Fetal Death Edit Specifications for the 2003 Revision of the U.S. Standard Report of Fetal Death

Note: This document replaces Instruction Manual Part 3b, "Classification and Coding Instructions for Fetal Death Records"

5/2004; Updated 2/18/2005

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* Item is not part of the NCHS data set.

SPECIFICATIONS FOR COLLECTING AND EDITING THE UNITED STATES STANDARD CERTIFICATES OF BIRTH AND DEATH AND THE REPORT OF FETAL DEATH -- 2003 REVISION

INTRODUCTION

Since the inception of a national vital statistics system, the states and the federal government have worked together cooperatively to promote standards and consistency among state vital statistics systems. The U. S. Standard Certificates of Birth and Death, and Report of Fetal Death are the principal means of promoting uniformity in the data collected by the states. These documents are reviewed and revised approximately every 10 years through a process that includes broad input from data providers and users. In 1997, the National Center for Health Statistics (NCHS) appointed a panel of vital statistics data providers and users to evaluate the (1989) certificates. That panel completed its work in April 1999, and submitted recommended revisions to NCHS.

NEED FOR SPECIFICATIONS

As one of its findings, the panel recommended that NCHS develop and promulgate standards for vital statistics data collection and processing. One of the reasons for this was that the Working Group to Improve Data Quality found a decline in vital statistics birth data quality associated in part with electronic registration of vital events (1).

Over the past 15 years, automation has had a significant effect on the nations' vital statistics system. Currently, over 95 percent of births are registered electronically and the move toward electronic death registration is accelerating. Unfortunately, these electronic systems were developed in a piecemeal fashion in an environment of constantly changing technology options. As a result, data quality issues not seen prior to the Electronic Birth Registration (EBR) systems began to surface. Many of these quality issues along with issues that appeared to be a problem for both paper and electronic systems are documented in the "Report of the Working Group to Improve the Quality of Birth Data."(1)

With the development of electronic systems for new standard certificates there is an opportunity to prevent some of the problems identified by the "Working Group" and improve data quality. One way to improve data quality as well as to ensure uniformity in the national databases is to include, as part of the implementation package, detailed specifications for electronic as well as paper systems. All vital statistics registration areas as well as software vendors will have the same set of specifications for data submission to NCHS. As a result, differences in data due to software created by different vendors should be minimized.

Our goal is to offer comprehensive instructions/recommendations covering all aspects of the electronic system. The data specifications for electronic birth, death, and fetal death registration systems include:

- Mechanisms for incorporating recommended worksheets into the system
- Item specific edit criteria
- Computational algorithms
- Item code specifications
- Response categories, including drop down menus and "pick lists" (excluding cause of death)
- Requirements for context specific help
- Electronic transmission standards

The overall goal of these specifications is to have the electronic systems identify, and wherever possible, rectify data problems as close to data entry as possible. To that end, we recommend that the systems edit and query at the time the data is entered and that a second level of editing be performed for some items, once the record is filed with the state office. Editing performed close to the time that data are collected should greatly minimize queries from state offices to data providers. In addition, the editing and resolving of problems before data are transmitted to NCHS should reduce queries from NCHS to the states and maximize resolution of data problems before data are transmitted to NCHS when it is often too late for them to be fixed.

At present, most Electronic Birth Registration (EBR) systems are designed for freestanding software in birthing facilities. The software captures the data, carries out limited editing, and transmits data to the state for further processing. State processing is then done either with software developed by the same vendor who developed the facility software, or by software developed by state staff. Although the current specifications are designed to be used with the different types of electronic systems (stand alone facility/provider software, state central processor, or central/ "web based," systems) a system housed and operated centrally at the state office may facilitate system maintenance, version control, security, and uniform processing of data.

We also strongly recommend that each state operated EBR/EDR input system replicate the data input system used by facilities/providers in the field. This helps to ensure that records not filed electronically will be keyed, edited, and processed as similarly as possible to electronically filed records.

States may also wish to integrate the EBR and the Fetal Death Reporting system to minimize facility workload and promote more complete reporting. The new electronic systems may also be integrated with other public health data systems, such as newborn screening, immunization registries, medical examiner reporting systems, or other

appropriate disease-specific reporting systems. However, the states should review how data are collected in these systems and the potential impact of this data on vital statistics information before allowing integration of systems.

These specifications follow as closely as possible the data standards (HISSB standards) promulgated by the Centers for Disease Control and Prevention (CDC).

The specifications include recommendations on the steps that should occur during data collection and processing, but do not specifically (with a few exceptions) mandate how the steps are to be operationalized.

The specifications are meant to be software neutral. Any language that might be construed as mandating a particular software approach is not intentional.

NCHS will review state software for the handling of data elements to ensure that data are collected and recorded as intended. The software will also be tested to ensure that the edits and computational algorithms work as intended, and that instructions and help menus, pick lists, and drop down menus are uniform.

The EBR/EFDR specifications were developed assuming the NCHS Standard Worksheets (see attachments) as the source documents used to populate the EBR/EFDR. The standard worksheets are developed in a format that is the most efficient for hospital staff to complete. To further encourage the use of the worksheets **the electronic systems must be designed to follow the flow of these worksheets.** The paper worksheets are also readily adaptable to electronic formats (i.e., electronic worksheets).

Most items on the Report of Fetal Death are similar or identical to those on the Birth Certificate. It is important that the EFDR also closely resemble the EBR so that comparable data may be collected from the two systems.

GENERAL PRINCIPLES

1. Electronic birth data are to be collected in a manner and format as similar to the recommended worksheets as possible. Death data should closely follow the death certificate.
2. The specifications for electronic systems include instructions that are to appear on the screen to complete each item and instructions to be included for help menus.
3. The specifications for electronic systems include, in many cases, the specific edit screens to be followed at data input and at later stages in the processing.
4. Once a record has been saved once and then reopened, the EDR/EBR/EFDR should include a window for the record that lists items still pending (incomplete). The keyer should be able to go to any item in the pending list and enter data when information becomes available.
5. Default values are not permissible except for those clearly identified in the specifications.

6. Individual check boxes or item responses may not be dropped, but State laws and regulations and individual State needs may dictate that additional categories be included. Any additions should be added to the end of the standard list. For exceptions to this recommendation please contact the Director of the Division of Vital Statistics, NCHS.
7. State laws and regulations and individual State needs may also dictate that additional items be added to the certificate. Because additions may affect responses to the standard items, please contact the Director of DVS, NCHS before finalizing additional items.
8. The certificates/worksheets generally do not include the response option "unknown." Electronic systems, however, allow a final response of "unknown" for a number of items.
9. Electronic non-check box numeric items such as dates, and "unknown" will require the entry of a character or series of characters as shown in the specifications. The use of "hot keys" for unknown numeric values is recommended.
10. The software must be able to integrate with several external pieces of software, e.g., the state GIS system, occupation and industry coding software, and Supermicar.
11. Although quality control tabulations are not included in the specifications (e.g., the percent of unknown responses by provider), we strongly recommend that these types of tabulations be included as an essential component of the new EBR/EDR/EFDR systems.
12. Software and table updates should be implemented uniformly across the state.

FEATURES INTEGRAL TO THE ELECTRONIC SYSTEMS:

- **Automatic edits at time of data entry** - automatic messages which appear immediately after data is entered for a given item. The message alerts the user of data problems (i.e., data out of range or inconsistent with other information) and allows the user to immediately modify the data. Cross-item edits, for example, maternal age by maternal education, should fire immediately after data for both items are entered. The user should not have discretion as to whether the edits are run. There are two types of edits - soft edits which identify and query entries but accept the entry upon the users approval, and hard edits which identify and query entries which must be corrected before the record can be filed.

- **Ability to edit related items together** - the user should be able to readily modify data entered for all related items when an edit has identified a problem. For example, if birthweight is found to be within the allowable range, but is inconsistent with the (derived) length of

gestation, the user should be able to readily correct both items since either could be inaccurate.

- **Capture of soft-edit query** - the system should track when a soft edit has been performed. This will allow States to tract frequent edit failures and take corrective action. For selected variables, when a soft edit fails a second time, a by-pass variable will be set to alert States and NCHS that the out of range value has been verified as correct.

- **On screen messages** - the individual item specifications include a number of reminders/instructions. A well-designed system should be able to incorporate these messages without unduly burdening the user. Not all messages should require action on the part of the user. For example, some messages can just be flashed on the screen quickly enough to read.

- **On-line help** - definitions and more detailed instructions included in the specifications for both the EBR/EDR/EFDR and "The Guide to Completing the Facility Worksheet" for the EBR should be available on-line to the user.

- **Item order or flow** - systems must flow in the same order as the worksheets which were designed to encourage information to be gathered from the best sources. (Not applicable to death.)

- **Final review/query screen** - systems should be designed to allow the user to temporarily skip certain items to allow the user additional time to gather information, especially from the medical records. The final query screen reminds the user to complete all missing information and gives them the opportunity to do so before the record can be filed or released to the State data file. It also queries rare responses, such as a response of "no prenatal care." Once a record is released to the State data file and is accepted by the State, providers should no longer have the ability to modify the record.

- **List of pending items** - systems should allow the user to easily access a list of incomplete items and go to the incomplete items once a record has been worked on and saved once. Prior to sending or finalizing a record, it should be mandatory that the user be presented with a list of all incomplete items.

- For items where it is only correct to choose one response (e.g. Prepregnancy or Gestational Diabetes, or The Principal Source of Payment for Delivery) systems should be designed so as to accept only

one response. Two possible ways to accomplish this are via edit messages or blocking out other response categories after one has been selected.

- **Version control** - systems should include methods to track changes in software versions and notify NCHS of version change. Version changes considered necessary to track are ones which include changes to items, edits or more substantive changes to tables and format. Each record transmitted to NCHS should have a version number. This notice should greatly improve our ability to identify and fix data problems.

- **Cause of death**

- Consistent look for cause of death- On medical examiner, coroner, and physician entry screens, it is imperative that the physician viewing the screen be able to see, at minimum, the same prompts and formatting as those physicians using the paper version of the death certificate. (Not applicable to birth).

- Additional lines for cause- Additional lines may be added as needed in the cause-of-death statement. (Not applicable to birth).

- **Prohibition of pick lists**- Physicians completing cause of death MUST enter medical conditions using their own terminology (e.g., pick lists or other mechanisms limiting the choice for cause are not allowed).

- **Electronic death registration system guidelines**- The National Association for Public Health Statistics and Information Systems' (NAPHSIS) Electronic Death Registration project has created guidelines and associated standards (see guidelines and standards at http://www.naphsis.org) for use in developing and implementing an electronic death registration system. The NAPHSIS document deals with broad issues while the NCHS specifications document deals with individual fields.

TRANSMISSION FILE PRINCIPLES

1. State file numbers should be sequential starting with the number one each year.
2. Each shipment of data shall be accompanied by a transmittal that includes the file name, state name, date of shipment, certificate number range, and number of records in the shipment (new, updated and total). Each record shall include a variable which indicates that it is a valid record or a void.
3. Data will be sent to NCHS as soon as possible after receipt and initial processing by the state. The state shall not wait for the results of queries before transmitting a record.
4. All record updates and changes to variables in the NCHS data set due to query,

registrar initiation or interested party initiation should be forwarded to NCHS as soon as the updated record is accepted by the state.

(1) *Report of the Working Group to Improve the Quality of Birth Data. U.S. Department of Health and Human Services, PHS, CDC, NCHS. 1998.*

TERMS AND DEFINITIONS

Soft Edit:	An edit that identifies and queries entries which are outside of the expected range, but which accepts out of range entries.
Hard Edit:	An edit that identifies and queries entries which are outside of the expected range which must be corrected before the record can be filed.
EBR	Electronic Birth Registration System.
EDR	Electronic Death Registration System.
EFDR	Electronic Fetal Death Registration System
EBR/EDR Edit	Edits (both hard and soft) run before the record is transmitted to the state. Wherever feasible, edits are to be run at data entry.
State Edit	Edits performed by the state after the record has been transmitted to the State.
Help Menu Instructions	Instructions to be included as part of the standard help function.
On Screen Instructions	Instructions to complete or revise an item which should always appear on the EBR/EDR/EFDR screen.
Hot key	A specific key such as a "?" which can be used to represent unknown values for any item.
Final Review Screen	A screen designed to improve data collection by allowing the keyer additional time to gather information, and to remind the keyer to complete missing information before the record can be filed. Also queries rare responses. (See discussion below.)
Bypass Variable	A variable that indicates the results of a query for an entry failing an edit. The results of the query are in the transmitted data. (See discussion below.)

Missing Value Variable	A variable that provides additional information to an "unknown" response, e.g., "sought but unknown," "unobtainable," and "refused." (See discussion below.)
Processing Variables	Variables states will use to collect and process vital statistics data.
Transmission Variables	Variables to be transmitted to NCHS as part of the VSCP contract.

FINAL REVIEW SCREEN: (EBR/EFDR examples)
(Also see section on Final Review Screen)

The final review screen is designed to encourage better reporting of items for which necessary information is not immediately available (primarily prenatal care items). The keyer is given the option to temporarily skip an item, that is, indicate that data to complete the item are not available at the time the record is initiated. The item is then placed in pending status and, if not called up and completed beforehand, will appear on the final review screen to be completed before the record can be transmitted to the state. At the final review screen, the keyer may enter the item information or enter a response of "unknown."

Once a record has been closed and reopened, the keyer will also have the option to return and complete pending items. A list of items still pending will appear on the screen at all times after the record is re-opened allowing the keyer to complete the item as information becomes available. For example, assume that the keyer has all information on a given delivery except the patient's prenatal care data. When the keyer comes to item 6(a) "Date of first prenatal care visit," one of the first items on the facility worksheet, the keyer may then indicate that the PNC record is "not yet available," the item will be skipped and the keyer can continue to complete other items on the record. Once the record is re-opened, the item "Date of the first prenatal visit" will appear on the pending list to be completed at the keyers discretion. If not completed beforehand, the item will appear on the final review screen.

The "pending list" should be available to the keyer at all times after the first re-opening of the record, but the final review screen will appear only once, prior to the record being sent to the state. The final review screen is also used to query rare item responses such as a response of "no prenatal care."

BYPASS VARIABLE:

Bypass variables are used where edits are performed. This variable indicates the keyer has been queried about an unexpected response, and has had the opportunity to change the response. The use of bypass variables should help reduce queries from the state to data providers, and from NCHS to the states.

MISSING VALUE VARIABLE:

The "Missing Value Variable" (MVR) captures responses such as "refused," "sought but unknown," and "unobtainable," which are intended to expand upon an "unknown" response. While not necessary for most variables in the Vital Statistics System, MVRs can be useful for items when data are collected directly from an informant. These

responses can then be reviewed by the state to identify data collection issues. The death specifications include several items for which several MVR responses are recommended.

THE FINAL REVIEW SCREEN

Systems should be designed to allow the keyer to temporarily skip items for which information/records are not immediately available. This is particularly, but not exclusively, applicable to information collected from prenatal care records.

The "Final Review Screen" is to appear prior to the final transmission of the record for those items still "pending." Such items include any that were marked "pending" as above, or those left blank but required to be completed for the record to be filed with the state. It also includes items that have failed a hard edit, and selected items with relatively rare responses (e.g., "no prenatal care").

The following are instructions for the final review screen using "Date of first prenatal care visit" and "Date of last prenatal care visit" (items 23(a)&(b)) as examples:

When items "Date of first prenatal care visit" and "Date of last prenatal care visit" are marked "pending" the following screen should appear:

The following item has been marked "pending." This item must be completed before the record is filed.

Complete ALL PARTS of the dates that are available.
Leave blank any parts of the dates that are not known.

Month of the first visit __ __
Day of the first visit __ __
Year of the first visit __ __ __ __

Month of the last visit __ __
Day of the last visit __ __
Year of the last visit __ __ __ __

- ❑ Check this button if all dates are unknown
- ❑ Check this button is there was no prenatal care

A response of "No prenatal care" on the <u>initial</u> entry screen, also is to be verified at the final review screen. (Verification is not necessary for data entered at the State level.)

Please verify whether or not the patient received prenatal care.

- ❑ Yes, the patient received prenatal care
- ❑ No, the patient did not receive prenatal care

If "no prenatal care" is verified, there is no further query for item 29, and item 30 is skipped.

If the verification response indicates that prenatal care was provided, the following will appear:

Complete ALL PARTS of the dates that are available.
Leave blank any parts of the dates that are not known.

Month of the first visit __ __
Day of the first visit __ __
Year of the first visit __ __ __ __

Month of the last visit __ __
Day of the last visit __ __
Year of the last visit __ __ __ __

- ❑ Check this button if all dates are unknown
- ❑ Check this button is there was no prenatal care

Entry operator must tab through all entry fields.

If a date is entered, the edits for date are run as indicated in the item specification.

If a date is entered or the "unknown" button is checked, item 24 should be completed.

If no parts of a date are entered after tabbing through the last field, all date fields are assigned the "unknown" codes.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Centers for Disease Control and Prevention

National Center for Health Statistics
6525 Belcrest Road, Room 1140
Hyattsville, Maryland 20782

September 10, 2001
(Revised October 29, 2001)

Dear Colleague:

Recent meetings with the States and software vendors have demonstrated the need for us to clarify NCHS's position on the data-capturing components of the electronic birth and death systems being designed for the upcoming revision. This letter briefly summarizes the NCHS guidelines for these systems; more detailed information can be found in the overview of "The Specifications for Collecting and Editing The United States Standard Certificates of Birth and Death -2003 Revision" and in the specifications for the individual items. The overview and the death specifications will be available at our web site soon. We expect to post the finalized birth specifications within the next month.

In order to improve the quality of both State and national vital statistics and to promote standardization and comparability among the States, we believe it is essential that all areas incorporate certain features into their electronic systems. Data from systems which do not include these elements may not be considered comparable to that from systems which do, and ultimately may not be included in the national file or in national tabulations. We strongly encourage all States which are considering data collection or editing methods which deviate from the specifications to consult with us prior to implementation.

We hope to work closely with the software vendors to enhance understanding on both sides of data needs and system capabilities and are open to suggestions for ways to improve on these elements. We invite all vendors to meet with us within the next few months for more in-depth demonstrations and discussion.

Features integral to the electronic systems:

- **Automatic edits at time of data entry** - automatic messages which appear immediately after data is entered for a given item. The message alerts the user of data problems (i.e., data out of range or inconsistent with other information) and allows the user to immediately modify the data. The user should not have discretion as to whether the edits are run. There are two types of edits - soft edits which identify and query entries but accept the entry upon the users approval, and hard edits which identify and query

entries which must be corrected before the record can be filed.

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- **Ability to edit related items together** - the user should be able to readily modify data entered for all related items when an edit has identified a problem. For example, if birthweight is found to be within the allowable range, but is inconsistent with the (derived) length of gestation, the user should be able to readily correct both items since either could be inaccurate.

- **Capture of soft-edit query** - the system should track when a soft edit has been performed. This will allow States to tract frequent edit failures and take corrective action. For selected variables, when a soft edit fails a second time, a by-pass variable will be set to alert States and NCHS that the out of range value has been verified as correct.

- **On screen messages** - the individual item specifications include a number of reminders/instructions. A well-designed system should be able to incorporate these messages without unduly burdening the user. Not all messages should require action on the part of the user. For example, some messages can just be flashed on the screen quickly enough to read.

- **On-line help** - definitions and more detailed instructions included in the specifications for both the EBR and the EDR, and "The Guide to Completing the Facility Worksheet" for the EBR should be available on-line to the user. NCHS expects to make an electronic version of the guide available soon.

- **Item order or flow** - systems should flow in the same order as the worksheets which were designed to encourage information to be gathered from the best sources. (Not applicable to death.)

- **Final review/query screen** - Systems should be designed to allow the user to temporarily skip certain items to allow the user additional time to gather information, especially from the medical records. The final query screen reminds the user to complete all missing information and gives them the opportunity to do so before the record can be filed or released to the State data file. It also queries rare responses, such as a response of "no prenatal care." Once a record is released to the State data file and is accepted by the State, providers should no longer have the ability to modify the record. (Not applicable to death.)

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- **Cause of death**

  - Consistent look for cause of death- On medical examiner, coroner, and physician entry screens, it is imperative that the physician viewing the screen be able to see, at minimum, the same prompts and formatting as those physicians using the paper version of the death certificate. (Not applicable to birth).

  - Additional lines for cause- Additional lines may be added as needed in the cause-of-death statement. (Not applicable to birth).

  - Prohibition of pick lists- Physicians completing cause of death must enter medical conditions using their own terminology (e.g., pick lists or other mechanisms limiting the choice for cause are not allowed). (Not applicable to birth).

- **Electronic death registration system guidelines**- The National Association for Public Health Statistics and Information Systems' (NAPHSIS) Electronic Death Registration project has created guidelines and associated standards (see guidelines and standards at http://www.naphsis.org) for use in developing and implementing an electronic death registration system. The NAPHSIS document deals with broad issues while the NCHS specifications document deals with individual fields.

This list is intended to address the major issues we have encountered thus far. As we all gain more experience with the new systems new issues may arise that will also need to be addressed. We look forward to an ongoing dialogue with all parties to work towards the development of the best systems possible.

For questions or comments on the birth specifications please contact:

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For information on the death specifications:

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Sincerely yours,

Mary Anne Freedman
Director
Division of Vital Statistics

Item Title: **NAME OF FETUS (Optional-at the discretion of the parents)**

(Item is not part of the NCHS data set.)

Item Number: **1 Report, 1 Patient's Worksheet**

Description**:** The name of the fetus as provided by the parents.

Source of Information:

Preferred Source: Patient

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the First, Middle, and Last Names of the fetus including suffix. If the parents choose not to name the fetus, leave the item blank In some states the report or certificate of fetal death requires that the fetus be named. In these cases state law or rule should be followed in regards to the name of the fetus.

If the fetus is named, it is suggested that you print or type the names as provided to you by the parents and have the parents check the spelling and order of names before entering the name on the report.

If there appears to be more than one spelling of any name provided, and the correct spelling cannot be verified, use the most common spelling.

If the fetus is a foundling, enter the name of the fetus as provided by state law or rule.

FOR AN ELECTRONIC RECORD:

Enter the names of the fetus as recorded in item 1 of the patient's work sheet. Have the patient check the spelling and order of names before entering the names into the computer.

EFR Developer

The paper fetal death report does not have separate boxes for the names of the fetus. However, the patient's work sheet does have separate spaces for the names.

The EFR should have separate fields for the first name(s), middle name(s), last name(s) (surname), and last name suffix.

There should also be a check box to indicate if the fetus is a foundling.

☐ Check this box if the fetus is a foundling.

When the name of the fetus screen appears, display the foundling check box first and if checked the following instruction should appear.

Enter the last name of the fetus as follows: (state should supply)

If the fetus is to be named the following at the top of the screen until all the name fields are completed.

It is suggested that you print out the name(s) as provided to you by the parents and have the parents check the spelling and order of names before entering the names into the computer.

If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling.

When completing the first name entry box or the middle name entry box, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Help on multiple first or middle names**
- ☐ **Initials**
- ☐ **No first or middle names**

If the first help box is checked, the following instruction appears:

Multiple first or middle names

If the parents indicate two first names separated by a space, such as “Mary Louise Carter,” verify that “Louise” is part of the first name and is not a middle name.

Enter the two first names with a blank space between them.

If several middle names are given, enter all with a space between the names.

If the second help box is checked, the following instruction appears:

Initials

If the parents indicate that the fetus is to have only a first initial such as "E. Charles Jones," enter the E followed by a period.

If the parents indicate two initials and a last name such as "H.S. Green," determine if these are a first and middle initial, or two first initials with no middle name or initial. Enter the initials in the appropriate spaces. Each initial should be followed by a period.

If the third help box is checked, the following instruction appears:

No first or middle names

If the child has not been given a first or middle name, leave the first and middle name fields blank.

When completing the last name entry, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Multiple last names**
- ☐ **Unknown last name (foundling)**
- ☐ **Special characters in last names**
- ☐ **Surname suffixes**

If the first help box is checked, the following instruction appears:

Multiple last names

If more than one surname is given separated by a hyphen, enter exactly as given with the hyphen. If there is more than one last name and no hyphen, enter the two names with a space between them.

If the second help box is checked, the following instruction appears:

Unknown last name

If the last name is unknown (foundling) enter as provided by state law or rule, enter "unknown" in the last name field and leave the other fields blank. (**The state should supply specific instructions for this)**

If the third help box is checked, the following instruction appears:

Special characters in last names

If the surname has a space or apostrophe following prefixes, such as Mac Pherson or O'Toole, enter as given with the space or apostrophe.

If the fourth help box is checked, the following instruction appears:

Surname suffixes

Suffixes and generation identifiers are to be entered in the suffix field.

PROCESSING VARIABLES:

NAME	DESCRIPTION	LENGTH	VALUES
FNAME	First name	50	Alpha characters
MNAME	Middle name	100	Alpha characters
LNAME	Last name	50	Alpha characters
SUFF	Last name suffix	20	Alpha characters
FOUND	Foundling indicator	1	N, Default F, Foundling

EDITS:

"Unknown" is an acceptable entry for the last name only if the variable FOUND had value F.

If the last name field is blank or has value "Unknown," all other name fields must be blank.

Name fields must contain English alphabetic characters or be blank.

STATE DATA FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

Item Title: **TIME OF DELIVERY (24hr)**

Item Number: **2 Report, 17 Facility worksheet**

Description: Hour and minute fetus was delivered.

Source of Information:

Preferred Source: Labor and delivery, Mother/patient's admission history and physical
Other Source: Attendant (non-facility deliveries only)

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the hour and minute of delivery using a 24-hour clock.
If the time of delivery is not known, enter "unknown" in the space.

Based on the recommendation of the National Institute of Standards and Technology it is strongly recommended that the 24-hour clock with the range of 0000-2359 be used. 0000 is considered the start of the new day.

TIME OF DELIVERY

_____ (24hr)

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

To report the "Time of Delivery" use a 24-hour clock and four digit entry field.

