire corroborated only 10.2 percent of the birth certificates where care was reported to have begun in the first month. However, a large proportion of these cases (55.3 percent) reported care beginning in the second rather than the first month on the questionnaire, which is still in the first trimester. Among the other categories, agreement ranged from 28.9 to 53.2 percent.

In cases where differing months were reported, it was more likely that the birth certificate had care as beginning earlier than the questionnaire did; 38.4 percent reported earlier care on the birth certificate in comparison with 18.6 reporting earlier care on the questionnaire. Thus it is tempting to surmise that many discrepancies arise from cases where more than one physician was consulted, and that these

discrepancies result from the inclusion of early care by other physicians on the birth certificate. However, for certificates reporting care beginning in the third month or later, there was a tendency, and in some cases quite large, toward reporting an earlier date on the questionnaire than on the birth certificate (see table 12), which would refute this hypothesis.

The New York State study also compared reporting of month prenatal care began and found comparability to be better than the present study (53.9 compared with 42.9 percent).

NUMBER OF PRENATAL VISITS

The birth certificate, the mother's questionnaire, and the long hospital/physician questionnaire each contained an item on the number of prenatal visits. Information on the birth certificate was probably provided by the mother or the attending physician. The source of data for the M questionnaire was the mother who was queried several months after the birth of her child. The questionnaire was structured to ascertain additional sources of prenatal care and the number of visits to these sources which may have helped to elicit an accurate response. However, heaping at an even number of visits seems to indicate that the response was often a guess. Because data for the HL/P questionnaire were obtained directly from the hospital's or the attending physician's records, visits to additional sources of prenatal care may not have been included. Heaping was not as great among responses on the HL/P questionnaire.

Among cases where data were available from both the birth certificate and the M questionnaire, only 15.6 percent reported an identical number of visits on both sources (table 13). Approximately 56 percent agreed within 2 visits; however, nearly 24 percent were discrepant by 5 visits or more.

Classification of data by the number of prenatal visits reported on the birth certificate reveals an agreement rate ranging between 7 and 19 percent for all categories except the no prenatal care category for which 66.7 percent agreement was found; however, the number of cases in this category was small. Among categories 1-2 through 11-12, there was a large bias toward a lower entry on the birth certificate than on the mother's questionnaire. The size of this bias generally decreased as the number of visits increased, from 76 percent for those reporting 1-2 visits to 43 percent for those reporting 11-12 visits. A large proportion of these (between 22 and 59 percent) reported at least three fewer visits on the birth certificate.

With the exception of the category 15-16 visits, agreement was lowest (approximately 8 percent) among those reporting 13 visits or more on the birth certificate. Unlike those reporting fewer prenatal visits, there was a bias toward a greater number of visits reported on the birth certificate than on the questionnaire.

As shown in table 13, there was a somewhat greater consistency of response between the birth certificate and the HL/P questionnaire. The number of prenatal visits reported on the HL/P questionnaire was identical to the number reported on the birth certificate 25 percent of the time and agreed within 2 visits 66 percent of the time. Although the M questionnaire and the birth certificate differed by 5 visits or more almost 24 percent of the time, the HL/P questionnaire differed from the birth certificate by this amount less than 16 percent of the time.

Consistency of reporting between these two documents was, for the most part, inversely related to the number of visits as reported on the birth certificate, decreasing from 88.2 percent agreement at no visits to 2.9 percent at 19 visits or more. For most of these categories, between 62 and 72 percent agreed within 2 visits. Among those reporting 10 visits or less, there were more likely to be fewer visits reported on the birth certificate than on the HL/P questionnaire. However, this bias was not nearly as great as that found in the comparison of the birth certificate with the mother's questionnaire, which may have been a result of the mother's knowledge of visits to other physicians. Among those reporting 11 visits or more on the birth certificate, a larger proportion reported more visits on the birth certificate than on the HL/P questionnaire. Although the number reporting no prenatal care on the birth certificate was small, agreement was good (88.2 percent).

COMPARABILITY OF REPORTING BY RACE OF CHILD AND AGE AND EDUCATION OF MOTHER

To determine differences in comparability among subgroups of the population, the percent agreement of selected variables was computed by race of child and by age and education of mother as reported on the birth certificate.

As shown in table D, comparability was generally better for white than for black births. The only exception was the number of prenatal visits (as reported on the long hospital/physician questionnaire) for which the percent of cases with exact agreement was found to be slightly higher among black than among white births (28.1 vs. 24.4 percent, respectively). However, there was a higher proportion of white than of black births for which reporting differed by no more than two visits (66.1 and 63.3 percent, respectively).

Only for the prenatal care items reported on the HL/P questionnaire was there a relationship between comparability of reporting and age of mother (table E). Accuracy of reporting the month of pregnancy that prenatal care began increased with the age of the mother—from 37.0 percent for mothers who were under 20 years of age to 47.1 percent for mothers 35 years of age and older. The same relationship was found by trimester that care began. The percent of cases reporting prenatal care starting within the same trimester ranged from 65.7 percent for the youngest age group to 80.2 percent for the oldest age group.

For the number of prenatal visits, a small variation in comparability by age of mother was found: the percent with exact agreement was

Table D. Percent agreement of selected items on the birth certificate and National Natality Survey questionnaires, by race of child reported on the birth certificate, 1972

Selected item	Questionnaire[1]	Total[2]	Race of child reported on the birth certificate	
			White	Black
Education of mother				
Number of cases compared	M	2,833	2,610	223
Percent agreement by:				
Single years of school	M	76.4	77.4	65.0
Grouped years of school	M	85.6	86.3	77.6
Birth weight				
Number of cases compared	HL/HS	4,693	4,247	446
Percent agreement within 500-gram interval	HL/HS	96.0	96.6	90.6
Month of pregnancy prenatal care began				
Number of cases compared	HL/P	2,950	2,734	216
Percent agreement by:				
Single month	HL/P	42.9	43.5	35.6
Trimester	HL/P	75.7	76.3	68.1
Number of prenatal visits				
Number of cases compared	HL/P	2,221	2,025	196
Percent agreement by:				
Single visit	HL/P	24.7	24.4	28.1
±2 visits	HL/P	65.8	66.1	63.3

[1]M refers to mother's questionnaire; HL/HS refers to long/short hospital questionnaire; HL/P refers to long hospital/physician questionnaire.

[2]Total includes white and black races only.

Table E. Percent agreement of selected items on the birth certificate and National Natality Survey questionnaires, by age of mother reported on the birth certificate, 1972

Selected item	Questionnaire[1]	Total	Age of mother reported on the birth certificate		
			Under 20 years	20-34 years	35 years and over
Education of mother					
Number of cases compared	M	2,869	325	2,360	184
Percent agreement by:					
Single years of school	M	76.2	74.8	76.6	73.4
Grouped years of school	M	85.5	85.8	85.7	83.2
Birth weight					
Number of cases compared	HL/HS	4,769	687	3,794	288
Percent agreement within 500-gram interval	HL/HS	96.0	95.5	96.1	95.1
Month of pregnancy prenatal care began					
Number of cases compared	HL/P	3,002	432	2,398	172
Percent agreement by:					
Single month	HL/P	42.9	37.0	43.7	47.1
Trimester	HL/P	75.8	65.7	77.3	80.2
Number of prenatal visits					
Number of cases compared	HL/P	2,258	313	1,814	131
Percent agreement by:					
Single visit	HL/P	24.9	28.4	24.0	29.0
±2 visits	HL/P	65.9	64.5	65.5	73.3

[1]M refers to mother's questionnaire; HL/HS refers to long/short hospital questionnaire; HL/P refers to long hospital/physician questionnaire.

lower among mothers 20-34 years of age (24.0 percent) than among both younger and older mothers (28.4 and 29.0 percent, respectively). Agreement within 2 visits showed a much larger age differential that increased with age from 64.5 percent among mothers under 20 years of age to 73.3 percent among mothers 35 years of age or older.

Table F shows that there was only a slight variation in percent agreement by educational attainment of mother. For birth weight, comparability of reporting between the birth certificate and the long/short hospital questionnaire increased slightly with education, ranging from 95.1 percent among mothers with less than 12 years of schooling to 96.8 percent among those with 13 years or more.

The prenatal care items showed more variation by education than did birth weight, but no consistent pattern was found. For the month of pregnancy prenatal care began, mothers with the most education had a slightly higher percent of agreement than mothers with less education (approximately 46 percent vs. slightly over 43 percent, respectively). However, education had a considerable effect on agreement rates by trimester, with the magnitude of agreement increasing as education increased. Agreement rates by trimester ranged from 70.5 percent for mothers with less than 12 years of education to 81.4 percent for mothers with 13 years or more of education.

Exact agreement for number of prenatal visits ranged from 23.8 percent for those with 12 years of education to 27.4 percent for those with less than 12 years of education. Agreement within two visits showed a very slight inverse relationship to education.

