## Hospitals' and Physicians' Handbook on Birth Registration and Fetal Death Reporting



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service National Center for Health Statistics

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## Preface

This handbook is prepared by the National Center for Health Statistics, U.S. Public Health Service, Department of Health and Human Services, and contains instructions for physicians, hospital personnel, and others with responsibilities for completing and filing records of birth and fetal death. It pertains to the 1989 revisions of the U.S. Standard Certificate of Live Birth and U.S. Standard Report of Fetal Death and the 1977 revision of the Model State Vital Statistics Act and Regulations. This handbook is intended to serve as a model for adaptation by any vital statistics registration area.

Other handbooks available as references on preparing and registering vital records are:

- Medical Examiners' and Coroners' Handbook on Death Registration and Fetal Death Reporting
- Physicians' Handbook on Medical Certification of Death
- Funeral Directors' Handbook on Death Registration and Fetal Death Reporting
- Guidelines for Reporting Occupation and Industry on Death Certificates
- Handbook on the Reporting of Induced Termination of Pregnancy
- Handbook on Marriage Registration
- Handbook on Divorce Registration

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## Introduction

#### Purpose

This handbook is designed as an aid to acquaint physicians, hospital personnel, and others with the vital registration system in the United States and to provide instructions for completing and filing records of birth and fetal death. It includes background information on the importance of these documents for legal and statistical purposes and specific instructions for recording entries.

The purpose of this handbook is to achieve improved reporting by promoting better understanding of the forms and of the uses of information entered on them. Because most live births and fetal deaths of 20 weeks or more gestation occur in hospitals, the quality of birth registration and fetal death reporting depends heavily on hospital personnel.

The hospital administrator generally has the overall responsibility for obtaining the personal data, preparing the certificate or report, securing the required signatures, and filing the certificate or report with the local or State registrar, although State laws vary in specific requirements. In some States the hospital administrator is authorized under certain circumstances to certify to the facts of birth. The physician is generally responsible for completing the medical and health information and certifying to the date, time, and place of birth.

Both the birth certificate and fetal death report provide medical and health information that is used extensively in research and in planning programs relating to maternal and child health.

## Importance of birth registration and fetal death reporting

A birth record is a statement of facts concerning an individual. It is a permanent legal record. Throughout life, a person uses his or her birth certificate to prove age, parentage, and citizenship. Birth certificates are needed for entrance to school; voter registration; obtaining a driver's license, marriage license, passport, veterans' benefits, welfare aid, or social security benefits; and many other purposes.

Society would be greatly misserved if the birth certificate was used only for legal purposes. Annual vital statistics are compiled on the number and rate of births by characteristics such as place of birth, place of residence of mother, age of mother, plurality, and birth weight. Population composition and growth are estimated using these data. Educational systems and institutions, government agencies, and private industry find this information essential in planning and evaluating programs in public health and other important areas.

The medical and health information on the birth certificate can be used to study the conditions that may lead to infant death. This information also helps in establishing programs to address the problems associated with infant death.

The fetal death report is recommended as a legally required statistical report. However, in a number of States it remains a legal certificate. The record, whether a certificate or report, provides valuable health and research data. These data are also essential in planning and evaluating prenatal care services and obstetrical programs and, when used with data on neonatal deaths, provide a composite picture of perinatal outcome.

## U.S. standard certificates and reports

The National Center for Health Statistics, U.S. Public Health Service, Department of Health and Human Services, provides leadership and coordination in the development of standard certificates and reports to serve as models for use by States. These certificates and reports are revised periodically in collaboration with State health officials, registrars, and statisticians; Federal agencies; and other providers or users of vital statistics, such as physicians, medical examiners, coroners, local registrars, midwives, medical record personnel, and funeral directors. The purpose of the revision is to ensure that the data collected relate to current and future needs. In the revision process, each item on the standard certificates and reports is evaluated thoroughly for its registration, legal, statistical, medical, and research value.

Each State is encouraged to adopt the recommended standard certificates and reports as a means of developing a uniform national vital registration and statistics system. Although many States use the recommended standard certificates and reports, some States modify them to comply with State laws and regulations or to meet their own particular needs for information.

#### The State health department

The State health department administers the birth registration and fetal death reporting system under the laws and regulations of the State. Birth certificates are placed on permanent file by the State office of vital statistics after they have been accepted for filing. In some States, fetal death reports are maintained in a permanent file; in others, they are destroyed after the medical and health information has been abstracted.

## The local registrar

In States having a local registrar system, the local registrar performs vital record activities under the direction and supervision of the State registrar and under the same laws and regulations. Certificates and reports must be filed with the local registrar promptly and accurately. The local registrar transmits the records to the State registrar on a monthly or more frequent basis, maintains records, makes reports, and performs other duties as required by the State registrar.

#### Confidentiality of vital records

State and local registrars protect the information on vital records from unwarranted or indiscriminate disclosure. Vital records are available only to persons who are authorized access by State law and supporting regulations. Legal safeguards to the confidentiality of vital records have been strengthened in recent years. Physicians and hospitals are assured that extensive legal and administrative measures are used to protect individuals and establishments from unauthorized disclosure of personal information.

The format of the live birth certificate is designed to further assure confidentiality of information. The upper part of the certificate contains information for the identification of the child, a description of when and where the birth occurred, items relating to the certifier or attendant at birth, and items identifying the mother and father. This information is routinely provided in certified copies of the birth record to be used for legal purposes. The lower portion of the certificate of live birth is designed only for medical and health uses. This information is *never* to be included on certified copies. The lower portion of the record contains other items of information relating to the mother and father; medical information about the pregnancy, labor, and delivery; and medical and health items relating to the mother and child, such as risk factors for the pregnancy, obstetric procedures, complications of labor and delivery, method of delivery, abnormal conditions of the newborn, and congenital anomalies of the child.

The fetal death report is designed primarily to collect information for statistical and research purposes. In many States these records are not maintained in the official files of the State health department? Most States never issue certified copies of these records; the other States issue certified copies very rarely.

## **Registration requirements**

When a delivery results in a live birth, a birth certificate must be filed, even if the infant lives for only a very short period of time. In most States, a live birth is defined as the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

A fetal death report is filed when a delivery results in a fetus that shows no evidence of life after it is entirely outside the mother. This would be an infant that has no heart beat, respiration, voluntary movement of muscles, or any other evidence of life.

## **Specific responsibilities**

#### Hospital

Hospital personnel must assemble and record the medical and personal data to be entered on the birth certificate and fetal death report. Necessary procedures usually cut across departmental lines. This, combined with the current emphasis on reducing the length of stay in hospitals, makes it extremely important for one hospital staff member to be given the overall responsibility and authority to request and obtain the cooperation needed. Specifically, the hospital should:

- Develop efficient procedures for prompt preparation, signing, and filing of certificates and reports.
- Collect and record the information about the parent(s) and the medical data required on the birth certificate and fetal death report. The medical information should be obtained from the obstetric and pediatric record.
- Prepare a correct and legible certificate or report, making certain that every item is completed.
- Secure all necessary signatures on the certificate.
- File the certificates and reports with the proper official within the time specified in the vital statistics laws of the State.
- Cooperate with State or local registrars concerning queries on certificate entries.
- Assist parent(s) of children born in the hospital by completing any forms or statements needed to correct errors in the original certificates.
- Provide a system for preparing and filing a birth certificate for an infant born en route to the hospital.
- Call on the local or State office of vital statistics for advice and assistance when necessary.

#### Midwife or other person who delivers a child

When a birth or fetal death occurs outside a hospital and no physician is in attendance at or immediately after the delivery, the responsibility for completing and filing the birth certificate or fetal death report rests on one of the following, in the order of preference shown: the midwife or other person in attendance, the father, the mother, or, in the absence of the father and the inability of the mother, the person in charge of the place where the birth occurred.

#### Informant

The informant, preferably the mother (or the father or another adult having knowledge of the personal facts concerning the birth), is responsible for providing the legal facts (for example, parents' names) and signing the birth certificate to certify that the information is correct.

## Physician

#### **Birth registration**

When the birth takes place in a hospital, the physician is primarily responsible for certifying to the date, time, and place of birth. The physician's responsibilities are to:

- Complete or verify the certificate of live birth or those parts of the certificate for which the physician is responsible under State law and regulations.
- Complete the certifier/attendant section.
- Complete or verify the medical and health information section.
- Cooperate with State or local registrars concerning queries on certificate entries.
- Assist parents in correcting errors on the original certificate.
- Be familiar with the State vital statistics law and related rules and regulations of the State health department to determine the scope of a physician's responsibility in birth registration.

If the birth takes place outside a hospital (for example, in a doctor's office or at home) and is attended by a physician, the physician must complete the <u>entire</u> certificate. In such cases, the physician also must transmit the certificate to the State or local registrar of the district in which the birth occurred within the time prescribed by State law.

#### Certifying to a live birth

When a birth occurs in a hospital, the physician usually receives a completed birth certificate ready for review and signature. The medical record practitioner gathers the information on the certificate from a variety of sources, including hospital charts, medical records of infant and mother, and the physician's own records. The physician, therefore, should examine these items for any discrepancies or incorrect statements before signing the certificate. In some cases, certain items may be left blank to be completed by the physician. For example, the checkbox items at the bottom of the certificate (items 38-43) may be left blank for the physician to complete. These items request medical information on risk factors for the pregnancy, obstetric procedures used, complications of labor or delivery, method of delivery, and congenital anomalies of the child. If any errors are found, the physician should ask that a new certificate be prepared for signature.

When a birth occurs outside of a hospital, the physician or other attendant who is present at or immediately after the birth of a child is required to obtain and record information on all items listed on the certificate and is responsible for filing the birth certificate with the registrar. Detailed information on filling out these items is provided in Part II of this handbook.

#### Fetal death reporting

The physician is responsible for knowing when it is necessary to report a fetal death. The gestational age of the fetus is the usual criterion for determining if a fetal death report must be filed. In some States the weight of the fetus may be an additional criterion for determining if the fetal death report must be filed.

Although it is recommended that all fetal deaths of 20 weeks or more gestation or a weight of 350 grams or more should be reported, State requirements may vary. Any questions about the requirements in your State should be addressed to your State or local registrar.

When a fetal death occurs in a hospital, the physician is primarily responsible for providing the time and cause of fetal death and completing or verifying the remaining medical and health information. If a report must be filed, the physician's responsibilities are to:

- Enter or verify the date of delivery (month, day, and year).
- Complete or verify the medical and health information section. (The person responsible for this may differ depending on institutional practice.)
- Complete the cause of fetal death section.
- Return the fetal death report to the person or institution charged by State law with the responsibility for filing the report.

When a fetal death occurs outside a hospital (for example, in a doctor's office or at home) and is attended by a physician, the physician must complete the entire report and send it directly to the State or local registrar.

## Part I—General instructions for completing certificates and reports

The data necessary for preparation of the live birth certificate and fetal death report are obtained from the:

- Informant (in order of preference the mother, the father, another relative, or other person who has knowledge of the facts).
- Attending physician (mother's and infant's).
- Hospital or physician records.

Worksheets are useful in obtaining information for completing the forms. The development and use of worksheets are discussed in appendix A. The informant should sign the informant's worksheet, if one is used, to indicate that the information is correct. The attending physician should review the entries on the medical records worksheet to be sure they are correct. The actual certificate can then be completed from the worksheets.

- If your State requires that the informant sign the birth certificate, the informant should review the certificate before signing it.
- The attending physician should review the entire certificate before signing it.
- The informant and the physician should never sign a blank certificate.
- In the case of a birth or fetal death occurring in a hospital, the medical items are usually typed on the certificate or report and are ready for the physician's review and signature.

When a birth or fetal death occurs outside of a hospital, the person preparing the certificate will find it necessary to obtain information from the parent(s) for the items that are personal and not medical in character, such as residence, age of parents, and education. This may be done, in order of preference, by the physician, midwife, nurse, or other person in attendance at the delivery.