Hour and minute of delivery_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION

TD	Hour and minute of delivery	0000-2359,	
		9999	Unknown
		OR	
		0001-2400, (See Edits)	
		9999	Unknown

EDITS:

Some facilities may use a 0001-2400 range in lieu of the 0000-2359 range. The only difference between these systems is in how the beginning of the new day, midnight (or 12:00 am using the 12-hour clock) to 59 seconds after midnight (12:00:59 am) is represented. For medical facilities the commonly used sequence is:
2359 (11:59 pm)
0000 (12:00 am)
0001 (12:01 am).
However, for the military (but not necessarily military medical institutions) the sequence is:
2359(11:59 pm)
2400 (12:00 am)
0001 (12:01 am).

The new day begins at 0000 or 2400 (midnight) (0001 = 1 minute after midnight, etc.). These latter systems should convert 2400 to 0000 for transmission to NCHS purposes.

ELECTRONIC RECORD

Before the record is transmitted to the State

Values must be in the range 0000-2359, 9999 or 0001-2400, 9999. If the value is outside the range, an error message should appear showing the invalid value and asking that a new value be entered.

STATE FILE CONSIDERATIONS

The hour should be recorded using a 24-hour clock. However, States may wish to convert the recorded time on the electronic record to the standard 12-hour clock when printing paper copies of the record for families.

- For 0000 to 0059 add 1200 hours and “a.m.”
- For 0100 to 1159 add “a.m.”
- For 1200 to 1259 add “p.m.”
- For 1300 to 2359 subtract 1200 hours and add “p.m.”

If states elect to use a database system that has an option of storing dates as “date type variables,” the system must meet the criteria listed under transmission.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
TD	4	Numeric	0000-2359, 9999

EDI TRANSMISSION:
HL 7 transmission standards will be followed. This is a time and date stamped standard in the following format:

[HH[mm]]

Software that stores dates as “date type” must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Title: **SEX**

Item Number: **3 Report, 27 Facility worksheet**

Description: The sex of the fetus

Source of Information:

Preferred Source: Delivery record, Fetus's medical record

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type whether the fetus is male, female or if the sex of the fetus is not yet determined.

SEX

_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

When the item is to be completed, the following menu should be used to select one response:

Sex

- ❑ Male
- ❑ Female
- ❑ Unknown

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FSEX	The sex of the fetus	M	Male
		F	Female
		U	Unknown

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
FSEX	1	Alpha character string	M, F, U

EDI TRANSMISSION:

No standards set yet.

Item Title: **DATE OF DELIVERY (FETUS)**

Item Number: **4 Report, 16 Facility worksheet**

Description: The fetus' date of delivery

Source of Information:

Preferred Source: Labor and delivery, mother/patient's admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the month, day, and four digit year of delivery. Please spell out the month of delivery. Numeric abbreviations are acceptable for the day and year of delivery.

DATE OF DELIVERY (Mo/Day/Yr)

_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The Date of Delivery is a three-field entry with the month, day, and year entered in separate fields.

Month of fetus' delivery ___ ___

Day of fetus' delivery ___ ___

Year of fetus' delivery ___ ___ ___ ___

The following instruction should appear in the help function when the fetus' date of delivery is not known.

If the date of delivery of the fetus is not known, please ask the patient for the delivery date. If the patient is not available, enter the date the fetus was found as the date of delivery.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FDOD_YR	Year of Delivery	4 digit year	Must be equal to current data year
FDOD_MO	Month of Delivery	01	January
		02	February
		03	March
		04	April
		05	May
		06	June
		07	July
		08	August
		09	September
		10	October
		11	November
		12	December
FDOD_DY	Day of Delivery	01-31	January
		01-29	February
		01-31	March
		01-30	April
		01-31	May
		01-30	June
		01-31	July
		01-31	August
		01-30	September
		01-31	October
		01-30	November
		01-31	December

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If month is February and day = 29, year of delivery should be a leap year. If not, an error message should appear and ask that the date be corrected.

The fetus's date of delivery must be earlier than or the same as the date the record is filed.

PAPER RECORD

For paper records, the same edits are applied at the State level. Edits failed after re-entry through the edit screens will result in a listing of items to be queried and the item will be given a pending query status.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
FDOD_YR	4	Numeric or "date type"	Must be equal to current data year
FDOD_MO	2	Numeric or "date type"	01-12
FDOD_DY	2	Numeric or "date type"	01-31 (based on month)

EDI TRANSMISSION:

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits.

Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the

HL7 EDI format.

Item Titles: **FACILITY NAME**
CITY, TOWN OR LOCATION OF DELIVERY
COUNTY OF DELIVERY
FACILITY ID (NPI)
PLACE WHERE DELIVERY OCCURRED

Item Numbers: **5a Report, 3 Facility worksheet**
6 Report, 4 Facility worksheet
7 Report, 5 Facility worksheet
8 Report, 1 Facility worksheet
9 Report, 2 Facility worksheet

Descriptions: The name of the facility where the delivery took place
The city, town or location of delivery
The county of delivery
The facility's National Provider Identification (NPI) or if no NPI, the state hospital code
The type of place where the delivery occurred

Source of Information:

Preferred Source: Admission history and physical, delivery record, basic admission data, progress notes
Other Source: Attendant (non-facility deliveries only)

INSTRUCTIONS

FOR A PAPER RECORD:

Item 8.

Type or print the name of the facility where the delivery occurred. If this delivery did not occur in a hospital or freestanding birthing center, please type or print the street and number of the place where the delivery occurred. If the delivery occurred en route, that is in a moving conveyance, type or print the city, town, village, or location where the fetus was first removed from the conveyance. If the delivery occurred in international air space or waters enter "plane" or "boat."

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

_____

Item 5a.

Type or print the name of the city, town, township, village or other location where the delivery occurred. If the delivery occurred in international waters or air space, enter the location where the fetus was first removed from the boat or plane.

CITY, TOWN, OR LOCATION OF DELIVERY

_____

Item 6.

Type or print the name of the county where the delivery occurred. If the delivery occurred in international waters or air space, enter the name of the county where the fetus was first removed from the boat or plane.

COUNTY OF DELIVERY

_____

Item 9.

Print the facility's National Provider Identification Number (NPI) or, if no NPI, the state hospital code.

FACILITY ID. (NPI)

_____

Item 7.

Please check the box that best describes the type of place where the delivery occurred. If the type of place is not known, type or print "unknown" in the space

PLACE WHERE DELIVERY OCCURRED (Check one)

- ❑ Hospital
- ❑ Freestanding birthing center
- ❑ Home Delivery: Planned to deliver at home? ❑ Yes ❑ No
- ❑ Clinic/Doctor's office
- ❑ Other (Specify)_____

FOR AN ELECTRONIC RECORD:

EFDR Developer: *(Instructions are in Italics)*

The initial question should ask if the delivery occurred in this facility, if the answer is "yes," or "delivered en route", all the items (5,6,7,8,9) and the state facility code should be automatically completed from a table look up allowing the keyer to skip these items and move to the next item.

EFDR software should have a table for each facility that contains information about the facility, as well as a roster of attendants and certifiers. A mechanism for updating the information such as a change in name, status, and the roster is needed. In addition, a mechanism for adding and deleting NPI numbers is necessary.

If the answer is "no," the following will appear:

Please check the box below that best describes the type of place where the delivery occurred.

- ❑ Hospital
- ❑ Freestanding birthing center
- ❑ Home Birth:
  Planned to deliver at home?
  - ❑ Yes
  - ❑ No
  - ❑ Unknown
- ❑ Clinic/Doctor's office
- ❑ Other (Specify)_____ e.g. taxi, train, plane
- ❑ Unknown place of birth

If "Hospital" or "Freestanding birthing center" is checked, the following will appear:

Name of the facility:_____

If "Home delivery," or "Clinic/Doctor's office" is checked, the following will appear:

Street and Number_____

City, town, or location_____

County_____

If "Unknown" is checked, all the fields will be filled with the "unknown" code.
If the delivery occurred en route, that is in a moving conveyance, enter the city, town, village, or location where the child was first removed from the conveyance. If the delivery occurred in an airplane or boat enter boat (lake___) or boat (international waters) etc.

City, town, or location_____

County_____

Location_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FNAME	Name of facility	Alpha/numeric	
FNPI	Facility NPI number	Alpha/numeric	
SFN	State facility number	Alpha/numeric	
FLOC	City town or location of delivery	Alpha/numeric	
CNAME	County name where delivery occurred	Alpha character string	
CNTYO	County code	Numeric (Appendix C)	
DPLACE	Place of Delivery	1	Hospital
		2	Freestanding Birthing Center
		3	Home (intended)
		4	Home (not intended)
		5	Home (unknown if intended)
		6	Clinic/Doctor's Office
		7	Other
		9	Unknown

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Valid FIPS codes are assigned to county of delivery. If county cannot be located in the facility information table, a message should appear indicating the county is not a valid county. The message should ask that the spelling be checked and the item re-entered. Or a drop down list of counties to choose from could be offered. It is recommended to re-enter the county rather than having a drop down menu.

Place of Delivery Item:
If item is not completed and clerk proceeds to the next item, the item is flagged to be put on the list of items needed for completion before the report can be filed or printed (final review screen).
Must be a valid code as indicated above. If "home" is checked and none of the subcategories are checked, or "unknown" is checked, the item is assigned the "home unknown" code and the following message should appear.

The record indicates that this delivery occurred at home.

Please query either the attendant or the patient to determine if the patient intended to have a home delivery.

Item will be flagged for completion at a later time or at the final review screen.

Both the home (intended) and home (not intended) boxes cannot be checked.

PAPER RECORD

Query if item is not completed. If no response to query, assign the "unknown" code.

If home delivery is checked but neither the planned at home "yes" or "no" box is checked, query. If no response to query, assign the "home (unknown if intended)" code.

STATE FILE CONSIDERATIONS

It is recommended that states have a 55 character field to maintain the literal entries to Report item 5a. In addition, they will need fields for city, town, or location; county, and the type of place codes. Only the county codes and type of place codes will be transmitted to NCHS. County codes will be assigned immediately by table look up when an EFDR is completed. City, town and location codes can be handled similarly. For paper records it is suggested that the literals be keyed and table look-ups be used for coding.

For Report item 7, states may elect to code the "Other (specify)" responses. A 15 character field to capture the literals and probably a 2 digit field for codes if electing to code will be needed.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
CNTYO	3	Numeric	Appendix C
DPLACE	1	Numeric	1-7, 9
FNPI	12	Alpha/numeric	
SFN	4	Alpha/numeric	

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)**
(Item is not part of the NCHS data set.)

Item Number: **10a Report, 2 Patient's Worksheet**

Description**:** The current legal name of the mother.

Sources of Information:

Preferred Source: Patient

Other Sources: Medical Records
Father of child or other relative

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the mother's current legal First, Middle, and Last Names including suffix.

It is suggested that you print or type the names as provided to you and have the patient check the spelling and order of names before entering the names on the certificate.

If there appears to be more than one spelling of any name provided, and the correct spelling cannot be verified, use the most common spelling.

FOR AN ELECTRONIC RECORD:

Enter the mother's current legal name as recorded in item 2 of the patient's work sheet. Have the patient check the spelling and order of names before entering the names into the computer.

EFR Developer

The paper fetal death report does not have separate boxes for the current legal name of the mother. However, the patient's work sheet does have separate spaces for the names.

The EFR should have separate fields for the first name(s), middle name(s), last name(s) (surname), and last name suffix.

It is suggested that you print out the name(s) as provided to you by the patient and have the patient check the spelling and order of names before submitting the record to the state.

If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling.

When completing the first name entry box or the middle name entry box, the following message should pop up in a manner that does not obscure the item completion screen.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Help on multiple first or middle names**
- ☐ **Initials**

If the first help box is checked, the following instruction appears:

Multiple first or middle names

If two first names separated by a space, such as "Mary Louise Carter" are indicated, verify that "Louise" is part of the first name and is not a middle name.

Enter the two first names with a blank space between them.

If several middle names are given, enter all with a space between the names.

If the second help box is checked, the following instruction appears:

Initials

If the mother indicates that she is to have only a first initial such as "E. Mary Jones," enter the E followed by a period.

If the mother indicates two initials and a last name such as "H.S. Green," determine if these are a first and middle initial, or two first initials with no middle name or initial.

Enter the initials in the appropriate spaces. Each initial should be followed by a period.

If there is a title preceding the name, such as Doctor, do not enter the title in any of the name fields.

When completing the last name entry, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Multiple last names**
- ☐ **Special characters in last names**
- ☐ **Surname suffixes**

If the first help box is checked, the following instruction appears:

Multiple last names

If more than one last name is given separated by a hyphen, enter exactly as given with the hyphen. If there is more than one last name and no hyphen, enter the two names with a space between them.

If the second help box is checked, the following instruction appears:

Special characters in last names

If the last name has a space or apostrophe following prefixes, such as Mac Pherson or O'Toole, enter as given with the space or apostrophe.

If the third help box is checked, the following instruction appears:

Surname suffixes

Suffixes and generation identifiers are to be entered in the suffix field.

PROCESSING VARIABLES:

NAME	DESCRIPTION	LENGTH	VALUES
MFNAME	First name	50	Alpha characters
MMNAME	Middle name	100	Alpha characters
MLNAME	Last name	50	Alpha characters
MSUFF	Last name suffix	20	Alpha characters

BOTH ELECTRONIC AND PAPER RECORDS

Name fields must contain English alphabetic characters or be blank.

Unless variable FOUND (item 1) has value F, there must be an entry in the last name field. Any of the other fields may be blank

STATE DATA FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

Item Title: **DATE OF BIRTH (MOTHER/PATIENT)**

Item Number: **10b Report, 6 Patient's worksheet**

Description: The mother/patient's date of birth

Source of Information:

Preferred Source: Mother/patient

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the month (spelled out), day, and four-digit year of birth.

If the patient's Date of Birth is unknown, then print "unknown." If part of Date of Birth is unknown, enter the known parts and leave the remaining parts blank.

DATE OF BIRTH (Mo/Day/Yr)

_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The Date of Birth item is a three-field entry with the month, day, and year entered in separate fields.

When the item is to be completed, the following message should appear at the top of the screen and remain on the screen until the last field of the date is completed:

> **If only part of the Patient's date of birth is known, enter all parts that are known and leave the unknown parts blank.**
>
> **If the date of birth of the patient is not known at this time, leave blank.**
>
> Month of patient's birth ___ ___
>
> Day of patient's birth ___ ___
>
> Year of patient's birth ___ ___ ___ ___

If the date of birth is not known at this time, the item will be pended and will appear on the final review screen.

Any fields left blank will be filled with 9's. (Alternatively, "hot keys" for unknown numeric values may be used in place of leaving values blank.)

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MDOB_YR	Year of Birth	4 digit year	Must be less than fetus's year of delivery
		9999	Unknown
MDOB_MO	Month of Birth	01	January
		02	February
		03	March
		04	April
		05	May
		06	June
		07	July
		08	August
		09	September
		10	October
		11	November
		12	December
		99	Unknown
MDOB_DY	Day of Birth	01-31	January
		01-29	February
		01-31	March
		01-30	April
		01-31	May
		01-30	June
		01-31	July
		01-31	August
		01-30	September
		01-31	October
		01-30	November
		01-31	December
		99	Unknown
MAGE_CALC	Calculated age	00-98	
		99	Unknown

MAGE_BYPASS	0	Off
	1	On (data queried)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

All blank fields will be converted to all 9's.

If month is February and day = 29, year of birth should be a leap year. If not, an error message should appear and ask that the date be corrected.

Age is calculated using patient's date of birth (completed dates only) and the fetus's date of delivery.

Calculated age must be >8 and < 65.

If age is outside this range a message appears that reads:

Patient's age is out of acceptable limits, please check the patient's date of birth and re-enter the date of birth.

The entry screen for the patient's date of birth appears.

Age is recalculated and if still outside the acceptable limits the MAGE_BYPASS variable is set to ON-1

PAPER RECORD

Records filed with no age of patient are queried. For those records with stated "age of patient" the same edits described above are applied. Failed edits are to be queried.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
MDOB_YR	4	Numeric or "date type"	4 digit year, <fetus's yr of delivery, 9999
MDOB_MO	2	Numeric or "date type"	01-12, 99
MDOB_DY	2	Numeric or "date type"	01-31 (based on month), 99
MAGE_BYPASS	1	Numeric	0,1

EDI TRANSMISSION:

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits. Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Title: **MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last, Suffix)**
(Item is not part of the NCHS data set.)

Item Number: **10c Report, 12 Patient's Worksheet**

Description**:** The name of the mother prior to first marriage.

Sources of Information:

Preferred Source:	Patient
Other Sources:	Medical Records Father of child or other relative

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the mother's name prior to first marriage, First, Middle, and Last Names including suffix.

It is suggested that you print or type the names as provided to you and have the patient check the spelling and order of names before entering the names on the certificate.

If there appears to be more than one spelling of any name provided, and the correct spelling cannot be verified, use the most common spelling.

FOR AN ELECTRONIC RECORD:

Have the patient check the spelling and order of names before submitting the record to the state.

EFR Developer

The paper fetal death report does not have separate boxes for the name of the mother prior to first marriage. However, the patient's work sheet does have separate spaces for the names.

The EFR should have separate fields for the first name(s), middle name(s), last name(s) (surname), and last name suffix.

When the mother's name prior to first marriage screen appears, display the following at the top of the screen until all the name fields are completed.

> **It is suggested that you print out the name(s) as provided to you by the patient and have the patient check the spelling and order of names before entering the names into the computer.**
>
> **If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling.**

When completing the first name entry box or the middle name entry box, the following message should pop up in a manner that does not obscure the item completion screen.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Help on multiple first or middle names**
- ☐ **Initials**
- ☐ **Titles**

If the first help box is checked, the following instruction appears:

> **Multiple first or middle names**
>
> If two first names separated by a space, such as "Mary Louise Carter" are indicated, verify that "Louise" is part of the first name and is not a middle name.
>
> Enter the two first names with a blank space between them.
>
> If several middle names are given, enter all with a space between the names.

If the second help box is checked, the following instruction appears:

> **Initials**
>
> If the mother indicates only a first initial such as "E. Mary Jones," enter the E followed by a period.
>
> If the mother indicates two initials and a last name such as "H.S. Green," determine if these are a first and middle initial, or two first initials with no middle name or initial.

Enter the initials in the appropriate spaces. Each initial should be followed by a period.

If the third help box is checked, the following instruction appears:

Titles

If there is a title preceding the name, such as Doctor, do not enter the title in any of the name fields.

When completing the last name entry, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Multiple last names**
- ☐ **Special characters in last names**
- ☐ **Surname suffixes**

If the first help box is checked, the following instruction appears:

Multiple last names

If more than one last name is given separated by a hyphen, enter exactly as given with the hyphen. If there is more than one last name and no hyphen, enter the two names with a space between them.

If the second help box is checked, the following instruction appears:

Special characters in last names

If the last name has a space or apostrophe following prefixes, such as Mac Pherson or O'Toole, enter as given with the space or apostrophe.

If the third help box is checked, the following instruction appears:

Surname suffixes

Suffixes and generation identifiers are to be entered in the suffix field.

PROCESSING VARIABLES:

NAME	DESCRIPTION	LENGTH	VALUES
MFNAMEP	First name	50	Alpha characters
MMNAMEP	Middle name	100	Alpha characters

MLNAMEP	Last name	50	Alpha characters
MSUFFP	Last name suffix	20	Alpha characters

EDITS:
BOTH ELECTRONIC AND PAPER RECORDS

Name fields must contain English alphabetic characters or be blank.

Unless variable FOUND (item 1) has value F, there must be an entry in the last name field. Any of the other name fields may be blank.

STATE DATA FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

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Item Title: **BIRTHPLACE (STATE, TERRITORY, OR FOREIGN COUNTRY)**

Item Number: **10d Report, 7 Mother/patient's worksheet**

Description: The geographic location of the mother/patient's place of birth.

Source of Information:

Preferred Source: Mother/patient or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the name of the U.S. State or U.S. Territory in which the patient was born. If the patient was born outside of the U.S., print or type the name of the country in which the patient was born. U.S. territories are: Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas. If the patient's birthplace is not known, print or type "Unknown" in the space. (NOTE: Canadian Provinces and Canadian Territories are not individually identified for patient's place of birth)

BIRTHPLACE (U.S. State, U.S. Territory, or Foreign Country)

_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

There should be a screen with separate entry spaces each for state, territory, and country of birth. The series of items to be captured with instructions is suggested below.

Birthplace of Patient
(Please enter for only one field)

Patient's U.S. State of Birth _____

OR

Patient's U.S. Territory of Birth _____

OR

Patient's Country of Birth_____ (if born outside of the U.S.)

- ❑ Patient's birthplace unknown

If unknown is recorded on the worksheet or if the informant does not know, check the "Patient's birthplace unknown" box.

As soon as an acceptable entry is made in any one of the fields, the screen moves on to the next item on the worksheet to avoid entries in more than one birthplace field.

"Incremental browsing" may be used to facilitate quicker selection of the patients's birthplace. Incremental browsing refers to the process in which the keyer enters the first or so letter of the state, territory or country and the system automatically presents the list of places beginning with that letter(s). The keyer then can more readily select the correct locale without typing in the rest of the word. For example, for the patient's country of birth, when the keyer enters the letter "C " the system would automatically go to where "Cambodia" is on the list. If the keyer enters the letters "Ch," the system would automatically go to where "Chad" is on the list.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES
BPLACE_ST	Patient's state of birth (literal)	Literal entry, blank
BPLACE_TER	Patient's territory of birth (literal)	Literal entry, blank
BPLACE_CNT	Patient's country of birth (literal)	Literal entry, blank
BPLACEC_ST_TER	Code for Patient's state or territory of birth	Appendix B
BPLACEC_CNT	Code for Patient's country of birth	Appendix A

TRANSLATIONS:

Literal entries for U.S. States and U.S. Territories must be converted to FIPS 5-2, two character codes (Appendix B).

Literal entries for U.S. States and U.S. Territories must be combined to a single field (BPLACEC_ST_TER) when coded.

Literal entries for countries must be coded two character FIPS10-4 codes for countries (Appendix A).

If the " unknown" box is checked, the value ZZ is assigned to all fields.

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Entries in all fields transmitted to NCHS must be valid FIPS codes or ZZ (Appendix A and B).

If there is an entry in the U.S. State/Territory field other than ZZ, country and unknown fields must be blank.

If there is an entry in the country field other than ZZ, the U.S State/Territory and unknown fields must be blank.

If there is an entry in either field other than ZZ, the unknown field must be blank.

STATE FILE CONSIDERATIONS

Suggested field names are:

State of birth	**BPLACE_ST_TER**
Country of birth	**BPLACE_CNT**

A field length of 30 characters for each field is suggested.
States may also opt to retain coded fields as well as the literal entries. If coded fields are maintained as well, there are HISSB standards that should be used. Literals for countries should be assigned codes using two character FIPS 10-4 codes (Appendix A).

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
BPLACEC_ST_TER	2	Alphabetic	Appendix B
BPLACEC_CNT	2	Alphabetic	Appendix A

EDI TRANSMISSION:

No standards set yet.

Item Title: **RESIDENCE OF MOTHER/PATIENT:**
STATE
COUNTY
CITY, TOWN OR LOCATION
STREET AND NUMBER
APT. NO.
ZIP CODE
INSIDE CITY LIMITS?

Item Number: **11a – 11g Report; 3, 4 Mother/patient's worksheet**

Description: The geographic location of the mother/patient's residence

Source of Information:

Preferred Source: Mother/patient or other informant

INSTRUCTIONS:

FOR A PAPER RECORD:

Items 11a-11g.
These items refer to the patient's residence address, not her postal address. Do not include post office boxes or rural route numbers.

Item 11a.
This item is where the U.S. States and territories, and the provinces of Canada are recorded.
If the patient is a U.S. resident, print the U.S. State or territory where the patient lives.
If the patient is a U.S. resident do not record "U.S."

If the patient is a Canadian resident, print the name of the province or territory followed by " / Canada."

If the patient is not a resident of the U.S., its territories, or Canada, print the name of the patient's country of residence.

RESIDENCE OF PATIENT-STATE

Item 11b & 11c.
Print the county, city or town or location where the patient lives.
If the patient is not a U.S. resident, leave these items blank.

COUNTY _____ CITY, TOWN, OR LOCATION _____

Items 11d-11f.
Print the patient's street name and number, apartment or room number, and zip code.
If the patient is not a U.S. resident, leave these items blank.

For the street name, be sure to include any prefixes, directions and apartment numbers.

Examples: South Main Street
Walker Street NW

STREET AND NUMBER _____ APT. NO. _____ ZIP CODE _____

Item 11g.
Check whether the patient's residence is inside of city or town limits.
If it is not known if the residence is inside the city limits, print "unknown."
If the patient is not a U.S. resident, leave this item blank.

INSIDE CITY LIMITS?
❒ Yes ❒ No

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*
The collection of the patient's residence data should be set up to maximize the efficient use of GIS coding technology in order to improve the geographic allocation of these events. Two options for recording the street address are provided. In the second option, the street address will have to be parsed to separate out the pre- and post-directionals. Space in the State data files for the extended zip codes, latitude and longitude coordinates and centroids will have to be allowed.

PREFERRED METHOD:
If the "street" name has a direction as a prefix, enter the prefix in the space labeled "pre-directional". If the "street" name has a direction after the name, enter the suffix in the space labeled "post-directional."

Examples: South Main Street. Enter the name as Main and the pre-

direction as South.
Walker Street NW. Enter the name as Walker and NW in the post-directional space.

If there are no pre- or post-directions, leave these spaces blank.

OPTIONAL ACCEPTABLE METHOD I:
If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street" name has a direction after the name, enter the direction after the name.

Examples: South Main Street. Enter the name as South Main.
Walker Street NW. Enter the name as Walker NW.

While all the residence fields are being completed, the following general instructions should be on the screen.