Table F. Percent agreement of selected items on the birth certificate and National Natality Survey questionnaires, by education of mother reported on the birth certificate, 1972

Selected item	Questionnaire[1]	Total	Education of mother reported on the birth certificate		
			Less than 12 years	12 years	13 years or more
Birth weight					
Number of cases compared	HL/HS	3,275	853	1,617	805
Percent agreement within 500-gram interval	HL/HS	96.0	95.1	96.1	96.8
Month of pregnancy prenatal care began					
Number of cases compared	HL/P	2,291	562	1,138	591
Percent agreement by:					
Single month	HL/P	43.9	43.4	43.1	45.9
Trimester	HL/P	76.6	70.5	77.2	81.4
Number of prenatal visits					
Number of cases compared	HL/P	2,135	552	1,018	565
Percent agreement by:					
Single visit	HL/P	24.9	27.4	23.8	24.4
±2 visits	HL/P	65.7	66.5	66.1	64.1

[1]HL/HS refers to long/short hospital questionnaire; HL/P refers to long hospital/physician questionnaire.

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LIST OF DETAILED TABLES

Table 1. Comparability of reporting age of mother between the birth certificate and the National Natality Survey questionnaires, by age of mother reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Age of mother reported on birth certificate					
		Under 20 years	20-24 years	25-29 years	30-34 years	35 years and over	No response
	Number						
All sample cases	5,689	831	2,136	1,680	691	346	5
Mother's questionnaire	Percent						
Cases excluded	29.8	44.3	30.4	24.3	26.5	23.1	100.0
	Number						
Cases compared	3,996	463	1,487	1,272	508	266	-
	Percent distribution						
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:							
2 years or more	1.4	2.2	1.4	1.3	0.6	1.5	...
1 year	5.2	4.5	5.6	4.3	6.9	4.9	...
Certificate same as questionnaire	90.7	91.6	90.8	91.7	89.4	86.5	...
Certificate greater than questionnaire:							
1 year	1.6	1.1	1.7	1.3	1.8	2.6	...
2 years or more	1.1	0.6	0.5	1.3	1.4	4.5	...
Long/short hospital questionnaire	Percent						
Cases excluded	16.0	17.7	16.0	14.6	16.8	15.9	100.0
	Number						
Cases compared	4,779	684	1,794	1,435	575	291	-
	Percent distribution						
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:							
2 years or more	1.4	0.6	1.4	1.7	2.1	0.3	...
1 year	2.9	3.7	2.3	3.1	3.1	3.8	...
Certificate same as questionnaire	87.8	93.6	88.2	85.6	87.0	83.2	...
Certificate greater than questionnaire:							
1 year	6.4	1.9	7.0	7.5	5.9	8.9	...
2 years or more	1.5	0.3	1.1	2.1	1.9	3.8	...

Table 2. Comparability of reporting age of father between the birth certificate and the National Natality Survey mother's questionnaire, by age of father reported on birth certificate, 1972

Comparison of certificate with mother's questionnaire	All certificates	Age of father reported on birth certificate						
		Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40 years and over	No response
	Number							
All sample cases	5,689	278	1,681	1,926	990	451	338	25
	Percent							
Cases excluded	32.4	48.6	38.6	28.3	25.4	31.0	29.9	100.0
	Number							
Cases compared	3,843	143	1,032	1,381	739	311	237	-
	Percent distribution							
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:								
2 years or more	1.9	1.4	2.3	1.4	1.9	2.6	2.5	...
1 year	7.2	11.9	6.7	6.0	8.9	7.7	7.6	...
Certificate same as questionnaire	84.5	81.8	86.7	86.9	82.8	78.8	75.9	...
Certificate greater than questionnaire:								
1 year	4.6	4.2	3.5	4.3	4.6	7.1	8.0	...
2 years or more	1.8	0.7	0.8	1.4	1.8	3.9	5.9	...

Table 3. Comparability of reporting number of previous children born alive and still living between the birth certificate and the National Natality Survey questionnaires, by number of previous children born alive and still living reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Number of previous children born alive and still living reported on birth certificate									
		None	1	2	3	4	5	6	7	8 or more	No response
		Number									
All sample cases	5,689	2,110	1,746	845	425	184	100	71	32	34	142
Mother's questionnaire		Percent									
Cases excluded	30.4	30.2	26.1	25.2	32.5	29.3	40.0	32.4	46.9	35.3	100.0
		Number									
Cases compared	3,960	1,473	1,291	632	287	130	60	48	17	22	-
		Percent distribution									
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:											
3 children or more	0.1	0.2	0.1	-	-	0.8	-	-	-	-	...
2 children	0.2	0.2	0.1	0.2	0.3	-	-	-	-	-	...
1 child	1.0	1.4	0.9	0.3	-	0.8	3.3	4.2	-	-	...
Certificate same as questionnaire	97.0	98.2	97.9	95.4	96.5	96.2	91.7	85.4	82.4	77.3	...
Certificate greater than questionnaire:											
1 child	1.3	...	1.0	3.5	2.1	1.5	5.0	6.3	5.9	9.1	...
2 children	0.2	...	...	0.6	1.0	-	-	2.1	-	-	...
3 children or more	0.2	...	...	...	-	0.8	-	2.1	11.8	13.6	...
Long/short hospital questionnaire		Percent									
Cases excluded	20.4	17.3	18.6	18.1	18.8	23.4	20.0	19.7	28.1	32.4	100.0
		Number									
Cases compared	4,527	1,745	1,421	692	345	141	80	57	23	23	-
		Percent distribution									
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:											
3 children or more	0.1	0.2	0.1	0.1	-	-	-	-	-	-	...
2 children	0.3	0.6	0.1	0.3	0.3	-	-	-	-	-	...
1 child	4.5	2.4	7.2	4.6	3.8	4.3	3.8	3.5	13.0	8.7	...
Certificate same as questionnaire	92.1	96.8	89.4	91.2	88.7	88.7	85.0	84.2	65.2	78.3	...
Certificate greater than questionnaire:											
1 child	2.3	...	3.2	3.0	4.1	5.0	10.0	10.5	13.0	4.3	...
2 children	0.2	...	...	0.7	1.7	-	-	-	-	-	...
3 children or more	0.3	...	...	...	1.4	2.1	1.3	1.8	8.7	8.7	...

Table 4. Comparability of reporting number of previous children born alive and now dead between the birth certificate and the National Natality Survey questionnaires, by number of previous children born alive and now dead reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Number of previous children born alive and now dead reported on birth certificate				
		None	1 or more			No response
			Total	1	2 or more	
	Number					
All sample cases	5,689	5,285	200	176	24	204
Mother's questionnaire	Percent					
Cases excluded	30.9	28.2	31.0	29.5	41.7	100.0
	Number					
Cases compared	3,932	3,794	138	124	14	-
	Percent distribution					
Cases compared	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire	0.9	0.9	0.7	0.8	-	...
Certificate same as questionnaire	98.3	99.1	77.5	79.8	57.1	...
Certificate greater than questionnaire	0.8	...	21.7	19.4	42.9	...
Long/short hospital questionnaire	Percent					
Cases excluded	21.4	18.3	21.5	21.6	20.8	100.0
	Number					
Cases compared	4,473	4,316	157	138	19	-
	Percent distribution					
Cases compared	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire	1.0	1.0	0.6	-	5.3	...
Certificate same as questionnaire	97.5	99.0	57.3	58.0	52.6	...
Certificate greater than questionnaire	1.5	...	42.0	42.0	42.1	...

Table 5. Comparability of reporting live-birth order between the birth certificate and the National Natality Survey questionnaires, by live-birth order reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Live-birth order reported on birth certificate								
		1st	2d	3d	4th	5th	6th	7th	8th or higher	No response
	Number									
All sample cases	5,689	2,054	1,707	850	427	197	98	75	76	205
Mother's questionnaire	Percent									
Cases excluded	31.1	30.1	26.1	24.4	32.6	31.0	38.8	34.7	40.8	100.0
	Number									
Cases compared	3,918	1,435	1,262	643	288	136	60	49	45	-
	Percent distribution									
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:										
2 births or more	0.3	0.3	0.2	0.2	0.3	1.5	1.7	-	-	...
1 birth	1.3	1.8	0.7	0.9	0.7	1.5	5.0	2.0	4.4	...
Certificate same as questionnaire	96.1	97.9	98.0	93.3	94.8	91.9	83.3	87.8	73.3	...
Certificate greater than questionnaire:										
1 birth	1.8	...	1.0	5.0	2.8	3.7	10.0	6.1	8.9	...
2 births or more	0.5	...	...	0.6	1.4	1.5	-	4.1	13.3	...
Long/short hospital questionnaire	Percent									
Cases excluded	21.4	17.2	18.9	17.6	19.7	23.9	20.4	18.7	28.9	100.0
	Number									
Cases compared	4,471	1,701	1,384	700	343	150	78	61	54	-
	Percent distribution									
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:										
2 births or more	0.7	0.7	0.5	0.4	0.9	0.7	1.3	-	1.9	...
1 birth	4.7	2.5	7.3	5.3	2.9	4.7	2.6	6.6	9.3	...
Certificate same as questionnaire	91.1	96.8	88.9	89.6	85.7	86.0	82.1	78.7	63.0	...
Certificate greater than questionnaire:										
1 birth	3.0	...	3.3	3.9	7.0	6.7	11.5	13.1	14.8	...
2 births or more	0.7	...	...	0.9	3.5	2.0	2.6	1.6	11.1	...