Birth certificates are permanent legal records from which official copies are made. Fetal death reports are valuable health and research documents. Therefore, it is essential that the certificates and reports be prepared accurately. These general rules should be followed:

- File the original certificate or report with the registrar. Reproductions or duplicates are not acceptable.
- Avoid abbreviations except those recommended in the specific item instructions.
- Verify with the informant the spelling of names, especially those that have different spellings for the same sound (Smith or Smyth, Gail or Gayle, and Wolf or Wolfe).
- Refer problems not covered in these instructions to the State office of vital statistics or the local registrar.
- Use the current form designated by the State.
- Type all entries whenever possible. If a typewriter cannot be used, print legibly in permanent black ink.
- Complete each item, following the specific instructions for that item.
- Do not make alterations or erasures.
- Obtain all signatures. Rubber stamps or other facsimile signatures are not acceptable.

# Part II—Completing the live birth certificate

These instructions pertain to the 1989 revision of the U.S. Standard Certificate of Live Birth, shown in appendix B.

## Upper portion of the live birth certificate

The upper portion of the Standard Certificate of Live Birth (items 1-24) contains information required for identification of the individual and a description of where and when the birth occurred. These are the items that are generally furnished when a person requests a copy of his or her birth certificate.

#### 1. CHILD'S NAME (First, Middle, Last)

Type or print the child's first, middle, and last names.

- Enter the full name of the child exactly as given by the parent(s).
- Entries of Jr. and II, following the last name, are acceptable.
- Practices for assigning surname vary from State to State. If the parents request that the surname of the child be entered differently from State procedures, contact your local registrar or State office of vital statistics for guidance.

If the parents do not have a given name selected for the child, leave the item blank. Never enter "Baby girl," or "Infant boy."

This item identifies the individual for whom the certificate is being prepared.

#### 2. DATE OF BIRTH (Month, Day, Year) (Child)

Enter the exact month, day, and year the child was born.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

Pay particular attention to the entry of month, day, or year when the birth occurs around midnight or on December 31. Consider a birth at midnight to have occurred at the end of one day rather than the beginning of the next day.

This item records the date of birth of the individual named on the certificate. It is used to establish age for such purposes as school entrance, obtaining a driver's license, and social security benefits. This information is used in conjunction with date last normal menses began to calculate length of gestation, which is used to study survivorship of low-birth-weight and premature infants. It is also used in conjunction with dates of last live birth and other termination to compute intervals between births and pregnancies.

#### **3. TIME OF BIRTH**

Enter the exact time (hour and minute) the child was born according to local time. If daylight saving time was the official prevailing time when the birth occurred, it should be used to record the time of birth. Be sure to indicate whether the time of birth is a.m. or p.m.

Enter 12 noon as "12 noon." One minute after 12 noon is entered as "12:01 p.m."

Enter 12 midnight as "12 mid." One minute after 12 midnight is entered as "12:01 a.m."

In cases of plural births, the exact time that each child was delivered should be recorded as the hour and minute of birth for that child.

This item documents the exact time of birth for various legal uses, such as the order of birth in plural deliveries. When the birth occurs around midnight, the exact hour and minute may affect the date of birth. For births occurring at the end of the year, the hour and minute affect not only the day but the year of birth, a factor in establishing dependency for income tax purposes.

#### 4. SEX

Enter male or female. Do not abbreviate or use other symbols. If sex and name are inconsistent, verify both entries. If sex cannot be determined after verification with medical records, mother of child, informant, or other sources, make no entry. Attach a note to the certificate stating the reason for omission.

This item aids in identification of the child. It is also used for measuring sex differentials in health-related characteristics and for making population estimates and projections.

#### 5-8 PLACE OF BIRTH

#### 5. CITY, TOWN, OR LOCATION OF BIRTH

Enter the name of the city, town, village, or location where the birth occurred. For births occurring on a moving conveyance, enter the city, town, village, or location where the child was first removed from the conveyance.

#### 6. COUNTY OF BIRTH

Enter the name of the county where the birth occurred. For births occurring on a moving conveyance, enter the county where the child was first removed from the conveyance.

If the birth occurred on a moving conveyance in the United States and the child was first removed from the conveyance in this State, complete a birth certificate showing the place of birth as this State. If the birth occurred on a moving conveyance in international waters, international airspace, or in a foreign country or its airspace, and the child was first removed from the conveyance in this State, complete a birth certificate in this State, but enter the actual place of birth insofar as can be determined.

These items identify the place of birth, which is used to determine U.S. citizenship. Information on the place of occurrence, together with information on the place of residence, is used to evaluate the supply and distribution of obstetrical services.

#### 7. PLACE OF BIRTH

Hospital Freestanding Birthing Center Clinic/Doctor's Office

Residence Other (Specify)

Check the place where the birth occurred. A birthing center located in and operated by a hospital is considered part of the hospital and should be reported as occurring in the hospital. Freestanding birthing centers include those facilities that are operated independently from hospitals (autonomously). The "clinic/doctor's office" category includes other nonhospital outpatient facilities where births occasionally occur.

This item identifies home births, births in freestanding birthing centers, and births in nonhospital clinics or physicians' offices. Such information permits analysis of the number and characteristics of births by type of facility and is helpful in determining the level of utilization and characteristics of births occurring in such facilities.

#### 8. FACILITY NAME (If not institution, give street and number)

Enter the full name of the facility where the birth occurred.

If the birth occurred on a moving conveyance en route to or on arrival at a facility, enter the full name of the facility followed by "En route."

If the birth occurred at home, enter the house number and street name of the place where birth occurred.

If the birth occurred at some place other than those described above, enter the number and street name of the location.

If the birth occurred on a moving conveyance that was not en route to a facility, enter as the place of birth the address where the child was first removed from the conveyance.

The facility name is used for followup and query programs in the State vital statistics office and is of historical value to the parents and child. It is also used by many States to produce statistical data by specific facility.

## 9-13 CERTIFIER/ATTENDANT INFORMATION

#### 9. CERTIFICATION STATEMENT AND SIGNATURE

I certify that this child was born alive at the place and time and on the date stated.

Obtain the signature of the physician or other person in attendance at the birth or other person as authorized by State law. Rubber stamps or other facsimile signatures are not permitted.

In some States, the person in charge of the institution is authorized to complete and sign the certificate if the physician or other person in attendance is unable to certify within 72 hours after the birth (or whatever time period is specified by law).

10. DATE SIGNED (Month, Day, Year)

Enter the exact month, day, and year the certifier signed the certificate.

Do not use a number to designate the month.

The certification validates the accuracy of the date, time, and place of birth of the child recorded on the certificate.

11. ATTENDANT'S NAME AND TITLE (If other than certifier) (Type/Print)

When the certifier was not the attendant, type or print the full name of the person in attendance on the line provided and check the appropriate box to identify his or her title. M.D. = doctor of medicine, D.O. = doctor of osteopathy, C.N.M. = certified nurse midwife. Lay midwives should be identified as "Other Midwife." If "Other (Specify)" is checked, type or print the title of the attendant on the line provided.

The attendant's name is important in case of queries. The title provides information on the type of attendant, which is used to assess the service rendered. This information will permit separate identification of deliveries attended by certified nurse midwives, lay midwives, and other persons.

## 12. CERTIFIER'S NAME AND TITLE (Type/Print)

Name \_

M.D. D.O. Hospital Admin. C.N.M. Other Midwife

Other (Specify)

Type or print the full name of the person whose signature appears in item 9 on the line provided and check the appropriate box to identify his or her title. M.D. = doctor of medicine, D.O. = doctor of osteopathy, Hospital Admin. = hospital administrator, C.N.M. = certified nurse midwife. Lay midwives should be identified as "Other Midwife." If "Other (Specify)" is checked, type or print the title of the certifier on the line provided.

This item provides information about the certifier and indicates the type of person who attended the birth when the certifier is the attendant.

**13. ATTENDANT'S MAILING ADDRESS** (Street and Number or Rural Route Number, City or Town, State, Zip Code)

Enter the mailing address of the person whose name appears in item 11.

The mailing address is used for inquiries to correct or complete items on the record and for followback studies to obtain additional information about the birth.

#### 14-15 REGISTRAR

#### **14. REGISTRAR'S SIGNATURE**

This item is signed by the local or State registrar when the certificate is filed.

The signature documents the fact that the certificate has been accepted by and filed with the registrar.

#### 15. DATE FILED BY REGISTRAR (Month, Day, Year)

This item is completed by the local or State registrar when the certificate is filed.

This item documents whether the certificate was filed within the time period specified by law.

#### 16a. MOTHER'S NAME (First, Middle, Last)

Type or print the first, middle, and last name of the mother. This is the mother's *current legal* name.

#### 16b. MAIDEN SURNAME

Type or print the last name of the mother as given at birth or adoption, not a name acquired by marriage.

Items 16a and 16b are used for identification and as documentary evidence of parentage. The mother's maiden surname is important because it remains constant throughout her life, in contrast to other names, which may change because of marriage or divorce.

#### 17. DATE OF BIRTH (Month, Day, Year) (Mother)

Enter the exact month, day, and year that the mother was born.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

This item is used to calculate the age of the mother, which is one of the most important factors in the study of childbearing. Studies have shown a relationship between the health of the child and age of the mother. For example, teenage women and women over 40 have a higher percentage of low-birth-weight and premature infants than women of other ages. This item is also useful for genealogical research.

#### 18. BIRTHPLACE (State or Foreign Country) (Mother)

If the mother was born in the United States, enter the name of the State.

If the mother was born in a foreign country or a U.S. territory, enter the name of the country or territory.

If the mother was born in the United States but the State is unknown, enter "U.S.-Unknown."

If the mother was born in a foreign country but the country is unknown, enter "Foreign-Unknown."

If no information is available regarding place of birth, enter "Unknown." Do not leave this item blank. This item provides information on recent immigrant groups, such as Asian and Pacific Islanders, and is used for tracing family histories. It is also used with the U.S. Bureau of the Census data to compare the childbearing of women who were born in the United States with that of foreign-born women.

## **19a-e MOTHER'S RESIDENCE**

The mother's residence is the place where her household is located. This is not necessarily the same as her "home State," "voting residence," "mailing address," or "legal residence." The State, county, city, and street address should be for the place where the mother actually lives. Never enter a temporary residence, such as one used during a visit, business trip, or vacation. Residence for a short time at the home of a relative, friend, or home for unwed mothers for the purpose of awaiting the birth of the child is considered temporary and should not be entered here. However, place of residence during a tour of military duty or during attendance at college is not considered temporary and should be entered on the certificate as the mother's place of residence.

#### 19a. RESIDENCE—STATE (Mother)

Enter the name of the State in which the mother lives. This may differ from the State in her mailing address. If the mother is not a U.S. resident, enter the name of the country and the name of the nearest unit of government that is the equivalent of a State.

#### 19b. RESIDENCE—COUNTY (Mother)

Enter the name of the county in which the mother lives.

#### 19c. RESIDENCE-CITY, TOWN, OR LOCATION (Mother)

Enter the name of the city, town, or location where the mother lives. This may differ from the city, town, or location in her mailing address.

#### 19d. RESIDENCE-STREET AND NUMBER (Mother)

Enter the number and street name of the place where the mother lives.

If this location has no number and street name, enter the Rural Route number or a description of the place that will aid in identifying the precise location.

## 19e. RESIDENCE-INSIDE CITY LIMITS? (Yes or no) (Mother)

Enter "Yes" if the location entered in item 19 is incorporated and the mother's residence is inside its boundaries. Otherwise, enter "No."

Statistics on births are tabulated by place of residence of the mother. This makes it possible to compute birth rates based on the population residing in the area. Data on births by place of residence of the mother are used to prepare population estimates and projections. These data are used in planning for and evaluating community services and facilities, including maternal and child health programs, schools, etc. Private businesses and industries also use these data for estimating demands for services. "Inside City Limits" is used to properly assign residence to either the city or the remainder of the county.

## 20. MOTHER'S MAILING ADDRESS (If same as residence, enter ZIP Code only)

Enter the mailing address of the mother only if it is different from the residence address. If it is the same, enter the ZIP Code only. It is important to distinguish between the mother's mailing address and her residence address. Because each serves a different purpose, they are not substitutes for one another.

This information is used to mail a birth notification record or a copy of the certificate to the mother and to ask for clarification of birth certificate entries or obtain missing information. It is also used for followback studies to obtain additional details about the birth.