- **Residence of the patient is the place the patient actually resides.**
- **Do not report temporary residences such on a visit, business trip, or vacation.**
- **Place of residence during a tour of military duty or attendance at college should be entered as the place of residence.**
- **For patients who live in a group home, mental institution, penitentiary, or hospital for the chronically ill, report the location of the facility as the place of residence.**
- **Enter all of the address that is known. For example, a homeless woman could only have a city, county and state entered.**

Data entry should be set up in the order identified below. When each item is to be completed specific instructions will appear. These are listed below.

1. Building number_____
2. Pre-directional_____
3. Name of the "street"_____
4. Street designator e.g., street, avenue, etc. _____
5. Post-directional _____
6. Apartment or room number_____
7. Name of the city, town, or other place of residence_____
8. County of the patient's residence_____
9. U.S. State, U.S. Territory, or Canadian Province of the residence _____
10. Zip code of the above address (either 5 or 9 digits)_____
11. Patient's country of residence_____

The inside city limits question will appear only if the "Patient's country of residence" is USA, and "Name of city, town, or other place of residence is not "unknown."

12. Is patient's place of residence inside the city or town limits?

- ❑ Yes
- ❑ No
- ❑ Unknown

When item 1 "Building number" is to be completed, the following instructions should appear:

Enter the building number assigned to the patient's residence.
Do not record a R.R. number or P.O. box.
If the number is unknown, enter "unknown."

When item 2 "Pre-directional" is to be completed, the following instructions should appear.

If the "street" name has a direction as a prefix, enter the prefix in the space labeled "pre-directional."

Example: South Main Street. Enter the pre-direction as South.

If there is no pre-direction, leave this space blank.

When item 3 "Street name" is to be completed, the following instructions should appear.

Enter the "street" name of the patient's residence.
Do not enter a R.R. number.

When item 4 "Street designator" is to be completed, the following instruction should appear.

Enter the street designator.
Examples of the street designators are words like Street, Avenue, Road, Circle, Court etc.

When item 5 "Post directional" is to be completed, the following instructions should appear.

If the "street" name has a direction after the name, enter the suffix in the space labeled "post-directional."

Example: Walker Street NW. Enter NW in the post-directional space.

If there is no post-direction, leave this space blank.

When item 6 "Apartment number" is to be completed, the following instruction should appear.

If there is no apartment or room number associated with this residence, leave the item blank.

When item 7 "Name of city or town" is to be completed, no instructions are needed.

When item 8. "County of residence" is to be completed, the following instruction should appear.

If the patient resides in any country other than the U.S. or its Territories, leave this item blank.

When item 9. "U. S. State, U.S. territory, Canadian province, or Canadian Territory" is to be completed, the following instructions should appear.

Enter the U.S. State or U.S. territory.

If the patient resides in a Canadian province or Canadian territory, enter the name of the province or territory.

When item 10 "Zip code" is to be completed, the following instruction should appear.

If only the 5 digit Zip code is known, report that.

If the patient is not a resident of the U.S. or its territories, leave this item blank.

When item 11 "Country of residence" is to be completed, the following instructions should appear.

If a valid U.S. State or U.S. territory was entered in the previous item, "United States" will automatically be entered.

If a valid Canadian province or Canadian territory was entered in the previous item, "Canada" will automatically be entered.

If the patient is not a resident of the U.S., its territories, or Canada, enter the name of the patient's country of residence.

If the patient's country of residence is unknown, enter "unknown."

When item 12. "Inside city limits" is to be completed, the following instruction should appear.

If uncertain if the residence is inside the city or town limits, check the "unknown" box.

OR (Alternate Format II)

1 Building number_____
2. Name of the "street"_____
3. Street designator e.g., street, avenue, etc. _____
4. Apartment or room number_____
5. Name of the city, town, or other place of residence_____

6. County of the patient's residence_____
7. U.S. State, U.S. Territory, or Canadian Province of the residence _____
8. Zip code of the above address (either 5 or 9 digits)_____
9. Patient's country of residence_____

The inside city limits question will appear only if the "Patient's country of residence" is USA, and "Name of city, town, or other place of residence is not "unknown."

10. Is patient's place of residence inside the city or town limits?

- ❑ Yes
- ❑ No
- ❑ Unknown

Instructions for the optional method:

When item 1 "Building" is to be completed, the following instructions should appear.

Enter the street number assigned to the patient's residence.
Do not record a R.R. number or P.O. box.
If the number is unknown, enter "unknown."

When item 2 "Name of street" is to be completed, the following instructions should appear.

Enter the "street" name of the patient's residence.
Do not enter a R.R. number.

If the "street" name has a direction as a prefix, enter the prefix in front of the street name. If the "street" name has a direction after the name, enter the direction after the name.

Examples: South Main Street. Enter the name as South Main.
Walker Street NW. Enter the name as Walker NW.

When item 3 "Street designator" is to be completed, the following instruction should appear.

Enter the street designator.
Examples of the street designator are words like Street, Avenue, Road, Circle, Court, etc.

When item 4 "Apartment number" is to be completed, the following instruction should appear.

If there is no apartment or room number associated with this residence, leave the item blank.

When item 5 "City or town" is to be completed, no instructions are needed.

When item 6 "County of residence" is to be completed, the following instruction should appear.

If the patient resides in any country other than the U.S. or its territories, leave this item blank.

When item 7 "State, U.S. territory, or Canadian province" is to be completed, the following instructions should appear.

Enter the U.S. State or U.S. territory.

If the patient resides in a Canadian province or Canadian territory, enter the name of the province or territory.

When item 8 "Zip code" is to be completed, the following instruction should appear.

> **If only the 5 digit Zip code is known, report that.**
> **If the patient is not a resident of the U.S. or its territories, leave this item blank.**

When item 9 "Country of residence" is to be completed, the following instructions should appear.

> **If a valid U.S. State or U.S. territory was entered in the previous item, "United States" will automatically be entered.**
>
> **If a valid Canadian province or Canadian territory was entered in the previous item, "Canada" will automatically be entered.**
>
> **If the patient is not a resident of the U.S., its territories, or Canada, enter the name of the patient's country of residence.**
>
> **If the patient's country of residence is unknown, enter "unknown."**

When item 10 "Inside city limits" is to be completed, the following instruction should appear.

> **If uncertain if the residence is inside the city or town limits, check the "unknown" box.**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
STNUM	Street number		
PREDIR	Pre-directional		
STNAME	Street name		
STDESIG	Street designator		
POSTDIR	Post-directional		
UNUM	Unit or apartment number		
CITY	City or Town name		
CITYC	City or Town code		See Appendix C
ZIP	Zip Code		
COUNTY	County		
COUNTYC	County code		See Appendix C
STATE	State/Province		
STATEC	State/Province code		See Appendix B
COUNTRY	Country		
COUNTRYC	Country code		See Appendix A
LIMITS	Inside city limits	Y	Yes
		N	No
		U	Unknown

TRANSLATIONS
Response Mapping (examples)

Response	Maps to values
Country Name	Appendix A to be superseded by NCHS Part 8 FIPS10-4 two character codes
State/Province Name	Appendix B to be superseded by NCHS Part 8 FIPS 5-2 two character codes or Canadian two character postal codes
City/Town Name	Appendix C to be superseded by NCHS Part 8 FIPS 55-3 five digit place codes
County Name	Appendix C to be superseded by NCHS Part 8 FIPS 6-4 three digit County codes

EDITS:
ELECTRONIC RECORD

Before the record is transmitted to the State

1. *If country is unknown, then city, county and State may also be unknown. Do not run any table look-ups for city, county or State.*

2. *If country is known and is not the U.S. or Canada, then city, county, and State/Province may be blank.*

3. *If country is Canada, city and county may be blank, but run table look-ups for State/Province.*

   The Province is checked against Canadian Postal Codes (Appendix B). If not in table and if it is an electronic record, a message should appear asking that the name be checked. Enter revised data; if edit fails again, code Province to "unknown." Keep literal. For a paper record, automatically reject and follow-up with the hospital. If rejected a second time, code Province to "unknown."

4. *If country is the U.S., run table look-ups for State/Province, County, and city.*

   State is checked in FIPS 5-2. If not in table and if it is an electronic record, a message should appear asking that the name be checked. Enter revised data; if edit

fails again, code State to "unknown." Keep literal. For a paper record, automatically reject and follow-up with the hospital. If rejected a second time, code State to "unknown."

The city name is checked in FIPS 55-3 name table. If not in table and if it is an electronic record, a message should appear asking that the name be checked. Enter revised data; if edit fails again, code city to "unknown." Keep the literals. For a paper record, automatically reject and follow-up with the hospital. If rejected a second time, code city to "unknown."

Code County using FIPS 6-4. If not in table, then reject record for review and/or follow-up. If electronic record, reject at hospital. Error message should indicate that the county is not listed, please check and re-enter. Record cannot be printed or filed without a county entered.

STATE FILE CONSIDERATIONS

If all components of residence are unknown, use place of occurrence as place of residence for statistical purposes. States may wish to keep the record unknown for legal files. It is recommended that States keep this information in as detailed a format as possible. See the recommended electronic format below. For data collected on paper records, keying instructions need to reflect the detail of the electronic record. If States elect to use GIS on these data then space in the State data file will be needed for the derived variables of latitude, longitude, centroid and extended nine-digit zip code.

ELECTRONIC RECORD

For the purpose of recording and printing certified copies from the electronic file and for geo-coding the record, it is recommended that the address field be separated into fields as described below. These fields generally correspond to the CDC, HISSB recommendations. However, the field lengths do not correspond to the recommendations because the literal entries need to be captured. If a State desires, the literal entries can be transposed to abbreviations for purposes of compacting the file using standard abbreviations as recommended in the HISSB standards. States may wish to collect Zip code to the ninth digit when known rather than just five.

Suggested field names are:

DESCRIPTION	NAME	LENGTH
Street number	**STNUM**	**10**
Pre-directional	**PREDIR**	**10**
Street name	**STNAME**	**28**
Street designator	**STDESIG**	**10**

Post-directional	**POSTDIR**	**10**
Unit or apartment number	**UNUM**	**7**
City or Town name	**CITY**	**28**
Zip Code	**ZIP**	**9**
County	**COUNTY**	**28**
State/Province	**STATE**	**28**
Country	**COUNTRY**	**28**

States may also opt to retain coded fields as well as the literal entries. If coded fields are maintained as well, there are HISSB standards that should be used. Literals for countries should be assigned codes using FIPS 10-4 using the two character codes for nations (Appendix A). County should be coded using three digit FIPS 6-4codes (Appendix C). City of residence should be transmitted to NCHS using FIPS 55-3 five digit codes (Appendix C). State/Province should be coded using two character codes and Canadian postal codes, see Appendix B).

Note that new FIPS 10-4 tables are issued regularly. As new FIPS 10-4 tables are issued, new codes should be added, but do not replace existing codes. The old codes are needed for consistency.

NCHS TRANSMISSION FILE

States that elect to use a GIS coding process prior to submission of data to NCHS shall replace the codes for city, town, or other place as well as county codes with those derived from the GIS process.

VARIABLES:

NAME		LENGTH	TYPE	VALUE
CITYC	City/Town	5	Numeric	Appendix C
COUNTYC	County	3	Numeric	Appendix C
STATEC	State/Province	2	Alpha	Appendix B
COUNTRYC	Country	2	Alpha	Appendix A
LIMITS		1	Alpha	Y,N,U

EDI TRANSMISSION:

No standards set yet.

Item Title: **FATHER'S CURRENT LEGAL NAME (First, Middle, Last, Suffix)**
(Item is not part of the NCHS data set.)

Item Number: **12a Report, 14 Patient's Worksheet**

Description**:** The current legal name of the father.

Sources of Information:

Preferred Source:	Patient
Other Sources:	Medical Records
	Father of child or other relative

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the father's current legal First, Middle, and Last Names including suffix. State law or rule may dictate the conditions when a father can be named, and the name of the man to be entered as the father on a fetal death report.

It is suggested that you print or type the names as provided to you and have the patient or father check the spelling and order of names before entering the names on the certificate.

If there appears to be more than one spelling of any name provided, and the correct spelling cannot be verified, use the most common spelling.

FOR AN ELECTRONIC RECORD:

Enter the father's current legal name as recorded in item 14 of the patient's work sheet. Have the patient or father check the spelling and order of names before entering the names into the computer.

EFR Developer

The paper fetal death report does not have separate boxes for the current legal name of the father. However, the patient's work sheet does have separate spaces for the names.

The EFR should have separate fields for the first name(s), middle name(s), last name(s) (surname), and last name suffix.

The father's current legal name screen should appear:

1. *Only if item 22 on the certificate (13 on the patient's work sheet), was the patient married at birth, conception or any time between is checked "Yes," OR*

2. *As otherwise specified by state rule or law.*

If a father's name cannot be entered, the fields should be left blank.

When the father's current legal name screen appears, display the following at the top of the screen until all the name fields are completed.

> **It is suggested that you print out the name(s) as provided to you by the patient and have the patient check the spelling and order of names before submitting the report to the state.**
>
> **If there appears to be more than one spelling of any name provided and the correct spelling cannot be verified, use the most common spelling.**

When completing the first name entry box or the middle name entry box, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Help on multiple first or middle names**
- ☐ **Initials**
- ☐ **Titles**

If the first help box is checked, the following instruction appears:

Multiple first or middle names

If two first names separated by a space, such as " Billy Bob Carter" are indicated, verify that "Bob" is part of the first name and is not a middle name.

Enter the two first names with a blank space between them.

If several middle names are given, enter all with a space between the names.

If the second help box is checked, the following instruction appears:

Initials

If only a first initial such as "J. Jones," is indicated enter the J. followed by a period.

If the patient indicates two initials and a last name such as "J. S. Green," determine if these are a first and middle initial, or two first initials with no middle name or initial.

Enter the initials in the appropriate spaces. Each initial should be followed by a period.

If the third box is checked, the following instruction appears:

Titles

If there is a title preceding the name, such as Doctor, do not enter the title in any of the name fields.

When completing the last name entry, the following message should pop up.

IF YOU NEED HELP, CHECK THE APPROPRIATE BOX BELOW:

- ☐ **Multiple last names**
- ☐ **Special characters in last names**
- ☐ **Surname suffixes**

If the first help box is checked, the following instruction appears:

Multiple last names

If more than one last name is given separated by a hyphen, enter exactly as given with the hyphen. If there is more than one last name and no hyphen, enter the two names with a space between them.

If the second help box is checked, the following instruction appears:

Special characters in last names

If the last name has a space or apostrophe following prefixes, such as Mac Pherson or O'Toole, enter as given with the space or apostrophe.

If the third help box is checked, the following instruction appears:

Surname suffixes

Suffixes and generation identifiers are to be entered in the suffix field.

PROCESSING VARIABLES:

NAME	DESCRIPTION	LENGTH	VALUES
FFNAME	First name	50	Alpha characters
FMNAME	Middle name	100	Alpha characters
FLNAME	Last name	50	Alpha characters
FSUFF	Last name suffix	20	Alpha characters

EDITS:

If the father cannot be named by law or rule, all name fields must be blank
If the variable FOUND (item 1) has value "F," all fields may be blank
If the last name field is blank, all other name fields must be blank.
All name fields must contain English alphabetic characters if not blank.

STATE DATA FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

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Item Title: **DATE OF BIRTH (FATHER)**

Item Number: **12b Report, 15 Mother/patient's worksheet**

Description: The father's date of birth

Source of Information:

Preferred Source: Mother/patient or father

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the month, day, and four-digit year of birth.

If the father's Date of Birth is unknown, print "unknown." If part of the Date of Birth is unknown, enter the known parts and leave the remaining parts blank.

DATE OF BIRTH (Mo/Day/Yr)

_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The Date of Birth item is a three-field entry with the month, day, and year entered in separate fields.

When the item is to be completed, the following message should appear at the top of the screen and remain on the screen until the last field of the date is completed:

> **Enter all parts of the father's date of birth that are known. Leave the unknown parts blank. If the entire date of birth of the father is not known, leave all fields blank.**

The date of birth is a three-field entry.

Month of father's birth ___ ___

Day of father's birth ___ ___

Year of father's birth ___ ___ ___ ___

As an alternative to leaving unknown values blank, "hot keys" may be used.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FDOB_YR	Year of Birth 4 digit year		Must be less the child's date of delivery
		9999	Unknown
FDOB_MO	Month of Birth	01	January
		02	February
		03	March
		04	April
		05	May
		06	June
		07	July
		08	August
		09	September
		10	October
		11	November
		12	December
		99	Unknown
FDOB_DY	Day of Birth	01-31	January
		01-29	February
		01-31	March
		01-30	April
		01-31	May
		01-30	June
		01-31	July
		01-31	August
		01-30	September
		01-31	October
		01-30	November
		01-31	December
		99	Unknown
FAGE_CALC	Calculated age	00-98	
		99	Unknown
FAGE_BYPASS		0	Off
		1	On (data queried)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

All blank fields will be converted to all 9's.

If month is February and day = 29, year of birth should be a leap year. If not, an error message should appear and ask that the date be corrected..

Age is calculated using father's date of birth (completed dates only) and the delivery date.

Calculated age must be >8 and < 75.

If age is outside this range a message appears that reads:

Father's age is out of acceptable limits, please check the father's date of birth and re-enter the date of delivery.

The entry screen for the father's date of birth appears.

Age is recalculated and if still outside the acceptable limits the FAGE_BYPASS variable is set to ON-1

PAPER RECORD

For paper records, the same edits are applied.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
FDOB_YR	4	Numeric or "date type"	4 digit year <Year of delivery, 9999
FDOB_MO	2	Numeric or "date type"	01-12, 99
FDOB_DY	2	Numeric or "date type"	01-31 (based on month), 99
FAGE_BYPASS	1	Numeric	0,1

EDI TRANSMISSION:

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits. Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Title: **BIRTHPLACE (STATE, TERRITORY, OR FOREIGN COUNTRY)**
(Item is not part of the NCHS data set.)

Item number**:** **12c Report, 16 Patient's worksheet**

Description: The geographic location of the father's place of birth.

Source of information:

Preferred Source: Patient or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

Complete this item only if a father is named on the record.

Print or type the name of the U.S. State, U.S. Territory in which the father was born. If the father was born outside the U.S., print or type the name of the country in which the father was born. U.S. Territories are: Puerto Rico, U.S. Virgin Islands, Guam, American Samoa, and Northern Marianas. If the father's birthplace is not known print or type "Unknown" in the space. (note: Canadian Provinces and Canadian Territories are not collected for father's place of birth)

BIRTHPLACE (U.S. State, U.S. Territory, or Foreign Country)
_____

FOR AN ELECTRONIC RECORD:

EFR developer:

There should be a screen with separate entry spaces for, state of birth, territory of birth and country of birth. The series of items to be captured with instructions is suggested below.

Birthplace of Father

Father's State of Birth _____

OR

Father's Territory of Birth_____

OR

Father's Country of Birth_____

☐ **Father's birthplace unknown**

If unknown is recorded on the worksheet or if the informant does not know, or the worksheet item is blank, check the "Father's birthplace unknown" box.

As soon as an entry is made in any one of the fields the screen changes to the next item on the worksheet to avoid entries in the remaining two fields.

Literal entries for U.S. States and U.S. Territories must be combined to a single field (BPLACE_ST_TER)

.

PROCESSING VARIABLES:

NAME:	**DESCRIPTION**	**LENGTH**	**VALUES**
FBPLACE_ST_TER_L	Father's state or Territory of birth	30	Alpha character
FBPLACE_CNT_L	Father's country of birth	30	Alpha character

EDITS:

If variable FBPLACE_ST_TER_L is not blank, FBPLACE_CNT_L must be blank. The reverse also holds. If variable FBPALCE_CNT_L has an entry, variable FBPLACE_ST_TER_L must be blank.

Father's State or Territory of birth must be a U.S. State or Territory

All fields can be blank

STATE DATA FILE CONSIDERATIONS

States may also opt to retain coded fields as well as literal entries.

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**LENGTH**	**VALUES**

FBPLACE_ST_TER_C	Code for Father's State or Territory of birth	2	Appendix B
FBPLACE_CNT_C	Code for Father's **c**ountry of birth	2	Appendix A

Literal entries for U.S. States and U.S. Territories should be assigned using FIPS 5-2two character codes (Appendix B).

Literal entries for countries should be assigned codes using two character FIPS 10-4 codes (Appendix A).

If the " unknown" box is checked, the value ZZ is assigned to all fields.

Item Title: **METHOD OF DISPOSITION**
(Item is not part of the NCHS data set.)

Item Number: **13 Report, 32 Facility Worksheet**

Description: Method of final disposition of the dead fetus

Source of Information:

Preferred Source: Facility
Funeral Director
Other person authorized to dispose of a dead fetus

INSTRUCTIONS

FOR A PAPER RECORD:

Person completing the Report of Fetal Death

Response is based on wishes of the next of kin or informant.

Check the appropriate box (see below).
If the box labeled "Other" is chosen, print the method of disposition.

- ☐ **Burial**
- ☐ **Cremation**
- ☐ **Hospital disposition**
- ☐ **Donation**
- ☐ **Removal from State**
- ☐ **Other (Specify)_____**

FOR AN ELECTRONIC RECORD:

EFR Developer

Method of disposition is to be selected from the menu below based on the information in the facility work sheet or other acceptable source. Only one check box is allowed.

Method of Disposition

- ☐ Burial
- ☐ Cremation
- ☐ Hospital disposition
- ☐ Donation
- ☐ Removal from State
- ☐ Other

If the "other" response is selected, a place to enter the "other" method of disposition appears.

Please describe the other type of disposition.

Other (specify)_____

PROCESSING VARIABLE:

NAME	DESCRIPTION	LENGTH	VALUES	
DISP	Method of disposition	1	B	Burial
			C	Cremation
			H	Hospital disposition
			D	Donation
			R	Removal from State
			O	Other
			X	Unknown

ELECTRONIC RECORD

Electronic record must contain one of the responses indicated above. If not, query screen appears before record can be printed or filed. Same screen as entry screen appears and indicates that one of the categories below must be selected before the record can be printed or filed.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the "Unknown" code.

If multiple methods are reported, states may elect to record the multiple responses or select a single response. Order of preference from most preferred to least is as follows: burial, cremation, hospital disposition, donation, removal from State, other.

STATE FILE CONSIDERATIONS

States may opt to electronically record the "Other (specify)" methods. This will be needed if copies are to be issued from the electronic file. It is recommended that this be a 30-character field

PROCESSING VARIABLE:

NAME	DESCRIPTION	LENGTH	VALUES
DISPL	Method of disposition	30	Alpha characters

Item Title: **ATTENDANT'S NAME, TITLE, AND NPI**

Item Number: **14 Report, 21 Facility worksheet**

Description: The name of the attendant (the person responsible for delivering the fetus), their title, and their National Provider Identification (NPI) Number.

The attendant at birth is defined as the individual at the delivery who is responsible for the delivery. For example, if an intern or nurse-midwife delivers a fetus under the supervision of an obstetrician who is present in the delivery room, the obstetrician is to be reported as the attendant. However, a person who is not physically present at the delivery should not be reported as the attendant. For example, if the obstetrician is not physically present, the intern or nurse-midwife MUST be reported as the attendant.

Source of Information:

Preferred Source: Delivery record
Other Source: Attendant

INSTRUCTIONS

FOR A PAPER RECORD:

This item is to be completed by the facility. If the delivery did not occur in a facility, it is to be completed by the attendant or certifier.

Please print or type the name of the person who attended the delivery and their National Provider Identification (NPI) number:

NAME:_____NPI_____

If attendant does not have an NPI number, type or print "none." If the attendant should have an NPI number but it is unknown, type or print "unknown."

Please check one box below to specify the attendant's title. If the "other (specify)" box is checked, please print or type the title of the attendant. Examples include: nurse, father, police officer, EMS technician, etc.

- ❑ MD
- ❑ DO
- ❑ CNM/CM
- ❑ Other midwife
- ❑ Other (specify)_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in italics)*

The following definition should be available in the help function:

The attendant at delivery The attendant at birth is defined as the individual at the delivery who is responsible for the delivery. For example, if an intern or nurse-midwife delivers an infant under the supervision of an obstetrician who is present in the delivery room, the obstetrician is to be reported as the attendant. However, a person who is not physically present at the delivery should not be reported as the attendant. For example, if the obstetrician is not physically present, the intern or nurse-midwife MUST be reported as the attendant.

This item is to be completed by the facility. Data are to be keyed from the facility worksheet or from information obtained from the attendant. If the delivery did not occur in a facility, it is to be completed by the attendant or certifier.

Attendant's Name, Title and NPI

The attendant's name should be three fields (last name, first name, middle name or initial).

When the attendant's name is entered the software should automatically examine a roster of attendants to see if the name is on the roster for the facility. If it is on the roster, the attendant's title and NPI number are automatically completed. Note the software can be set up to bring up a name after only a few letters are entered.

NOTE: This process can also be constructed as a drop down list of possible attendants. But, this approach could easily lead to errors that cannot be caught or edited.

If the name is not on the roster, the following screens will appear:

Attendant's National Provider Identification Number

The instructions below should appear when the NPI is to be entered.

If attendant does not have an NPI number, enter "none." If the attendant should have an NPI number but it is unknown, enter "unknown."

Attendant's Title

Attendant's title is to be selected from the list below.

- ❑ MD
- ❑ DO
- ❑ CNM/CM
- ❑ Other midwife
- ❑ Other(specify)
- ❑ Unknown

The system should be designed to allow only one box to be checked.

If the "other" box is checked, following message appears:

Please specify the title of the "other" attendant. Examples include: nurse, father, police officer, EMS technician, etc.

After the above items are completed, an option of adding the attendant information to the facility roster of attendants is offered.

Roster of Attendants

Do you wish this information to be added to your facility's roster of attendants?