Table 6. Comparability of reporting number of fetal deaths between the birth certificate and the National Natality Survey questionnaires, by number of fetal deaths reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Number of fetal deaths reported on birth certificate				
		None	1	2	3 or more	No response
	Number					
All sample cases	5,689	4,804	440	89	34	322
Mother's questionnaire	Percent					
Cases excluded	32.9	29.2	25.9	23.6	41.2	100.0
	Number					
Cases compared	3,817	3,403	326	68	20	-
	Percent distribution					
Cases compared	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:						
2 fetal deaths or more	2.6	2.7	1.8	1.5	5.0	...
1 fetal death	7.1	7.1	7.1	5.9	5.0	...
Certificate same as questionnaire	89.2	90.2	80.1	86.8	75.0	...
Certificate greater than questionnaire:						
1 fetal death	1.0	...	11.0	2.9	-	...
2 fetal deaths or more	0.1	...	...	2.9	15.0	...
Long/short hospital questionnaire	Percent					
Cases excluded	21.9	17.6	14.3	11.2	14.7	100.0
	Number					
Cases compared	4,443	3,958	377	79	29	-
	Percent distribution					
Cases compared	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:						
2 fetal deaths or more	2.2	2.2	2.9	1.3	-	...
1 fetal death	7.3	7.5	5.6	5.1	6.9	...
Certificate same as questionnaire	88.7	90.3	77.2	73.4	55.2	...
Certificate greater than questionnaire:						
1 fetal death	1.5	...	14.3	11.4	6.9	...
2 fetal deaths or more	0.4	...	...	8.9	31.0	...

Table 7. Comparability of reporting education of mother between the birth certificate and the National Natality Survey mother's questionnaire, by education of mother reported on birth certificate, 1972

Comparison of certificate with mother's questionnaire	All certificates	Education of mother reported on birth certificate						Not on certificate
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	No response	
	Number							
All sample cases	5,689	245	808	1,879	558	397	69	1,733
	Percent							
Cases excluded[1]	49.5	45.3	37.9	24.3	15.9	13.4	100.0	100.0
	Number							
Cases compared	2,871	134	502	1,422	469	344	-	-
	Percent distribution							
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate less than questionnaire:								
3 years or more	1.8	9.7	1.4	2.1	0.4	-	...	...
2 years	1.4	6.7	1.8	1.1	1.7	-	...	...
1 year	6.5	10.4	14.3	2.3	7.5	9.3	...	...
Certificate same as questionnaire	77.2	65.7	66.1	90.0	55.4	74.7	...	...
Certificate greater than questionnaire:								
1 year	9.1	6.7	13.7	2.4	26.0	8.1	...	...
2 years	1.8	-	1.6	1.0	4.7	2.6	...	...
3 years or more	2.1	0.7	1.0	1.1	4.3	5.2	...	...

[1] A large proportion of the excluded cases occurred in the 11 States and the District of Columbia that did not include the item on the birth certificate. See table II in appendix I.

Table 8. Comparability of reporting education of father between the birth certificate and the National Natality Survey mother's questionnaire, by education of father reported on birth certificate, 1972

Comparison of certificate with mother's questionnaire	All certificates	Education of father reported on birth certificate						Not on certificate
		0-8 years	9-11 years	12 years	13-15 years	16 years or more	No response	
	Number							
All sample cases	5,689	299	625	1,687	606	652	87	1,733
	Percent							
Cases excluded[1]	50.0	43.1	41.9	25.1	20.0	14.0	100.0	100.0
	Number							
Cases compared	2,842	170	363	1,263	485	561		-
	Percent distribution							
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate less than questionnaire:								
3 years or more	2.4	12.9	2.8	2.6	0.8	-	...	...
2 years	2.3	7.6	4.1	1.7	3.1	-	...	...
1 year	8.7	11.2	15.2	3.4	14.4	10.7	...	...
Certificate same as questionnaire	72.3	54.7	55.1	85.8	53.6	74.7	...	...
Certificate greater than questionnaire:								
1 year	9.0	7.1	15.4	3.1	19.2	10.0	...	...
2 years	2.9	2.9	5.5	1.6	6.0	1.6	...	...
3 years or more	2.3	3.5	1.9	1.7	2.9	3.0	...	...

[1] A large proportion of the excluded cases occurred in the 11 States and the District of Columbia that did not include the item on the birth certificate. See table II in appendix I.

Table 9. Comparability of reporting plurality between the birth certificate and the National Natality Survey long/short hospital questionnaire, by plurality reported on birth certificate, 1972

Plurality reported on the questionnaire	All certificates	Plurality reported on birth certificate			
		Single	Twin	Triplet or higher	No response
	Number				
All sample cases	5,689	5,576	108	2	3
	Percent				
Cases excluded	15.8	15.8	16.7	-	100.0
	Number				
Cases compared	4,789	4,697	90	2	-
	Percent distribution				
Cases compared	100.0	100.0	100.0	100.0	...
Single	98.1	99.9	5.6	-	...
Twin	1.9	0.1	94.4	-	...
Triplet or higher	0.0	-	-	100.0	...

Table 10. Comparability of reporting birth weight between the birth certificate and the National Natality Survey long/short hospital questionnaire, by birth weight reported on birth certificate, 1972

Comparison of certificate with long/short hospital questionnaire	All certificates	Birth weight reported on birth certificate											
		0-500 grams	501-1,000 grams	1,001-1,500 grams	1,501-2,000 grams	2,001-2,500 grams	2,501-3,000 grams	3,001-3,500 grams	3,501-4,000 grams	4,001-4,500 grams	4,501-5,000 grams	5,001 grams or more	No response
	Number												
All sample cases	5,689	3	23	26	93	251	982	2,204	1,491	486	87	16	27
	Percent												
Cases excluded	16.5	-	8.7	26.9	16.1	11.6	18.7	16.6	15.5	12.3	16.1	25.0	100.0
	Number												
Cases compared	4,750	3	21	19	78	222	798	1,838	1,260	426	73	12	-
	Percent distribution												
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...
Certificate less than questionnaire:													
500 grams or more	0.5	33.3	-	-	3.8	2.7	0.5	0.4	0.2	0.2	-	-	...
250-499 grams	0.8	-	4.8	-	2.6	1.8	0.5	1.2	0.6	-	-	-	...
1-249 grams	3.8	-	9.5	5.3	12.8	6.3	4.6	3.8	2.9	2.8	1.4	-	...
Certificate same as questionnaire	86.5	33.3	76.2	78.9	71.8	79.7	86.6	86.9	87.5	89.4	87.7	83.3	...
Certificate greater than questionnaire:													
1-249 grams	7.1	33.3	9.5	15.8	7.7	9.5	7.3	7.0	7.1	5.4	5.5	8.3	...
250-499 grams	0.5	-	-	-	1.3	-	0.3	0.4	0.7	0.9	1.4	-	...
500 grams or more	0.6	...	-	-	-	-	0.3	0.3	1.1	1.2	4.1	8.3	...

Table 11. Comparability of reporting length of pregnancy between the birth certificate and the National Natality Survey long/short hospital questionnaire, by length of pregnancy reported on birth certificate, 1972

Comparison of certificate with long/short hospital questionnaire	All certificates	Length of pregnancy reported on birth certificate										Not on certificate[1]
		Under 20 weeks	20-27 weeks	28-31 weeks	32-35 weeks	36 weeks	37-39 weeks	40 weeks	41-42 weeks	43-44 weeks	No response	
	Number											
All sample cases	5,689	1	11	39	163	113	1,299	790	815	178	974	1,306
	Percent											
Cases excluded	53.0	-	9.1	28.2	29.4	18.6	22.4	20.5	20.0	21.4	100.0	100.0
	Number											
Cases compared	2,674	1	10	28	115	92	1,008	628	652	140	-	-
	Percent distribution											
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate less than questionnaire:												
5 weeks or more	1.0	100.0	10.0	7.1	9.6	5.4	0.6	-	-	-	...	...
4 weeks	1.0	-	-	7.1	7.0	4.3	1.1	0.5	-	-	...	...
3 weeks	0.3	-	-	-	0.9	1.1	0.5	0.2	-	-	...	...
2 weeks	1.0	-	-	-	-	2.2	1.9	0.8	0.3	-	...	...
1 week	4.0	-	40.0	3.6	3.5	4.3	4.4	4.8	2.6	1.4	...	...
Certificate same as questionnaire	85.8	-	50.0	75.0	73.9	79.3	86.7	88.2	87.4	79.3	...	...
Certificate greater than questionnaire:												
1 week	2.8	-	-	7.1	3.5	-	2.6	2.4	3.5	3.6	...	...
2 weeks	1.0	-	-	-	-	-	0.4	1.0	2.1	2.9	...	...
3 weeks	0.9	-	-	-	-	-	0.7	0.6	1.2	2.9	...	...
4 weeks	1.1	-	-	-	0.9	1.1	0.4	0.5	1.5	7.1	...	...
5 weeks or more	1.1	-	-	-	0.9	2.2	0.8	1.1	1.2	2.9	...	...

[1]See table II in appendix I for a listing of the 11 States that did not include the date last normal menstrual period began on the birth certificate.