#### 21. FATHER'S NAME (First, Middle, Last)

State laws vary. In general, if the child was:

- Born to a mother who was married at the time of birth, type or print the name of her husband.
- Conceived in wedlock but born after a divorce was granted or after the husband died, type or print the name of the mother's deceased or divorced husband.
- Conceived and born out of wedlock to a divorced, widowed, or never-married mother, make no entry regarding the father's name and omit items 22, 23, 25b, 26b, and 27b, except as authorized by State law.

The surname of the father and the child are usually the same. When they are different, carefully review this information with the parent(s) to ensure that there is no mistake.

Refer problems not covered in these instructions to the State office of vital statistics.

This item is used for identification and as documentary evidence of parentage.

#### 22. DATE OF BIRTH (Month, Day, Year) (Father)

Enter the exact month, day, and year that the father was born.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

This item is used to calculate the age of the father, which is used in the study of childbearing and health and genealogical research.

#### 23. BIRTHPLACE (State or Foreign Country) (Father)

If the father was born in the United States, enter the name of the State.

If the father was born in a foreign country or a U.S. territory, enter the name of the country or territory.

If the father was born in the United States, but the State is unknown, enter "U.S.-Unknown."

If the father was born in a foreign country, but the country is unknown, enter "Foreign-Unknown."

If no information is available regarding place of birth, enter "Unknown." Do not leave this item blank.

This item provides information on recent immigrant groups, such as Asian and Pacific Islanders, and is used for tracing family histories.

#### 24. INFORMANT STATEMENT AND SIGNATURE

I certify that the personal information provided on this certificate is correct to the best of my knowledge and belief.

Obtain the signature of the parent or other person who provided the personal facts about the family after the information has been entered on the certificate and reviewed by the informant.

The certification validates the accuracy of the personal information recorded on the certificate.

## Lower portion of the live birth certificate—INFORMATION FOR MEDICAL AND HEALTH USE ONLY

The lower portion of the U.S. Standard Certificate of Live Birth contains information that is used for medical and health studies only. These items (25-43) are separated from the identifying information and are excluded from certified copies of the certificate. The information is used for a wide range of health research and medical purposes.

**25. OF HISPANIC ORIGIN?** (Specify No or Yes—If yes, specify Cuban, Mexican, Puerto Rican, etc.)

#### 25a. MOTHER

No Yes Specify:\_\_\_\_

#### 25b. FATHER

No Yes Specify:\_\_\_\_

Check "No" or "Yes." If "Yes" is checked, enter the specific Hispanic group as obtained from the parent(s) or other informant. Item 25 should be "checked" for the mother on all certificates and for the father in all cases where the name of the father is shown on the certificate. Do not leave this item blank. The entry in this item should reflect the response of the informant.

For the purposes of this item, "Hispanic" refers to those people whose origins are from Spain, Mexico, or the Spanish-speaking countries of Central or South America. Origin can be viewed as the ancestry, nationality, lineage, or country in which the person or his or her ancestors were born before their arrival in the United States.

There is no set rule as to how many generations are to be taken into account in determining Hispanic origin. A person may report Hispanic origin based on the country of origin of a parent, grandparent, or some far-removed ancestor. The response should reflect what the person considers himself or herself to be and is not based on percentages of ancestry. Although the prompts include the major Hispanic groups of Cuban, Mexican, and Puerto Rican, other Hispanic groups should also be identified in the space provided.

If a person indicates that he or she is of multiple Hispanic origin, enter the origins as reported (for example, Mexican-Puerto Rican).

If a person indicates that he or she is Mexican-American or Cuban-American, enter the Hispanic origin as stated.

This item is not a part of the Race item. A person of Hispanic origin may be of any race. Each question, Race and Hispanic origin, should be asked independently.

Hispanics comprise the second largest ethnic minority in this country. This item provides data to measure differences in fertility and pregnancy outcome as well as variations in health care for people of Hispanic and non-Hispanic origin. Without collection of data on persons of Hispanic origin, it is impossible to obtain valid demographic and health information on this important group of Americans.

Some States have a very small Hispanic population and may wish to obtain data on other groups. Therefore, they may opt to include a general Ancestry item on their certificate instead of a specific Hispanic origin item. Instructions for the general Ancestry item follow:

Ancestry—Mexican, Puerto Rican, Cuban, African, English, Irish-German, Hmong, Etc. (Specify)

Enter the ancestry as obtained from the parent(s) or other informant. This item should be completed for the mother on all certificates and for the father in all cases where the name of the father is shown on the certificate. Do not leave this item blank. The entry in this item should reflect the response of the informant.

For purposes of this item, ancestry refers to the nationality, lineage, or country in which the person or his or her ancestors were born before their arrival in the United States. American Indian and Alaska Native ancestry should be entered as such.

There is no set rule as to how many generations are to be taken into account in determining ancestry. A person may report ancestry based on the country of origin of a parent, grandparent, or some far-removed ancestor. The response should reflect what the person considers himself or herself to be and is not based on percentages of ancestry.

Some persons may not identify with the foreign birthplace of their ancestors or with a nationality and may report "American." If, after clarification of the intent of this item, the person still feels that he or she is an "American," enter "American" on the record.

If a person indicates that he or she is of multiple ancestry, enter the ancestry as reported (for example, English-Scottish-Irish, Mexican-American).

If a respondent gives a religious group—such as, Jewish, Moslem, or Protestant—ask for the country of origin or nationality.

This item is not a part of the Race item. Both questions, Race and Ancestry, should be asked independently. This means that for certain groups—such as Japanese, Chinese, or Hawaiian, the entry will be the same in both items. The entry should be made in both items even if it is the same. However, an entry of "Black" or "White" should never be recorded in the ancestry item.

#### 26. RACE—American Indian, Black, White, etc. (Specify below)

#### 26a. MOTHER

#### 26b. FATHER

Enter the race of the mother and of the father as obtained from the parent(s) or other informant. This item should be completed for the mother on all certificates and for the father in all cases where the name of the father is shown on the certificate. The entry in this item should reflect the response of the informant.

For Asians and Pacific Islanders, enter the national origin of the mother and father, such as Chinese, Japanese, Korean, Filipino, or Hawaiian.

If the informant indicates that the mother and/or father is of "mixed race," enter both races or ancestries.

These items are used to determine the race of the child. Information on race is essential in producing data for minority groups. It is used to study racial variations in childbearing, access to health care, and pregnancy outcomes (infant mortality and birth weight). Race is an important variable in planning for and evaluating the effectiveness of health programs and in preparing population estimates.

#### 27. EDUCATION (Specify only highest grade completed) Elementary/Secondary (0-12) — College (1-4 or 5+)

#### 27a. MOTHER

#### 27b. FATHER

Enter the highest number of years of regular schooling completed by the mother and father in either the space for elementary/secondary school or the space for college. An entry should be made in only one of the spaces. The other space should be left blank. Report only those years of school that were completed. A person who enrolls in college but does not complete one full year should not be identified with any college education in this item.

Count formal schooling. Do not include beauty, barber, trade, business, technical, or other special schools when determining the highest grade completed.

Education is correlated with fertility and birth outcome, and is used as an indicator of socioeconomic status. It is used to measure the effect of education and socioeconomic status on health, childbearing, and infant mortality.

## 28a-e PREGNANCY HISTORY (Complete each section)

When certificates or reports are prepared for a plural delivery, items 28a-e on the certificate or report of the first-born should not include any of the other deliveries. On the certificate or report of the second-born, these items should include information about the first-born of the plural delivery. Similarly, for the third-born, these items should include information about the first- and second-born, and so on.

#### 28a. Now Living

Number None

Enter the number of prior children born alive to this mother who are still living at the time of this birth. Do not include this child. Do not include children by adoption.

Check "None" if this is the first live birth to this mother or if all previous children are dead.

#### 28b. Now Dead

Number\_\_\_\_ None

Enter the number of prior children born alive to this mother who are no longer living. Do not include this birth or any children by adoption.

Check "None" if this is the first live birth to this mother or if all previous children are still living.

#### 28c. DATE OF LAST LIVE BIRTH (Month, Year)

Enter the date (month and year) of birth of the last live-born child of the mother.

If this certificate is for the second birth of a twin set, enter the date of birth for the first baby of the set, if it was born alive. Similarly, for triplets or other multiple births, enter the date of birth of the previous live birth of the set. If all previously born members of a multiple set were born dead, enter the date of the mother's last delivery that resulted in a live birth.

Enter "-," "Not applicable," or "None" if the mother has not had a previous live birth. Do not leave this item blank.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

**28d-e OTHER TERMINATIONS** (Spontaneous and induced at any time after conception)

28d. Number\_\_\_\_ 🗌 None

Enter the number of fetuses that were delivered dead regardless of the length of gestation. Include each recognized loss of a product of conception, such as ectopic pregnancy, miscarriage, stillbirth, and spontaneous or induced abortion.

Check "None" if this is the first pregnancy for this mother or if all previous pregnancies resulted in live-born infants.

## 28e. DATE OF LAST OTHER TERMINATION (Month, Year)

Enter the date (month and year) of the last termination of pregnancy that was not a live birth regardless of the length of gestation.

If the mother has never had such a termination, enter "-," "Not applicable," or "None." Do not leave this item blank.

Enter the full name of the month—January, February, March, etc. Do not use a number or abbreviation to designate the month.

If this certificate is for the second birth of a twin set and the first was born dead, enter the date of delivery of that fetus. Similarly, for other multiple births, if any previous member of the set was born dead, enter the date of delivery of that fetus. If all previously born members of a multiple set were born alive, enter the date of the mother's last delivery that resulted in a fetal death.

These items are used to determine live-birth order and total-birth order, which are important in studying trends in childbearing and child spacing. They are also useful in studying health problems associated with birth order—for example, first births to older women—and determining the relationship of birth order to infant and perinatal mortality.

In studying child spacing, the dates of last live birth and other terminations are used to compute the intervals between live births and fetal deaths and between pregnancies. This information allows researchers to measure known risk factors associated with the mother's previous pregnancies, such as prior fetal loss, short interpregnancy interval, and high parity.

#### 29. MOTHER MARRIED? (At birth, conception, or any time between)(Yes or no)

Enter "Yes" if the mother was married at the time of conception, at the time of birth, or at any time between conception and birth. Otherwise, enter "No." In many States the father's name cannot be entered if the mother is not married. A woman is legally married even if she is separated. A person is no longer legally married when the divorce papers are signed. It may be necessary to check with your State or local registrar to determine how to complete this item.

This information is used to monitor the substantial differences in health and fertility between married and unmarried women. It enables the study of health problems encountered during and after pregnancies of unmarried women. This information allows researchers to measure medical risk factors of out-of-wedlock children and their mothers. These children tend to have lower birth weight and higher infant mortality, and they may be born to mothers with less prenatal care. Because of these differences, unmarried women and their babies are more likely to require additional health services.

#### 30. DATE LAST NORMAL MENSES BEGAN (Month, Day, Year)

Enter the exact date (month, day, and year) of the first day of the mother's last normal menstrual period, as obtained from the physician or hospital record. If the information is unavailable from these sources, obtain it from the mother.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

If the exact day is unknown but the month and year are known, obtain an estimate of the day from the mother, her physician, or the medical record. If an estimate of the date cannot be obtained, enter the month and year only.

Enter "Unknown" if the date cannot be determined. Do not leave this item blank.

This item is used in conjunction with the date of birth to determine the length of gestation, which is closely related to infant morbidity and mortality. Length of gestation is linked with birth weight to determine the maturity of the child at birth.

## 31. MONTH OF PREGNANCY PRENATAL CARE BEGAN—First, Second, Third, etc. (Specify)

Enter the number of the *month in this pregnancy* (second, third, fourth, etc.) when the mother first received care from a physician or other health professional or attended a prenatal clinic. Do *not* enter the name of a month.

The month of pregnancy in which prenatal care began is measured from the date the last normal menses began and not from the date of conception.

Prenatal care begins when a physician or other health professional first examines and/or counsels the pregnant woman.

If no prenatal care was received, enter "None." If item 32 is reported as "None," this item should also be completed as "None." Do not leave this item blank.