- ❑ Yes
- ❑ No

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
ATTENDN	Attendant's name	Alpha character string	
NPI	National provider	Alpha/numeric	

	ID number		
ATTEND	Type of attendant	1	MD
		2	DO
		3	CNM/CM
		4	Other midwife
		5	Other(specify)
		9	Unknown
ATTENDS	Other specified attendant	Alpha character string	

EDITS:

ELECTRONIC RECORD

Before the record is submitted to the State

Record must have a name of an attendant. Only one attendant is allowed. If more than one box is checked the following message appears:

> **More than one attendant was selected. Please choose one attendant from the menu below.**
>
> *Original menu appears:*

If "type of attendant" is blank, the record can not be filed or printed until item is complete.

All "other (specify)" –"unknown" responses will be automatically coded to the "not classifiable" code.

PAPER RECORD

Records filed with the type of attendant blank or unknown should be queried. If no response to query, enter "unknown" in the other specify location.

All "other (specify)" –"unknown" responses will be automatically be coded to the "not classifiable" code.

If more than one attendant is selected, choose the first listed attendant.

State Edits of data file prior to NCHS transmission

Must be a valid code (see below).

STATE FILE CONSIDERATIONS

State offices will have to design their software to handle the names of attendants and their NPI numbers. States may want to maintain only the NPI numbers and a reference list roster of names and other information about attendants. States may also want to code the "other (specify)" attendants.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
ATTEND	1	Numeric	1,2,3,4,5,9

EDI TRANSMISSION:

No standards set yet.

Item Title: **NAME TITLE OF PERSON COMPLETING REPORT**

(Item is not part of the NCHS data set.)

Item Number: **15 Report, 28 Facility Worksheet**

Description**:** The name and title of the person completing the report of fetal death.

Sources of Information:

Preferred Source: Person completing the report

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the name of the person completing the report and their title.

NAME AND TITLE OF PERSON COMPLETING REPORT

NAME_____
TITLE_____

FOR AN ELECTRONIC RECORD:

Enter the name of the person completing the report as recorded in item 18 of the facility work sheet.

EFR Developer

The paper report of fetal death does not have separate boxes for the names of the person completing the report. Nor does, the facility work sheet have separate spaces for the names.

The EFR should have separate fields for the first /middle name(s), last name(s) (surname). The developer may elect to record the names in separate fields or parse the names after entry to separate the first/middle name(s) from the last name.

The developer may elect to record the first and middle names separately

The title of the person shall be recorded as entered and can be blank.

PROCESSING VARIABLES:

NAME	DESCRIPTION	LENGTH	VALUES
REPFNAME	First name and middle name	50	Alpha characters
REPLNAME	Last name	50	Alpha characters
REPTITLE	Title of the person completing the report	50	Alpha character

EDITS:

States may want to compare the name of the person completing the report with a list of approved persons either for the state as a whole or by facility in order to prevent the fraudulent filing of a report of fetal death. Records completed by a person not approved should not be accepted without a query.

BOTH ELECTRONIC AND PAPER RECORDS

Name fields must contain English alphabetic characters.
There must be an entry in the last name field. The first/middle name field can be blank
The title may be blank.

STATE DATA FILE CONSIDERATIONS

It is recommended that states keep name information in as detailed a format as possible. For data collected on paper records, keying instructions need to be the same as those for the electronic record.

Item Title: **DATE REPORT COMPLETED**
(Item is not part of the NCHS data set.)

Item Number: **16 Report, 19 Facility worksheet**

Description: The date the Report of Fetal Death is Completed

Source of Information:

Preferred Source: Person completing the report

INSTRUCTIONS

FOR A PAPER RECORD:
Print or type the month, day, and four digit year the report is completed. Standard numeric abbreviations are acceptable.

DATE REPORT COMPLETED (Mo/Day/Yr)
_____

FOR AN ELECTRONIC RECORD:

EFR Developer ***(Instructions are in italics)***

The Date Report Completed item is a three-field entry with the month, day, and year entered in separate fields.

Month reported___ ___

Day reported___ ___

Year reported___ ___ ___ ___

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	LENGTH	DEFINITIONS
REP_YR	Year reported	4 digit year	4	4 digit year
REP_MO	Month reported	01	2	January
		02		February
		03		March
		04		April
		05		May

		06		June
		07		July
		08		August
		09		September
		10		October
		11		November
		12		December,
REP_DY	Day reported	01-31	2	January 1-31
				February 1-29
				March 1-31
				April 1-30
				May 1-31
				June 1-30
				July 1-31
				August 1-31
				September 1-30
				October 1-31
				November 1-30
				December 1-31

EDITS:

ELECTRONIC RECORD

If month is February and day = 29, Date Report Completed should be a leap year. If not, an error message should appear and ask that the date be corrected.

D*ate Report Completed must be the same as or later than the Date of Delivery (Item 4) and the same as or earlier than the Date Received By Registrar (Item 17).*

Paper Records

For paper records, the same edits are applied. Edits failed after re-entry through the edit screens will result in a listing of items to be queried and the item will be given a pending query status.

STATE DATA FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as “date type variables,” then the system must meet the criteria listed under transmission standards.

EDI TRANSMISSION

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits.

Software that stores dates as “date type” must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Title: **DATE RECEIVED BY REGISTRAR**
(Item is not part of the NCHS data set.)

Item Number: **17 Report**

Description: The date the fetal death report is received by the registrar

Source of Information:

Preferred Source: Registrar

INSTRUCTIONS

FOR A PAPER RECORD:
Print, type, or stamp the month, day, and four digit year the fetal death report is received by the registrar. The format for this is a state issue but , standard numeric abbreviations are not recommended.

DATE RECEIVED BY REGISTRAR (Mo/Day/Yr)
_____

FOR AN ELECTRONIC RECORD:

EFR Developer ***(Instructions are in italics)***

Each registration district will determine how the date shall be assigned electronically for their system. The date the record is completed and accepted by the registrar is a logical choice. However, depending on the characteristics of the registration system, some other options may be appropriate.

The Date Received By Registrar item is a three-field entry with the month, day, and year entered in separate fields.

Month received___ ___

Day received__ ___

Year received___ ___ ___ ___

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	LENGTH	DEFINITIONS
REC_YR	Year received	4 digit year	4	4 digit year

REC_MO	Month received	01	2	January
		02		February
		03		March
		04		April
		05		May
		06		June
		07		July
		08		August
		09		September
		10		October
		11		November
		12		December,

REC_DY	Day received	01-31	2	January 1-31
				February 1-29
				March 1-31
				April 1-30
				May 1-31
				June 1-30
				July 1-31
				August 1-31
				September 1-30
				October 1-31
				November 1-30
				December 1-31

EDITS:

ELECTRONIC RECORD

If month is February and day = 29, Date Received By Registrar should be a leap year. If not, an error message should appear and ask that the date be corrected.

D*ate Received By Registrar must be the same as or later than the Date of Delivery (Item 4) and the same as or later than the Date Report Completed (Item 16).*

Paper Records

For paper records, the same edits are applied. Edits failed after re-entry through the edit screens will result in a listing of items to be queried and the item will be given a pending query status.

STATE DATA FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date, it is recommended that the date be entered and stored as three separate fields.

If states elect to use a database system that has an option of storing dates as “date type variables,” then the system must meet the criteria listed under transmission standards.

EDI TRANSMISSION

HL 7 Transmission standards will be followed. This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits.

Software that stores dates as “date type” must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Title: **CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH**

Item Number: **18a Report; 33 facility worksheet**
18b Report; 34 facility worksheet

Description: Causes of death are diseases, abnormalities, injuries, or poisonings that contributed to fetus' death.

Source of Information:

Attending Physician or Medical Examiner/Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Physician/Medical Examiner

The cause-of-death section consists of two parts. The initiating cause/condition (18a) is for reporting a single condition that most likely began the sequence of events resulting in the death of the fetus. Other significant causes or conditions (18b) include all other conditions contributing to death. These conditions may be conditions that are triggered by the initiating cause (18a) or causes that are not among the sequence of events triggered by the initiating cause (18a).

The cause-of-death information should be your best medical opinion. Report a specific condition in the space most appropriate to the given situation. A condition can be listed as "probable" even if it has not been definitively diagnosed. In reporting the causes of fetal death, conditions in the fetus or patient, 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.

Cause of death is used for medical and epidemiological research on disease etiology and evaluating the effectiveness of diagnostic and therapeutic techniques. It is a measure of health status at local, state, national, and international levels.

When a death occurs without medical attendance at or immediately after the delivery, or when further investigation is required by State regulations, a medical examiner or coroner may investigate the fetal death. Report the death to the medical examiner or coroner as required by State law. The medical examiner or coroner will either complete the cause-of-death section of the fetal death report or waive that responsibility. If the medical examiner does not accept the case, then the certifier will need to complete the fetal cause-of-death section.

<u>General instructions for completing cause of fetal death</u>

(For an expanded set of instructions, refer to the State vital statistics office, handbooks, and other resources at http://www.cdc.gov/nchs/about/major/dvs/handbk.htm, or NCHS, Room 820, 6525 Belcrest Road, Hyattsville, Maryland 20782).

- Cause-of-death information should be your best medical opinion.
- Abbreviations and parentheses should be avoided in reporting causes of death.
- The original fetal death report should be amended if additional medical information or autopsy or histological placental findings become available that would change the cause of death originally reported.
- For unattended fetal deaths, report to the medical examiner or coroner in accordance with State regulations.
- The terminal event should not be used. You should report the initiating cause of the terminal event in 18a.
- If an organ system failure is listed as a cause of death, always report its etiology.
- Always report the fatal injury (e.g., stab wound of patient's abdomen), the trauma, and impairment of function.
- In 18b, report all diseases or conditions contributing to death that were not reported in 18a and that did not result in the initiating cause of death.
- If two or more possible sequences resulted in death, or if two conditions seem to have added together, report in 18a the one that, in your opinion, most directly caused death. Report in 18b the other conditions or diseases.

FOR AN ELECTRONIC RECORD:

EDR Developer

When the cause-of-death section of the electronic fetal death report is opened or accessed, the first screen to appear should read as follows:

A fetal death report provides important information used for medical and epidemiological research on disease etiology and evaluating the effectiveness of diagnostic and therapeutic techniques. It is a measure of health status at local, state, national, and international levels.

The cause-of-death section consists of two parts. The initiating cause/condition (18a) is for reporting a single condition that most likely began the sequence of events resulting in the death of the fetus. Other significant causes or conditions (18b) include all other conditions contributing to death. These conditions may be conditions that are triggered by the initiating cause (18a) or causes that are not among the sequence of events triggered by the initiating cause (18a).

The cause-of-death information should be your best medical opinion. Report a specific condition in the space most appropriate to the given situation. A condition can be listed as "probable" even if it has not been definitively diagnosed. In reporting the causes of fetal death, conditions in the fetus or patient, 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.

Physician's responsibility

The physician's primary responsibility in completing the cause-of-death section is to report to the best of his or her knowledge, based upon available information, the initiating condition that most likely began the sequence of events resulting in the death of the fetus and other contributing causes or conditions.

Medical examiner or coroner's responsibility

When a death occurs without medical attendance at or immediately after the delivery, or when further investigation is required by State regulations, a medical examiner or coroner may investigate the fetal death. Report the death to the medical examiner or coroner as required by State law. The medical examiner or coroner will either complete the cause-of-death section of the fetal death report or waive that responsibility. If the medical examiner does not accept the case, then the attending physician will need to complete the fetal cause-of-death section.

General instructions for completing cause of fetal death (For an expanded set of instructions, click on help)

- **Cause-of-death information should be your best medical opinion.**
- **Abbreviations and parentheses should be avoided in reporting causes of death.**
- **The original fetal death report should be amended if additional medical information or autopsy or histological placental findings become available that would change the cause of death originally reported.**
- **For unattended fetal deaths, report to the medical examiner or coroner in accordance with State regulations.**
- **The terminal event should not be used. You should report the initiating cause of the terminal event in 18a.**
- **If an organ system failure is listed as a cause of death, always report its etiology.**
- **Always report the fatal injury (e.g., stab wound of patient's abdomen), the trauma, and impairment of function.**
- **In 18b, report all diseases or conditions contributing to death that were not reported in 18a and that did not result in the initiating cause of death.**
- **If two or more possible sequences resulted in death, or if two conditions seem to have added together, report in 18a the one that, in your opinion, most directly caused death. Report in 18b the other conditions or diseases.**

On medical examiner (ME), coroner, and physician entry screens of the EFDR, it is imperative that the physician viewing the screen be able to see, at minimum, the same prompts and formatting as those physicians using the paper version of the 2003 revision of the U.S. Standard Report of Fetal Death (as shown below). These medical certifiers need to be able to see that they will be completing both 18a and 18b of the fetal death report. The EFDR provides the opportunity to provide additional space and instructions. Additional lines may be added.

18. CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH

18a. INITIATING CAUSE/CONDITION	18b. OTHER SIGNIFICANT CAUSES OR CONDITIONS
(AMONG THE CHOICES BELOW, PLEASE SELECT THE ONE WHICH MOST LIKELY BEGAN THE SEQUENCE OF EVENTS RESULTING IN THE DEATH OF THE FETUS)	**(SELECT OR SPECIFY ALL OTHER CONDITIONS CONTRIBUTING TO DEATH IN ITEM 18b)**
Maternal Conditions/Diseases (Specify)_____	Maternal Conditions/Diseases (Specify)_____ _____
Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____	Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____
Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____	Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____
Other Fetal Conditions/Disorders (Specify)_____ Unknown	Other Fetal Conditions/Disorders (Specify)_____ Unknown

Each page should include a context sensitive progress bar (or mouse-over or some alternative pop-up) that provides an instruction or definition as the cursor moves from item to item. When the cursor moves to the cause-of-death boxes representing 18a of the standard certificate of death, the progress bar or other alternative should have a status message that says:

Report the single initiating condition. Click on Help for examples and assistance.

When cursor is on the entry box representing information collected on 18b of the fetal death report, the status message on the progress bar should read:

Report conditions that contributed to death, but were not reported in 18a, as reported above. Click on Help for examples and assistance.

INFORMATION THAT SHOULD BE INCLUDED IN THE HELP FUNCTION

The following shows the structure and content of the Help Section. When the user clicks on Help from an item, the Help screen that appears should show the section of Help that is relevant to that item as well as the index of the Help Section that would permit them to navigate elsewhere within the Help. This will provide assistance for the item in question as well as letting them know that the additional topics are addressed in Help.

[Certifier- Guidance on getting to help should be prominent on every screen; within the help section, the index should be prominent:]

Index of Help Section:

Introduction to completing a cause-of-death statement
Examples of properly completed cause-of-death statements
Detailed instructions
Glossary of terms
Possible solutions to common problems in death certification
    Uncertainty
    Avoid ambiguity
References

Introduction to completing a cause-of-death statement

One purpose of the fetal death report is to obtain a simple description of the conditions contributing to death rather than a record describing all medical conditions present at death.

Causes of death on the fetal death report represent a medical opinion that might vary among individual physicians. In signing the fetal death report, the physician, medical examiner, or coroner certifies that, in his/her medical opinion, the individual died from the reported causes of death. The certifier's opinion and confidence in that opinion are based upon his/her training, knowledge of medicine, available medical records, symptoms, diagnostic tests, and available autopsy or histological placental results for the fetus. Even if extensive information is available to the certifier, causes of death may be difficult to determine, so the certifier may indicate uncertainty by qualifying the causes on the fetal death report.

Cause-of-fetal-death data is important for surveillance, research, design of public health and medical interventions, and funding decisions for research and development.

Examples of properly completed cause-of-fetal-death statements

The following are examples of properly completed fetal death reports:

Example 1:

18. CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH

18a. INITIATING CAUSE/CONDITION	18b. OTHER SIGNIFICANT CAUSES OR CONDITIONS
(AMONG THE CHOICES BELOW, PLEASE SELECT THE ONE WHICH MOST LIKELY BEGAN THE SEQUENCE OF EVENTS RESULTING IN THE DEATH OF THE FETUS)	**(SELECT OR SPECIFY ALL OTHER CONDITIONS CONTRIBUTING TO DEATH IN ITEM 18b)**
Maternal Conditions/Diseases (Specify)___Maternal drug abuse_____	Maternal Conditions/Diseases (Specify)_____ _____
Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____	Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____
Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____	Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ Anencephaly _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____
Other Fetal Conditions/Disorders (Specify)_____	Other Fetal Conditions/Disorders (Specify)_____
Unknown	Unknown

Example 2:

18. CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH

18a. INITIATING CAUSE/CONDITION	18b. OTHER SIGNIFICANT CAUSES OR CONDITIONS
(AMONG THE CHOICES BELOW, PLEASE SELECT THE ONE WHICH MOST LIKELY BEGAN THE SEQUENCE OF EVENTS RESULTING IN THE DEATH OF THE FETUS)	**(SELECT OR SPECIFY ALL OTHER CONDITIONS CONTRIBUTING TO DEATH IN ITEM 18b)**
Maternal Conditions/Diseases (Specify)_____	Maternal Conditions/Diseases (Specify)___Homicide by stabbing_____ _____
Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____	Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____
Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____	Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____
Other Fetal Conditions/Disorders (Specify)___Asphyxia_____	Other Fetal Conditions/Disorders (Specify)_____
Unknown	Unknown

Example 3:

18. CAUSE/CONDITIONS CONTRIBUTING TO FETAL DEATH

18a. INITIATING CAUSE/CONDITION	18b. OTHER SIGNIFICANT CAUSES OR CONDITIONS
(AMONG THE CHOICES BELOW, PLEASE SELECT THE ONE WHICH MOST LIKELY BEGAN THE SEQUENCE OF EVENTS RESULTING IN THE DEATH OF THE FETUS)	**(SELECT OR SPECIFY ALL OTHER CONDITIONS CONTRIBUTING TO DEATH IN ITEM 18b)**
Maternal Conditions/Diseases (Specify)_____	Maternal Conditions/Diseases (Specify)_____ _____
Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____	Complications of Placenta, Cord or Membranes Rupture of membranes prior to onset of labor Abruptio placenta Placental insufficiency Prolapsed cord Chorioamnionitis Other (Specify)_____
Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ Triploidy syndrome, XXY Fetal Injury (Specify)_____ Fetal Infection (Specify)_____	Other Obstetrical or Pregnancy Complications (Specify)_____ Fetal Anomaly (Specify)_____ _____ _____ Fetal Injury (Specify)_____ Fetal Infection (Specify)_____
Other Fetal Conditions/Disorders (Specify)_____	Other Fetal Conditions/Disorders (Specify)_____
Unknown	Unknown

Detailed instructions

- **Cause-of-death information should be your best medical opinion.**
- **List only one condition in 18a.**
- **Abbreviations and parentheses should be avoided in reporting causes of death.**
- **The original fetal death report should be amended by the certifying physician (if additional medical information or autopsy or histological placental findings become available that would change the cause of death originally reported) by immediately reporting the revised cause of death to the State Vital Records Office.**
- **Report each disease, abnormality, injury, or poisoning that you believe adversely affected the fetus including maternal conditions. A condition can be listed as "probable" even if it has not been definitively diagnosed.**
- **An initiating condition should be reported in 18a that explains why the fetus died. The initiating cause may result in an etiological or pathological sequence as well as a sequence in which an earlier condition is believed to have prepared the way for a subsequent cause by damage to tissues or impairment of function.**
- **If two or more possible sequences resulted in death, report in 18a the initiating condition triggering the sequence that, in your opinion, most directly caused death. Report in 18b the other conditions or diseases.**
- **A specific cause of death should be reported in 18a so there is no ambiguity about the etiology of this cause.**
- **Conditions or diseases in 18b should contribute to death.**
- **Mechanistic terminal events should not be the condition reported in 18a.**
- **Always report an etiology for organ system failure such as congestive heart failure, hepatic failure, renal failure, or respiratory failure on the lines beneath it.**

- **If, in your opinion, the use of alcohol, tobacco, other substance by the patient, or a recent injury caused or contributed to death, then this condition should be reported.**
- **When indicating neoplasms as a cause of death, include the following: 1) primary site or that the primary site is unknown, 2) benign or malignant, 3) cell type or that the cell type is unknown, 4) grade of neoplasm, and 5) part or lobe of organ affected.**
- **For unattended fetal deaths, report to the medical examiner or coroner in accordance with State regulations.**
- **For deaths resulting from injuries, always report the fatal injury event, the trauma, and the impairment of function.**

Glossary of terms

Causes of death: The causes of death to be entered on the medical certificate of cause of death are all those diseases, morbid conditions or injuries which either initiated or contributed to death and the circumstances of the accident or violence which produced any such injuries.

Initiating cause of death: the disease or injury that most likely began the sequence of events resulting in the death of the fetus.

Possible solutions to common problems in death certification

Uncertainty:

Often several acceptable ways of writing a cause-of-death statement exist. Optimally, a certifier will be able to provide a simple description of the initiating cause and other contributing causes that is etiologically clear and to be confident that this is correct. However, realistically, description of the process is sometimes difficult because the certifier is not certain.

In this case, the certifier should think through the causes about which he/she is confident and what possible etiologies could have resulted in these conditions. The certifier should select the causes that are suspected to have been involved and use words such as "probable" or "presumed" to indicate that the description provided is not completely certain. Causes of death on the fetal death report should not include terms such as prematurity without explaining the etiology because they have little value for public health or medical research. Reporting a cause of fetal death as unknown should be a last resort.

When a number of conditions or multiple organ/system failure resulted in death, the physician, medical examiner, or coroner should choose a single condition which most likely began the sequence of events resulting in the fetal death and list the other conditions in 18b of the certification section. "Multiple system failure" could be included as an "other significant cause or condition" but also specify the systems involved to ensure that the detailed information is captured. Maternal conditions may have initiated or affected the sequence that resulted in a fetal death. These maternal conditions should be reported in the cause-of-death statement in addition to the fetal causes.

Avoid ambiguity:

Most certifiers will find themselves, at some point, in the circumstance in which they are unable to provide a simple description of the process of death. In this situation, the certifier should try to provide an initiating condition, qualify the causes about which he/she is uncertain, and be able to explain the certification chosen.

When conditions such as the following are reported, information about the etiology should be reported if possible:

Unknown
Prematurity
Immaturity
Low birth weight
Intrauterine hypoxia

If the certifier is unable to determine the etiology of a process such as those shown above, the process must be qualified as being of an unknown, undetermined, probable, presumed, or unspecified etiology so it is clear that a distinct etiology was not inadvertently or carelessly omitted.

When indicating neoplasms as a cause of death indicate the following: 1) primary site or that the primary site is unknown, 2) benign or malignant, 3) cell type or that the cell type is unknown, 4) grade of a neoplasm, and 5) part or lobe of an organ affected.

References

For detailed information on how to complete the medical certification section of the fetal death report, you may refer to:

- **State resources.**
- **NCHS' Medical Examiners' and Coroners' Handbook on Death Registration and Fetal Death Reporting (available from NCHS or at http://www.cdc.gov/nchs/data/misc/hb_me.pdf).**
- **NCHS' Hospitals' and Physicians' Handbook on Birth Registration and Fetal Death Reporting (available from NCHS or at http://www.cdc.gov/nchs/data/hb_birth.pdf).**

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITIONS
COD18a1	Rupture of membranes prior to onset of labor	Y N	Rupture box checked Rupure box not checked
COD18a2	Abruptio placenta	Y N	Abruptio box checked Abruptio box not checked
COD18a3	Placental insufficiency	Y N	Placental box checked Placental box not checked
COD18a4	Prolapsed cord	Y N	Cord box checked Cord box not checked
COD18a5	Chorioamnionitis	Y N	Chorio box checked Chorio box not checked
COD18a6	Other complications of placenta, cord, Or membranes	Y N	Other box checked Other box not checked
COD18a7	Unknown	Y N	Unknown box checked Unknown box not checked
COD18a8	Maternal conditions/diseases literal	Literal responses	
COD18a9	Other complications of placenta, cord, or Membranes literal	Literal responses	
COD18a10	Other obstetrical or pregnancy complications literal	Literal responses	
COD18a11	Fetal anomaly literal	Literal responses	
COD18a12	Fetal injury literal	Literal responses	
COD18a13	Fetal infection literal	Literal responses	
COD18a14	Other fetal conditions/disorders literal	Literal responses	
COD18b1	Rupture of membranes prior to onset of labor	Y N	Rupture box checked Rupure box not checked

COD18b2	Abruptio placenta	Y N	Abruptio box checked Abruptio box not checked
COD18b3	Placental insufficiency	Y N	Placental box checked Placental box not checked
COD18b4	Prolapsed cord	Y N	Cord box checked Cord box not checked
COD18b5	Chorioamnionitis	Y N	Chorio box checked Chorio box not checked
COD18b6	Other complications of placenta, cord, Or membranes	Y N	Other box checked Other box not checked
COD18b7	Unknown	Y N	Unknown box checked Unknown box not checked

COD18b8	Maternal conditions/diseases literal	Literal responses
COD18b9	Other complications of placenta, cord, or Membranes literal	Literal responses
COD18b10	Other obstetrical or pregnancy complications literal	Literal responses
COD18b11	Fetal anomaly literal	Literal responses
COD18b12	Fetal injury literal	Literal responses
COD18b13	Fetal infection literal	Literal responses
COD18b14	Other fetal conditions/disorders literal	Literal responses

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

The electronic fetal death report can be made more useful by providing some more immediate edit checks based on literal entries. Below are some specifications.

1) <u>Unacceptable causes</u>. An edit that flags the following as unacceptable causes if they are the only cause reported or are reported on the lowest line of the certification: asystole, cardiac arrest, CAR, cardiac pul arrest, cardiac pulmonary arrest, cardiopulmonary arrest, CPAR, ventricular fibrillation, VF, electrical mechanical dissociation, EMD, and electromechanical dissociation.

The edit message should be: **Mechanistic terminal events such as the last entry preferably should not be either the initiating cause in a cause-of-death statement. Please enter the medical conditions that led to this terminal event.**

2) <u>Spellcheck</u>. Include an automatic spelling checker

3) <u>Abbreviations and parentheses</u>. If there is an abbreviation or parentheses in the cause-of-death statement, provide a message that neither is good practice and please specify what is meant. It would be desirable to customize abbreviations so that the computer would ask if the certifier meant x,y, or specify. Providing possible terms using the same abbreviations would a) illustrate why using abbreviations is confusing and b) lessen the work the certifier needs to do to correct the entry. The abbreviations, shown below, are from NCHS Instruction Manual Part 2b, Instructions for Classifying Multiple Causes of Death, 2000.