Table 12. Comparability of reporting month of pregnancy prenatal care began between the birth certificate and the National Natality Survey long hospital/physician questionnaire, by month of pregnancy prenatal care began reported on birth certificate, 1972

Comparison of certificate with long hospital/physician questionnaire	All certificates	Month of pregnancy prenatal care began reported on birth certificate											Not on certificate[1]
		1st	2d	3d	4th	5th	6th	7th	8th	9th	No prenatal care	No response	
	Number												
All sample cases	5,689	448	1,731	1,271	494	258	142	102	48	22	38	373	762
	Percent												
Cases excluded	44.0	30.1	29.5	27.9	35.0	32.6	31.7	22.5	45.8	18.2	42.1	100.0	100.0
	Number												
Cases compared	3,187	313	1,221	916	321	174	97	79	26	18	22	-	-
	Percent distribution												
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate earlier than questionnaire:													
2 months or more	15.8	34.5	15.4	13.9	11.8	14.9	9.3	7.6	11.5	...	...	...	...
1 month	22.6	55.3	27.0	11.9	11.2	19.0	11.3	22.8	11.5	33.3	...	...	...
Certificate same as questionnaire	42.9	10.2	53.2	44.1	40.2	33.9	28.9	39.2	38.5	38.9	72.7	...	...
Certificate later than questionnaire:													
1 month	14.3	...	4.3	27.9	24.9	14.4	25.8	11.4	19.2	11.1	4.5	...	...
2 months or more	4.3	...	...	2.2	11.8	17.8	24.7	19.0	19.2	16.7	22.7	...	...

[1]See table II in appendix I for a listing of the 10 States that did not include the item on the birth certificate.

Table 13. Comparability of reporting number of prenatal visits between the birth certificate and the National Natality Survey questionnaires, by number of prenatal visits reported on birth certificate, 1972

Comparison of certificate with questionnaires	All certificates	Number of prenatal visits reported on birth certificate												Not on certificate[1]
		None	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19 or more	No response	
	Number													
All sample cases	5,689	31	61	181	269	442	756	809	355	202	40	45	268	2,230
Mother's questionnaire	Percent													
Cases excluded	63.6	71.0	52.5	60.8	46.8	38.9	33.7	28.2	25.4	25.2	40.0	40.0	100.0	100.0
	Number													
Cases compared	2,071	9	29	71	143	270	501	581	265	151	24	27	-	-
	Percent distribution													
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate less than questionnaire:														
5 visits or more	15.4	22.2	44.8	32.4	29.4	19.6	16.0	11.2	7.9	11.3	-	11.1	...	...
4 visits	5.1	11.1	-	7.0	13.3	10.7	4.2	4.0	2.3	0.7	-	-	...	...
3 visits	6.3	-	13.8	7.0	7.0	8.1	8.4	7.1	1.5	0.7	4.2	-	...	...
2 visits	10.9	-	6.9	18.3	12.6	11.9	15.6	7.1	10.2	6.0	12.5	11.1	...	...
1 visit	11.5	-	10.3	9.9	13.3	13.0	10.8	13.6	8.7	9.3	4.2	14.8	...	...
Certificate same as questionnaire	15.6	66.7	17.2	14.1	9.1	16.3	16.8	18.6	8.3	17.9	8.3	7.4	...	...
Certificate greater than questionnaire:														
1 visit	9.7	...	6.9	8.5	6.3	7.0	9.4	9.8	17.7	7.3	-	7.4	...	...
2 visits	8.4	...	-	1.4	2.1	5.9	5.0	11.9	17.7	6.0	12.5	-	...	...
3 visits	5.5	...	...	-	2.1	2.2	5.0	5.3	8.7	13.2	16.7	3.7	...	...
4 visits	3.5	...	...	1.4	2.1	0.4	1.4	3.1	7.5	11.9	12.5	3.7	...	...
5 visits or more	8.3	...	...	...	2.8	4.8	7.6	8.4	9.4	15.9	29.2	40.7	...	...
Long hospital/physician questionnaire	Percent													
Cases excluded	60.4	45.2	36.1	41.4	34.2	31.0	26.3	28.6	28.2	24.8	25.0	24.4	100.0	100.0
	Number													
Cases compared	2,250	17	39	106	177	305	557	578	255	152	30	34	-	-
	Percent distribution													
Cases compared	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	...	...
Certificate less than questionnaire:														
5 visits or more	5.5	11.8	12.8	14.2	7.3	8.9	6.6	2.8	2.0	2.0	3.3	-	...	...
4 visits	3.9	-	7.7	7.5	4.0	6.6	4.5	3.1	2.4	0.7	-	-	...	...
3 visits	5.6	-	7.7	3.8	6.8	7.2	7.4	5.4	2.0	3.3	3.3	2.9	...	...
2 visits	8.1	-	7.7	6.6	6.2	9.2	9.7	10.4	5.5	3.3	3.3	-	...	...
1 visit	13.9	-	7.7	6.6	21.5	13.4	15.4	13.8	14.5	11.2	10.0	-	...	...
Certificate same as questionnaire	25.0	88.2	48.7	29.2	25.4	30.5	24.8	24.9	20.8	12.5	16.7	2.9	...	...
Certificate greater than questionnaire:														
1 visit	11.8	...	5.1	15.1	9.6	7.2	11.0	14.5	17.6	7.2	13.3	8.8	...	...
2 visits	7.3	...	2.6	4.7	4.0	6.9	5.6	8.0	11.4	11.2	16.7	8.8	...	...
3 visits	4.8	...	...	6.6	2.8	1.3	4.1	5.5	7.1	9.9	10.0	5.9	...	...
4 visits	3.7	...	...	5.7	1.7	0.7	3.1	3.8	4.3	11.8	3.3	11.8	...	...
5 visits or more	10.3	...	...	...	10.7	8.2	7.9	7.8	12.5	27.0	20.0	58.8	...	...

[1]See table II in appendix I for a listing of the 14 States that did not include the item on the birth certificate.

APPENDIXES

CONTENTS

LIST OF APPENDIX TABLES

APPENDIX I

TECHNICAL NOTES

Sample Design

The sampling frame for the 1972 National Natality Survey was a file on microfilm of live-birth certificates received each month by the National Center for Health Statistics from the 54 birth registration areas of the United States. These birth registration areas included the 50 States, the District of Columbia, and the cities of New York, Baltimore, and New Orleans, which had independent registration systems. Each registration area assigned a file number to each birth certificate, and these file numbers run consecutively from the first to the last birth occurring during the year in that area. The sample for the survey was based on a probability design that used these birth certificate numbers. Each 500 consecutive records from each area constituted a primary sampling unit, and one record from each primary unit was selected at random. Thus the sample of selected birth certificates represented 1/500th of the live births occurring in the 54 areas during 1972.

Sampled records for infants who were reported or inferred to be out of wedlock were excluded from the survey, and no questionnaires were mailed to any of the respondent sources. Thus the statistics presented in this report pertain only to births to married women occurring in the United States in 1972. In the registration areas having an item on the birth certificate to identify out-of-wedlock births, 555 sampled records were excluded because the birth was reported to be out of wedlock. In the 12 areas that did not have this item, a birth was inferred to be out of wedlock under the following conditions: (1) the name of the father of the child was omitted; (2) the mother's surname as stated in the "informant" or "mailing address" section was the same as her maiden name and was different from the father's surname; (3) the mother's surname was different from her maiden name, but also was different from the father's and the baby's surname; (4) the mother's surname was missing from both the "informant" section and the "mailing address" section of the certificate and the baby's surname was different from the father's surname. Using these criteria, 261 sample records were inferred to be for out-of-wedlock births. The 816 reported and inferred out-of-wedlock cases were excluded from the survey, and no questionnaires were mailed to the mother, physician, or hospital named on those birth certificates.

Table I shows the number of births in the United States in 1972, the number of mothers in the original sample, and the number of mothers, physicians, and hospitals to whom questionnaires were mailed.

Table I. Number of live births in the United States and number of births and sources of information in the 1972 National Natality Survey

Item	Number
Live births in the United States	3,258,411
Births selected in the sample	6,505
Out-of-wedlock births excluded from survey	816
In-wedlock births included in survey	5,689
Mothers mailed a questionnaire	5,676
Mothers not mailed questionnaire because mother not U.S. resident	13
Births for which questionnaire was mailed to hospital	5,647
Nonhospital births	42
Births for which questionnaire was mailed to physician	4,415

Birth Certificate and Questionnaires

Facsimiles of the U.S. Standard Certificate of Live Birth and the questionnaires used in the survey are shown in appendix II. The short hospital (HS) and physician (P) forms are not shown, but together their content was the same as the long hospital (HL) form, which is shown. Although most of the registration areas' birth certificates include the same basic information, the standard certificate is not used by all registration areas. The item used to identify out-of-wedlock births is omitted by 12 areas, and this information was inferred for their records as described previously. Educational attainment of parents, date last normal menses began (used for computing length of gestation), month of pregnancy that prenatal care began, and total number of prenatal visits are other items used in this report that are not present on all the areas' certificates. Table II shows the reporting areas for each of these items.

Collection of Data

Data for the National Natality Survey were collected primarily by mail by using the addresses given on the birth certificates. No questionnaires were mailed when the birth was reported or inferred to be illegitimate.

If there was no response to the original mailing of the questionnaire within certain time limits, followup procedures were instituted as follows:

1. If mothers did not return the original questionnaire within 16 days, they were sent a second questionnaire. If the followup questionnaire elicited no response after an additional 21 days, then an interview by telephone or in person was attempted. Incomplete or inconsistent items on questionnaires from mothers were followed up by telephone or personal interview. The mother of the infant was the only person from whom information for the mother's questionnaire was accepted. In the telephone and personal interviews, no proxy respondents were accepted.
2. If physicians did not return the original questionnaire within 22 days, a postcard reminder was sent. If after an additional 14 days there was still no response, then a followup questionnaire was mailed. No interviews were attempted with physicians.
3. If hospitals and clinics did not return the original long or short hospital questionnaire within 22 days, a followup questionnaire was sent. No further followup attempts were made. Any items left blank by physicians or hospitals were assumed to mean that the respondent had no knowledge of that aspect of the mother's or baby's health care or history.