#### 32. PRENATAL VISITS—Total Number (If none, so state)

Enter the number of visits made for medical supervision of the pregnancy by a physician or other health care provider during the pregnancy. If no prenatal care was received, enter "None." If item 31 is reported as "None," this item should also be completed as "None." Do not leave this item blank.

If "None" is entered in item 31 and a number is reported in item 32, check to determine if a mistake has been made.

This information is used to determine the relationship of prenatal care to the health of the child at birth. Women receiving delayed care or no care are of considerable interest to public health officials because inadequate care may be harmful to both the mother and fetus.

Information on the month of pregnancy prenatal care began and number of prenatal visits can be used with length of gestation to compute the Kessner Index,<sup>1</sup>a quantitative measure of the adequacy of prenatal care.

#### 33. BIRTH WEIGHT (Specify unit)

Enter the birth weight of the child as it is recorded in the hospital record.

Enter the weight as shown in the hospital record, in either grams or pounds and ounces. Do not convert from one measure to the other. Specify the type of measure used (grams or pounds and ounces).

This is the single most important characteristic associated with infant mortality. It is also related to prenatal care, socioeconomic status, marital status, and other factors surrounding the birth. Consequently, it is used with other information to plan for and evaluate the effectiveness of health care.

<sup>&</sup>lt;sup>1</sup>D.M. Kessner, Singer, Jr., C.E. Kalk, and E.R. Schlesinger: Infant Death: An Analysis by Maternal Risk and Health Care, in *Contrasts in Health Status*, Vol. 1. Washington, D.C. Institute of Medicine, National Academy of Sciences, 1973.

#### 34. CLINICAL ESTIMATE OF GESTATION (Weeks)

Enter the length of gestation as estimated by the attendant. Do *not* compute this information from the date last normal menses began and date of birth. If the attendant has not done a clinical estimate of gestation, enter "None." Do not leave this item blank.

This item provides information on gestational age when the item on date last normal menses began contains invalid or missing information. For a record with a plausible date last normal menses began, it provides a cross-check with length of gestation based on ultrasound or other techniques.

## 35a-b PLURALITY-BIRTH ORDER

When a plural delivery occurs, prepare and file a separate certificate or report for each child or fetus. File certificates or reports relating to the same plural delivery at the same time. However, if holding the completed certificates or reports while waiting for incomplete ones would result in late filing, the completed certificates or reports should be filed first.

#### 35a. PLURALITY—Single, Twin, Triplet, etc. (Specify)

Specify the birth as single, twin, triplet, quadruplet, etc.

## 35b. IF NOT SINGLE BIRTH-Born First, Second, Third, etc. (Specify)

Specify the order in which the child being reported was born-first, second, etc.

If this is a single birth, leave the item blank.

These items are related to other items on the certificate (for example, period of gestation and birth weight) that have important health implications. This information is also used to study twin deliveries and high-risk infants who may require additional medical attention.

#### 36a-b APGAR SCORE

#### 36a. 1 minute

Enter the Apgar score (0 through 10) as assigned by the delivery room personnel 1 minute after birth. Refer to the following table to determine the method of Apgar scoring.

#### 36b. 5 minutes

Enter the Apgar score (0 through 10) as assigned by the delivery room personnel 5 minutes after birth. Refer to the following table to determine the method of Apgar scoring.

#### Method of Apgar scoring

	Score		
Sign	0	1	2
Heart rate	Absent	Slow (less than 100)	100 or more
Respiratory effort	Absent	Weak cry; hypoventilation	Good, strong cry
Muscle tone	Limp	Some flexion of extremities	Well flexed
Reflex irritability	No response	Some motion	Cry
Color	Blue, pale	Body pink; extremities blue	Completely pink

SOURCE: V. Apgar et al.: Evaluation of the newborn infant-second report. *Journal of the American Medical Association* 168(15):1985-1988, Dec. 13, 1958.

The Apgar score is regarded as a reliable summary measure for evaluating the physical condition of the infant at birth.

#### 37a-b MOTHER-INFANT TRANSFERS

## 37a. MOTHER TRANSFERRED PRIOR TO DELIVERY? 🗌 No 🗌 Yes

If Yes, enter name of facility transferred from:

Check "No" if this is the first facility the mother was admitted to for delivery. Check "Yes" if the mother was transferred from one facility to another facility *before* the child was delivered. If the mother was transferred before delivery, enter the name of the facility that transferred her. If the mother was transferred more than once, enter the name of the last facility from which she was transferred.

This information is used to study transfer patterns and determine whether timely identification and movement of high-risk patients is occurring.

37b. INFANT TRANSFERRED? No Yes If Yes, enter name of facility transferred to:

Check "No" if the infant was not transferred to another facility. Check "Yes" if the infant was transferred from this facility to another facility *after* delivery. If the infant was transferred, enter the name of the facility the infant was transferred to. If the infant was transferred more than once, enter the name of the first facility to which the infant was transferred.

This information is used to examine transfer patterns and perinatal outcomes by type of hospital or level of care. It may also be used to follow up and determine the survival status of an infant transferred to a different facility.

#### 38-43 CHECKBOX ITEMS

The following medical and health items are formatted into checkboxes. It has been demonstrated that this format produces higher quality and more complete information than open-ended items do. Please review *each* checkbox listed, and carefully check the appropriate block(s). Clearly mark an "X" or check the block. The mark should not overlap more than one box.

#### 38a-b RISK FACTORS FOR THIS PREGNANCY

#### 38a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)

Anemia (Hct. < 30/Hgb. < 10)	01 🗌
Cardiac disease	02 🗌
Acute or chronic lung disease	03 🗌
Diabetes	04 🗌
Genital herpes	05 🗌
Hydramnios/Oligohydramnios	06 🗌
Hemoglobinopathy	07 🗌
Hypertension, chronic	08 🗌
Hypertension, pregnancy-associated	
Eclampsia	10 🗌
Incompetent cervix	
Previous infant 4000 + grams	12 🗌
Previous preterm or small-for-gestational-age	
infant	13 🗌
Renal disease	14 🗌
Rh sensitization	15 🗌
Uterine bleeding	16 🗌
None	00 🗌
Other	_17 🗌
(Specify)	

Check each of the medical risk factors that the mother experienced during this pregnancy. If the mother experienced medical risk factor(s) not identified in the list—for example, other infectious diseases, AIDS, or syphilis—check "Other" and enter the risk factor on the line provided. Medical risk factors should be identified from the hospital or physician record. If there were no medical risk factors, check "None." Do not leave this item blank.

This information allows for the identification of specific maternal conditions that are often predictive of poor maternal and infant outcome. It can be used for planning intervention and prevention strategies.

#### 38b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)

Tobacco use during pregnancy .....Yes No Average number cigarettes per day\_\_\_\_\_ Alcohol use during pregnancy .....Yes No Average number drinks per week\_\_\_\_ Weight gained during pregnancy\_\_\_\_\_ lbs.

Complete each question/statement. Check "Yes" for tobacco use if the mother smoked tobacco at any time during the pregnancy. Check "No" if the mother did not smoke during the entire pregnancy. If "Yes" is checked, specify the average number of cigarettes the mother smoked *per day* during her pregnancy. If, on the average, she smoked less than one cigarette per day, enter "Less than 1." If "No" is checked, do not make any entry on the line requesting the average number of cigarettes per day.

Check "Yes" for alcohol use if the mother consumed alcoholic beverages at any time during her pregnancy. Check "No" if the mother did not consume any alcoholic beverages during the entire pregnancy. If "Yes" is checked, specify the average number of drinks she consumed *per week*. One drink is equivalent to 5 ounces of wine, 12 ounces of beer, or 1 ½ ounces of distilled liquor. If, on the average, she drank less than one drink per week, enter "Less than 1." If "No" is checked, do not make any entry on the line requesting the average number of drinks per week.

Enter the amount of weight gained by the mother during the pregnancy in pounds. Do not enter the total weight of the mother. If no weight was gained, enter "None." If the mother lost weight during her pregnancy, enter the amount of weight lost (for example, "Lost 10 pounds"). Do not leave this item blank.

Information for this item should be obtained from the mother's medical chart or the physician. If the medical chart is not available or does not include this information and the physician is unavailable, the informant should be asked to respond to these items.

Smoking and drinking during pregnancy may have an adverse impact on pregnancy outcome. This information is used to evaluate the relationship between certain lifestyle factors and pregnancy outcome and to determine at what levels these factors clearly begin to affect pregnancy outcome.

## **39. OBSTETRIC PROCEDURES** (Check all that apply)

Amniocentesis	
Electronic fetal monitoring	02 🗌
Induction of labor	
Stimulation of labor	
Tocolysis	05 🗌
Ultrasound	
None	
Other	07 🗌
(Specify)	

Check each type of procedure that was used during this pregnancy. More than one procedure may be checked. If a procedure was used that is not identified in the list, check "Other" and specify the procedure on the line provided. If no procedures were used, check "None." Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

Information on obstetric procedures is used to measure the use of advanced medical technology during pregnancy and labor and to investigate the relationship of these procedures to type of delivery and pregnancy outcome.

10. COMPLICATIONS OF LABOR AND/OR DELIVERY (Check all that apply)

Febrile (> 100 <sup>0</sup> F. or 38 <sup>0</sup> C.)	01	
Meconium, moderate/heavy	02	
Premature rupture of membrane (> 12 hours)		
Abruptio placenta	04	
Placenta previa	1	
Other excessive bleeding	1	
Seizures during labor		
Precipitous labor (<3 hours)	08	
Prolonged labor (>20 hours)	09	
Dysfunctional labor	10	
Breech/Malpresentation	11	
Cephalopelvic disproportion	12	
Cord prolapse.	13	
Anesthetic complications	14	
Fetal distress		$\Box$
None	00	
Other	_16	
(Specify)		

Check each medical complication present during labor and/or delivery. If a complication was present that is not identified in the list, check "Other" and specify the complication on the line provided. If there were no complications, check "None." Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

This information is used to identify pregnancy complications during labor and delivery and their relationship to method of delivery and birth outcome.

41. METHOD OF DELIVERY (Check all that apply)

Vaginal	01 🗌
Vaginal birth after previous C-section	02 🗌
Primary C-section	03 🗌
Repeat C-section	04 🗌
Forceps	
Vacuum	06 🗌

Check the method of delivery of the child. If more than one method was used, check all methods that apply to this delivery. Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

This information is used to relate method of delivery with birth outcome, to monitor changing trends in obstetric practice, and to determine which groups of women are most likely to have cesarean delivery.

The method of delivery is relevant to the health of mothers, especially if it is by cesarean section. Information from this item can be used to monitor delivery trends across the United States.

#### 42. ABNORMAL CONDITIONS OF THE NEWBORN (Check all that apply)

Anemia (Hct. < 39/Hgb. < 13)	01 🗌
Birth injury	.02
Fetal alcohol syndrome	.03 🗌
Hyaline membrane disease/RDS	.04 🗌
Meconium aspiration syndrome	.05
Assisted ventilation < 30 min	.06 🗌
Assisted ventilation ≥ 30 min	.07 🗌
Seizures	.08 🗌
None	00 🗌
Other	_09 🗌
(Specify)	

Check each abnormal condition associated with the newborn infant. If more than one abnormal condition exists, check each condition. If an abnormal condition is present that is not identified in the list, check "Other" and specify the condition on the line provided. Do not leave this item blank. This information should be obtained from the mother's and infant's physicians or the medical records (obstetric and pediatric).

Information on abnormal conditions of the newborn helps measure the extent infants experience medical problems and can be used to plan for their health care needs. This item also provides a source of information on abnormal outcome in addition to congenital anomaly or infant death. These data allow researchers to estimate the number of high-risk infants who may benefit from special medical services.