The edit message should be: ***Please do not use abbreviations to report cause of death. We think that the full term for (e.g., AAA) is (e.g., abdominal aortic aneurysm)? Indicate which term is correct if multiple meanings are possible, or specify what you meant by the abbreviation if we have not suggested the correct full term. Thank you.***

AAA	abdominal aortic aneurysm	ACT	acute coronary thrombosis syndrome		
AAS	aortic arch syndrome			AEG	air encephalogram
AAT	alpha-antitrypsin	ACTH	adrenocorticotrophic hormone	AF	auricular or atrial fibrillation; acid fast
AAV	AIDS-associated virus				
AB	abortion; asthmatic bronchitis	ACVD	arteriosclerotic cardiovascular disease	AFB	acid-fast bacillus
				AFI	amaurotic familial idiocy
ABD	abdomen	AD	auris dextra (right ear); addiction, drug; adenoidal degeneration; atrio dextro (rt. atrium)	AGG	agammaglobulinemia
ABE	acute bacterial endocarditis			AGL	acute granulocytic leukemia
ABS	acute brain syndrome			AGN	acute glomerulonephritis
ACA	adenocarcinoma			AGS	adrenogenital syndrome
ACD	arteriosclerotic coronary disease; absolute cardiac dullness	ADEM	acute disseminated encephalomyelitis	AHA	acquired hemolytic anemia; autoimmune hemolytic anemia
		ADH	antidiuretic hormone		
ACH	adrenal cortical hormone	ADS	antibody deficiency	AHD	arteriosclerotic heart disease

AHHD arteriosclerotic hypertensive heart disease
AHG anti-hemophilic globulin deficiency
AHLE acute hemorrhagic leukoencephalitis
AI aortic insufficiency; additional information
AIDS acquired immunodeficiency syndrome
AKA above knee amputation
ALL acute lymphocytic leukemia
ALS amyotrophic lateral sclerosis
AMI acute myocardial infarction
AML acute myelocytic leukemia
ANS arteriolonephrosclerosis
AOD arterial occlusive disease
AODM adult onset diabetes mellitus
AOM acute otitis media
AP angina pectoris; anterior and posterior repair; artificial pneumothorax; anterior pituitary
A&P anterior and posterior repair
APC auricular premature contraction; Acetylsalicylic acid, Acetophenetidin, and caffeine
APE acute pulmonary edema; anterior pituitary extract
APH antepartum hemorrhage
AR aortic regurgitation
ARC AIDS-related complex
ARF acute respiratory failure
ARM artificial rupture of membranes
ARV AIDS-related virus
AS arteriosclerotic; arteriosclerosis; aortic stenosis; auris sinestra (left ear)
ASA acetylsalicylic acid (aspirin)
ASAD arteriosclerotic artery disease
ASCD arteriosclerotic coronary disease
ASCHD arteriosclerotic coronary heart disease
ASCVA arteriosclerotic cerEBRovascular accident
ASCVD arteriosclerotic cardiovascular disease
ASCVHD arteriosclerotic cardiovascular heart disease
ASCVRD arteriosclerotic cardiovascular renal disease
ASD atrial septal defect
ASDHD arteriosclerotic decompensated heart disease
ASHCVD arteriosclerotic hypertensive cardiovascular disease
ASHD arteriosclerotic heart disease; atrioseptal heart defect
ASHHD arteriosclerotic hypertensive heart disease
ASHVD arteriosclerotic hypertensive vascular disease
ASO arteriosclerosis obilterans
ASPVD arteriosclerotic peripheral vascular disease
ASVD arteriosclerotic vascular disease
ASVH(D) arteriosclerotic vascular heart disease
ATC all-terrain cycle
ATN acute tubular necrosis
ATS anxiety tension state; anti-tetanus serum; arteriosclerosis
ATSHD arteriosclerotic heart disease
ATV all-terrain vehicle
AU aures unitas (both ears)
AUL acute undifferentiated leukemia
AV arteriovenous; auriculoventricular; aortic valve
AVF arterio-ventricular fibrillation; arteriovenous fistula
AVH acute viral hepatitis
AVP aortic valve prosthesis
AVR aortic valve replacement
AWMI anterior wall myocardial infarction
AZT azidothymidine
BA basilar arteriogram; bronchial asthma; basilar artery
B&B bronchoscopy and biopsy
BBB bundle branch block
B&C biopsy and cauterization
BCE basal cell epithelioma
BE barium enema
BEH benign essential hypertension
BGL Bartholin's gland
BKA below knee amputation
BL bladder; bucolingual; blood loss; Burkitt's lymphoma
BMR basal metabolism rate
BNA Bladder neck adhesions
BNO bladder neck obstruction
BOMSA bilateral otitis media serous acute
BOMSC bilateral otitis media serous chronic
BOW "bag of water" (membrane)
B/P, BP blood pressure
BPH benign prostate hypertrophy
BSA body surface area
BSO bilateral salpingo-oophorectomy
BSP Bromosulfaphthalein test
BTL bilateral tubal ligation
BUN blood, urea, and nitrogen test
BVL bilateral vas ligation
B&W Baldy-Webster suspension (uterine)
BX biopsy
BX CX biopsy cervix
_
c with
Ca cancer
CA cancer; carotid arteriogram; cardiac arrest
CAD coronary artery disease
CAG chronic atrophic gastritis
CAO coronary artery occlusion; chronic airway obstruction
CAS cerEBRal arteriosclerosis
CASCVD chronic arteriosclerotic cardio-vascular disease
CB chronic bronchitis
CBC complete blood count
CBD common bile duct
CBS chronic brain syndrome
CCF chronic congestive failure
CCI chronic cardiac or coronary insufficiency
CDE common duct exploration
CDH congenital dislocation hip
CF congestive failure; compliment fixation test; cystic fibrosis; Christmas factor (plasma thromboplastin component)
CFT chronic follicular tonsillitis
CGN chronic glomerulonephritis
CHA congenital hypoplastic anemia
CHB complete heart block
CHD congestive heart disease; coronary heart disease; Chediak-Higaski Disease; congenital heart disease
CHF congestive heart failure
C_2H_5OH ethyl alcohol
CI cardiac insufficiency; cerEBRal infarction
CID cytomegalic inclusion disease

CIS carcinoma in situ
CLD chronic lung disease; chronic liver disease
CLL chronic lymphatic leukemia; chronic lymphocytic leukemia
CMID cytomegalic inclusion disease
CML chronic myelocytic leukemia
CMM cutaneous malignant melanoma
CMV cytomegalic virus
CNHD congenital nonspherocytic hemolytic disease
CNS central nervous system
CO carbon monoxide
COAD chronic obstructive airway disease
CO_2 carbon dioxide
COBE chronic obstructive bullous emphysema
COBS chronic organic brain syndrome
COFS cerEBRo-oculo-facio-skeletal
COOMBS test for Rh sensitivity
COLD chronic obstructive lung disease
COPD chronic obstructive pulmonary disease
COPE chronic obstructive pulmonary emphysema
CP cerEBRal palsy; cor pulmonale
C&P cystoscopy and pyelography
CPB cardiopulmonary bypass
CPC chronic passive congestion
CPD cephalopelvic disproportion; contagious pustular dermatitis
CPE chronic pulmonary emphysema
CRD chronic renal disease
CRF cardiorespiratory failure; chronic renal failure
CRST calcinosis cutis, Raynaud's phenomenon, sclerodactyly, and telangiectasis
CS coronary sclerosis; cesarean section; cerEBRo-spinal
CSF cerEBRal spinal fluid
CSH chronic subdural hematoma
CSM cerEBRospinal meningitis
CT cerEBRal thrombosis; coronary thrombosis
CTD congenital thymic dysplasia
CU cause unknown
CUC chronic ulcerative colitis
CUP cystoscopy, urogram, pyelogram (retro)
CUR cystocele, urethrocele, rectocele
CV cardiovascular; cerEBRovascular
CVA cerEBRal vascular accident
CV Accident cerEBRal vascular accident
CVD cardiovascular disease
CVHD cardiovascular heart disease
CVI cardiovascular insufficiency; cerEBRal vascular insufficiency
CVRD cardiovascular renal disease
CWP coal worker's pneumoconiosis
CX cervix
DA degenerative arthritis
DBI Phenformin hydrochloride
D&C dilation and curettage
DCR dacrocystorhinostomy
D&D drilling and drainage; dEBRidement and dressing
D&E dilation and evacuation
DFU dead fetus in utero
DIC disseminated intravascular coagulation
DILD diffuse infiltrative lung disease
DIP distal interphalangeal joint; desquamative interstitial pneumonia
DJD degenerative joint disease
DM diabetes mellitus
DMT dimethyltriptamine
DOA dead on arrival
DOPS diffuse obstructive pulmonary syndrome
DPT diphtheria, pertussis, tetanus vaccine
DR diabetic retinopathy
DS Down's syndrome
DT due to; delirium tremens
D/T delirium tremens; due to
DU diagnosis unknown; duodenal ulcer
DUB dysfunctional uterine bleeding
DUI driving under influence
DVT deep vein thrombosis
DWI driving while intoxicated
DX dislocation; diagnosis; disease
EBV Epstein-Barr virus
ECCE extracapsular cataract extraction
ECG electrocardiogram
ECT electric convulsive therapy
EFDR expected date of confinement
EEE Eastern equine encephalitis
EEG electroencephalogram
EFE endocardial fibroelastosis
EGL eosinophilic granuloma of lung
EH enlarged heart; essential hypertension
EIOA excessive intake of alcohol
EKC epidemic keratoconjunctivitis
EKG electrocardiogram
EKP epikeratoprosthesis
ELF elective low forceps
EMC encephalomyocarditis
EMD electromechanical dissociation
EMF endomyocardial fibrosis
EMG electromyogram
EN erythema nodosum
ENT ear, nose, and throat
EP ectopic pregnancy
ER emergency room
ERS evacuation of retained secundines
EST electric shock therapy
ETOH alcohol
EUA exam under anesthesia
EWB estrogen withdrawal bleeding
FB foreign body
FBS fasting blood sugar
Fe symbol for iron
FGD fatal granulomatous disease
FHS fetal heart sounds
FHT fetal heart tone
FLSA follicular lymphosarcoma
FME full-mouth extraction
FS frozen section; fracture site
FT full term
FTA fluorescent Treponemal antibody test
5FU Fluorouracil
FUB functional uterine bleeding
FULG fulguration
FUO fever unknown origin
FX fracture
FYI for your information
GAS generalized arteriosclerosis
GB gallbladder; Guillain-Barre syndrome
GC gonococcus; gonorrhea; general circulation (systemic)
GI gastrointestinal
GIT gastrointestinal tract
GOK God only knows
GSW gunshot wound
GTT glucose tolerance test
gtt drop

GU genitourinary; gastric ulcer
GVHR graft versus host reaction
GYN gynecology
HA headache
HAA hepatitis associated antigen
HASCVR hypertensive arteriosclerotic cardiovascular renal disease
HASVD hypertensive arteriosclerotic vascular disease
HB hemoglobin; heart block
HBP high blood pressure
HC Huntington's chorea
HCT hematocrit
HCVD hypertensive cardiovascular disease
HCVRD hypertensive cardiovascular renal disease
HD Hodgkin's disease; heart disease
HDN hemolytic disease of newborn
HDS herniated disc syndrome
HF heart failure; hayfever
HGB;Hgb hemoglobin
HHD hypertensive heart disease
HIV human immunodeficiency virus
HMD hyaline membrane disease
HN_2 Nitrogen Mustard
HNP herniated nucleus pulposus
H/O history of
HPN hypertension
HPVD hypertensive pulmonary vascular disease
HRE high-resolution electro-cardiology
HS herpes simplex; Hurler's syndrome
HTLV-III/LAV human T-cell lymphotropic virus-III/ lymphadenopathy-associated virus
HTLV-3 human T-cell lymphotropic virus-III
HTLV-III human T-cell lymphotropic virus -III
HVD hypertensive vascular disease
Hx history of
IADH inappropriate antidiuretic hormone
IASD interatrial septal defect
ICCE intracapsular cataract extraction
ICD intrauterine contraceptive device
I&D infectious disease; incision and drainage
IDA iron deficiency anemia
IDDM type 1 diabetes
IH infectious hepatitis
IHD ischemic heart disease
IHSS idiopathic hypertrophic subaortic stenosis
ILD ischemic leg disease
IM intramuscular; intramedullary; infectious mononucleosis
IMPP intermittent positive pressure
INAD infantile neuroaxonal dystrophy
INC incomplete
INE infantile necrotizing encephalomylopathy
INF infection; infected; infantile; infarction
INH Isoniazid; inhalation
INS idiopathic nephrotic syndrome
IO intestinal obstruction
IOH idiopathic orthostatic hypotension
IPD inflammatory pelvic disease
IPP intermittent positive pressure
IRDS idiopathic respiratory distress syndrome
IRHD inactive rheumatic heart disease
ISD interatrial septal defect
ITP idiopathic thrombocytopenic purpura
IU intrauterine
IUCD intrauterine contraceptive Device
IUD intrauterine device (contraceptive); intrauterine death
IUP intrauterine pregnancy
IVC intravenous cholangiography; inferior vena cava
IVCC intravascular consumption coagulopathy
IVD intervertEBRal disc
IVH intraventricular hemorrhage
IVP intravenous pyelogram
IVSD intraventricular septal defect
IVU intravenous urethrography
IWMI inferior wall myocardial infarction
JBE Japanese B encephalitis
KFS Klippel-Feil syndrome
KS Klinefelter's syndrome
KUB kidney, ureter, bladder
K-W Kimmelstiel-Wilson disease or syndrome
LAP laparotomy
LAV lymphadenopathy-associated virus
LAV/ lymphadenopathy-associated HTLV-III virus/Human T-cell lymphotrophic virus-III
LBBB left bundle branch block
LBNA lysis bladder neck adhesions
LBW low birth weight
LBWI low birth weight infant
LCA left coronary artery
LDH lactic dehydrogenase
LE lupus erythematosus; lower extremity; left eye
LKS liver, kidney, spleen
LLL left lower lobe
LMA left mentoanterior (position of fetus)
LMCAT left middle cerEBRal artery thrombosis
LML left mesiolateral; left mediolateral (episiotomy)
LMP last menstrual period; left mento-posterior (position of fetus)
LN lupus nephritis
LOA left occipitoanterior
LOMCS left otitis media chronic serous
LP lumbar puncture
LRI lower respiratory infection
LS lumbosacral;lymphosarcoma
LSD lysergic acid diethylamide
LSK liver, spleen, kidney
LSO left salpingo-oophorectomy
LTB laryngotracheobronchitis
LUL left upper lobe
LVF left ventricular failure
LVH left ventricular hypertrophy
MBD minimal brain damage
MD muscular dystrophy; manic depressive; myocardial damage
MDA methylene dioxyamphetamine
MEA multiple endocrine adenomatosis
MF myocardial failure; myocardial fibrosis; mycosis fungoides
MGN membranous Glomerulonephritis
MHN massive hepatic necrosis

MI myocardial infarction; mitral insufficiency
MID multi-infarct dementia
MLC myelomonocytic leukemia, chronic
MM malignant melanoma; multiple myeloma
MMOA mandible, maxillary, odontectomy, alveolectomy
MOD mode of death; moment of death
MPC meperidine, promethazine, chlorpromazine
MS multiple sclerosis; mitral stenosis
MT malignant teratoma
MUA myelogram
MVR mitral valve regurgitation
NACD no anatomical cause of death
NCA neurocirculatory asthenia
NDI nephrogenic diabetes insipidus
NFI no further information
NFTD normal full-term delivery
NH_3 symbol for ammonia
NIDDM type 2 diabetes
NMI no more information
NPD Niemann-Pick disease
NSD normal spontaneous delivery; nonsurgical delivery
NSR normal sinus rhythm; nasal submucous resection
NTG nontoxic goiter
NTN nephrotoxic nephritis
N&V nausea and vomiting
NVD nausea, vomiting, diarrhea
OA osteoarthritis
OAD obstructive airway disease
OB obstetrical
OBS organic brain syndrome
OBST obstetrical
OD oculus dexter (right eye); overdose; occupational disease
OHD organic heart disease
OM otitis media
OMI old myocardial infarction
OMS organic mental syndrome
ORIF open reduction, internal fixation
OS oculus sinister (left eye); occipitosacral (fetal position)
OT occupational therapy; old TB
OU oculus uterque (each eye); both eyes
PA pericious anemia; paralysis agitans; pulmonary artery; peripheral arterio sclerosis
PAC premature auricular contraction; phenacetin, aspirin, caffeine
PAF paroxysmal auricular fibrillation
PAOD peripheral arterial occlusive disease; peripheral arteriosclerosis occlusive disease
PAP primary atypical pneumonia
PAS pulmonary artery stenosis
PAT pregnancy at term; paroxysmal auricular tachycardia
Pb chemical symbol for lead
PCD polycystic disease
PCF passive congestive failure
PCP pentachlorophenol; pneumocystis carinii pneumonia
PCT porphyria cutanea tarda
PCV polycythemia vera
PDA patent ductus arteriosus
PE pulmonary embolism; pleural effusion; pulmonary edema
PEG pneumoencephalography
PET pre-eclamptic toxemia
PG pregnant; prostaglandin
PGH pituitary growth hormone
PH past history; prostatic hyertrophy; pulmonary hypertension
PI pulmonary infarction
PID pelvic inflammatory disease; pro-lapsed intervertEBRal disc
PIE pulmonary interstitial emphysema
PIP proximal interphalangeal joint
PKU phenylketonuria
PMD progressive muscular dystrophy
PMI posterior myocardial infarction; point of maximum impulse
PN periarteritis nodosa; pneumonia;pyelonephritis
PO postoperative
POC product of conception
POE point (or portal) of entry
PP postpartum
PPD purified protein derivative test for tuberculosis
PPH postpartum hemorrhage
PPLO pleuropneumonia-like organism
PPS postpump syndrome
PPT precipitated; prolonged prothrombin time
PROM premature rupture of membranes
PT paroxysmal tachycardia; pneumothorax; prothrombin time
PTA prior to admission; persistent truncus arteriosus
PTC plasma thromboplastin component
PU peptic ulcer
PUD peptic ulcer disease; pulmonary disease
PUO pyrexia of unknown origin
P&V pyloroplasty and vagotomy
PVC premature ventricular contraction
PVD peripheral vascular disease; pulmonary vascular disease
PVI peripheral vascular insufficiency
PVT paroxysmal ventricular tachycardia
PVS premature ventricular systole (contraction)
PWI posterior wall infarction
PWMI posterior wall myocardial infarction
PX pneumothorax
R right
RA rheumatoid arthritis; right atrium; right auricle
RAD radiation absorbed dose
RAI radioactive iodine
RBBB right bundle branch block
RBC red blood cells
RCA right coronary artery
RCS reticulum cell sarcoma
RD Raynaud's disease; respiratory disease
RDS respiratory distress syndrome
RE regional enteritis
REG radioencephalogram
RF rheumatic fever
RHD rheumatic heart disease
RLF retrolental fibroplasia
RLL right lower lobe
RMCA right middle cerEBRal artery
RMCAT right middle cerEBRal artery thrombosis
RMLE right mediolateral episiotomy
RNA ribonucleic acid
RND radical neck dissection

R/O rule out
RSA reticulum cell sarcoma
RSR regular sinus rhythm
Rt right
RT recreational therapy; right
RTA renal tubular acidosis
RV right ventricle
RVH right ventricular hypertrophy
RVT renal vein thrombosis
RX drugs or other therapy or treatment
þ without
SA sarcoma; secondary anemia
SACD subacute combined degeneration
SBE subacute bacterial endocarditis
SBO small bowel obstruction
SC sickle cell
SCC squamous cell carcinoma
SCI Subcoma insulin; spinal cord injury
SD spontaneous delivery; septal defect; sudden death
SDAT senile dementia, Alzheimer's type
SDII sudden death in infancy
SDS sudden death syndrome
SF scarlet fever
SGA small for gestational age
SH serum hepatitis
SI saline injection
SIADH syndrome of inappropriate antidiuretic hormone
SICD sudden infant crib death
SID sudden infant death
SIDS sudden infant death syndrome
SLC short leg cast
SLE systemic lupus erythematosus; Saint Louis encephalitis
SMR submucous resection
SNB scalene node biopsy
SO or S&O salpingo-oophorectomy
SOB shortness of breath
SOM secretory otitis media
SOR suppurative otitis, recurrent
S/P status post
SPD sociopathic personality disturbance
SPP suprapubic prostatectomy
SQ subcutaneous
S/R schizophrenic reaction; sinus rhythm
S/p P/T schizophrenic reaction, paranoid type
SSE soapsuds enema
SSKI saturated solution potassium iodide
SSPE subacute sclerosing panencephalitis
STB stillborn
STS serological test for syphilis
STSG split thickness skin graft
SUBQ subcutaneous
SUD sudden unexpected death
SUDI sudden unexplained death of an infant
SUID sudden unexpected infant death
SVC superior vena cava
SVD spontaneous vaginal delivery
Sx symptoms
T&A tonsillectomy and adenoidectomy
TAH total abdominal hysterectomy
TAL tendon achilles lengthening
TAO Triacetyloleandomycin (antibiotic); thromboangiitis oliterans
TAPVR total anomalous pulmonary venous return
TAR thrombocytopenia absent radius (syndrome)
TAT tetanus anti-toxin
TB tuberculosis; tracheobronchitis
TBC,Tbc tuberculosis
TBLC term birth living child
TCI transient cerEBRal ischemia
TEF tracheo-esophageal fistula
TF tetralogy of Fallot
TGV transposition great vessels
TI tricuspid insufficiency
TIA transient ischemic attack
TIE transient ischemic episode
TL tubal ligation
TM tympanic membrane
TOA tubo-ovarian abscess
TP thrombocytopenic purpura
TSD Tay-Sachs disease
TTP thrombotic thrombocytopenic purpura
TUI transurethral incision
TUR transurethral resection (NOS) (prostate)
TURP transurethral resection of prostate
TVP total anomalous venous return
UC ulcerative colitis
UP ureteropelvic
UPJ ureteropelvic junction
URI upper respiratory infection
UTI urinary tract infection
VAMP vincristine, amethopterine, 6-mercaptopurine, and prednisone
VB vinblastine
VC vincristine
VD venereal disease
VDRL venereal disease research lab
VEE Venezuelan equine encephalomyelitis
VF ventricular fibrillation
VH vaginal hysterectomy; viral hepatitis
VL vas ligation
VM viomycin
V&P vagotomy and pyloroplasty
VPC ventricular premature contractions
VR valve replacement
VSD ventricular septal defect
VT ventricular tachycardia
WBC white blood cell
WC whooping cough
WE Western encephalomyelitis
WPW Wolfe-Parkinson-White syndrome
YF yellow fever
ZE Zollinger-Ellison (syndrome)
fracture
' minute
" second(s)
9 decreased
8 increased; elevated
ÿ without

00
11 secondary to

00
11 to secondary to

4) Rare cause. If a rare cause of death is on the fetal death report, provide an automatic query stating: **The reported cause is one of the causes that State Health Departments always try to verify, either because the cause is rarely reported on a fetal death report or because it may present threats to public health in the United States.** *Then ask,* **Was this the cause of death that the certifier intended to enter?**

The diagnosis then needs to be confirmed by the certifier. It is strongly recommended by NCHS/CDC that the State vital statistics program notify, as soon as possible, the state health officer (or designee) and the state epidemiologist of validated rare causes of death. For all cases, a notation of confirmation should be recorded on a copy of the certificate that is sent to the NCHS, whether confirmed electronically or by traditional means. Correspondence between NCHS and the State will still be needed, so that we ensure that all appropriate parties are aware that a rare cause has been reported.