Response Rates

In any survey where the participation of the subjects is not mandatory, there will be some subjects who do not respond to the survey questionnaire. Mothers, physicians, and hospitals were all informed, both on the printed questionnaires and by the telephone and personal interviewers, that they were under no legal obligation to participate in the survey and that their participation was completely voluntary.

The final response rates were 71.5 percent from the mothers, 72.2 percent from the physicians, and 85.4 percent from the hospitals. Table III shows the number of persons or institutions queried and the percent responding at the different stages of data collection. The response rates from the mothers varied with age—the younger mothers had lower response rates. At each age, the response of white mothers was higher than that of all other mothers. The number of births in the sample and the response rates by age of mother and color are shown in table IV.

Table V shows selected variables used in this report and their item nonresponse rates. Although not every item has been included in the table, there was no variable with a higher nonresponse rate than those shown. The figures do not include cases where no questionnaire was returned, where an item did not appear on a State's certificate, or where a "don't know" response was allowed.

Table II. Areas reporting educational attainment of parents, date last normal menstrual period began (LMP), month of pregnancy prenatal care began, number of prenatal visits, and marital status of mother on birth certificates: Each State, 1972

Area	Educational attainment of parents	Date last normal menstrual period began (LMP)	Month of pregnancy prenatal care began	Number of prenatal visits	Marital status of mother
Alabama					X
Alaska	X	X			X
Arizona	X	X	X	X	X
Arkansas					X
California		X	X		
Colorado	X	X	X	X	X
Connecticut					
Delaware	X	X	X	X	X
District of Columbia		X	X	X	X
Florida	X	X	X	X	X
Georgia					
Hawaii	X	X	X	X	X
Idaho					
Illinois	X	X	X	X	X
Indiana	X	X	X	X	X
Iowa	X	X	X	X	X
Kansas	X	X	X	X	X
Kentucky	X	X	X	X	X
Louisiana	X	X	X	X	X
Maine	X	X	X	X	X
Maryland		X	X		
Massachusetts	X				
Michigan	X	X	X	X	X
Minnesota	X	X	X	X	X
Mississippi	X	X	X	X	X
Missouri	X	X	X	X	X
Montana	X	X	X	X	
Nebraska	X	X	X	X	X
Nevada	X	X	X	X	
New Hampshire	X	X	X	X	X
New Jersey	X	X	X	X	X
New Mexico					
New York	X	X	X		
North Carolina	X	X	X	X	X
North Dakota	X	X	X	X	X
Ohio	X	X	X		
Oklahoma	X	X	X	X	X
Oregon	X	X	X	X	X
Pennsylvania					X
Rhode Island	X	X	X	X	X
South Carolina	X	X	X	X	X
South Dakota	X	X	X	X	X
Tennessee	X	X	X	X	X
Texas			X		X
Utah	X	X	X	X	X
Vermont	X	X	X	X	
Virginia	X			X	X
Washington		X	X	X	X
West Virginia	X	X	X	X	X
Wisconsin	X		X	X	X
Wyoming	X	X	X	X	X

Table III. Response rates by type of respondent and stage of data collection: 1972 National Natality Survey

Response status	Respondent		
	Mothers	Private physicians	Hospitals
	Number		
Total in survey	5,689	4,415	5,647
	Percent distribution		
Total in survey	100.0	100.0	100.0
Total response	71.5	72.2	85.4
Response to first mailing	40.5	68.6	76.6
Response to second mailing	13.0	3.6	8.8
Response to interview	17.9	. . .	. . .
Total nonresponse	28.5	27.8	14.6

Table IV. Response rates for mothers by age of mother and color of child: 1972 National Natality Survey

Age of mother	Total		White		All other	
	Number in sample	Percent responding	Number in sample	Percent responding	Number in sample	Percent responding
All ages	5,689	71.5	5,007	73.6	682	56.0
Under 20 years	833	57.5	708	58.9	125	49.6
20-24 years	2,137	70.7	1,899	73.5	238	48.7
25-29 years	1,681	76.9	1,517	78.8	164	59.1
30-34 years	692	74.7	586	75.6	106	69.8
35 years and over	346	77.2	297	78.8	49	67.3

Table V. Item nonresponse rates for selected items, by selected respondent sources: 1972 National Natality Survey

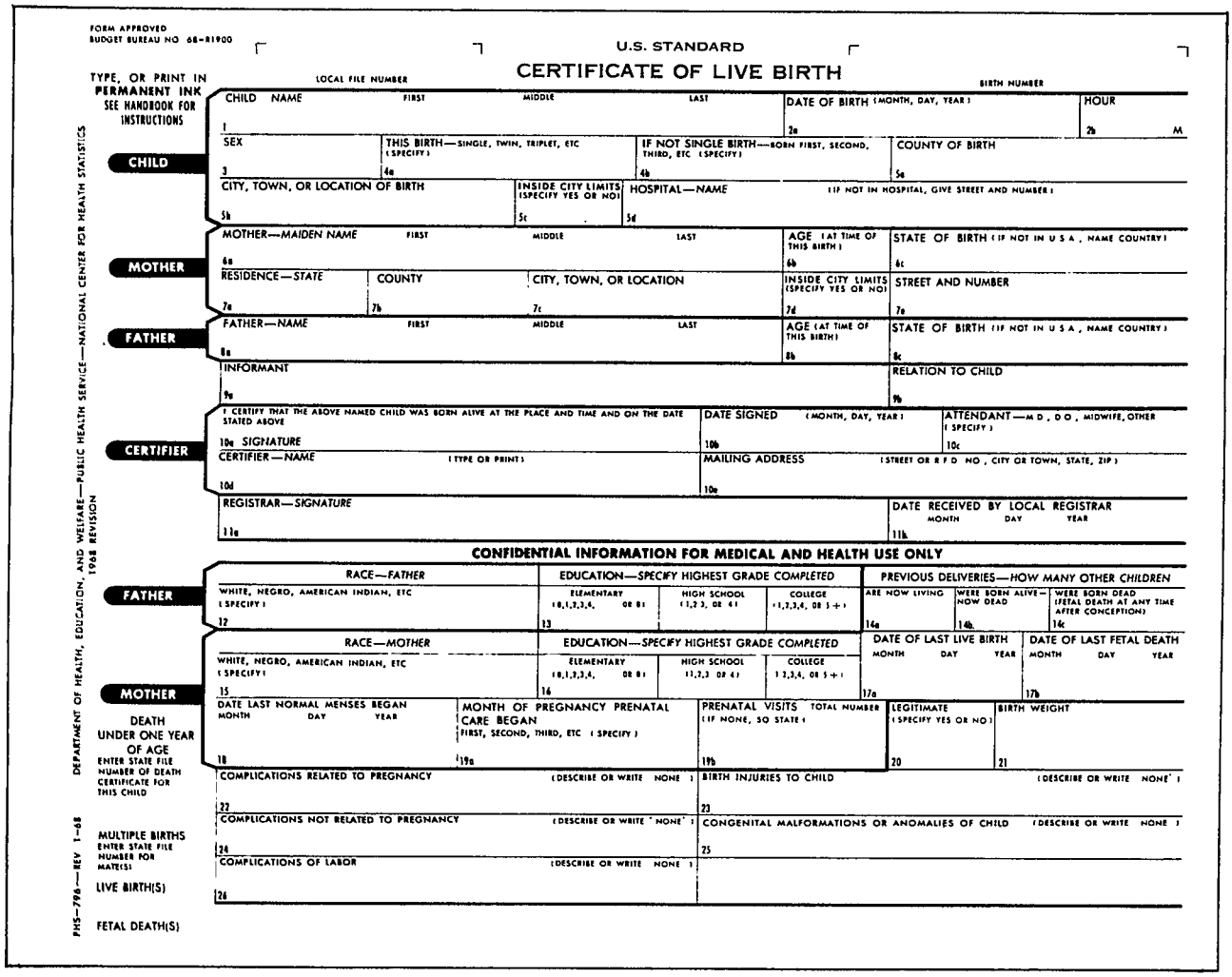
Item	Respondent source[1]	Percent item nonresponse
Age of mother	BC	0.1
Age of mother	M	1.2
Age of mother	HL/HS	1.4
Age of father	BC	0.4
Age of father	M	3.7
Education of mother	BC	1.2
Education of mother	M	0.2
Education of father	BC	1.5
Education of father	M	1.0
Birth weight	BC	0.4
Birth weight	HL/HS	1.7
Date last menstrual period began	BC	15.0
Date last menstrual period began	HL/HS	12.4
Month of pregnancy prenatal care began	BC	5.2
Month of pregnancy prenatal care began	HL/P	1.0
Number of prenatal visits	BC	4.7
Number of prenatal visits	HL/P	1.7
Number of prenatal visits to attending physician	M	6.0
Number of prenatal visits to other physician	M	4.6
Number of previous children born alive, still living	BC	1.2
Number of previous children born alive, now dead	BC	2.3
Number of previous children born alive, still living	M	0.1
Number of previous children born alive, now dead	HL/HS	2.7
Number of stillbirths	M	0.5
Number of miscarriages	M	0.4
Number of previous pregnancies	HL/HS	2.6

[1]BC refers to birth certificate; M refers to mother's questionnaire; HL/HS refers to long/short hospital questionnaire; HL/P refers to long hospital/physician questionnaire.