#### 43. CONGENITAL ANOMALIES OF CHILD (Check all that apply)

CONGENITAL ANOMALIES OF CH	ILD (CA
Anencephalus	01 🗌
Spina bifida/Meningocele	02 🗌
Hydrocephalus	03 🗌
Microcephalus	04 🗌
Other central nervous system anomalies	_
(Specify)	05 🗌
Heart malformations	06 🗌
Other circulatory/respiratory anomalies	_
(Specify)	07 🛄
Rectal atresia/stenosis	08
Tracheo-esophageal fistula/Esophageal atre	
Omphalocele/Gastroschisis	
Other gastrointestinal anomalies	
(Specify)	11 🗌
Malformed genitalia	12
Renal agenesis	13 🗌
Other urogenital anomalies	
(Specify)	14 🗌
Cleft lip/palate	
Polydactyly/Syndactyly/Adactyly	
Club foot	
Diaphragmatic hernia	18
Other musculoskeletal/integumental anomal	ies
(Specify)	19
Down's syndrome	20 🗌
Other chromosomal anomalies	_
(Specify)	21
None	00 🔲
Other	22
(Specify)	

Check each anomaly of the child. Do not include birth injuries. The checklist of anomalies is grouped according to major body systems. If an anomaly is present that is not identified in the list, check "Other" and specify the anomaly on the line provided. Note that each group of system-related anomalies includes an "Other" category for anomalies related to that particular system. If there is a question as to whether the anomaly is related to a specific system, enter the description of the anomaly in "Other (Specify)" at the bottom of the list. If there are no congenital anomalies of the child, check "None." Do not leave this item blank. This information should be obtained from the mother's and infant's physicians or the medical records (obstetric and pediatric).

Information on congenital anomalies is used to identify health problems that require medical care and monitor the incidence of the stated conditions. It is also used to study unusual clusters of selected anomalies, to track trends among different segments of the population, and to relate the prevalence of anomalies to other characteristics of the mother, infant, and the environment.

# Part III—Completing the report of fetal death

These instructions pertain to the 1989 revision of the U.S. Standard Report of Fetal Death.

## 1-3 PLACE OF DELIVERY

#### 1. FACILITY NAME (If not institution, give street and number)

Enter the full name of the hospital, freestanding birthing center, or other facility where the delivery occurred.

If the delivery occurred on a moving conveyance en route to or on arrival at a facility, enter the full name of the facility followed by "En route."

If the delivery occurred at home, enter the house number and street name of the place where delivery occurred.

If the delivery occurred at some place other than those described above, enter the number and street name of the location.

If the delivery occurred on a moving conveyance that was not en route to a facility, enter as the place of delivery the address where the fetus was first removed from the conveyance.

#### 2. CITY, TOWN, OR LOCATION OF DELIVERY

Enter the name of the city, town, village, or location where the delivery occurred. For deliverics occurring on a moving conveyance, enter the city, town, village, or location where the fetus was first removed from the conveyance.

If a dead fetus is found in this State and the place of fetal death is unknown, the fetal death should be registered in this State. The place where the fetus was found should be considered the place of fetal death.

#### 3. COUNTY OF DELIVERY

Enter the name of the county where the delivery occurred. For deliveries occurring on a moving conveyance, enter the county where the fetus was first removed from the conveyance.

Items 1-3 identify the place of delivery, which is used to study relationships of hospital and nonhospital pregnancy terminations. It is also used by many States to produce statistical

data by specific facility. Information on place of delivery, together with residence information, provides data to evaluate the utilization and distribution of health services.

#### 4. DATE OF DELIVERY (Month, Day, Year)

Enter the exact month, day, and year the fetus was delivered.

Enter the full name of the month—January, February, March, etc. Do not use a number or abbreviation to designate the month.

Pay particular attention to the entry of month, day, or year when the delivery occurs around midnight or on December 31. Consider a delivery at midnight to have occurred at the end of one day rather than the beginning of the next day.

This item is used in conjunction with date last normal menses began to calculate length of gestation, which is an essential element in the study of low-birth-weight deliveries.

#### 5. SEX OF FETUS

Enter male, female, or undetermined. Do not abbreviate or use other symbols. Do not leave this item blank.

This information is used to measure fetal and perinatal mortality by sex. It helps identify differences in the impact of environmental and biological factors between the sexes.

#### 6a. MOTHER'S NAME (First, Middle, Last)

Type or print the first, middle, and last name of the mother. This is the mother's *current legal* name.

#### 6b. MAIDEN SURNAME

Enter the last name of the mother as given at birth or adoption, not a name acquired by marriage.

The mother's name is used to identify the record. The maiden surname is important for matching the record with other records because maiden surname remains constant throughout a lifetime, in contrast to other names, which may change because of marriage or divorce.

#### 7. DATE OF BIRTH (Month, Day, Year) (Mother)

Enter the exact month, day, and year that the mother was born.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

This item is used to calculate the age of the mother, which is one of the most important factors in the study of childbearing and pregnancy outcome.

## 8a-f MOTHER'S RESIDENCE

The mother's residence is the place where her household is located. This is not necessarily the same as her "home State," "voting residence," "mailing address," or "legal residence." The State, county, city, and street address should be for the place where the mother actually lives. Never enter a temporary residence, such as one used during a visit, business trip, or vacation. Residence for a short time at the home of a relative, friend, or home for unwed mothers for the purpose of awaiting the delivery is considered temporary and should not be entered here. However, place of residence during a tour of military duty or during attendance at college is *not* considered temporary and should be entered on the report as the mother's place of residence.

If the mother had been living in a facility where an individual usually resides for a long period of time, such as a group home, mental institution, nursing home, penitentiary, or hospital for the chronically ill, this facility should be entered as the place of residence.

#### 8a. RESIDENCE-STATE (Mother)

Enter the name of the State in which the mother lives. This may differ from the State in her mailing address. If the mother is not a U.S. resident, enter the name of the country and the name of the unit of government that is the nearest equivalent of a State.

#### 8b. RESIDENCE—COUNTY (Mother)

Enter the name of the county in which the mother lives.

#### 8c. RESIDENCE-CITY, TOWN, OR LOCATION (Mother)

Enter the name of the city, town, or location where the mother lives. This may differ from the city, town, or location in her mailing address.

#### 8d. RESIDENCE-STREET AND NUMBER (Mother)

Enter the number and street name of the place where the mother lives.

If this location has no number and street name, enter the rural route number or a description of the place that will aid in identifying the precise location.

#### 8e. RESIDENCE-INSIDE CITY LIMITS? (Yes or no) (Mother)

Enter "Yes" if the location entered in item 8c is incorporated and the mother's residence is inside its boundaries. Otherwise, enter "No."

#### 8f. RESIDENCE—ZIP CODE (Mother)

Enter the ZIP Code of the place where the mother resides.

Statistics on fetal deaths are tabulated by place of residence of the mother. These data are used in planning for and evaluating community services and facilities, including maternal health programs. "Inside City Limits" is used to properly assign residence to either the city or the remainder of the county. ZIP Code information may also be used for environmental impact studies for small geographic areas.

#### 9. FATHER'S NAME (First, Middle, Last)

State laws vary. In general, if the fetus was:

• Born to a mother who was married at the time of delivery, type or print the name of her husband.

- Conceived in wedlock but delivered after a divorce was granted or after the husband died, type or print the name of the mother's deceased or divorced husband.
- Conceived and delivered out of wedlock to a divorced, widowed, or never-married mother, make no entry regarding the father's name and omit items 10, 11b, 12b, 13b, 14c, and 14d, except as authorized by State law. Refer problems not covered in these instructions to the State office of vital statistics.

The father's name is used to identify the record.

10. DATE OF BIRTH (Month, Day, Year) (Father)

Enter the exact month, day, and year that the father was born.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

This item is used to calculate the age of the father, which is important in the study of childbearing. For example, it is used to study the association between congenital anomalies and children of older parents.

## 11. OF HISPANIC ORIGIN? (Specify No or Yes—If yes, specify Cuban, Mexican, Puerto Rican, etc.)

#### 11a. MOTHER

No Yes Specify:

#### 11b. FATHER

No Yes Specify:

Check "No" or "Yes." If "Yes" is checked, enter the specific Hispanic group as obtained from the parent(s) or other informant. Item 11 should be checked for the mother on all reports and for the father in all cases where the name of the father is shown on the report. Do not leave this item blank. The entry in this item should reflect the response of the informant.

For the purposes of this item, "Hispanic" refers to people whose origins are from Spain, Mexico, or the Spanish-speaking countries of Central or South America. Origin can be viewed as the ancestry, nationality, lineage, or country in which the person or his or her ancestors were born before their arrival in the United States.

There is no set rule as to how many generations are to be taken into account in determining Hispanic origin. A person may report Hispanic origin based on the country of origin of a parent, grandparent, or some far-removed ancestor. The response should reflect what the person considers himself or herself to be and is not based on percentages of ancestry. Although the prompts include the major Hispanic groups of Cuban, Mexican, and Puerto Rican, other Hispanic groups should also be identified in the space provided.

If a person indicates that he or she is of multiple Hispanic origin, enter the origins as reported (for example, Mexican-Puerto Rican).

If a person indicates that he or she is Mexican-American or Cuban-American, enter the Hispanic origin as stated.
This item is not a part of the Race item. A person of Hispanic origin may be of any race. Each question, Race and Hispanic origin, should be asked independently.

Hispanics comprise the second largest minority in this country. This item provides data to measure differences in pregnancy outcome and variations in health care for people of Hispanic and non-Hispanic origin. Without collection of data on persons of Hispanic origin, it is impossible to obtain valid demographic and health information on this important group of Americans.

Some States have a very small Hispanic population and may wish to obtain data on other groups. Therefore, they may opt to include a general Ancestry item on their report instead of a specific Hispanic origin item. Instructions for the general Ancestry item follow:

ANCESTRY—Mexican, Puerto Rican, Cuban, African, English, Irish-German, Hmong, etc. (Specify)

Enter the ancestry as obtained from the parent(s) or other informant. This item should be completed for the mother on all reports and for the father in all cases where the name of the father is shown on the report. Do not leave this item blank. The entry in this item should reflect the response of the informant.

For purposes of this item, ancestry refers to the nationality, lineage, or country in which the person or his or her ancestors were born before their arrival in the United States. American Indian and Alaska Native ancestry should be entered as such.

There is no set rule as to how many generations are to be taken into account in determining ancestry. A person may report ancestry based on the country of origin of a parent, grandparent, or some far-removed ancestor. The response should reflect what the person considers himself or herself to be and is not based on percentages of ancestry.

Some persons may not identify with the foreign birthplace of their ancestors or with a nationality and may report "American." If, after clarification of the intent of this item, the person still feels that he or she is an "American," enter "American" on the record.

If a person indicates that he or she is of multiple ancestry, enter the ancestry as reported (for example, English-Scottish-Irish, Mexican-American).

If a respondent gives a religious group—such as Jewish, Moslem, or Protestant—ask for the country of origin or nationality.

This item is not a part of the Race item. Both questions, Race and Ancestry, should be asked independently. This means that for certain groups—such as Japanese, Chinese, or Hawaiian, the entry will be the same in both items. The entry should be made in both items even if it is the same. However, an entry of "Black" or "White" should never be recorded in the ancestry item.

#### 12. RACE—American Indian, Black, White, etc. (Specify below)

#### 12a. MOTHER

#### 12b. FATHER

Enter the race of the mother and of the father as obtained from the parent(s) or other informant. This item should be completed for the mother on all reports and for the

father in all cases where the name of the father is shown on the report. The entry in this item should reflect the response of the informant.

For Asians and Pacific Islanders, enter the national origin of the mother and the father, such as Chinese, Japanese, Korean, Filipino, or Hawaiian.

If the informant indicates that the mother and/or father is of mixed race, enter both races or ancestries.

These items are used to determine the race of the fetus. Information on race is essential in producing data for minority groups. It is used to study racial variations in childbearing, access to health care, and pregnancy outcomes (perinatal mortality and birth weight). Race is an important variable in planning for and evaluating the effectiveness of health programs.

#### 13. EDUCATION (Specify only highest grade completed) Elementary/Secondary (0-12) — College (1-4 or 5+)

#### 13a. MOTHER

#### 13b. FATHER

Enter the highest number of years of regular schooling completed by the mother and father in either the space for elementary/secondary school or the space for college. An entry should be made in only one of the spaces. The other space should be left blank. Report only those years of school that were completed. A person who enrolls in college but does not complete one full year should not be identified with any college education in this item.