The following list of infrequent and rare causes is derived from NCHS Instruction Manual Part 2a, Instructions for classifying the underlying cause of death, 2001 (will be updated in the 2002 manual):

A00	Cholera
A01	Typhoid and paratyphoid fevers
A05.1	Botulism (botulism, infant botulism, wound botulism)
A20	Plague
A21	Tularemia
A22	Anthrax
A23	Brucellosis
A24.0	Glanders
A24.1-.4	Melioidosis
A25	Rat-bite fever
A27	Leptospirosis
A30	Leprosy
A36	Diphtheria
A37	Whooping cough
A44	Bartonellosis
A65	Nonvenereal syphyllis
A66	Yaws
A67	Pinta
A68	Relapsing fever
A69	Other spirochetal infection
A70	Chlamydia psittaci infection (ornithosis)
A75.0	Louse-born typhus due to Rickettsia prowazekii
A75.1-.9	Other typhus
A77.1	Spotted fever due to Rickettsia conorii (Boutonneuse fever)

A77.2	Spotted fever due to Rickettsia siberica (North Asian tick fever)
A77.3	Spotted fever due to Rickettsia australis (Queensland tick typhus)
A77.8	Other spotted fevers (Other tick-born rickettsioses)
A77.9	Unspecified spotted fevers (Unspecified tick-born rickettsioses)
A78	Q fever
A79	Other Rickettsioses
A80	Acute poliomyelitis
A81	Slow virus infections of central nervous system
A82	Rabies
A84	Tick-born viral encephalitis
A85.2	Arthropod-born viral encephalitis, unspecified (Viral encephalitis transmitted by other and unspecified arthropods)
A90	Dengue fever
A91	Dengue hemmorrhagic fever
A92	Other mosquito-born viral fevers
A93	Other arthropod-born viral fevers including Oropouche fever, sandfly fever, Colorado tick fever and other specified
A94	Unspecified arthropod-born viral fever
A95	Yellow fever
A96	Arenaviral hemorrhagic fever
A98-A99	Other viral hemorrhagic fevers including Crimean-Congo, Omsk, Kyasanur Forest, Ebola virus, Hanta virus
B01	Varicella without complication (Chickenpox)
B03	Small pox
B04	Monkeypox
B05	Measles
B08.0	Other orthopoxvirus (cowpox and paravaccinia)
B26	Mumps
B33.0	Epidemic myalgia (epidemic pleurodynia)
B50-B54	Malaria
B55	Leishmaniasis
B56	African trypanosomiasis (trypanosomiasis)
B57	Chagas' disease (trypanosomiasis)
B65	Schistosomiasis
B66	Other fluke infections (Other trematode infection)
B67	Echinococcosis
B68	Taeniasis
B69	Cysticercosis
B70	Diphyllobothriasis and sparganosis
B71	Other cestode infections
B72	Dracunculiasis (Dracontiasis)
B73	Onchocerciasis
B74	Filariasis (Filarial infection)
P35.0	Congenital rubella syndrome
W88-W91	Exposure to radiation
Y36.5	War operation involving nuclear weapons

5) <u>*Specificity for cancer*</u>. *If words indicative of cancer appear on the fetal death report (as shown below), ask* **Have you specified the site and cell type or if the condition had metastasized? Thank you.** *The following list is from Instruction manual part 2g, Data Entry Instructions for the Mortality Medical Indexing, Classification, and Retrieval System (MICAR), 2000.*

Acidophil cancer
Acidophil carcinoma
Adenocarcinoma
Adenocarcinomatosis
Adenofibroma
Adenoid cystic carcinoma
Adenoma
Adenomatous polyp
Adenomatous polyposis
Adenosarcoma
Adenosquamous (cell) cancer
Adenosquamous (cell) carcinoma
Aleukemic leukemia
Alveolar adenocarcinoma
Alveolar carcinoma
Alveolar cancer
Alveolar cell cancer
Alveolar cell carcinoma
Alveolar rhabdomyosarcoma
Anaplastic adenocarcinoma
Anaplastic astrocytoma
Anaplastic cancer
Anaplastic carcinoma
Anaplastic fulminant cancer
Anaplastic fulminant carcinoma
Angioblastic meningioma
Angioblastoma
Angioma
Angiomyosarcoma
Angiosarcoma
Apocrine cancer
Apocrine carcinoma
Astroblastoma
Astrocytoma
Astroglioma
Basal cell cancer
Basal cell carcinoma
Basal cell epithelioma
Basophil adenocarcinoma
Basophil cancer
Basophil carcinoma
Bile duct type cancer
Bile duct type carcinoma
C cell cancer
C cell carcinoma
Cancer
Carcinoid
Carcinoid malignancy
Carcinoid tumor
Carcinoma
Carcinomatosis
Cavernous hemangioma
Cavernous lymphangioma
Chemodectoma
Cholangiocarcinoma
Cholangiohepatoma
Cholangioma
Chondrosarcoma
Chordoma
Choriocarcinoma
Chorioepithelioma
Chorionic cancer
Chorionic carcinoma
Chromophobe adenocarcinoma
Chromophobe adenoma
Chromophobe cancer
Chromophobe carcinoma
Clear cell adenocarcinoma
Congenital leukemia
Craniopharyngioma
Cylindroma
Cystadenocarcinoma
Dermatofibroma
Dermatofibrosarcoma
Di Guglielmos disease
Duct cell carcinoma
Ductal cancer
Ductal carcinoma
Ductal cell carcinoma
Dukes adenocarcinoma
Dukes cancer
Dysgerminoma
Eaton lambert syndrome
Embryoma
Embryonal adenocarcinoma
Embryonal cancer
Embryonal carcinoma
Eosinophil adenocarcinoma
Eosinophil cancer
Eosinophil carcinoma
Ependymoblastoma
Ependymoma
Epidermoid cancer
Epidermoid carcinoma
Epidermoid cystic tumor
Epithelioma
Erythremic myelosis
Erythrocythemia
Erythroleukemia
Ewings sarcoma
Ewings tumor
Familial polyposis
Fibroid
Fibroid tumor
Fibrolipoma
Fibroliposarcoma
Fibroma
Fibromyoma
Fibromyosarcoma
Fibromyxolipoma
Fibromyxosarcoma
Fibrosarcoma
Fibrous histiocytoma
Follicular adenocarcinoma
Follicular lymphoma
Ganglioglioma
Gardners syndrome
Gastrinoma
Gastrocarcinoma
Germ cell carcinoma
Giant cell cancer
Giant cell carcinoma
Giant cell leukemia
Glioblastoma
Glioblastoma multiforme
Glioma
Gliosarcoma
Glomangioma
Granulocytic leukemia
Granulocytic leukemia blast crisis
Granulosa cell cancer
Granulosa cell carcinoma
Growth
Hemangioendothelioma
Hemangioma
Hemangiopericytoma
Hemangiosarcoma
Hemoleukemia

Hepatoblastoma
Hepatocarcinoma
Hepatocellular cancer
Hepatocellular carcinoma
Hepatocholangiocarcinoma
Hepatocholangiolitic cancer
Hepatocholangiolitic carcinoma
Hepatoma
Histiocytic leukemia
Histiocytic lymphoma
Histiocytoma
Hodgkins disease
Hodgkins disease
Hodgkins lymphoma
Hurthle cell adenocarcinoma
Hurthle cell adenoma
Hurthle cell cancer
Hurthle cell carcinoma
Hygroma
Hypernephroma
Immunoblastic sarcoma
Immunolymphosarcoma
Infiltrating duct adenocarcinoma
Infiltrating duct cancer
Infiltrating duct carcinoma
Infiltrating duct cell cancer
Infiltrating duct cell carcinoma
Infiltrating ductal carcinoma
Infiltrating lobular carcinoma
Inflammatory cancer
Inflammatory carcinoma
Insulinoma
Insuloma
Intraductal cancer
Intraductal carcinoma
Islet cell adenocarcinoma
Islet cell adenoma
Islet cell cancer
Islet cell carcinoma
Kaposi sarcoma
Kaposis sarcoma
Kasabach Merritt syndrome
Krukenbergs tumor
Large cell anaplastic cancer
Large cell anaplastic carcinoma
Large cell cancer
Large cell carcinoma
Large cell lymphoma
Large cell tumor
Leiomyosarcoma
Lesion
Leucosarcoma
Leukemia
Leukemic crisis
Leukemic infiltrate
Leukemic infiltration
Leukemic lymphosarcoma
Leukolymphosarcoma
Leukosarcoma
Linitis plastica
Lipoblastoma
Lipoblastomatosis
Lipofibroma
Lipoma
Lipomyosarcoma
Lipomyxoma
Lipomyxosarcoma
Liposarcoma
Lobular carcinoma
Lymphangiosarcoma
Lymphangiosarcoma
Lymphatic leukemia
Lymphocyte depleted
Lymphocytic leukemia
Lymphocytic lymphoma
Lymphocytic lymphosarcoma
Lymphogenous leukemia
Lymphohistiocytic lymphoma
Lymphoid leukemia
Lympholeukemia
Lymphoma
Lymphomatous disease
Lymphoproliferative disease
Lymphoproliferative disorder
Lymphoreticularproliferative disease
Lymphoreticularproliferative disorder
Lymphoreticulum cell leukemia
Lymphosarcoma
Lymphosarcoma cell leukemia
Lymphosarcoma leukemia
Malignancy
Mass
Medullary carcinoma
Medulloblastoma
Megaadenoma
Megakaryocytic leukemia
Megakaryocytic myelosclerosis
Megakaryocytoid leukemia
Megaloleukemia
Meigs syndrome
Melanoma
Meningioma
Mesenchymoma
Mesoepithelioma
Mesothelioma
Metastases
Metastasis
Microglioma
Mixed cell leukemia
Mixed cell lymphoma
Mixed leukemia
Monocytic leukemia
Monocytoid leukemia
Monoleukemia
Monoleukocytic leukemia
Monomyelocytic leukemia
Monomyelogenous leukemia
Mucinous adenocarcinoma
Mucinous adenofibroma
Mucinous cancer
Mucinous carcinoma
Mucinous cystadenocarcinoma
Mucinous cystadenocarcoma
Mucinous cystadenoma
Mucoepidermoid cancer
Mucoepidermoid carcinoma
Mucoid cell adenocarcinoma
Multiple myeloma
Myelogenous leukemia
Myeloid leukemia
Myeloleukemia
Myeloma
Myelomonocytic leukemia
Myeloproliferative disease
Myeloproliferative disorder
Myeloproliferative syndrome
Myelosis
Myoliposarcoma
Myoma
Myxofibrosarcoma
Myxoliposarcoma
Myxopapillary ependymoma
Myxosarcoma
Neoplasm
Neoplastic disease
Nephroblastoma
Nephroma
Neurilemmoma
Neurilemmosarcoma
Neuroblastoma
Neurofibromatosis
Neurofibrosarcoma
Neurogenic sarcoma
Nodular lymphcytic leukemia
Nodular lymphoma
Non Hodgkins lymphoma
Non oat cell carcinoma
Non small cell carcinoma
Oat cell cancer
Oat cell carcinoma
Oligodendroblastoma
Oligodendroglioma
Orchioblastoma
Osteochondrosarcoma
Osteofibrosarcoma
Osteogenic sarcoma
Osteosarcoma
Pancoast syndrome
Pancoast tumor
Pancoasts syndrome

Pancoasts tumor
Papillary adenocarcinoma
Papillary cancer
Papillary carcinoma
Papillary ependymoma
Papillary serous adenocarcinoma
Papillary serous cystadenocarcinoma
Papillary transitional (cell) carcinoma
Pheochromoblastoma
Pheochromocytoma
Pinealoblastoma
Pinealoma
Pineoblastoma
Pineocytoma
Plasma cell leukemia
Plasma cell myeloma
Plasmacytic myeloma
Plasmacytoma
Polycythemia
Polycythemia rubra vera
Polycythemia vera
Polyp
Polyposis
Promyelocytic leukemia
Pseudofollicular leukemia
Pseudomucinous adenocarcinoma
Pseudomucinous cancer
Pseudomucinous carcinoma
Pseudomucinous cystadenocarcinoma
Recklinghausens disease
Renal cell adenocarcinoma
Renal cell cancer
Renal cell carcinoma
Reticularproliferative disease
Reticuloendothelial tumor
Reticulum cell sarcoma
Retinoblastoma
Rhabdomyosarcoma
Rhabdosarcoma
Round cell cancer
Round cell carcinoma
Sarcoma
Sarcomatosis
Schilling type monocytic leukemia
Schwannoma
Scirrhous carcinoma
Seminoma
Serous adenocarcinoma
Serous adenofibroma
Serous cystadenocarcinoma
Signet cell adenocarcinoma
Sipples syndrome
Small cell cancer
Small cell carcinoma
Small cell lymphoma
Spindle cell cancer
Spindle cell carcinoma
Squamous cancer
Squamous carcinoma
Squamous cell cancer
Squamous cell carcinoma
Stem cell leukemia
Subependymoma
Subleukemic leukemia
Synovial sarcoma
T cell leukemia
T cell lymphoma
Teratoma
Theca cell cancer
Theca cell carcinoma
Thecoma
Thrombocythemia
Thrombocytic leukemia
Thymoma
Transitional (cell) cancer
Transitional (cell) carcinoma
Transitional cell tumor
Tumor
Vaguez disease
Vaguez Osler disease
Vernet Morrison syndrome
Verrucous carcinoma
Villous adenocarcinoma
Villous adenoma
Von Recklinghausens disease
Von Recklinghausens tumor
WDHA syndrome
Wilms tumor

6) <u>Unlikely underlying causes</u>. Include an edit that flags the following as unlikely (nonspecific) underlying causes of death if reported on the lowest used line. The causes include:

Unknown
Prematurity
Immaturity
Low birth weight
Intrauterine hypoxia

The flagged causes would generate either a generic message similar to the message for the first automatic query but giving the certifier more leeway in reporting these conditions. The message to the certifier is: **The condition you reported on 18a ("Prematurity") usually develops as a complication of another more specific condition. Was there a specific initiating condition in this case? If so, please report it in 18a.** *The appropriate term should be used where Prematurity is shown as an example.*

STATE FILE CONSIDERATIONS:

The outputs from the EFDR must allow manual coding now but be flexible for interfacing with future NCHS produced software for processing cause-of-death data. For the manual coders, they need to be able to know what was originally reported on the fetal death report and how it was reported.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
COD18a1	1	Alpha character string	Y,N
COD18a2	1	Alpha character string	Y,N
COD18a3	1	Alpha character string	Y,N
COD18a4	1	Alpha character string	Y,N
COD18a5	1	Alpha character string	Y,N
COD18a6	1	Alpha character string	Y,N
COD18a7	1	Alpha character string	Y,N
COD18a8	60	Alpha character string	Literal, blank
COD18a9	60	Alpha character string	Literal, blank
COD18a10	60	Alpha character string	Literal, blank
COD18a11	60	Alpha character string	Literal, blank
COD18a12	60	Alpha character string	Literal, blank
COD18a13	60	Alpha character string	Literal, blank
COD18a14	60	Alpha character string	Literal, blank
COD18b1	1	Alpha character string	Y,N
COD18b2	1	Alpha character string	Y,N
COD18b3	1	Alpha character string	Y,N
COD18b4	1	Alpha character string	Y,N
COD18b5	1	Alpha character string	Y,N
COD18b6	1	Alpha character string	Y,N
COD18b7	1	Alpha character string	Y,N
COD18b8	240	Alpha character string	Literal, blank
COD18b9	240	Alpha character string	Literal, blank
COD18b10	240	Alpha character string	Literal, blank
COD18b11	240	Alpha character string	Literal, blank
COD18b12	240	Alpha character string	Literal, blank
COD18b13	240	Alpha character string	Literal, blank
COD18b14	240	Alpha character string	Literal, blank

EDI TRANSMISSION:

Item Title: **WEIGHT OF FETUS**

Item Number: **18c Report, 25 Facility worksheet**

Description: The weight of the fetus at delivery.

Source of Information:

Preferred Source: Delivery record, Admission assessment

INSTRUCTIONS

FOR A PAPER RECORD:

Wherever possible, weigh and report the fetal weight in grams. Report weight in pounds and ounces (lb/oz) only if weight in grams is not available.
DO NOT convert weight from lb/oz to grams.
Please specify whether grams or lb/oz are used.
If the fetal weight is not known, print or type "unknown" in the space.

WEIGHT OF FETUS (grams preferred, specify unit)

_____
□ grams □ lb/oz

FOR AN ELECTRONIC RECORD:

EFDR Developer: *(Instructions are in italics).*

The weight of the fetus is to be entered in the units in which it is measured (preferably grams). Hospital staff should not convert from lbs/oz to grams.

The following instruction should appear when the fetal weight item is to be completed.

Please check one box below.
Note: hospitals which only use one unit to measure fetal weight may choose to preset their systems to either grams or pounds and ounces. For hospitals which do so, the following two check boxes need not appear.

- ❑ Weight of fetus is measured in grams
- ❑ Weight of fetus is measured in pounds and ounces

When the box for grams is checked, the following appears:

Weight of fetus_____grams.

When the pounds and ounces box is checked, the following appears:

Weight of fetus _____lbs. _____ozs.

The following instruction should appear in the help menu:

Unknown fetal weight: If the weight of the fetus is not known, check the grams box and enter 9999, or the pounds and ounces box and enter 99, 99. States may elect to use a "hot key" or other symbols (e.g., "?") for unknowns. These will be converted to numeric values of 9999 or 99, 99.

If unknown values are entered the following message will appear:

Please obtain the records needed to complete this item. The item will appear on the final review screen.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FWG	Fetus's weight	0000-9998	Fetal weight in grams
		9999	Unknown
FWP	Fetus's weight	00-20	Fetal weight pounds
FWO	Fetus's weight	00-15	Fetal weight ounces
		99	Fetal weight pounds
		99	Fetal weight ounces
FW_BYPASS	Bypass flag	0	OFF
		1	Queried data correct, but out of range
		2	Queried, failed fetal weight/gestation edit.

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Fetal weights in pounds and ounces are converted to grams and assigned to the FWG field for editing and tabulation purposes. (Do not convert unknown (99, 99) values for pounds and ounces.)
The conversion algorithm is:

*FWG= ((FWP*16) + FWO)*28.35*

Round the result as follows: If the result is not a whole number and the fraction is 0.5 or greater, round to the next higher whole gram. If the fraction is <0.5, round to the lower whole gram.

The item must have a value of 0000-9999.

If 9999 is entered the following message appears:

Please obtain the records to complete this item. The item will appear on the final review screen.

If fetal weight is ≤227 or ≥ 8165 but not 9999, the following message should appear:

The weight of the fetus is _____grams.

Please check the box or enter a new weight.

- ❑ Weight is correct

Fetal weight is _____ grams.

If the "Fetal weight correct"box is checked the BW_BYPASS variable is set to ON-1.

If a new fetal weight is entered the edit is rerun. If the edit fails, the FW_BYPASS variable is set to ON-1. If the edit passes, the FW_BYPASS variable is set to OFF-0.

FETAL WEIGHT/GESTATION CONSISTENCY CHECK
The following edit is done if: the FW_BYPASS flag is 0, the fetal weight value is not 9999, and the C_GESTM (calculated months of gestation, see item "Date Last Normal Menses Began) is 4-11:

If C_GESTM is <5 and plurality is any valid value, FW <1,000 grams
If C_GESTM is 5 and plurality is any valid value, FW < 2,000 grams
If C_GESTM is 6 and plurality is any valid value, FW< 3,000 grams
If C_GESTM is 7 and plurality is any valid value, FW <4,000 grams
If C_GESTM is equal to or >8 and plurality is value 1, FW ≥1,000 grams.

The following edit is done if: the FW_BYPASS flag is 0, the fetal weight value is not 9999, the C_GESTM is not 4-11 (values 99 or 88), the OWGEST (obstetric estimate of gestation in weeks, see item "Obstetric Estimate of Gestation") is 17-47, and the OWGEST_BYPASS is 0:

If OWGEST is <20 and plurality is any valid value, FW <1,000 grams
If OWGEST is 20-23 and plurality is any valid value, FW < 2,000 grams
If OWGEST is 24-27 and plurality is any valid value, FW< 3,000 grams

If OWGEST is 28-31 and plurality is any valid value, FW <4,000 grams
IF OWGEST is 32-47 and plurality is value 1, FW ≥1,000 grams.

If these edits fail, an error message appears that reads:

The record indicates that the fetus has a gestation of _____months/weeks and a fetal weight of _____grams.

Please check the correct box or enter a new fetal weight.

- ❑ Fetal weight correct

Fetal weight_____ grams

If the "Fetal weight correct" box is checked, the FW_BYPASS flag is set to ON-2

If a new fetal weight is entered, the edit is rerun. If the edit fails, the FW_BYPASS variable is set to ON-2. If the edit passes, the FW_BYPASS variable is set to OFF-0.

PAPER RECORD

Records filed with the fetal weight blank should be queried. If no response to query, assign 9999 to the fetal weight grams variable.

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

STATE FILE CONSIDERATIONS

States may want to keep all the processing variables.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
FWG	4	Numeric	0000-9999
FW_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **OBSTETRIC ESTIMATION OF GESTATION AT DELIVERY**

Item Number: **18d Report, 26 Facility worksheet**

Description: The obstetric estimate of the infant's gestation in completed weeks based on the delivery attendant's final estimate of gestation which should be determined by all perinatal factors and assessments such as ultrasound, but not the neonatal exam

Source of Information:

Preferred Source: OB Admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

Please enter the obstetric estimate of the fetus's gestation.
If the obstetric estimate of gestation is not known, print or type "unknown" in the space.
Do not complete this item based on the fetus's date of delivery and the patient's date of LMP.

OBSTETRIC ESTIMATE OF GESTATION AT DELIVERY:
_____ (completed weeks)

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The obstetric estimate of the fetus's gestation is to be entered in completed weeks.

Obstetric estimate of gestation _____completed weeks.

The following instruction should appear in the help menu.

Unknown Obstetric Estimate of Gestation: If the obstetric estimate of the fetus's gestation is not known, enter 99. Do not complete this item based on the fetus's date of delivery and the patient's date of LMP.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
OWGEST	Obstetric estimate of gestation	00-98 99	Gestation in weeks Unknown
OWGEST_BYPASS	Bypass flag	0 1	OFF Queried data correct, but out of range

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

The item must have a value in the range 00-99.

If 99 is entered, the following message shall appear:

Please obtain the records needed to complete this item. The item will appear on the final review screen.

If gestation is <17 or >47 but not 99, the following message should appear:

The obstetric estimate of the fetus's gestation is _____weeks.

Please check "Correct" or enter a new gestation.

- ❑ **Correct**

Gestation is _____ weeks.

If "Correct" is checked the OWGEST_BYPASS variable is set to ON-1.

If a new gestation is entered the edit is rerun. If the edit fails, the OWGEST_BYPASS variable is set to ON-1. If the edit passes, the OWGEST_BYPASS variable is set to OFF-0.

PAPER RECORD

Records filed with the "Obstetric estimate of gestation at delivery" blank should be queried. If no response to query, enter 99.

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
OWGEST	2	Numeric	00-98,99
OWGEST_BYPASS	1	Numeric	0,1

EDI TRANSMISSION:

No standards set yet.

Item Titles: **ESTIMATED TIME OF FETAL DEATH**

Item Number: **18e Report; 38 Facility Worksheet**

Description: Item to indicate when the fetus died with respect to labor and assessment.

Source of Information:

Preferred Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician, Medical Examiner, or Coroner

Check the most appropriate box in item 18e. Estimated time of fetal death.

- ☐ Dead at time of first assessment, no labor ongoing
- ☐ Dead at time of first assessment, labor ongoing
- ☐ Died during labor, after first assessment
- ☐ Unknown time of fetal death

FOR AN ELECTRONIC RECORD:

EFDR Developer

Select the most appropriate box from the list for item 18e.

Estimated time of fetal death.

- ☐ **Dead at time of first assessment, no labor ongoing**
- ☐ **Dead at time of first assessment, labor ongoing**
- ☐ **Died during labor, after first assessment**
- ☐ **Unknown time of fetal death**

After a selection is made, go to the next item.

PROCESSING VARIABLES

NAME	DESCRIPTION	VALUES	DEFINITION
ETIME	Estimated time of fetal death	N	At assessment, no labor
		L	At assessment, labor
		A	Labor, no assessment
		U	Unknown

EDITS:

ELECTRONIC RECORDS

Before the record is transmitted to the State

Electronic record for item 18e must contain one of the valid responses. They cannot be left blank. If items are left blank and certifier tries to move to the next item, a screen will appear asking that the item be completed at this time. Record cannot be printed or filed until this is complete.

PAPER RECORDS

Records filed with this field blank are queried. If no response to query, assign the "Unknown" code to 18e.

State edits of data file prior to NCHS transmission

STATE FILE CONSIDERATIONS

No special considerations.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
ETIME	1	Alpha character string	N,L,A,U

EDI TRANSMISSION:

No standards set yet.

Item Titles: **WAS AN AUTOPSY PERFORMED?**

WAS A HISTOLOGICAL PLACENTAL EXAMINATION PERFORMED?

WERE AUTOPSY OR HISTOLOGICAL PLACENTAL EXAMINATION RESULTS USED IN DETERMINING THE CAUSE OF FETAL DEATH?

Item Number: **18f Report; 35 Facility Worksheet**
18g Report; 36 Facility Worksheet
18h Report; 37 Facility Worksheet

Description: Information on whether or not an autopsy or histological placental examination was performed and if the findings of the autopsy or histological placental examination were used in completing the medical portion of the fetal death report.

Source of Information:

Preferred Source: Certifying Physician, Medical Examiner, or Coroner

INSTRUCTIONS

FOR A PAPER RECORD:

Certifying Physician, Medical Examiner, or Coroner

Check the appropriate box in item 18f. Was an autopsy performed?

- ☐ Yes
- ☐ No
- ☐ Planned

Select "Yes" if a partial or complete autopsy was performed.

Check the appropriate box in item 18g. Was a histological placental examination performed?

- ☐ Yes
- ☐ No
- ☐ Planned

Select "Yes" if any histological placental examination was performed.

If no is checked for both 18f and 18g, leave item 18h blank.

If yes is checked for either 18f or 18g, complete item 18h (Were autopsy or histological placental examination results used in determining the cause of fetal death?)

- ☐ Yes
- ☐ No

FOR AN ELECTRONIC RECORD:

EFDR Developer

Selection of "Yes" or "No" to be made from list.

Was an autopsy performed?

- ☐ **Yes**
- ☐ **No**
- ☐ **Planned**

Instructions for help screen on this item

Select "Yes" if a partial or complete autopsy was performed.

Selection of "Yes" or "No" to be made from list.

Was a histological placental examination performed?

- ☐ **Yes**
- ☐ **No**
- ☐ **Planned**

Instructions for help screen on this item

Select "Yes" if a partial or complete histological placental examination was performed.

If the response is no to both 18f and 18g, the next item will be skipped and the code for "Not applicable" automatically entered in the data field for item 18h.

If the response is yes to 18f or 18g, the yes/no list for item 18h appears:

Were the results of the autopsy or histological placental examination results used in determining the cause of fetal death?

- ☐ **Yes**
- ☐ **No**

After a selection is made, go to the next item.

PROCESSING VARIABLES

NAME	DESCRIPTION	VALUES	DEFINITION
AUTOP	Autopsy performed?	Y	Yes
		N	No
		P	Planned
HISTOP	Histological placental Examination performed?	Y	Yes
		N	No
		P	Planned
AUTOPF	Autopsy or histological results Used?	Y	Yes
		N	No
		X	Not applicable

EDITS:

ELECTRONIC RECORDS

Before the record is transmitted to the State

Electronic record for item 18f and 18g must contain one of the valid responses (yes or no). They cannot be left blank. If items are left blank and certifier tries to move to the next item, a screen will appear asking that the item be completed at this time. Record cannot be printed or filed until this is complete. If the response to item 18f or 18g is "no," item 18h will be coded to "Not applicable."