APPENDIX II

1972 NATIONAL NATALITY SURVEY SOURCE DOCUMENTS

Certificate of Live Birth



FORM APPROVED
BUDGET BUREAU NO 68-R1900

U.S. STANDARD

CERTIFICATE OF LIVE BIRTH

TYPE, OR PRINT IN PERMANENT INK SEE HANDBOOK FOR INSTRUCTIONS

LOCAL FILE NUMBER

BIRTH NUMBER

CHILD

1 CHILD NAME (FIRST, MIDDLE, LAST)

2a DATE OF BIRTH (MONTH, DAY, YEAR)

2b HOUR

3 SEX

4a THIS BIRTH—SINGLE, TWIN, TRIPLET, ETC (SPECIFY)

4b IF NOT SINGLE BIRTH—BORN FIRST, SECOND, THIRD, ETC (SPECIFY)

5a COUNTY OF BIRTH

5b CITY, TOWN, OR LOCATION OF BIRTH

5c INSIDE CITY LIMITS (SPECIFY YES OR NO)

5d HOSPITAL—NAME (IF NOT IN HOSPITAL, GIVE STREET AND NUMBER)

MOTHER

6a MOTHER—MAIDEN NAME (FIRST, MIDDLE, LAST)

6b AGE (AT TIME OF THIS BIRTH)

6c STATE OF BIRTH (IF NOT IN U S A, NAME COUNTRY)

7a RESIDENCE—STATE

7b COUNTY

7c CITY, TOWN, OR LOCATION

7d INSIDE CITY LIMITS (SPECIFY YES OR NO)

7e STREET AND NUMBER

FATHER

8a FATHER—NAME (FIRST, MIDDLE, LAST)

8b AGE (AT TIME OF THIS BIRTH)

8c STATE OF BIRTH (IF NOT IN U S A, NAME COUNTRY)

9a INFORMANT

9b RELATION TO CHILD

CERTIFIER

I CERTIFY THAT THE ABOVE NAMED CHILD WAS BORN ALIVE AT THE PLACE AND TIME AND ON THE DATE STATED ABOVE

10a SIGNATURE

10b DATE SIGNED (MONTH, DAY, YEAR)

10c ATTENDANT—M D, D O, MIDWIFE, OTHER (SPECIFY)

10d CERTIFIER—NAME (TYPE OR PRINT)

10e MAILING ADDRESS (STREET OR R F D NO, CITY OR TOWN, STATE, ZIP)

11a REGISTRAR—SIGNATURE

11b DATE RECEIVED BY LOCAL REGISTRAR (MONTH, DAY, YEAR)

CONFIDENTIAL INFORMATION FOR MEDICAL AND HEALTH USE ONLY

FATHER

12 RACE—FATHER (WHITE, NEGRO, AMERICAN INDIAN, ETC (SPECIFY))

13 EDUCATION—SPECIFY HIGHEST GRADE COMPLETED (ELEMENTARY (0,1,2,3,4, OR 5); HIGH SCHOOL (1,2,3, OR 4); COLLEGE (1,2,3,4, OR 5+))

14a PREVIOUS DELIVERIES—HOW MANY OTHER CHILDREN ARE NOW LIVING

14b WERE BORN ALIVE—NOW DEAD

14c WERE BORN DEAD (FETAL DEATH AT ANY TIME AFTER CONCEPTION)

MOTHER

15 RACE—MOTHER (WHITE, NEGRO, AMERICAN INDIAN, ETC (SPECIFY))

16 EDUCATION—SPECIFY HIGHEST GRADE COMPLETED (ELEMENTARY (0,1,2,3,4, OR 5); HIGH SCHOOL (1,2,3 OR 4); COLLEGE (1,2,3,4, OR 5+))

17a DATE OF LAST LIVE BIRTH (MONTH, DAY, YEAR)

17b DATE OF LAST FETAL DEATH (MONTH, DAY, YEAR)

18 DATE LAST NORMAL MENSES BEGAN (MONTH, DAY, YEAR)

19a MONTH OF PREGNANCY PRENATAL CARE BEGAN (FIRST, SECOND, THIRD, ETC (SPECIFY))

19b PRENATAL VISITS TOTAL NUMBER (IF NONE, SO STATE)

20 LEGITIMATE (SPECIFY YES OR NO)

21 BIRTH WEIGHT

DEATH UNDER ONE YEAR OF AGE
ENTER STATE FILE NUMBER OF DEATH CERTIFICATE FOR THIS CHILD

22 COMPLICATIONS RELATED TO PREGNANCY (DESCRIBE OR WRITE NONE)

23 BIRTH INJURIES TO CHILD (DESCRIBE OR WRITE NONE)

MULTIPLE BIRTHS
ENTER STATE FILE NUMBER FOR MATE(S)

24 COMPLICATIONS NOT RELATED TO PREGNANCY (DESCRIBE OR WRITE "NONE")

25 CONGENITAL MALFORMATIONS OR ANOMALIES OF CHILD (DESCRIBE OR WRITE NONE)

LIVE BIRTH(S)

26 COMPLICATIONS OF LABOR (DESCRIBE OR WRITE NONE)

FETAL DEATH(S)

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE—PUBLIC HEALTH SERVICE—NATIONAL CENTER FOR HEALTH STATISTICS
1968 REVISION
PHS—798—REV 1-68

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
ROCKVILLE, MARYLAND 20852

NATIONAL CENTER FOR
HEALTH STATISTICS

The Public Health Service is conducting a national survey of medical care provided to mothers who have babies during 1972. We are trying to learn more about the medical care mothers received during the period before and after the birth of the child. Past studies have shown that medical care is related to the health of a mother and her baby. The information which mothers throughout the country give us will greatly aid in planning better medical care programs for all American women.

You are one of a small sample of mothers being selected to represent all mothers having babies in 1972. Because of this you play an important role in telling us about the medical care you received before and after the birth of your child.

All information you give us, as well as that provided by medical personnel and facilities listed by you in the questionnaire will be held strictly confidential. No information will be released to any other person or agency.

In giving answers to the first part of the form, please name every doctor, hospital, or clinic from which you received any care related to your pregnancy during the period specified in the question. It is necessary that we obtain as complete and accurate a picture as possible of all the medical care you received before and after the birth of your baby. If you do not know an exact answer to any of the questions in the form, give your best estimate. Please complete the form and return it within the next few days in the enclosed postage-free envelope.

Thank you for your cooperation.

Sincerely yours,

Robert A. Israel

Robert A. Israel
Director, Division of Vital Statistics

NAME OF CHILD	DATE OF BIRTH

M

ASSURANCE OF CONFIDENTIALITY – All information which would permit identification of an individual, or of an establishment, will be held confidential, will be used only by persons engaged in and for the purpose of the survey, and will be protected against disclosure in accordance with provisions of 42 CFR Part I.

VOLUNTARY PARTICIPATION – Completing this form is voluntary; you are under no legal obligation to do so.

NATIONAL BIRTH SURVEY

PART I. SOURCES OF MEDICAL CARE

This part is concerned with persons or places which provided medical care to you. If you do not know a complete address, please give us as much information as you can.

1. (a) List the name and address of the doctor, midwife, or other person who delivered your baby.

NAME (First) (Last)

ADDRESS (Number) (Street)

(City or Town) (State) (Zip Code)

(b) How many times were you seen for medical care by this person during the year before the baby was born? (DO NOT include the delivery episode).

_____ Number

3. Did you see a doctor, midwife, or other person for any medical care related to your pregnancy within THREE MONTHS AFTER THE BIRTH OF YOUR BABY?

☐ Yes ☐ No (Go on to Part II)

List the names and addresses of all persons who provided medical care related to your pregnancy within three months after the birth of your baby.

NAME (First) (Last)

ADDRESS (Number) (Street)

(City or Town) (State) (Zip Code)

NAME (First) (Last)

ADDRESS (Number) (Street)

(City or Town) (State) (Zip Code)

If more space is needed, continue below.

2. Were you seen by any other persons or places (hospitals, maternity clinics, etc.) for prenatal care (care related to your recent pregnancy)?

☐ Yes ☐ No (Go to question 3)

List the names and addresses of all persons or places which provided prenatal care to you.

A. NAME (First) (Last)

ADDRESS (Number) (Street)

(City or Town) (State) (Zip Code)

How many times were you seen for prenatal care by the above?

_____ (Number)

B. NAME (First) (Last)

ADDRESS (Number) (Street)

(City or Town) (State) (Zip Code)

How many times were you seen for prenatal care by the above?

_____ (Number)

If more space is needed, continue below.

PART II. INFORMATION ON HEALTH INSURANCE

In this part, we are interested in any health insurance you or your husband may have had during the TWELVE MONTHS before the baby was born.

1. Did you have any kind of health insurance for hospital or doctor bills at any time during the twelve months before your baby was born?

☐ Yes ☐ No (Go to question 6)

2. Did you have any kind of health insurance at the time your baby was born?

☐ Yes ☐ No

3. (a) Did health insurance pay for any part of the medical care you received during your pregnancy PRIOR TO the delivery?

☐ Yes ☐ No ☐ No medical care bill during pregnancy

(b) What part of the medical bills during pregnancy did your insurance pay?