Count formal schooling. Do not include beauty, barber, trade, business, technical, or other special schools when determining the highest grade completed.

Education is highly related to fertility and to birth outcome and it is used as an indicator of socioeconomic status. It is used to measure the effect of education and socioeconomic status on health, childbearing, and perinatal mortality.

#### 14a-d OCCUPATION AND BUSINESS/INDUSTRY (Worked during last year)

Enter the information even if the parent(s) was retired, disabled, or institutionalized at the time of fetal death.

#### 14a. MOTHER-Occupation

#### 14c. FATHER-Occupation

Enter the occupation of the parent(s) during the last year. The occupation is the kind of work the parent(s) did during most of the previous year, such as claim adjuster, farmhand, coal miner, homemaker, janitor, store manager, college professor, or civil engineer. Even if the mother resigned her employment early in the pregnancy, that occupation should be reported. If the mother did not work outside her home in the previous 12 months, report her occupation as "Homemaker" and her industry (item 14b) as "Own home." If the father did not work during the previous 12 months, report his occupation as "Unemployed" and the industry (item 14d) as "None." In determining which occupation to report for a parent who held more than one job during the year, give the occupation held during the pregnancy. If both jobs were held during the pregnancy, give the occupation worked for the longest length of time.

Enter "Student" if the parent(s) was a student and was never regularly employed or employed full time during the year prior to delivery. If questions arise about what classification to use for an occupation or industry, you may find the handbook *Guidelines for Reporting Occupation and Industry on Death Certificates* helpful.

#### 14b. MOTHER-Business/Industry

#### 14d. FATHER-Business/Industry

Enter the kind of business or industry to which the occupation listed in items 14a and/or 14c was related, such as insurance, farming, coal mining, hardware store, retail clothing, university, or government. Do not enter firm or organization names.

Information from these items is useful in studying occupationally related fetal mortality and in identifying job-related risk areas. These items are used to obtain information on the potential impact of the work environment on the fetus. Researchers believe that the occupational hazards (exposures) to the parent(s) which have the most deleterious effect on the fetus are those that occur during the pregnancy, particularly early in the pregnancy.

#### Medical and health information

#### 15a-e PREGNANCY HISTORY (Complete each section)

When certificates or reports are prepared for a plural delivery, items 15a-e on the certificate or report of the first-delivered should not include any of the other deliveries. On the certificate or report of the second delivery, these items should include information about the first delivery of the plural delivery. Similarly, for the third delivery, these items should include information about the first and second deliveries, and so on.

#### 15a-c LIVE BIRTHS

#### 15a. Now Living Number\_\_\_\_\_ None

Enter the number of children born alive to this mother who are still living at the time of this delivery. Do not include children by adoption.

Check "None" if this is the first delivery to this mother or if all previous children are dead.

#### 15b. Now Dead

Number\_\_\_\_ None

Enter the number of prior children born alive to this mother who are no longer living at the time of this delivery. Do not include children by adoption.

Check "None" if this is the first delivery to this mother or if all previous children are still living.

#### 15c. DATE OF LAST LIVE BIRTH (Month, Year)

Enter the date (month and year) of birth of the last live-born child of the mother.

If this report is for the second delivery of a twin set, enter the date of birth for the first baby of the set, if it was born alive. Similarly, for triplets or other multiple deliveries, enter the date of birth of the previous live birth of the set. If all previously born members of a multiple set were born dead, enter the date of the mother's last delivery that resulted in a live birth.

Enter "-," "Not applicable," or "None," if the mother has not had a previous live birth. Do not leave this item blank.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

## **15d-e OTHER TERMINATIONS** (Spontaneous and induced at any time after conception)

15d. (Do not include this fetus) Number\_\_\_\_\_ 🗌 None

Enter the number of fetuses that were delivered dead regardless of the length of gestation. Include each recognized loss of a product of conception, such as ectopic pregnancy, miscarriage, stillbirth, and spontaneous or induced abortion. Do not include this fetus.

Check "None" if this is the first pregnancy for this mother or if all previous pregnancies resulted in live-born infants.

#### 15e. DATE OF LAST OTHER TERMINATION (Month, Year)

Enter the date (month and year) of the last termination of pregnancy that was not a live birth regardless of the length of gestation.

If the mother has never had such a termination, enter "-," "Not applicable," or "None." Do not leave this item blank.

Enter the full name of the month—January, February, March, etc. Do not use a number or abbreviation to designate the month.

If this report is for the second delivery of a twin set and the first was born dead, enter the date of delivery of that fetus. Similarly, for other multiple births, if any previous member of the set was born dead, enter the date of delivery of that fetus. If all previously born members of a multiple set were born alive, enter the date of the mother's last delivery that resulted in a fetal death. These items are used to determine total-birth order, which is important in studying trends in childbearing and child spacing. They are also useful in studying health problems associated with birth order—for example, first births to older women—and determining the relationship of birth order to perinatal mortality.

In studying child spacing, the dates of last live birth and other termination are used to compute the intervals between live births and fetal deaths and between pregnancies. This information allows researchers to measure known risk factors associated with the mother's previous pregnancies, such as prior fetal loss, short interpregnancy interval, and high parity.

## 16. MOTHER MARRIED? (At delivery, conception, or any time between) (Yes or no)

Enter "Yes" if the mother was married at the time of conception, at the time of delivery, or at any time between conception and delivery. Otherwise, enter "No." In many States the father's name cannot be entered if the mother is not married. A woman is legally married even if she is separated. A person is no longer legally married when the divorce papers are signed. It may be necessary to check with your State or local registrar to determine how to complete this item.

This information is used to monitor the substantial differences in health and fertility between married and unmarried women. It enables the study of health problems encountered during and after pregnancies of unmarried women. Unmarried women are likely to require additional health services.

#### 17. DATE LAST NORMAL MENSES BEGAN (Month, Day, Year)

Enter the exact date (month, day, and year) of the first day of the mother's last normal menstrual period, as obtained from the physician or hospital record. If the information is unavailable from these sources, obtain it from the mother.

Enter the full name of the month-January, February, March, etc. Do not use a number or abbreviation to designate the month.

If the exact day is unknown but the month and year are known, obtain an estimate of the day from the mother, her physician, or the medical record. If an estimate of the date cannot be obtained, enter the month and year only.

Enter "Unknown" if the date cannot be determined. Do not leave this item blank.

This item is used in conjunction with the date of delivery to determine the length of gestation. Gestational age is related to fetal morbidity and mortality. Length of gestation is linked with the weight of the fetus to determine the maturity of the fetus.

#### 18-19 PRENATAL CARE

#### 18. MONTH OF PREGNANCY PRENATAL CARE BEGAN—First, Second, Third, etc. (Specify)

Enter the number of the *month in this pregnancy* (second, third, fourth, etc.) when the mother first received care from a physician or other health professional or attended a prenatal clinic. Do *not* enter the name of a month.

The month of the pregnancy in which prenatal care began is measured from the date the last normal menses began and not from the date of conception. Prenatal care begins when a physician or other health professional first examines and/or counsels the pregnant woman.

If no prenatal care was received, enter "None." If item 19 is reported "None," this item should also be completed as "None." Do not leave this item blank.

#### 19. PRENATAL VISITS—Total Number (If none, so state)

Enter the number of visits made for medical supervision of the pregnancy by a physician or other health care provider during the pregnancy. If no prenatal care was received, enter "None." If item 18 is reported as "None," this item should also be completed as "None." Do not leave this item blank.

If "None" is entered in item 18 and a number is reported in item 19, check to determine if a mistake has been made.

This information is used to determine the relationship of prenatal care to the outcome of the pregnancy.

The number of prenatal visits can be used in conjunction with month of pregnancy prenatal care began to assess the adequacy of prenatal care. In addition, this information can be used with length of gestation to compute the Kessner Index,<sup>2</sup> a quantitative measure of the adequacy of prenatal care.

#### 20. WEIGHT OF FETUS (Specify unit)

Enter the weight of the fetus as it is recorded in the hospital record.

Enter the weight as shown in the hospital record, in either grams or pounds and ounces. Do not convert from one measure to the other. Specify the type of measure used (grams or pounds and ounces).

This is the single most important characteristic associated with the viability of the fetus. It is also related to prenatal care, socioeconomic status, marital status, and other factors surrounding the delivery. Consequently, it is used with other information to plan for and evaluate the effectiveness of health care.

#### 21. CLINICAL ESTIMATE OF GESTATION (Weeks)

Enter the length of gestation as estimated by the attendant. Do *not* compute this information from the date last normal menses began and date of delivery. If the attendant has not done a clinical estimate of gestation, enter "None." Do not leave this item blank.

This item provides information on gestational age when the item on date last normal menses began contains invalid or missing information. This measure is the basis for reporting fetal deaths in many States. For a record with a plausible date last normal menses began, it provides a cross-check with length of gestation based on ultrasound or other techniques.

<sup>&</sup>lt;sup>2</sup>D. M. Kessner, Singer, Jr., C. E. Kalk, E. R. Schlesinger: Infant Death: An Analysis by Maternal Risk and Health Care, in *Contrasts in Health Status*, Vol. 1, Washington, D.C. Institute of Medicine, National Academy of Sciences, 1973.

#### 22a-b PLURALITY-BIRTH ORDER

When a plural delivery occurs, prepare and file a separate certificate or report for each child or fetus. File certificates and reports relating to the same plural delivery at the same time. However, if holding the completed certificates or reports while waiting for incomplete ones would result in late filing, the completed certificate should be filed first.

#### 22a. PLURALITY—Single, Twin, Triplet, etc. (Specify)

Specify the delivery as single, twin, triplet, quadruplet, etc.

#### 22b. IF NOT SINGLE BIRTH-Born First, Second, Third, etc. (Specify)

Specify the order in which the fetus being reported was delivered-first, second, etc.

If this is a single delivery, leave the item blank.

These items are related to other items on the report (for example, period of gestation and weight of fetus) that have important health implications. The occurrence of plural deliveries is related to the age of the mother and birth order. Survival differences related to order of delivery exist for multiple births.

#### 23-27 CHECKBOX ITEMS

The following medical and health items are formatted into checkboxes. It has been demonstrated that this format produces higher quality and more complete information than open-ended items do. Please review *each* checkbox listed, and carefully check the appropriate block(s). Clearly mark an "X" or check the block. The mark should not overlap more than one box.

#### 23a. MEDICAL RISK FACTORS FOR THIS PREGNANCY (Check all that apply)

(Спеск ан таг арріу)	
Anemia (Hct. <30/Hgb. <10)01 [	
Cardiac disease02[	
Acute or chronic lung disease	
Diabetes04 [	
Genital herpes05 [	
Hydramnios/Oligohydramnios06 [	
Hemoglobinopathy07 [	
Hypertension, chronic08	
Hypertension, pregnancy-associated	
Eclampsia10	
Incompetent cervix11	
Previous infant 4000 + grams12 [	
Previous preterm or small-for-gestational-age	
infant13 [	
Renal disease14 [	
Rh sensitization15 [	
Uterine bleeding16	
None00 [	
Other17[	
(Specify)	

Check each of the medical risk factors that the mother experienced during this pregnancy. Complications should be entered even if they are a part of the cause of fetal death in item 28. If the mother experienced medical risk factor(s) not identified in the list—for example, other infectious diseases, AIDS, or syphilis—check "Other" and enter the risk factor on the line provided. Medical risk factors should be identified from the hospital or physician record. If there were no medical risk factors, check "None." Do not leave this item blank.

This information allows for the identification of specific maternal conditions that are often predictive of poor maternal and infant outcome. It can be used for planning intervention and prevention strategies.

#### 23b. OTHER RISK FACTORS FOR THIS PREGNANCY (Complete all items)

 Tobacco use during pregnancy......Yes
 No

 Average number cigarettes per day\_\_\_\_\_\_

 Alcohol use during pregnancy ......Yes
 No

 Average number drinks per week\_\_\_\_\_\_

 Weight gained during pregnancy\_\_\_\_\_\_ lbs.

Complete each question/statement. Check "Yes" for tobacco use if the mother smoked tobacco at any time during the pregnancy. Check "No" if the mother did not smoke during the entire pregnancy. If "Yes" is checked, specify the average number of cigarettes the mother smoked *per day* during her pregnancy. If, on the average, she smoked less than one cigarette per day, enter "Less than 1." If "No" is checked, do not make any entry on the line requesting the average number of cigarettes per day.