If response to item 18f or 18g is yes, then item 18h must have a valid response (yes or no). It cannot be left blank. If certifier tries to move to the next item, a screen will appear that indicates an autopsy had been performed and asks that a response be chosen from the menu.

- *If item 18f and 18g are N, item 18h must be X.*
- *If item 18f or 18g is Y, item 18h must be Y or N.*
- *Items 18f, 18g, and 18h cannot be blank.*

PAPER RECORDS

Records filed with this field blank are queried. If no response to query, assign the "No" code to 18f and 18g and the "Not applicable" code to item 18h.

State edits of data file prior to NCHS transmission

STATE FILE CONSIDERATIONS

No special considerations.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
AUTOP	1	Alpha character string	Y, N, P
HISTOP	1	Alpha character string	Y, N, P
AUTOPF	1	Alpha character string	Y, N, X

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER/PATIENT'S EDUCATION**

Item Number: **19 Report; 8 Mother/patient's worksheet**

Description: The highest degree or level of schooling completed by the mother/patient at the time of this delivery

Source of Information:

Preferred Source: Mother/patient or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

Based on the patient's response to the worksheet or interview, check the appropriate box on the Report. If the patient leaves the item blank on the worksheet and she is still in the facility, query. If the patient has left the facility write "Unknown" in the space.

PATIENT'S EDUCATION
(Check the box that best describes the highest degree or level of school completed at the time of delivery)

- □ 8^{th} grade or less
- □ 9^{th}-12^{th} grade; no diploma
- □ High school graduate or GED completed
- □ Some college credit, but not a degree
- □ Associate degree (e.g. AA, AS)
- □ Bachelor's degree (e.g. BA, AB, BS)
- □ Master's degree (e.g. MA, MS, MEng, MEd, MSW,MBA)
- □ Doctorate (e.g. PhD, EdD) or Professional degree (e.g. MD, DDS, DVM, LLB, JD)

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

Patient's education level is chosen from the list below and the instructions should appear when the item is to be completed.

Patient's Education

Based on the patient's response to the worksheet or interview, check the category that best describes the highest degree or level of school completed.

- □ 8th grade or less
- □ 9th-12th grade; no diploma
- □ High school graduate or GED completed
- □ Some college credit, but not a degree
- □ Associate degree (e.g. AA, AS)
- □ Bachelor's degree (e.g. BA, AB, BS)
- □ Master's degree (e.g. MA, MS, MEng, MEd, MSW, MBA)
- □ Doctorate (e.g. PhD, EdD) or Professional degree (e.g. MD, DDS, DVM, LLB, JD)
- □ Unknown

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MEDUC		1	8th grade or less
		2	9th through 12th grade; no diploma
		3	High school graduate or GED completed
		4	Some college credit, but not a degree
		5	Associate degree (e.g., AA, AS)
		6	Bachelor's degree (e.g., BA, AB, BS)
		7	Master's degree (e.g., MA, MS, MEng, Med, MSW, MBA)

	8	Doctorate degree (e.g., PhD, EdD) or professional degree (e.g., MD, DDS, DVM, LLB, JD)
	9	Unknown
MEDUC_BYPASS	0	OFF (default value, edit passed)
	1	ON (edit failed, data queried and verified)
	2	ON (edit failed, data queried and not verified)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If the "Unknown" box is checked the following message should appear:

If the patient is still in the facility, please obtain her education level. If the patient has left the facility, please check the box below.

- ☐ **Patient has left the facility**

If the box is checked the item is not pended and will not appear on the final review screen.

At the time of input to an EFDR or electronic work sheet, Patient's date of birth will have been entered and edited. Patient's age at the time the worksheet is completed will be calculated and stored as a variable for the purposes of this edit.

If age/education edit indicates a discrepancy, the education information needs to be reviewed.

Valid codes 1-9 (See processing variables for detail)

Values	**Minimum Age**
1	None
2	9
3	16
4	17
5	18
6	20
7	21
8	23
9	None

SAMPLE ERROR MESSAGE AND QUERY SCREENS

The data entered in the electronic Report indicates an unlikely level of education for the patient at her age.

Patient's education level is: _____

Please check one of the boxes below.

- ❑ Incorrect
- ❑ Correct
- ❑ Not able to verify

If the correct box is checked, the following message and query appears:

Patient's date of birth as entered is _____

Please check one of the boxes below.

- ❑ Incorrect
- ❑ Correct
- ❑ Not able to verify

If the "Correct" button for both education and age is checked, the bypass flag is set to ON-1.

If the "Not able to verify" button is checked, the bypass flag is set to ON-2.

If the "Incorrect" button is selected for education, the education selection screen appears.
The message asks that an education level be selected. If the edit fails, the bypass flag is set to ON-1. If the edit passes, reset bypass flag to OFF-0.

If the "Incorrect" button is selected for patient's date of birth, the patient's date of birth screen appears. Please enter the correct date of birth

Month of patient's birth ___ ___

Day of patient's birth ___ ___

Year of patient's birth ___ ___ ___ ___

If the edit fails, the bypass flag is set to ON-1. If the edits passes, reset the bypass flag to OFF-0

PAPER RECORD

The same edits are run on data entered through the State system. The initial edit will catch only keying errors. If the edit fails, a message appears indicating a discrepancy between age and education. The keyer is asked to re-enter the data. If the edit passes, the bypass flag is set to OFF-0. If the data still fail, the edit the bypass flag is set to ON-2.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
MEDUC	1	Numeric	1, 2, 3, 4, 5, 6, 7, 8, 9
MEDUC_BYPASS	1	Numeric	0, 1, 2,

EDI TRANSMISSION:
No standards set yet.

Item Title: **MOTHER/PATIENT OF HISPANIC ORIGIN?**

Item Number: **20 Report, 9 Mother/patient's worksheet**

Description: The Hispanic origin of the mother/patient.

Source of Information:

Preferred Source: Mother/patient or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

Based on the patient's response to the worksheet or the interview, select all the corresponding checkboxes on the Report and fill in any literal (written) responses. If patient has chosen more than one response, check all that she selected; for example, if both Mexican and Cuban are checked, select both responses. If the patient indicates an ethnic origin not on the list, record it in the "Specify" space. Enter the patient's response in this space even if it is not a Hispanic origin. If the patient did not respond, type or print "Unknown."

PATIENT OF HISPANIC ORIGIN? (Check the box that best describes whether the patient is Spanish/Hispanic/Latina. Check the "No" box if patient is not Spanish/Hispanic/Latina)

- □ No, not Spanish/Hispanic/Latina
- □ Yes, Mexican, Mexican American, Chicana
- □ Yes, Puerto Rican
- □ Yes, Cuban
- □ Yes, Other Spanish/Hispanic/Latina
  (Specify)_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

Hispanic origin will be selected from a menu list (below). The instructions should appear with the menu list.

Based on the patient's response, select all the corresponding boxes from the menu below and fill in any literal responses exactly as written on the worksheet regardless of whether or not any checkboxes are marked. If the

patient has chosen more than one response, check all that she has selected; for example, if both Mexican and Cuban are checked, select both responses. If the patient indicates an ethnic origin not on the list, record it in the "Specify" space. Enter the patient's response in this space even if it is not a Hispanic origin. If the patient did not respond, check "Unknown if Spanish/Hispanic/Latina."

PATIENT OF HISPANIC ORIGIN?

- □ No, not Spanish/Hispanic/Latina
- □ Yes, Mexican, Mexican American, Chicana
- □ Yes, Puerto Rican
- □ Yes, Cuban
- □ Yes, Other Spanish/Hispanic/Latina (e.g. Spaniard, Salvadoran, Columbian) (Specify)_____
- □ Unknown if Spanish/Hispanic/Latina

If the "Yes, Other Spanish/Hispanic/Latina" button is selected, the following message will appear:

Please enter the specified "other Hispanic origin."

Other:_____

States may give examples of the largest "other Hispanic origin" groups for that State.

Because more than one ethnicity may be reported, there should be a separate field for each of the 4 categories plus a 20-character field in which to enter the "other (specify)" response.

When the "No, not Spanish/Hispanic/Latina" response is chosen, each of the Hispanic origin fields will be automatically coded with the "No, not Hispanic" code. When the keyer moves to another item and at least one Hispanic category is selected, all the Hispanic selections that were not chosen will be automatically coded with the "No, not Hispanic" code.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
METHNIC1	Mexican, Mexican American or Chicana	N H U	No, not Mexican Yes, Mexican Unknown

METHNIC2	Puerto Rican	N	No, not Puerto Rican
		H	Yes, Puerto Rican
		U	Unknown
METHNIC3	Cuban	N	No, not Cuban
		H	Yes, Cuban
		U	Unknown
METHNIC4	Other	N	No, not Other Hisp
		H	Yes, Other Hisp
		U	Unknown
METHNIC5	Other literal entry	literal	
		(blank)	

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

*Electronic record must contain one or more valid responses indicated above. If not, a query message appears before the record can be printed or filed. A replica of the entry screen appears and indicates that one of the categories below must be selected. If states elect to use a missing value variable (*_MVR) for this item, it must have a valid missing value code when the ethnicity values are coded to "unknown."*

*If the "Unknown if Spanish/Hispanic/Latina origin" box is checked, assign the value "S" to the ***_MVR variable and "U" to all other variables*
Any of the Hispanic variables may have an H code. If the patient is not Hispanic, all codes must be N's. If the response is "Unknown," all coded fields must contain a U and the literal field blank.

PAPER RECORD

Records filed with no entry are queried. If no response to query, code to "Unknown."

State edits of data file prior to NCHS transmission

Records with more than one category of Hispanic checked will be transmitted with all codes to NCHS.

All "other (specify)" literals will be reviewed to see if they are of Hispanic origin (see Appendix D). If the literal is in the Appendix and of Hispanic origin, the value of the variable, METHNIC4, will be set to "H," Hispanic origin. If not, it will be set to "N," not Hispanic origin.

Must be valid codes (see above).

STATE FILE CONSIDERATIONS

States opting to electronically code any of the "other (specify)" responses to the Hispanic origin question might want to consider using the HISSB standard coding structure for ethnicity. A field would have to be added to record these codes, and the codes then collapsed into the DVS/NCHS structure for transmission.

Because of the possibility of "Unknown," responses, a missing value variable is recommended to keep track of these responses for intervention, or for follow-up training. All these codes will result in an "Unknown" code for each of the ethnicity fields. The recommended variable name is METHNIC_MVR.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
METHNIC1	1	Alpha character string	N, H, U
METHNIC2	1	Alpha character string	N, H, U
METHNIC3	1	Alpha character string	N, H, U
METHNIC4	1	Alpha character string	N, H, U
METHNIC5	20	Alpha character string	literal, blank

EDI TRANSMISSION:

No standards set yet.

As a coding service, NCHS can provide the coded Hispanic Origin literals. See Appendix D for current codes.

Item Title: **MOTHER/PATIENT'S RACE**

Item Number: **21 Report, 10 mother/patient's worksheet**

Description: The race(s) that best describes what the mother/patient considers herself to be.

Source of Information:

Preferred Source: The mother/patient

INSTRUCTIONS

PAPER RECORD

Based on the patient's response to the worksheet or interview, select all the corresponding checkboxes on the Report and fill in any literal (written) responses exactly as given regardless of whether or not any checkboxes are marked. If more than one response has been chosen, check all selected; for example, if both "Black" and "Chinese" are checked, select both responses. If there is no response, type or print "Unknown."

PATIENT'S RACE (Check one or more races to indicate what the patient considers herself to be)

- ❑ White
- ❑ Black or African American
- ❑ American Indian or Alaska Native
  (Name of the enrolled or principal tribe)_____
- ❑ Asian Indian
- ❑ Chinese
- ❑ Filipino
- ❑ Japanese
- ❑ Korean
- ❑ Vietnamese
- ❑ Other Asian (Specify)_____
- ❑ Native Hawaiian
- ❑ Guamanian or Chamorro
- ❑ Samoan
- ❑ Other Pacific Islander (Specify)_____
- ❑ Other (Specify)_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The item is completed by selecting one or more races from the menu and/or completing any literal responses. The instructions should appear when the item is to be completed.

> **Based on the patient's response, select all the corresponding boxes from the menu below and fill in any literal responses exactly as written on the worksheet regardless of whether or not any checkboxes are marked. If more than one race has been chosen, check all selected; for example, if both "Black" and "Chinese" are marked, select both responses. If there is no response, check "Unknown."**

Menu

PATIENT'S RACE

- ☐ White
- ☐ Black or African American
- ❑ American Indian or Alaska Native
  Tribe(s)_____
  _____
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ❑ Other Asian
  Specify_____
  _____
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ❑ Other Pacific Islander
  Specify_____
  _____
- ❑ Other
  Specify_____
  _____
- ☐ Unknown

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MRACE1	White checkbox	Y N	Box for race checked Box for race not checked
MRACE2	Black or African American checkbox	Y N	Box for race checked Box for race not checked
MRACE3	American Indian or Alaska Native checkbox	Y N	Box for race checked Box for race not checked
MRACE4	Asian Indian checkbox	Y N	Box for race checked Box for race not checked
MRACE5	Chinese checkbox	Y N	Box for race checked Box for race not checked
MRACE6	Filipino checkbox	Y N	Box for race checked Box for race not checked
MRACE7	Japanese checkbox	Y N	Box for race checked Box for race not checked
MRACE8	Korean checkbox	Y N	Box for race checked Box for race not checked
MRACE9	Vietnamese checkbox	Y N	Box for race checked Box for race not checked
MRACE10	Other Asian checkbox	Y N	Box for race checked Box for race not checked
MRACE 11	Native Hawaiian checkbox	Y N	Box for race checked Box for race not checked
MRACE 12	Guamanian or Chamorro checkbox	Y N	Box for race checked Box for race not checked
MRACE 13	Samoan checkbox	Y N	Box for race checked Box for race not checked
MRACE14	Other Pacific Islander checkbox	Y N	Box for race checked Box for race not checked

MRACE15	Other checkbox	Y N		Box for race checked Box for race not checked
MRACE16	First American Indian or Alaska Native literal		Literal responses, blank	
MRACE17	Second American Indian or Alaska Native literal		Literal responses, blank	
MRACE18	First Other Asian literal		Literal responses, blank	
MRACE19	Second Other Asian literal		Literal responses, blank	
MRACE20	First Other Pacific Islander literal		Literal responses, blank	
MRACE21	Second Other Pacific Islander literal		Literal responses, blank	
MRACE22	First Other literal		Literal responses, blank	
MRACE23	Second Other literal		Literal responses, blank	

EDITS:

Before the record is transmitted to the State

ELECTRONIC RECORD

An entry must be made before another entry field can appear. If the keyer tries to move to another item, a message should appear asking that the Race of the Patient be completed. If the" unknown" box is checked, no other boxes checked and there are no literal entries, each race checkbox variable is assigned the "N" code, and all literals are filled with Ns.

Record cannot be filed or printed unless at least one box is checked.

If the "Unknown," box is checked, and one or more specific race items are checked, ignore the "Unknown."

When a specific race box is selected (checked), the value Y is assigned to that variable.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the "N" code.

If the response is "Unknown," all fields must contain N.

STATE FILE CONSIDERATIONS

After the record is transmitted to NCHS, the responses on the race item are processed through the coding and editing algorithms developed and operated by NCHS. The coding algorithm assigns a three-digit code to each race processing-variable with an initial positive response, either directly for check-box races or through a table lookup using a table developed and maintained by NCHS. * If the race is not found in the table, the code for "other" is assigned. NCHS has also developed an imputation procedure for use when race is unknown.

Initial responses on the standard certificate race format are handled with 15 single-digit fields for check-boxes (MRACE1-MRACE15) and up to eight 30 character fields for literal entries, two for each of the four write-in lines (MRACE16-MRACE23). Three-digit codes assigned by the coding algorithm to the literal positive responses are stored in MRACE16C-MRACE23C.

The set of three-digit codes assigned to the initial race responses are run through an edit and reduction algorithm consistent with the basic year 2000 census edits, also developed and operated by NCHS. This algorithm eliminates redundant responses and adjusts inconsistent responses to determine the best set of codes for the responses. If a Hispanic response is entered in the "Other" field, an allocation of race is made at the same time that the edit and reduction algorithm is run.

Output from the edit and reduction algorithm includes up to eight possible race codes stored in variables MRACE1E thru MRACE8E. These eight race output variables are the ones to be used for tabulation purposes. All the processing variables as initially recorded including all the literal entries are to be transmitted to NCHS along with the eight assigned codes for tabulation. To save States from the effort of duplicating this complicated process, NCHS will return the edited race codes to the States.

States may, of course, elect to code these data internally. However, only uncoded data will be transmitted to NCHS to assure that these data are processed in a comparable fashion.

* At some point in the future, the transmission of data from the States to NCHS and back again will be done using "HL7-version 3" standard messaging with XML technology. Once XML messaging is established, States will convert data from their databases into XML messages with NEDSS codes and/or literals for transmission to NCHS. It is important to note, however, that until HL7/XML messaging is established, NCHS will continue to use the 3-digit format outlined above for transmission.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
MRACE1	1	Alpha character string	Y, N
MRACE2	1	Alpha character string	Y, N
MRACE3	1	Alpha character string	Y, N
MRACE4	1	Alpha character string	Y, N
MRACE5	1	Alpha character string	Y, N
MRACE6	1	Alpha character string	Y, N
MRACE7	1	Alpha character string	Y, N
MRACE8	1	Alpha character string	Y, N
MRACE9	1	Alpha character string	Y, N
MRACE10	1	Alpha character string	Y, N
MRACE11	1	Alpha character string	Y, N
MRACE12	1	Alpha character string	Y, N
MRACE13	1	Alpha character string	Y, N
MRACE14	1	Alpha character string	Y, N
MRACE15	1	Alpha character string	Y, N
MRACE16	30	Alpha character string	Literal, blank
MRACE17	30	Alpha character string	Literal, blank
MRACE18	30	Alpha character string	Literal, blank
MRACE19	30	Alpha character string	Literal, blank
MRACE20	30	Alpha character string	Literal, blank
MRACE21	30	Alpha character string	Literal, blank
MRACE22	30	Alpha character string	Literal, blank
MRACE23	30	Alpha character string	Literal, blank

TO BE PRODUCED BY THE NCHS EDITING ALGORITHM

MRACE1E	3	Alpha-numeric character string	Appendix E
MRACE2E	3	Alpha-numeric character string	Appendix E
MRACE3E	3	Alpha-numeric character string	Appendix E
MRACE4E	3	Alpha-numeric character string	Appendix E
MRACE5E	3	Alpha-numeric character string	Appendix E
MRACE6E	3	Alpha-numeric character string	Appendix E
MRACE7E	3	Alpha-numeric character string	Appendix E
MRACE8E	3	Alpha-numeric character string	Appendix E

TO BE PRODUCED BY THE NCHS CODING ALGORITHM

MRACE16C	3	Alpha-numeric character string	Appendix E
MRACE17C	3	Alpha-numeric character string	Appendix E
MRACE18C	3	Alpha-numeric character string	Appendix E
MRACE19C	3	Alpha-numeric character string	Appendix E
MRACE20C	3	Alpha-numeric character string	Appendix E

MRACE21C	3	Alpha-numeric character string	Appendix E
MRACE22C	3	Alpha-numeric character string	Appendix E
MRACE23C	3	Alpha-numeric character string	Appendix E

EDI TRANSMISSION: No standards set yet.

Item Title: **MOTHER/PATIENT MARRIED?**

Item Number: **22 Report; 11, 13 Mother/patient's worksheet**

Description: The marital status of the mother/patient at delivery, conception or any time in between.

Source of Information:

Preferred Source: Mother/patient
Other Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

If the patient is currently married or married at the time of conception or any time between conception and delivery, check the "Yes" box.

If the patient is not currently married or was not married at the time of conception or any time between conception and delivery, check the "No" box.

PATIENT MARRIED? (At delivery, conception, or any time between)
□ Yes □ No

FOR AN ELECTRONIC RECORD:

EFDR developer: *(Instructions are in italics)*

There are two questions required by this item:

A. Has the patient ever been married?

- Yes
- No
- Unknown at this time

If the "Yes" box is checked, the screen for the patient's name prior to first marriage is shown. (See item 10c). Once this is completed, question B appears.
If the "No" box is checked, B is skipped and question 12a (father's legal name) appears (if allowable under State law).

If the "Unknown at this time" box is checked, all variables are assigned the "unknown" code, question B is skipped and the following message will appear:

Please contact the patient, if she is still in the facility, to obtain this information. The item will appear on the final review screen.

B. Was the patient married at the time she conceived this child, at the time of delivery, or at any time between conception and delivery?

- ❑ Yes
- ❑ No

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
MARE	Patient ever married	Y	Yes
		N	No
		U	Unknown
MARN	Patient married at conception, at delivery or any time in between	Y	Yes
		N	No
		U	Unknown

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Each variable must have a response.

If the variable MARE has value "N", the value "N" is assigned to variable MARN.

PAPER RECORD

Records filed with the "Patient married" item blank should be queried. If no response to query, assign the "unknown" code to all variables.

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

STATE FILE CONSIDERATIONS

None.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
MARE	1	Alpha character string	Y, N, U
MARN	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet.

Item Title: **DATES OF FIRST AND LAST PRENATAL CARE VISIT**

Item Number: **23a Report, 6a Facility worksheet**
23b Report, 6b Facility worksheet

Description: Date that the mother/patient had her first prenatal care visit.

Date that the mother/patient had her last prenatal care visit.

Source of Information:

Preferred Source: Prenatal care record
Other Source: Initial physical exam

INSTRUCTIONS

If the information is not in the patient's file, please contact the prenatal care provider and obtain a copy of the prenatal care record.

DATA COLLECTION:

The following paragraph appears on the paper worksheet provided by NCHS before the section of data to be obtained from the patient's prenatal care record. The paragraph should also appear on an electronic worksheet just before the section of information to be obtained from the patient's prenatal care record.

"Information for this and the following items should come from the patient's prenatal care record and from other medical reports in the patient's chart, as well as the fetus's medical record. If the patient's prenatal care record is not in her hospital chart, please contact her prenatal care provider to obtain the record, or a copy of the prenatal care information. Preferred and acceptable sources for each item are listed in worksheets. Please do not provide information from sources other than the medical records."

FOR A PAPER RECORD:

Print or type the month, day, and year of the first prenatal care visit.
Complete all parts of the date that are available; leave the rest blank.

If it is not known whether the patient had prenatal care, or if she had care but the date of the first visit is not known, write in "unknown."

DATE OF FIRST PRENATAL CARE VISIT

_____/_____/_____
MM DD YYYY

Print or type the month, day, and year of the last prenatal care visit recorded in the records.
Complete all parts of the date that are available; leave the rest blank.

If it is not known whether the patient had prenatal care, or if she had care but the date of the last visit is not known, write in "unknown."

DATE OF FIRST PRENATAL CARE VISIT
_____/_____/_____
MM DD YYYY

If the patient had no prenatal care, check the "no prenatal care" box and leave the date blank.

❑ No Prenatal Care

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

When the date of first and last prenatal care visit is to be entered, it is critical that the recommended message screens appear when appropriate.

The following message should appear first:

> **Check this button if the information needed to complete the date of first and/or last prenatal care visit is currently not available, but an effort is being made to obtain it.**
>
> ❑ Information not currently available

EFDR developers may wish to use "?" or a hot key for unknown dates and for responding to the above rather than a specific button. For example the instruction could read:

> **Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.**

When this button is checked, the item is skipped and placed in pending status for completion at a later time. See "Final Review Screen."

Each part of the three-part date fields must be entered independently so that all parts of the dates which are known are captured.

Complete ALL PARTS of the dates that are available.
Leave blank any parts of the dates that are not known.

Month of the first visit __ __
Day of the first visit __ __
Year of the first visit __ __ __ __

Did the mother receive any prenatal care?

- ❑ Yes
- ❑ No

Month of the last visit __ __
Day of the last visit __ __
Year of the last visit __ __ __ __

If the "no prenatal care" button is checked, the date fields are automatically completed with the "no prenatal care" codes. However, the final review screen will include a query for the clerk, asking if this information is correct. The number of prenatal care visits is set to value "0" and the item is skipped.

If the "no" box is checked on a paper record and entry is through the state data entry system, the date fields are automatically completed with the "no prenatal care" codes. Item 30 "Number of prenatal care visits" is set to value "0" and the item skipped. The "no prenatal care" code is assigned to the derived variable "Month prenatal care began."

If the "yes" button checked, the date fields are automatically completed with the "unknown" codes. Also, a message should appear that reads:

> *Please obtain the mother's prenatal care record or other hospital record in order to enter the date of the mother's first prenatal care visit before the record is filed.*

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DOFP_MO	Month of first prenatal care visit	01-12, 88, 99	
DOFP_DY	Day of first prenatal care visit	01-31 (depending on month), 88,99	
DOFP_YR	Year of first prenatal care visit	Yr of fetus's delivery or yr of fetus's	

		delivery –1, 8888,9999	
DOLP_MO	Month of last prenatal care visit	01-12, 88, 99	
DOLP_DY	Day of last prenatal care visit	01-31 (depending on month), 88, 99	
DOLP_YR	Year of last prenatal care visit	Yr of fetus's delivery, or yr of fetus's delivery –1, 8888, 9999	
		88, 8888	No prenatal care
		99, 9999	Unknown
DNA29	Pending flag	0	OFF
		1	ON
PNC	Prenatal care	Y	Yes
		N	No

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

New data entered at the time of an edit replaces any data currently in the data file.

If the "Data not available at this time" box is checked, the pending flag is set to ON-1, the date variables are assigned the "unknown" codes and the edits are skipped. The item will appear on the final review screen.

The date is checked for validity (a proper combination of month day and year). If any of the fields are not valid a message should appear and ask that the value be re-entered. Edits are re-run until valid values are entered.

If there is a complete date for both the first and last prenatal care visits, the date of the first prenatal care visit must be earlier or the same as the date of the last prenatal care visit. If it is not, a message should appear pointing out the discrepancy and asking that the dates be re-entered.