☐ 1/4 or less ☐ over 1/2 to 3/4

☐ over 1/4 to 1/2 ☐ over 3/4

4. (a) Did health insurance pay any part of the hospital bill when your baby was born?

☐ Yes ☐ No ☐ No hospital bill

(b) What part of the hospital bill did your insurance pay?

☐ 1/4 or less ☐ over 1/2 to 3/4

☐ over 1/4 to 1/2 ☐ over 3/4

5. (a) Did health insurance pay any part of the doctor's bill for delivering your baby?

☐ Yes ☐ No ☐ No doctor's bill

(b) What part of the doctor's bill did your insurance pay?

☐ 1/4 or less ☐ over 1/2 to 3/4

☐ over 1/4 to 1/2 ☐ over 3/4

6. (a) Did any organization or agency (such as the Armed Forces, Medicaid, welfare, lodges, unions, etc.),pay for or provide any part of the medical services connected with pregnancy or birth?

☐ Yes ☐ No

(b) What part of the medical services were paid for or provided by the organization or agency?

☐ 1/4 or less ☐ over 1/2 to 3/4

☐ over 1/4 to 1/2 ☐ over 3/4

(c) What is the name of the agency or organization? _____

(GO ON TO PART III)

PART III. INFORMATION ABOUT YOU AND YOUR CHILDREN

We are interested in the outcomes of all the pregnancies you have ever had, even if they occurred before your present marriage. Please INCLUDE the child listed on the front of the questionnaire.

1. How many children have you ever had? (Count all those that were born ALIVE to you AT ANY TIME.)

Number ____

2. Have any of these children died? (DO NOT count miscarriages or babies that were born dead.)

☐ Yes ☐ No (Go to question 3)

Please list below, the name, sex, and dates of birth and death of each such child.

NAME OF CHILD (First) (Middle)	SEX M	SEX F	DATE OF BIRTH Mo.	DATE OF BIRTH Day	DATE OF BIRTH Year	DATE OF DEATH Mo.	DATE OF DEATH Day	DATE OF DEATH Year

3. Were any of your children living away from you when the child listed on the front of the questionnaire was born? (For example, usually living with relatives, adopted by someone else, in the Armed Forces, etc.) Do not include children who were away at school or college.

☐ Yes ☐ No (Go to question 4)

Please list below the name, sex, and date of birth of each such child.

NAME OF CHILD (First) (Middle)	SEX M	SEX F	DATE OF BIRTH Mo.	DATE OF BIRTH Day	DATE OF BIRTH Year

4. (a) Have you ever had a stillbirth? (That is, a baby that was born dead)

☐ Yes ☐ No (Go to question 5)

(b) How many have you ever had? Number ____

(c) Please give the date of your last stillbirth. _____ *(Mo. Day Year)*

(Part III continued on Page 4)

PART III. Continued

5. (a) Have you ever had a miscarriage? (DO NOT include any stillbirth counted in Question 4)

☐ Yes ☐ No (Go to question 6)

(b) How many have you ever had?

Number

(c) Please give the date of your last miscarriage. _____ (Mo. Day Year)

6. Thinking back, just before you became pregnant with your new baby, did you want to become pregnant at that time?

☐ I wanted this pregnancy at an earlier time, as well as at that time.

☐ I wanted to become pregnant at that time.

☐ I did not want to become pregnant at that time, but I wanted another child sometime in the future.

☐ I did not want to become pregnant at that time, or at any time in the future.

7. Do you expect to have more children?

☐ Definitely yes
☐ Probably yes
→ How many more children do you think you will probably have?

Number

☐ Probably no

☐ Definitely no

(GO ON TO PART IV)

PART IV. INFORMATION ABOUT YOU AND YOUR HUSBAND

(Check ONE box only)

1. Is this your first marriage?

☐ Yes → Please give the date of your marriage _____ Mo. Day Year

☐ No
- Please give the date of your first marriage _____ Mo. Day Year
- Please give the date of your present marriage _____ Mo. Day Year

2. (a) What is the highest grade of regular school (elementary school, high school, two year or four year college or university) that you COMPLETED? (DO NOT include business or trade schools, or other specialized training)

(Circle the highest grade of regular school completed)

0	1 2 3 4 5 6 7 8	9 10 11 12	13 14 15 16	17 18+
None	Elementary school	High school	University or college	Graduate school

(b) Other specialized training;

☐ Yes ☐ No

Specify: _____
(trade schools, beauty-barber college, hospital schools, etc.)

Circle years completed

Less than one 1 2 3 or more

3. (a) What is the highest grade of regular school (elementary school, high school, two-year or four-year college or university) that your husband COMPLETED? (DO NOT include business or trade schools or other specialized training.)

(Circle the highest grade of regular school he completed)

0	1 2 3 4 5 6 7 8	9 10 11 12	13 14 15 16	17 18+
None	Elementary school	High school	University or college	Graduate school

(b) Other specialized training;

☐ Yes ☐ No

Specify: _____
(trade schools, beauty-barber college, hospital schools, etc.)

Circle years completed

Less than one 1 2 3 or more

(GO ON TO PART V)

PART V. INFORMATION ABOUT YOUR FAMILY

In this part information is asked about all relatives living with you when the baby listed on the front of the questionnaire was born.

1. List below all relatives who usually lived with you at the time of your recent delivery. Be sure to list yourself, your baby, your husband (if he lived at home), as well as any of your children and other relatives living with you. Include children who were away at school or college. DO NOT include relatives who lived somewhere else (for example, relatives in the Armed Forces). Also, DO NOT include relatives who were only staying in your home temporarily when the baby was born.

NAME Enter your name on the first line; enter the names of every other relative who lived with you on the following lines. Be sure to include the baby *(First Name)* *(Last Name)*	For YOURSELF and EACH RELATIVE, provide the information requested below.				
	RELATIONSHIP TO YOU (Husband, daughter, son, father, father-in-law, nephew, stepson, adopted daughter, etc.)	DATE OF BIRTH			MARITAL STATUS Single (never married) Married Separated Widowed Divorced
		Mo.	Day	Year	
	YOURSELF				

2. Who was the head of this family? (This person must be you or one of the relatives who is listed above.)

☐ Your husband

☐ Yourself

☐ Another relative ⟶ Name of head _____

(GO ON TO PART VI)

PART VI. FAMILY INCOME

The following questions refer to the money income of members of your family during the TWELVE MONTHS before the baby was born. Include all incomes of members of the family whom you listed even if they were not living together during part of the twelve months. Include all income from wages, salaries, investments, property, Social Security, welfare, unemployment compensation, help from relatives, etc.

1. What was the income (total income before deductions for taxes, bonds, dues, insurance, etc.) received by YOUR HUSBAND from all sources during the twelve months before the baby was born? (This income should include money from wages, salaries, commissions, bonuses, tips, own business, professional practice, farm, unemployment compensation, etc.) If exact amount is not known, please check your best estimate.

(Check one)

- ☐ none or under $1,000
- ☐ $1,000 to $1,999
- ☐ $2,000 to $2,999
- ☐ $3,000 to $3,999
- ☐ $4,000 to $4,999
- ☐ $5,000 to $6,999
- ☐ $7,000 to $9,999
- ☐ $10,000 to $14,999
- ☐ $15,000 to $24,999
- ☐ $25,000 or more

2. What was the total family income (before deductions for taxes, bonds, dues, insurance, etc.) received by YOURSELF, YOUR HUSBAND, and ALL OTHER LISTED FAMILY MEMBERS from all sources during the twelve months before the baby was born? (This income should include money from wages, salaries, commissions, bonuses, tips, own business, professional practice, farm, unemployment compensation, etc.) If exact amount is not known, please check your best estimate.

(Check one)

- ☐ none or under $1,000
- ☐ $1,000 to $1,999
- ☐ $2,000 to $2,999
- ☐ $3,000 to $3,999
- ☐ $4,000 to $4,999
- ☐ $5,000 to $6,999
- ☐ $7,000 to $9,999
- ☐ $10,000 to $14,999
- ☐ $15,000 to $24,999
- ☐ $25,000 or more

(GO ON TO PART VII)

PART VII. PERSON COMPLETING THIS FORM

NAME _____

ADDRESS _____
(Number) *(Street)*

_____
(City or Town) *(State)* *(Zip Code)*

TELEPHONE NO. _____ DATE OF COMPLETION _____
(Month, day, year)

NOTES AND COMMENTS

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
ROCKVILLE, MARYLAND 20852

NATIONAL CENTER FOR
HEALTH STATISTICS

Your assistance is needed in a national birth survey being conducted by the Public Health Service with the approval of your State Health Department. We are seeking information on the amount of medical care provided to expectant mothers, and in the case of live births, to their newborn infants. This information is being collected on a sample of approximately 7,400 mothers of live births who represent the nearly 3.7 million women having deliveries during 1972. Each of the mothers included in the sample is being sent a questionnaire asking about her recent pregnancy.

According to our records, the mother named below was seen or treated at your facility at some time during the survey period given at the bottom of this page.

Since the 1972 national birth survey is based on only a small sample of mothers, it is particularly important that we receive as much information as possible on all mothers in the sample.

Please be assured that all information which you report about the mother and the newborn will be kept completely confidential. No identifying information will be disclosed to any person or any other agency. The data we collect will be used for statistical purposes only.