Check "Yes" for alcohol use if the mother consumed alcoholic beverages at any time during her pregnancy. Check "No" if the mother did not consume any alcoholic beverages during the entire pregnancy. If "Yes" is checked, specify the average number of drinks she consumed *per week*. One drink is equivalent to 5 ounces of wine, 12 ounces of beer, or 1 1/2 ounces of distilled liquor. If, on the average, she drank less than one drink per week, enter "Less than 1." If "No" is checked, do not make any entry on the line requesting the average number of drinks per week.

Enter the amount of weight *gained* by the mother during the pregnancy in pounds. Do not enter the total weight of the mother. If no weight was gained, enter "None." If the mother lost weight during her pregnancy, enter the amount of weight lost (for example, "Lost 10 pounds"). Do not leave this item blank.

Information for this item should be obtained from the mother's medical chart or the physician. If the medical chart is not available or does not include this information and the physician is unavailable, the informant should be asked to respond to these items.

Smoking and drinking during pregnancy may have an adverse impact on pregnancy outcome. This information is used to evaluate the relationship between certain lifestyle factors and pregnancy outcome and to determine at what levels these factors clearly begin to affect pregnancy outcome.

#### 24. OBSTETRIC PROCEDURES (Check all that apply)

Amniocentesis	01 🗌
Electronic fetal monitoring	02 🗌
Induction of labor	03 🗌
Stimulation of labor	04 🗌
Tocolysis	05 🗌
Ultrasound	06 🗌
None	00 🗌
Other	07 🔲
(Specify)	

Check each type of procedure that was used during this pregnancy. More than one procedure may be checked. If a procedure was used that is not identified in the list, check "Other" and specify the procedure on the line provided. If no procedures were used, check "None." Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

Information on obstetric procedures is used to measure the utilization of advanced medical technology during pregnancy and labor and to investigate the relationship of these procedures to type of delivery and pregnancy outcome.

#### 25. COMPLICATIONS OF LABOR AND/OR DELIVERY (Check all that apply)

Febrile (>100°F. or 38°C.)01
Meconium, moderate/heavy02
Premature rupture of membrane (>12 hours).03
Abruptio placenta04
Placenta previa05 🗌
Other excessive bleeding
Seizures during labor07
Precipitous labor (<3 hours)
Prolonged labor (> 20 hours)
Dysfunctional labor10
Breech/Malpresentation11
Cephalopelvic disproportion12
Cord prolapse13
Anesthetic complications14 🗌
Fetal distress15
None00 🗌
Other16 []
(Specify)

(Specify)

Check each medical complication present during labor and/or delivery. Check complications here even if they are a part of the cause of fetal death in item 28. If a complication was present that is not identified in the list, check "Other" and specify the complication on the line provided. If there were no complications, check "None." Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

These data are used to identify the pregnancy complications during labor and delivery that are associated with fetal deaths and their relationship to method of delivery and pregnancy outcome.

#### 26. METHOD OF DELIVERY (Check all that apply)

Vaginal	01 🔲
Vaginal birth after previous C-section	02 🗌
Primary C-section	03 🗌
Repeat C-section	04 🗌
Forceps	05 🗌
Vacuum	06 🗌
Hysterotomy/Hysterectomy	07 🗌

Check the method of delivery of the fetus. If more than one method was used, check all methods that apply to this delivery. Do not leave this item blank. This information should be obtained from the mother's medical chart or the physician.

This information is used to relate method of delivery with birth outcome, to monitor changing trends in obstetric practice, and to determine which groups of women are most likely to have cesarean delivery. The method of delivery is relevant to the health of mothers, especially if it is by cesarean section. Information from this item can be used to monitor delivery trends across the United States.

#### 27. CONGENITAL ANOMALIES OF FETUS (Check all that apply)

Anencephalus	01 🗌
Spina bifida/Meningocele	
Hydrocephalus	
Microcephalus	
Other central nervous system anomalies	
(Specify)	05 🗌
(Specify) Heart malformations	06 🗌
Other circulatory/respiratory anomalies	
(Specify)	07 🗆
Rectal atresia/stenosis	08
Tracheo-esophageal fistula/Esophageal	
atresia	
Omphalocele/Gastroschisis	10 🗌
Other gastrointestinal anomalies	
(Specify)	11 🗌
Malformed genitalia	12 🗌
Renal agenesis	13 🗌
Other urogenital anomalies	
(Specify)	14 🔲
Cleft lip/palate	15 🔲
Polydactyly/Syndactyly/Adactyly	16 🗌
Club foot	
Diaphragmatic hernia	18 🔲
Other musculoskeletal/integumental anoma	alies
(Specify)	19 🔲
Down's syndrome	
Other chromosomal anomalies	
(Specify)	21 🔲
None	00 🗌
Other	22 []
(Specify)	

(Specify)

24

~~

Check each anomaly of the fetus. Do not include birth injuries. The checklist of anomalies is grouped according to major body systems. If an anomaly is present that is not identified in the list, check "Other" and specify the anomaly on the line provided. Note that each group of system-related anomalies includes an "Other" category for anomalies related to that particular system. If there is a question as to whether the anomaly is related to a specific system, enter the description of the anomaly in "Other (Specify)" at the bottom of the list. If there are no congenital anomalies of the fetus, check "None." Do not leave this item blank. This information should be obtained from the medical chart or the physician.

Information on congenital anomalies is used to identify health problems that would have required medical care had the infant been born alive. It is important for monitoring the incidence of these conditions among all known products of conception. Collection of this information is also necessary to study unusual clusters of selected anomalies and track trends among different segments of the population.

#### 28. CAUSE OF FETAL DEATH

Detailed instructions for completing the section on cause of fetal death, together with examples of properly completed records, are contained in Part IV. These items should be completed by the person whose name appears in item 30.

#### Part I. CAUSE OF FETAL DEATH

Enter on line (a) the fetal or maternal condition directly causing the fetal death. Enter on lines (b) and (c) fetal and/or maternal conditions, if any, that gave rise to the immediate cause on line (a), stating the underlying cause last. Also, specify whether the condition was fetal or maternal.

#### Part II. OTHER SIGNIFICANT CONDITIONS

Enter any conditions contributing to the fetal death but not resulting in the underlying cause listed in Part I.

Cause of fetal death should include information provided by the pathologist if an autopsy or other type of postmortem exam was done. If microscopic exams for a fetal death are still pending at the time the report is filed, the hospital should report the additional information as soon as it is available.

This item provides medical information for ranking causes of fetal death and for analyzing the conditions leading to fetal death. Information on cause of fetal death is correlated with information from other items on the report, such as length of gestation and prenatal care.

# 29. FETUS DIED BEFORE LABOR, DURING LABOR OR DELIVERY, UNKNOWN (Specify)

Indicate when the fetus died by specifying one of the above choices.

This item is used as a check to ensure that the delivery was properly reported as a fetal death and was not a live birth.

#### 30. ATTENDANT'S NAME AND TITLE (Type/Print)

Name\_

M.D. D.O. C.N.M. Other Midwife

Other (Specify) \_\_\_\_

Type or print the full name of the physician or other person in attendance at this delivery on the line provided and check the appropriate box to identify his or her title. M.D. = doctor of medicine, D.O. = doctor of osteopathy, C.N.M. = certified nurse midwife. Lay midwives should be identified as "Other Midwife." If "Other (Specify)" is checked, type or print the title of the attendant on the line provided.

This item identifies the person to be contacted and queried for missing medical information. Additionally, the type of attendant is used to assess the service rendered and quality of care.

31. NAME AND TITLE OF PERSON COMPLETING REPORT (Type/Print)

Name \_\_\_\_\_\_

Type or print the full name and title of the person completing the report.

This item identifies the person to be contacted for missing information.

# Part IV—Completing the cause of fetal death

The primary responsibility of the medical attendant whose name appears in item 30 of the fetal death report is to complete the cause of fetal death. In addition to entering information on the causes of fetal death, this person should also see that the time, date, and place of fetal death are correctly entered. He or she should also check the medical and health information in the report.

#### Cause of fetal death

A facsimile of the section on cause of fetal death of the fetal death report is shown below. It is similar to the cause-of-death section of the U.S. Standard Certificate of Death. As such, it is designed to facilitate reporting of the causes of fetal death and places upon the medical attendant the responsibility for indicating the course of events leading to the fetal death. He or she is the best person to decide which of several conditions was directly responsible for the fetal death and what antecedent conditions, if any, gave rise to the immediate cause. For statistical and research purposes, it is important that the reporting of the medical information on the fetal death report be specified as precisely as possible.

	28.	Enter only one cause per line for a, b, and a.	
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CAUSE OF FETAL DEATH	Council, stating the under by ground the second to the se	Due to gat as a consequence of:	Specify Fetal or Natarnal
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			DURING LABOR OR DELIVERY, UNKNOWN (Specify)
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i	( <u> </u>		

As can be seen, the section on cause of fetal death consists of two parts. Part I is for reporting the sequence of events leading to the fetal death, proceeding backward from the immediate cause of fetal death. In Part II, other significant contributory conditions to the fetal death are reported. In reporting the causes of fetal death, conditions in the fetus or mother, or of the placenta, cord, or membranes, should be reported if they are believed to have adversely affected the fetus. Cause of fetal death should include information provided by the pathologist if tissue analysis, autopsy, or another type of postmortem exam was done. If microscopic exams for a fetal death are still pending at the time the report is filed, the additional information should be reported to the registrar as soon as it is available. If you have any questions about the procedures for doing this, contact your registrar.

#### PART I OF THE CAUSE OF FETAL DEATH

Only one cause is to be entered on each line of Part I. Additional lines should be added when necessary. For each cause, indicate in the space provided whether the condition was *fetal* or *maternal*. The underlying cause of fetal death should be entered on the lowest line used in Part I. The underlying cause of fetal death is the condition that started the sequence of events between normal health of the mother or fetus and the immediate cause of fetal death.

#### LINE (a) IMMEDIATE CAUSE

In Part I, the immediate cause of fetal death is reported on line (a). This is the fetal or maternal disease or condition directly causing the fetal death. An immediate cause of fetal death must always be reported and entered on line (a). It can be the sole entry in the cause-of-fetal-death section if that condition was the only condition causing the fetal death.

#### LINES (b) AND (c) DUE TO (OR AS A CONSEQUENCE OF)

On line (b) report the disease, injury, or complication, if any, that gave rise to the immediate cause of fetal death. If this, in turn, resulted from another condition, record that condition on line (c). The underlying cause of fetal death should be reported on the lowest used line in Part I.

The words "due to (or as a consequence of)," which are printed between the lines of Part I, apply not only to sequences with an etiological or pathological basis but also to sequences where an antecedent condition is believed to have prepared the way for the more immediate cause by damage to tissues or impairment of function.

If an accident, poisoning, or violence to the mother caused death to the fetus, the medical attendant must remember to comply with any local regulations for the referral of deaths due to violence or accidents to the medical examiner or coroner.

#### SPECIFY FETAL OR MATERNAL

Space is provided at the end of each line in Part I for recording whether the condition was fetal or maternal. This should be entered for *all* conditions.

# PART II OF THE CAUSE OF FETAL DEATH (OTHER SIGNIFICANT CONDITIONS)

Record on these lines all other important diseases or conditions in the fetus or mother that were present at the time of fetal death which may have contributed to the fetal death but did not result in the underlying cause of fetal death listed in Part I.

#### Supplemental report of cause of fetal death

In many instances, information on the cause of fetal death may be pending further study of tissue or autopsy results or a pathology report. In this situation, the pathologist may be in a better position than any other individual to make a judgment as to which of the conditions led directly to fetal death and to state the antecedent conditions, if any, which gave rise to this cause. In instances where the pathologist has additional information to report on the cause of fetal death, he or she should inform the attending physician so this information can be provided to the State registrar.