Please complete the questionnaire and return it within two weeks. Your cooperation in this study is deeply appreciated.

Sincerely yours,

Robert A. Israel

Robert A. Israel
Director, Division of Vital Statistics

Name of Mother	Name/Sex
Address	Date of Delivery
City (town), State, Zip Code	Survey Number
PERIOD COVERED BY THIS SURVEY: From	To

HL

ASSURANCE OF CONFIDENTIALITY– All information which would permit identification of an individual, or of an establishment, will be held confidential, will be used only by persons engaged in and for the purpose of the survey, and will be protected against disclosure in accordance with provisions of 42 CFR Part 1.

VOLUNTARY PARTICIPATION – Completing this form is voluntary; you are under no legal obligation to do so.

NATIONAL BIRTH SURVEY

PART I. PREGNANCY HISTORY OF MOTHER

(DO NOT include this delivery)

Total number of previous pregnancies ..... _____ or ☐ None

Number of pregnancies not ending in live birth (include all miscarriages, abortions, stillbirths, etc.) ..... _____ or ☐ None

Number of live births ..... _____ or ☐ None

Number now living ..... _____ or ☐ None

Number now dead ..... _____ or ☐ None

(GO ON TO PART II)

PART II. DELIVERY EPISODE

In this part we are interested in the condition of the mother and child and the care which the mother and child (if live born) received in the hospital from the time of delivery to discharge.

SECTION A. THIS DELIVERY

	Mo.	Day	Year
1. Date of admission of mother			
2. Date of discharge of mother			

(a) Was mother discharged ☐ Alive ☐ Dead

3. Age of mother at time of this delivery (age at last birthday) _____ years

	Mo.	Day	Year
4. Date last normal menses began			

5. Total duration of labor (If precise answer is not known, give your best estimate) _____ hours (or) ☐ Not known

6. Type of Anesthetic for delivery (Check all those which apply)

☐ Inhalation ☐ Local
☐ Spinal and epidural ☐ None
☐ Other
(Specify) _____

7. Type of delivery

☐ Spontaneous ☐ Cesarian Section
☐ Forceps ☐ Breech
☐ Other
(Specify) _____

8. Complications of labor (Check all those which apply)

☐ Inadequate pelvis ☐ Unusual bleeding
☐ Transverse lie ☐ Prolonged labor
☐ Multiple birth ☐ Anesthesia reaction
☐ Abnormal position of placenta or cord ☐ Placenta abruptio
☐ Premature rupture of membranes ☐ None
☐ Other
(Specify) _____

9. Complications of this pregnancy (Check all those which apply)

☐ Urinary infection ☐ Anemia
☐ Hypertension ☐ Rubella
☐ Toxemia preeclampsia ☐ Embolism
☐ Eclampsia ☐ Obesity
☐ Other ☐ None
(Specify) _____

10. Underlying medical conditions existing during this pregnancy (Check all those which apply)

☐ Obesity
☐ Anemia
☐ Diabetes ☐ Cardiovascular-renal disease
☐ Varicosity ☐ Asthma
☐ Congenital heart disease ☐ Other chronic pulmonary
☐ Thyroid condition ☐ Orthopedic condition
☐ Other ☐ None
(Specify) _____

11. Were any complications to mother's health noted after delivery?
☐ Yes, specify _____
☐ No

12. Was any operation performed which will prevent future pregnancies? ☐ Yes ☐ No

13. Condition of infant at delivery

☐ Born alive ☐ Born dead (Go to Part III)

APGAR rating, give scores

_____ At one minute or ☐ Not Done

_____ At five minutes or ☐ Not Done

O.M.B. No. 68-S 72088
Approval Expires : 12-31-73

PART II. SECTION A (Continued)

14. Were any unusual resuscitative efforts required?
☐ Yes, specify _____
☐ No

15. Congenital malformations or anomalies noted at delivery
_____ (or) ☐ None

16. Birth injuries noted at delivery
_____ (or) ☐ None

17. Weight of infant at birth
_____ pounds, _____ ounces, (or) _____ grams.

18. Infant named on the front of this questionnaire was,
☐ Single (Go to Section B)
☐ Twin
☐ Triplet, or other plural

19. If not single birth, was infant born
☐ First
☐ Second
☐ Third or higher

SECTION B. NEWBORN

1. Age when first examined outside of delivery room _____ hours (or) _____ days

2. Were any birth injuries noted before discharge?
☐ Yes, specify _____
☐ No

3. Were any congenital malformations or anomalies noted before discharge?
☐ Yes, specify _____
☐ No

4. Were any other illnesses noted before discharge?
☐ Yes, specify _____
☐ No

5. Was infant discharged alive?
☐ Yes ☐ No → Age at death _____ days, _____ hours
Cause of death _____ (Go to Part III)

(a) Date of discharge _____ *(Month Day Year)*

(b) Was infant given a discharge examination?
☐ Yes ☐ No

☐ RESIDENT (or) ☐ PRIVATE
NAME OF PHYSICIAN

(c) Place infant was discharged to
☐ Family home
☐ Medical care facility
☐ Other
NAME

(GO ON TO PART III)

HSM-254-5 (PAGE 3)
REV. 7-72

PART III. PRENATAL AND POSTPARTUM CARE OF MOTHER

In this part we are interested in all the prenatal and postpartum care the mother received from the period TWELVE MONTHS before this delivery to THREE MONTHS after.

1. Did the mother make any visits for prenatal care to facilities operated by this hospital?

☐ Yes ☐ No (Go to question 2.)

(a) Month of pregnancy prenatal care began (Check one)

☐ 1st ☐ 2nd ☐ 3rd ☐ 4th ☐ 5th

☐ 6th ☐ 7th ☐ 8th ☐ 9th

(b) How many visits did she have? _____ *(Number)*

(c) Were any complications or unusual conditions noted during the mother's prenatal care period?

☐ Yes ☐ No (Go to question 2)

↓

List below any complications or unusual conditions which were noted.

Trimester of Visit	Complications or Unusual Conditions

2. Was the mother referred to this hospital by a physician or by another hospital or clinic?

☐ Yes ☐ No (Go to question 3)

↓

NAME

ADDRESS *(Number)* *(Street)*

(City or Town) *(State)* *(Zip Code)*

Did the above provide any prenatal care to the mother? ☐ Yes ☐ No

3. Was the mother referred to any other medical facilities or persons for prenatal care?

☐ Yes ☐ No (Go to question 4)

↓

NAME

ADDRESS *(Number)* *(Street)*

(City or Town) *(State)* *(Zip Code)*

NAME

ADDRESS *(Number)* *(Street)*

(City or Town) *(State)* *(Zip Code)*

NAME

ADDRESS *(Number)* *(Street)*

(City or Town) *(State)* *(Zip Code)*

4. Did the mother make any visits to the hospital for postpartum care during the period between her discharge from the hospital and three months after?

☐ Yes ☐ No (Go to question 5)

↓

How many visits did she have? _____ *(Number)*

↓

Date		Condition or Reason

5. Did the mother receive family planning information,

(a) during her prenatal period? ☐ Yes ☐ No ☐ Don't Know

(b) during her delivery episode in the hospital? ☐ Yes ☐ No ☐ Don't Know

(c) during her postpartum period? ☐ Yes ☐ No ☐ Don't Know

6. (a) If yes to any of the above, did the mother agree to use the family planning information provided?

☐ Yes ☐ No ☐ Don't Know

↓

(b) What method of contraception did she agree to use? _____

HSM-254-5 (PAGE 4)
REV. 7-72

(GO ON TO PART IV)

PART IV. PERSON COMPLETING THIS FORM

NAME

ADDRESS

(Number) *(Street)*

(City or Town) *(State)* *(Zip Code)*

TELEPHONE NO. | DATE OF COMPLETION *(Mo. Day Yr.)*

NOTES AND COMMENTS

☆U.S. GOVERNMENT PRINTING OFFICE: 1980 311-240/14 1-3

VITAL AND HEALTH STATISTICS Series

Series 1. Programs and Collection Procedures.—Reports which describe the general programs of the National Center for Health Statistics and its offices and divisions and data collection methods used and include definitions and other material necessary for understanding the data.

Series 2. Data Evaluation and Methods Research.—Studies of new statistical methodology including experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory.

Series 3. Analytical Studies.—Reports presenting analytical or interpretive studies based on vital and health statistics, carrying the analysis further than the expository types of reports in the other series.

Series 4. Documents and Committee Reports.—Final reports of major committees concerned with vital and health statistics and documents such as recommended model vital registration laws and revised birth and death certificates.

Series 10. Data From the Health Interview Survey.—Statistics on illness, accidental injuries, disability, use of hospital, medical, dental, and other services, and other health-related topics, all based on data collected in a continuing national household interview survey.

Series 11. Data From the Health Examination Survey and the Health and Nutrition Examination Survey.—Data from direct examination, testing, and measurement of national samples of the civilian noninstitutionalized population provide the basis for two types of reports: (1) estimates of the medically defined prevalence of specific diseases in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics and (2) analysis of relationships among the various measurements without reference to an explicit finite universe of persons.

Series 12. Data From the Institutionalized Population Surveys.—Discontinued effective 1975. Future reports from these surveys will be in Series 13.

Series 13. Data on Health Resources Utilization.—Statistics on the utilization of health manpower and facilities providing long-term care, ambulatory care, hospital care, and family planning services.

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