#### Other items for medical certification

Additional information required from the physician includes a clinical estimate of gestation (item 21) and whether the fetus died before labor or during labor or delivery (item 29). In addition, some of the medical and health information (items 15-27) should be completed or checked for accuracy. These items request information on risk factors for the pregnancy, obstetric procedures used, complications of labor or delivery, method of delivery, and congenital anomalies of the fetus.

#### Examples of reporting causes of fetal death

#### **Case History No. 1**

The mother was a 29-year-old gravida 1, para 0 woman with a history of drug abuse. She had a normal pregnancy until 28 weeks gestation, when hydramnios was noted. Ultrasonography suggested anencephaly. No fetal movement was noted, nor were fetal heart sounds audible. Labor was induced, and a stillborn anencephalic fetus weighing 1100 grams was delivered.

CAUSE OF FETAL O DEATH	28.	Enter only one cause per line for a, b, and c.	
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	cause(s), stating the under- lyang cause last		
			29. FETUS DIED BEFORE LABOR.
	PART II. Other significant conditi	ne of fetus or mother contributing to fetal death but not resulting in the uncertying cause given in Part I.	DURING LABOR OR DELIVERY.
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			Before labor
			<u>L</u>

Note: The drug(s) should be specified when known.

#### **Case History No. 2**

The mother had a normal pregnancy until 28 weeks gestation, when she noticed the absence of fetal movement which was confirmed by ultrasound. There were no audible fetal heart sounds. Labor was induced and the mother was delivered of a 900-gram fetus, apparently female, delivered after prostaglandin.

The facies was abnormal with depressed nasal bridge, anteverted nostrils, small mouth, small posteriorly rotated ears, and midline frontal bossing. There was an umbilical hernia and a sacral neural tube defect (meningocele). The external genitalia

were ambiguous. There was syndactly of toes 2+3, and rockerbottom feet bilaterally. The fingers were short and edematous; there were no flexion creases on the palms of either hand.

Gross autopsy revealed internally that the genitalia were those of a normal male. The adrenals were small. There were several accessory spleens, partial malrotation of the gut and an atrial septal defect. The placenta had trophoblastic cysts. Tissues (muscle and fetal membranes) were taken for future chromosome analysis.

	23. PART L. Fetal or meternal condition directly causing fatal death.	condition directly									
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Two weeks later a chromosome analysis report became available that provided a diagnosis of triploidy, karyotype 69,XXY. A supplemental report of cause of fetal death was filed with the registrar of vital statistics.

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#### **Case History No. 3**

The mother, a 32-year-old primigravida with severe pre-eclampsia, developed an abruptio placenta at 35 weeks gestation. The fetus was observed by fetal monitoring to be without heart sounds for 20 minutes before delivery was accomplished. This was assumed to be intrauterine hypoxia.

	·		
	28. PART L. Fetel or maximal condition directly causing fetal desth.	Sately Febi or Matamal	
CAUSE DE FETAL DEATH	Futur and/or responsi cunditions, it any, giving rise to the immediate cause(s), stating the under- ying nause last.	Abruptio placenta	Maternal Sectiv Fetal or Medamud Maternal
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### **Appendixes**

- A. Hospital Worksheets
- B. The U.S. Standard Certificate of Live Birth
- C. The U.S. Standard Report of Fetal Death
- D. Definitions of Live Birth and Fetal Death
- E. The Vital Statistics Registration System in the United States

### Appendix A

### Hospital worksheets

Many hospitals use worksheets to accumulate the information needed to complete birth certificates or fetal death reports. The most common worksheet is used to obtain general information from the mother about the parent(s) and child. Some hospitals also have "preadmission" forms that are provided to physicians or expectant mothers and are completed by the mother prior to admission to the hospital for the delivery. Less frequently used is a summary worksheet containing information from the medical records of mother and child.

The worksheets and preadmission forms are usually developed and distributed by the State office of vital statistics, although they may be developed by an individual hospital to meet its specific needs. Any hospital interested in the use of worksheets should contact the State office of vital statistics. That office should be able to either provide the forms or give the hospital assistance in development of a worksheet.

## Appendix B

# The U.S. Standard Certificate of Live Birth

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## Appendix C

# The U.S. Standard Report of Fetal Death

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## Appendix D

# Definitions of live birth and fetal death

The following definitions have been adopted by the World Health Assembly and are recommended for use in the United States.

#### Live birth

Live birth is the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy, which, after such expulsion or extraction, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached.

Important—If an infant breathes or shows any other evidence of life after complete delivery, even though it may be only momentary, the birth must be registered as a live birth and a death certificate must also be filed.

#### Fetal death

Fetal death is death prior to the complete expulsion or extraction from its mother of a product of human conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such expulsion or extraction, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

*Important*—The definitions of fetal death followed in some States differ from the standard definition, particularly with respect to the minimum period of gestation for which a fetal death report is required. If you have any questions about the definitions used in your State, contact your State office of vital statistics.

### Appendix E

### The Vital Statistics Registration System in the United States

The registration of births, deaths, fetal deaths, and other vital events<sup>3</sup> in the United States is a State and local function. The civil laws of every State provide for a continuous, permanent, and compulsory vital registration system. Each system depends to a very great extent on the conscientious efforts of the physicians, hospital personnel, funeral directors, coroners, and medical examiners in preparing or certifying information needed to complete the original records. For a graphic presentation of the registration system, see the accompanying chart, "The Vital Statistics Registration System in the United States."

Most States are divided geographically into local registration districts or units to facilitate the collection of vital records. A district may be a township, village, town, city, county, or other geographic area or a combination of two or more of these areas. In some States, however, the law provides that records of birth, death, and/or fetal death be sent directly from the reporting source (hospital, physician, or funeral director) to the State vital statistics office. In this system, functions normally performed by a local registration official are assumed by the staff of the State office.

In States with a local registrar system, the local registrar collects the records of events occurring in his or her area and transmits them to the State vital statistics office. The local registrar is required to see that a complete certificate is filed for each event occurring in that district. In many States this official also has the duty of issuing burial-transit permits to authorize the disposition of dead human bodies. In many States this official is also required to keep a file of all events occurring within his or her district and, if authorized by State law and subject to the restrictions on issuance of copies as specified by the law, may be permitted to issue copies of these records.

The State vital statistics office inspects each record for promptness of filing, completeness, and accuracy of information; queries for missing or inconsistent information; numbers the records; prepares indexes; processes the records; and stores the documents for permanent reference and safekeeping. Statistical information from the records is tabulated for use by State and local health departments, other governmental agencies, and various private and voluntary organizations. The data are used to evaluate health problems and to plan programs and services for the public.

<sup>&</sup>lt;sup>3</sup>Vital events are defined as live births, deaths, fetal deaths, marriages, divorces, and induced terminations of pregnancy, together with any change in civil status that may occur during an individual's lifetime.

An important function of the State office is to issue certified copies of the certificates to individuals in need of such records and to verify the facts of birth and death for agencies requiring legal evidence of such facts.

The National Center for Health Statistics (NCHS) in the Public Health Service is vested with the authority for administering vital statistics functions at the national level. Data tapes of information derived from individual records registered in the State offices—or, in a few cases, copies of the individual records themselves—are transmitted to NCHS. From these data or copies, monthly, annual, and special statistical reports are prepared for the United States as a whole and for the component parts cities, counties, States, and regions—by various characteristics such as sex, race, and cause of death. The statistics are essential in the fields of social welfare, public health, and demography. They are also used for various administrative purposes, in both business and government. NCHS serves as a focal point, exercising leadership in establishing uniform practices through model laws, standard certificate forms, handbooks, and other instructional materials for the continued improvement of the vital statistics system in the United States.

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Aesponsible Person or Agency	Birth Certificate	Death Certificate	Fetal Death Report (Stilibirth)
Hospital authority	<ol> <li>Completes entire certificate in con- sultation with parent(s).</li> <li>Files certificate with local office or State office per State law.</li> </ol>	When death occurs in hospital, may initiate preparation of cartificate: Completes information on name, date, and place of death; obtains cartifica- tion of cause of death from physician; and gives cartificate to funeral director. NOTE: If the attending physician is unavailable to cartify to the cause of death, some States allow a hospital physician to cartify to only the fact and time of death. With legal pro- nouncement of the death and permis- sion of the artending physician, the body can then be released to the funeral director. The attending physi- cian still must complete the cause-of- death section prior to final disposition of the body.	<ol> <li>Completes entire report in con- sultation with parent(s).</li> <li>Obtains cuese of fetal death and other medical and health informa- tion from physician.</li> <li>Obtains euthorization for final disposition of fetus.</li> <li>Files report with local office or State office per State law.</li> </ol>
Funeral director		<ol> <li>Obtains personal facts about dece- dent and completes certificate.</li> <li>Obtains certification of cause of death from attending physician or medical examiner or coroner.</li> <li>Obtains authorization for final disposition per State law.</li> <li>Files certificate with local office or State office per State law.</li> </ol>	If fetus is to be buried, the funeral director is responsible for obtaining authorization for final disposition. NOTE: In some States the funeral director, or person acting as such, is responsible for all duties shown above under hospital authority.
Physician or other professional attendant	For inhospital birth, verifies accuracy of medical information and signs car- tificate. For out-of-hospital birth, duties are same as those for hospital authority, shown above.	Completes certification of ceuse of death and signs certificate.	Provides cause of fetal death and other medical and health information.

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Local office* (may be local registrar or city or county health department)	<ol> <li>Verifies completeness and ac- curacy of certificate and queries incomplete or inconsistent certificates.</li> <li>If authorized by State law, makes copy or index for local use.</li> <li>Sends certificates to State registrar.</li> </ol>	<ol> <li>Verifies completeness and ac- curacy of certificate and queries incomplete or inconsistent certificates.</li> <li>If authorized by State law, makes copy or index for local use.</li> <li>If authorized by State law, issues authorized by State law, issues authorized for final disposition on neceipt of completed certificate.</li> <li>Sends certificates to State registrar.</li> </ol>	If State law requires routing of fatal death reports through local office, the local office performs the same functions as shown for the death certificate.
City and county health departm diseases, planning programs, m	City and county health departments use data derived from these records in allocating medical and nursing services, following up on infectious discases, planning programs, measuring effectiveness of services, and conducting research studies.	<ul> <li>si allocating medical and nursing servic</li> <li>conducting research studies.</li> </ul>	ses, following up on infectious
State registrar, office of vital statistics	<ol> <li>Queries incomplete or inconsistent information.</li> <li>Maintains files for permenent reference and is</li> <li>Develops vital statistics for use in planning, eresearch studies.</li> <li>Compiles health-related statistics for State and agencies and groups interested in the fields of 5. Sends data derived from records or copies of n</li> </ol>	<ol> <li>Queries incomplete or inconsistent information.</li> <li>Maintains files for permanent reference and is the source of certified copies.</li> <li>Develops vital statistics for use in planning, evaluating, and administering State and local health activities and for research studies.</li> <li>Compiles health-related statistics for State and civil divisions of State for use of the health department and other agencies and groups interested in the fields of medical science, public health, demography, and social welfare.</li> <li>Sends data derived from records or copies of records to the National Center for Health Statistics.</li> </ol>	state and local health activities and for e of the health department and other th, demography, and social welfare. for Health Statistics.
Public Health Service, National Center for Health Statistics	<ol> <li>Prepares and publishes national statistics of births, deaths, and fe and related actuarial tables.</li> <li>Conducts health and social-research studies based on vital record.</li> <li>Conducts research and methodological studies in vital statistics m and legal aspects of vital records registration and administration.</li> <li>Maintains a continuing technical assistance program to improve the</li> </ol>	<ol> <li>Prepares and publishes national statistics of births, deaths, and fetal deaths; constructs the official U.S. life tables and related actuarial tables.</li> <li>Conducts health and social-research studies based on vital records and on sampling surveys linked to records.</li> <li>Conducts research and methodological studies in vital statistics methods, including the technical, administrative, and legal aspects of vital records registration and administration.</li> <li>Maintains a continuing technical assistance program to improve the quality and usefulness of vital statistics.</li> </ol>	constructs the official U.S. life tables ampling surveys linked to records. cluding the technical, administrative, and usefulness of vital statistics.

\* Some States do not have local vital registration offices. In these States, the certificates or reports are transmitted directly to the State office of vital statistics.