The dates of the first and last prenatal visits are compared to the date of delivery. The date of the first visit must be earlier than the date of delivery but no more than 10 months earlier. The date of the last visit can be no later than the date of delivery. The comparison is run only if a complete date is entered. If the date does not meet the edit criteria the following message appears:

> **The date of ___ ___ _____ is not a valid date for this woman's first prenatal care visit. Please check the date and re-enter:**
>
> *A date entry, even if it is the same date as currently entered, must be made on this screen. The entry operator cannot tab past this screen. The comparison is rerun with the newly entered date. If the edit still fails the date is accepted.*

PAPER RECORD

The same edits as above are run when data are key entered through the state system. This should be done at the time of key entry for the state entry system. After a new date is entered, the edit must be rerun. If the edit still fails, a message should appear that the item is to be queried. A date entered after query is edited but accepted and will be transmitted to NCHS.

STATE FILE CONSIDERATIONS

While the paper document does not have separate fields for each element of the date of first or last prenatal care visit, the dates must be entered and stored as three separate fields.

If states elect to use a data base system that has an option of storing dates as "date type variables," then the system must meet the criteria listed under transmission standards.

Dates that fail the edit criteria (that is, are more than one year earlier than the fetus's date of delivery) shall be changed to "unknown" before transmission to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
DOFP_MO	2	Numeric	01-12, 88, 99
DOFP_DY	2	Numeric	01-31, 88, 99
DOFP_YR	4	Numeric	4 digit year, year of fetus's delivery or year-1, 8888, 9999
DOLP_MO	2	Numeric	01-12, 88, 99
DOLP_DY	2	Numeric	01-31, 88, 99
DOLP_YR	4	Numeric	4 digit year, year of fetus delivery or year–1, 8888, 9999

EDI TRANSMISSION:

HL 7 transmission standards will be followed for the table.

Format------YYYY[MM[DD]]

Year must be fully represented with four digits. Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY format and capable of producing messages in the HL7 EDI Format.

DERIVED VARIABLES:

Outlined below is the calculation for the derived variable "The Month Prenatal Care Began." States should not keep or use the derived variable "Month Prenatal Care Began" as calculated below for any purpose other than editing. This variable is a crude calculation to be used only for editing.
At a later date, NCHS will provide the method used by NCHS to impute the missing "day" for records for which the day of the date of the first visit is unknown. Although the imputed day and the derived variable will not, at least initially, be transmitted to NCHS, **use of these standardized edits, and imputation and calculation methods will help to ensure that the variable is reported as comparably as possible across reporting areas.**

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CALCULATION OF "THE MONTH PRENATAL CARE BEGAN"

The month of prenatal care is calculated using the "Date of Last Menstrual Period" (where available) and the "Date of First Prenatal Care Visit" item.

The following algorithm is used to calculate the item "The Month Prenatal Care Began."
1. Convert to century dates the Date Last Menstrual Period Began (CDLMP) and Date of the First Prenatal Visit (CDPV) as follows:

CDPV= (365*YYYY)+DY

Where YYYY is the four digit year of the first prenatal care visit

DY is the number of days in the year prior to the beginning of the month of the date of first prenatal care visit + the day of the first prenatal care visit. (If the day is not known it will be imputed according to a method to be provided).

Month	#Prior Days*	Month	#Prior Days*
January	0	July	181
February	31	August	212
March	59	September	243
April	90	October	273
May	120	November	304
June	151	December	334

* In leap years add 1 to all numbers March-December

Example

Date of first prenatal care visit: April 10, 2003
Date of LMP is March 1, 2003

CDPV=(365*2003)+(90+10)=731195
CDLMP=(365*2003)+(59+1)=731155

1.Obtain the number of days between date of last LMP and date of first prenatal care visit.

Days=CDPV-CDLMP
Days=731195-731155
Days=40

2. Convert days to months of pregnancy.

Assume each month has 30.4 days (365/12) and use the following table:

Days	Month
1-30	1st
31-61	2nd
62-91	3rd
92-122	4th
123-152	5th
153-182	6th
183-213	7th
214-243	8th
244-274	9th
275-304	10th
305+	99 (unknown)

In this example the “Month Prenatal Care Began would be the 2nd month and assigned the value “2".

If the month and day of LMP date are missing, use obstetric estimate of gestation (OE) in weeks and use in place of CDLMP the variable CD(OE) calculated as follows:

Calculate century date of delivery as above and then

CD(OE)=CD(date of delivery)-(OE*7)
(Example to be included.)

In this situation if obstetric estimate is unknown, assign the “unknown” code 99.

In all cases :

If the year of first prenatal care visit is unknown, assign the “unknown” code 99 for this derived variable .

If the patient had no prenatal care, assign the “no prenatal care” code 88 for this derived variable.

Item Title: **TOTAL NUMBER OF PRENATAL CARE VISITS FOR THIS PREGNANCY**

Item Number: **24 Report, 7 Facility worksheet**

Description: Those visits which are listed in the mother/patient's prenatal care and/or facility records

Source of Information:

Preferred Source: Prenatal care record

INSTRUCTIONS

FOR A PAPER RECORD:

If the patient had no prenatal care, type or print "0" in the space. Note: the "no prenatal care" box should also be checked in item 23.

If the patient had prenatal care but the number of visits is not known, type or print "unknown" in the space.

Type or print the total number of prenatal care visits for this pregnancy in the space.

TOTAL NUMBER OF PRENATAL VISITS FOR THIS PREGNANCY

_____(If none, enter "0")

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

When the number of prenatal care visits is to be entered, it is critical that the recommended message screens also appear.

Please enter the total number of prenatal care visits listed in the patient's records.

Total number of prenatal care visits _____

The following message should also appear:

Check this button if the information needed to complete the number of prenatal care visits is currently not available, but an effort is being made to obtain it.

- ❑ Information not currently available

EFDR developers may wish to use a hot key for responding to the above rather than a specific button. For example the instruction could read:

Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.

When this button is checked, the item is skipped and placed in pending status for completion at a later time. The following message will appear.

Please check the patient's prenatal care record and/or facility records to obtain the number of prenatal care visits.

An entry for this item is required if the "no prenatal care" check box in item 23 is not marked. If the "no prenatal care" check box was marked in item 23, this screen is skipped and "0" automatically entered.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
NPREV	Number of prenatal care visits	0-98,99	Number within range
NPREV_BYPASS	Edit flag	0	OFF (edit passed)
		1	ON (edit failed, number verified)
		2	ON (edit failed, number not verified)
DNA30	Pending flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If the data not available at this time box is checked, the pending flag is set to ON-1, the number of visits is assigned the "unknown" code and the edits are skipped. The data item will appear on the final review screen.

If number of visits is "0," the box for no prenatal care in item 23 must be checked. If the box is not checked and there is a date in the "date of first prenatal care visit" field, a message should appear indicating the inconsistency and asking that it be resolved. See example below:

Item 23 indicates that the patient did have prenatal care. Therefore, the number of prenatal care visits must be greater than "0." Please enter the correct total below:

Number of prenatal visits_____

- ❑ Check this box if patient did not have any prenatal care.

If this box is checked, a message should appear indicating that this response is inconsistent with the entry for item 23. A review screen for item 23 then appears.

If the number of prenatal visits is greater than 49 and not "99," a query message should appear indicating that the number of visits is greater than 49.

The record shows the number of prenatal care visits is _____

- ❑ Please check this box if this number is correct.

If this box is checked, the edit bypass flag is set to ON-1

If the number is incorrect, please enter the correct number_____

The edit is rerun with the new number. If the edit fails, the bypass flag is set to ON-2

PAPER RECORD

If the field is blank and item 23 indicates that there was prenatal care, query. If item 23 indicates there was no prenatal care, assign the "0" code.

After data entry, run the same edits as above for the electronic record.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
NPREV	2	Numeric	0-98,99
NPREV_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:
No standards set yet

Item Title: **MOTHER/PATIENT'S HEIGHT**

Item Number: **25 Report, 18 Mother/patient's worksheet**

Description: The mother/patient's height

Source of Information:

Preferred Source: The mother/patient
Other Source: The mother/patient's medical record

INSTRUCTIONS

FOR A PAPER RECORD:

If the patient's height is unknown, print or type "unknown" in the space.

Enter the patient's height in feet and inches. If the record indicates height in fractions such as 5 feet 6 ½ inches, truncate and enter 5 feet, 6 inches.

PATIENT'S HEIGHT _____(feet/inches)

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

Height should be recorded in feet and inches. Enter whole inches only; truncate fractions of inches. The following instruction should appear when the item is to be completed.

Patient's height_____(feet) and
_____(inches)

☐ Unknown

Please enter height in feet and inches (for example, 5 feet, 6 inches). If no inches (for example, 5 feet only) enter the number of feet and "0" for inches. If the unknown box is checked, fill the feet field with 9 and the inches field with 99.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUE	DEFINITION
HFT	Patient's height feet	1-8	Feet
		9	Unknown
HIN	Patient's height inches	0-11	Inches
		99	Unknown
HGT_BYPASS	Edit flag for height	0	OFF
		1	ON (verified)
		2	ON (not verified)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Values of 1,2 and 8 will be soft edited. If the patient's height in feet is not between 3 and 7, the following message should appear:

You have entered a height of _____feet. Check the box below if this is correct, or re-enter height.

- ❑ Height is correct

Height_____(feet)
_____(inches)

Entries of 1 - 9 will be accepted as valid values if the keyer indicates that the height is correct.
If the correct box is checked, the bypass flag is set to ON-1.
If a new value is entered, the edit is rerun and, if it fails, the bypass flag is set to ON-2

The number of inches must be between 0 and 11 or 99,. Entries greater than 11 inches, except 99, will not be accepted (hard edit).
If systems allow initial entries >11 the following message should appear:

Please re-enter the number of inches. Inches must be between 0 and 11.
_____(inches)

PAPER RECORD

Records filed with the item blank shall be queried.

If there is no response to the query, assign the “unknown” code.

If the item indicates “unknown,” assign the “unknown” code.

If the response gives a range, enter the highest value.

If the response gives a fraction like 5 feet 6 ½ inches, enter only the whole number (6 inches).

State Edits of data file prior to NCHS transmission

Must be valid codes and values.

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
HFT	1	Numeric	1-8,9
HIN	2	Numeric	0-11,99
HGT_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:
No standards set yet.

Item Title: **MOTHER/PATIENT'S PREPREGNANCY WEIGHT**

Item Number: **26 Report, 19 Mother/patient's worksheet**

Description: The mother/patient's prepregnancy weight

Source of Information:

Preferred Source: Mother/patient
Other Source: Mother/patient's Prenatal care record

INSTRUCTIONS

FOR A PAPER RECORD:

If the patient's prepregnancy weight is unknown, print or type "unknown" in the item's space.

Record weight in whole pounds only, do not include fractions.

PATIENT'S PREPREGNANCY WEIGHT_____(pounds).

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The patient's prepregnancy weight should be recorded in whole pounds only, truncate, do not include fractions (e.g., 120 ½ pounds should be entered as 120 pounds). The following item and instruction should appear:

Patient's prepregnancy weight_____pounds.

If weight is unknown, enter 999.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
PWGT	Patient's prepregnancy weight	50-400	
		999	unknown
PWGT_BYPASS	Edit flag for prepregnancy weight	0	OFF
		1	ON (verified)
		2	ON (not verified)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If patient's prepregnancy weight is not between 75 and 300 pounds or 999 a message should appear that asks that the prepregnancy weight be verified.

Please check the box or enter correct weight.

- ❑ Weight is correct

Weight_____

If the correct box is checked, the bypass flag is set to ON-1.
If a new value is entered, the edit is rerun and, if it fails, the bypass flag is set to ON-2.
Values less than 50 and greater than 400 should be converted to unknown (999).

PAPER RECORD

Records filed with the item blank shall be queried.

If there is no response to the query, assign the "unknown" code.

If the item indicates "unknown," assign the "unknown" code.

If a response gives a range, enter the highest value given.

If a response gives a fraction, truncate and enter only the whole number (e.g., 120 ½ pounds should be reported as 120 pounds.)

State Edits of data file prior to NCHS transmission

Must be valid codes and values.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
PWGT	3	Numeric	50-400, 999
PWGT_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER/PATIENT'S WEIGHT AT DELIVERY**

Item Number: **27 Report, 22 Facility worksheet**

Description: The mother/patient's weight at the time of delivery

Source of Information:

Preferred Sources: Labor and Delivery records, Admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

If the patient's delivery weight is unknown, print or type "unknown" in the item's space.

Record weight in whole pounds only, do not include fractions.

PATIENT'S WEIGHT AT DELIVERY_____(pounds)

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

Weight should be recorded in whole pounds only, truncate, do not include fractions (e.g. 140 ½ pounds should be entered as 140 pounds). The following item and instruction should appear:

Patient's weight at delivery_____pounds.

If weight is unknown, enter 999.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DWGT	Patient's weight at delivery	50-450	
		999	unknown
DWGT_BYPASS	Edit flag for delivery weight	0	OFF

1	ON (verified)
2	ON (not verified)

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If patient's weight at delivery is not between 75 and 350 pounds (or 999), a message should appear asking that the delivery weight be verified.

Please check the box or enter correct weight.

- ❑ Weight is correct

Weight_____

If the correct box is checked, the bypass flag is set to ON-1.
If a new value is entered, the edit is rerun and, if it fails, the bypass flag is set to ON-2
Values less than 50 and greater than 450 should be converted to unknown (999).

PAPER RECORD

Records filed with the item blank shall be queried.

If there is no response to the query, assign the "unknown" code.

If the item indicates "unknown," assign the "unknown" code.

If the response gives a range, enter the highest value given.

If a response gives a fraction of a pound, enter only the whole number (e.g., 140 1/2 pounds should be reported as 140 pounds.)

State Edits of data file prior to NCHS transmission

Must be valid codes and values.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
DWGT	3	Numeric	50-450,999
DWGT_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:
No standards set yet.

Item Title: **DID MOTHER/PATIENT GET WIC FOOD FOR HERSELF DURING THIS PREGNANCY?**

Item Number: **28 Report, 17 Mother/patient's worksheet**

Description: Use of the Women, Infant's and Children (WIC) nutritional program by the mother/patient during the pregnancy

Source of Information:

Preferred Source: Mother/patient

INSTRUCTIONS

FOR A PAPER RECORD:

This item is to be completed based on information obtained from the patient. Either the "yes" or "no" box must be checked.

If the patient's work sheet indicates "unknown," print or type "unknown."

DID PATIENT GET WIC FOR HERSELF DURING THIS PREGNANCY?

□ Yes □ No

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The item should be completed by keying the response recorded on the patient's work sheet. The following list of choices should be provided.

- Yes
- No
- Unknown

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
WIC	Patient's use of the WIC program	Y N U	Yes No Unknown

EDITS:

ELECTRONIC RECORD

The field cannot be blank.

PAPER RECORD

Records filed with this item blank shall not be queried unless the record is being queried for another item.

If the item is blank and not queried, the "not classifiable" code shall be assigned.

If the item indicates "unknown," assign the "not classifiable" code.

State Edits of data file prior to NCHS transmission

Must be valid codes.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
WIC	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet.

Item Titles: **NUMBER OF PREVIOUS LIVE BIRTHS NOW LIVING**
NUMBER OF PREVIOUS LIVE BIRTHS NOW DEAD
DATE OF LAST LIVE BIRTH
NUMBER OF OTHER PREGNANCY OUTCOMES
DATE OF LAST OTHER PREGNANCY OUTCOME

Item Numbers: **29 a-c, 30 a-b Report;**
9, 10, 11, 12, 13 Facility worksheet

Description: The pregnancy history of the mother/patient with respect to previous children born alive.

The pregnancy history of the mother/patient with respect to other pregnancy outcomes (includes pregnancy losses of <u>any</u> gestational age, e.g., spontaneous or induced losses or ectopic pregnancies).

Source of Information:

Preferred Source: Prenatal care record
Other Source: Labor and delivery nursing admission triage form, Admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

When completing this item, do not include this fetal death; include all previous live born infants. For multiple deliveries, include all live born infants preceding this fetus in the delivery. If first born in a multiple delivery, do not include this fetus. If second born, include the first born, etc.

Please type or print the number of previous live born infants still living in item 29a, the number born alive now dead in item 29b, and the number of other pregnancy outcomes in item 30a. If there were none check the "none" boxes. If the number is unknown, type or

print “unknown” in the space.
NUMBER OF PREVIOUS LIVE BIRTHS / OTHER PREGNANCY OUTCOMES
(Do not include this fetus)

29a. Now Living	29b. Now Dead	30a. Other Outcomes
Number_____	Number_____	Number_____
□ None	□ None	□ None

If applicable, type or print the month and year of birth of the last live born infant in item 29c.
If the date of birth is not known, type or print “unknown” in the space.

29c. DATE OF LAST LIVE BIRTH

_____/_____
MM YYYY

If applicable, type or print the month and year of delivery of the last other pregnancy outcome in item 30b.
If the date of delivery is not known, type or print “unknown” in the space.

30b. DATE OF LAST OTHER PREGNANCY OUTCOME

_____/_____
MM YYYY

FOR AN ELECTRONIC RECORD:

EFDR Developer: *(Instructions are in Italics)*

When the pregnancy history items are to be entered, it is critical that the recommended message screens appear when appropriate.

The following message should appear first:

> **Check this button if the information needed to complete the pregnancy history items is currently not available, but an effort is being made to obtain it.**
>
> ❑ Information not currently available

EFDR developers may wish to use a hot key for responding to the above rather than a specific button. For example the instruction could read:

Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.

When this button is checked, the item is skipped and placed in pending status for completion at a later time. The following message will appear.

Please check the patient's prenatal care record and/or hospital record to obtain the number of previous live births and other pregnancy outcomes.

This item is to be completed by the facility. If the delivery did not occur in a facility, it is to be completed by the attendant or certifier.

Allow only 2 digit fields for entering responses to each of the three items: the number of previous live births now living, number of previous live births now dead, and number of other previous pregnancy outcomes. If the "unknown" box is checked for any of the variables the value 99 is assigned to the variable.
EFDR developers may wish to use a hot key in lieu of checkboxes for unknown values. The following message should appear.

When completing this item, do not include this fetal death. Do include any previous live born infants. If this was a multiple delivery, include all live born infants who preceded the fetal death in this delivery. If first born, do not include this fetus. If second born, include the first born. Also include all live born infants in previous deliveries.

Number of previous live births now living _____

- ❑ None
- ❑ Unknown

Number of previous live births now dead_____

- ❑ None
- ❑ Unknown

Number of other pregnancy outcomes_____

- ❑ None
- ❑ Unknown

If there are any previous live born infants the following message should appear.

Month and year of the last live birth.

Month ____ ____

Year ____ ____ ____ ____

❑ Unknown

If there were no previous live born infants the message above will not appear nor will the entry screen. The field will automatically be completed with the "not applicable" code. The year must be at least the patient's year of birth plus 10 years.
If there are any other pregnancy outcomes, the following message should appear.

Month and year of the last other pregnancy outcome.

Month ____ ____

Year ____ ____ ____ ____

❑ Unknown

If there were no other pregnancy outcomes, the message above will not appear, nor will the entry screen. The field will automatically be completed with the "not applicable" code.
The year must be at least the patient's year of birth plus 10 years. Values outside of this range should be converted to unknown (9999).

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**VALUES**	**DEFINTION**
PLBL	Previous live births now living	00-30,99	Number
PLBD	Previous live births now dead	00-30,99	Number
POPO	Previous other pregnancy outcomes	00-30,99	Number
MLLB	Month last live birth	01-12,88,99	Month number
YLLB	Year last live birth	4 digit year, 8888,9999	Year number (Patient's year of birth plus 10, through child's year of birth)
MOPO	Month last other pregnancy outcome	01-12,88,99	Month number

YOPO	Year other pregnancy outcome	4 digit yr, 8888,9999	Year number (Patient's year of birth plus 10, through child's year of birth)
LBO	Live birth order	00-30,99	Number
TBO	Total birth order	00-40,99	Number
C_AGEM	Patient's calculated age	10-64	Number
DNA	Pending flag	0	OFF
		1	ON
		88,8888	Not applicable
		99,9999	Unknown

The not applicable codes are used in the date fields when there were either no previous live births or no previous other pregnancy outcomes.

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If the data are not available at the time box is checked, the pending flag is set to ON-1, all the other variables are assigned the "unknown" codes and the edits are skipped. The data item will appear on the final review screen.

Once an entry is made in each item, the next field appears. This prevents both a box being checked and a number being entered.

If any of the "none" boxes are checked, fill the appropriate number field(s) with 00.

If any of the "unknown" boxes are checked, fill the number field(s) with 99 ("unknown").

If a "none" box is not checked and the "unknown" box is not checked and there is no number in the number field, the original entry screen with the message, **Please complete this item** *should appear.*

If "00" is entered or assigned for any of these fields the date fields must contain the "not applicable" codes.

Once these edits are done the fields are further edited.

If value of the field(s) is not 99 but >12, the following message should appear:

The record indicates that the number of previous born children still living is _____.

- ❑ correct

If incorrect, enter the correct number._____

The record indicates that the number of previous live born children now dead is _____.

- ❑ correct

If incorrect, enter the correct number._____

The record indicates that the number of other pregnancy outcomes is _____.

- ❑ correct

If incorrect, enter the correct number._____

If the correct box is checked and the number is greater than 30, assign 99 to the appropriate variable.

Compute the live birth order as follows: LBO = PLBL+PLBD+1
If the value is 99 for either PLBL or PLBD assign 99 to the variable LBO.

Compute the total birth order as follows: TBO=LBO+POPO
If the value is 99 for the POPO or LBO, assign 99 to variable TBO.

Check for consistency of live birth order and calculated age of patient as follows

C_AGEM-LBO must be ≥8.

If this value is < 8, the following message appears

The patient is _____years of age and the record indicates:

_____Previous live births living

_____Previous live births now dead

- ❑ correct

If incorrect, enter the correct number(s)

Previous live births living_____
Previous live births now dead_____

The calculation is redone, and if the edit fails, assign the value 99 to the variables LBO and TBO. If this edit fails, the following check is not done.

Check for consistency of total birth order and calculated age of patient as follows:

C_AGEM-TBO must be ≥8.

If this value is less than 8, the following message appears

The patient is _____years of age and the record indicates:

_____Previous live births living
_____Previous live births now dead
_____Previous other pregnancy outcomes

- ❑ correct

If incorrect, enter the correct number(s)

Previous live births living_____
Previous live births now dead_____
Previous other pregnancy outcomes_____

The calculation is redone, and if the edit fails, assign the value 99 to the variable TBO.

Any value for the LBO > 30, except 99, is changed to 99.

Any value for the TBO> 40, except 99, is changed to 99

Date fields must be checked for valid values. In addition, year must be less than or equal to year of current event. If the record indicates that any of the number fields contains a value other than 00, 99, and the date field "unknown" box is not checked and both parts of the date field are blank, a message should appear that reads:

Please enter the date or check the "unknown" box.

The appropriate entry screen should appear.

PAPER RECORD

If the fields are blank, query. If no response to query, assign 99 to the field.

Same edits are run as above. If edits fail, record is queried. If response to query contains new values that fail the edit, set values as indicated above for the EFDR. If the response indicates the values are correct set the values to 99 for any values that are greater than 30. If there are numbers for any of the three events and no date entered and unknown is not written in the space, query. If no response to query, set date fields to "99" and "9999."

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

Must have valid codes (see below).

STATE DATA FILE CONSIDERATIONS

States should keep the LBO and TBO calculated variables in their files for tabulation purposes. Numeric fields of 2 digits each should be reserved for these variables.

NCHS TRANSMISSION FILE

VARIABLES:

NAME		LENGTH	TYPE	VALUES
PLBL	Previous live births now living	2	Numeric	00-30,99
PLBD	Previous live births now dead	2	Numeric	00-30,99
POPO	Previous other pregnancy outcomes	2	Numeric	00-30,99
MLLB	Month last live birth	2	Numeric	01-12, 88, 99
YLLB	Year last live birth	4	Numeric	4 digit yr (Patient's year of birth plus 10 yrs through child's year of birth), 8888,9999
MOPO	Month last other pregnancy outcome	2	Numeric	01-12 88, 99
YOPO	Year other pregnancy outcome	4	Numeric	4 digit yr (Patient's year of birth plus 10 yrs through child's year of delivery), 8888,9999

EDI TRANSMISSION:

No standards set yet.

Item Title: **CIGARETTE SMOKING BEFORE AND DURING PREGNANCY**

Item Number: **31 Report, 20 Mother/patient's worksheet**

Description: The number of cigarettes or packs of cigarettes the mother/patient smoked 3 months before and at various intervals during the pregnancy

Source of Information:

Preferred Source: Mother/patient

INSTRUCTIONS*

* States that implemented the 2003 revision of the birth certificate and fetal death report prior to 2005 may have adopted editing specifications that were consistent with the version of the certificate and report in effect through October 2003, that is the version that was initially recommended by the Panel to Evaluate the U.S. Standard Certificates and Reports (http://www.cdc.gov/nchs/vital_certs_rev.htm). The standard certificates and report have now been officially cleared and promulgated by the U.S. Department of Health and Human Services, effective November 2003, and incorporate modest changes in some items, including this item. States which revise their certificates and report for 2005 and later years are expected to use these specifications (dated 2/2005) that reflect the content of the cleared certificates.

For item 31, the original version of the fetal death report had the last response category as "last three months of pregnancy." During the clearance process that wording was revised; on the final version of the fetal death report, the last response category for item 31 now reads "third trimester of pregnancy."

FOR A PAPER RECORD:

This item is to be completed by the facility based on information obtained from the patient. If the delivery did not occur in a facility, it is to be completed by the attendant or certifier based on information obtained from the patient.

If the patient's work sheet indicates "unknown," or "refused" print or type "unknown." Enter either the average number of cigarettes or the average number of packs of cigarettes smoked for each time period.

CIGARETTE SMOKING BEFORE AND DURING PREGNANCY
For each time period enter either the number of cigarettes or the number of packs of cigarettes smoked. If none enter "0."

Average number of cigarettes or packs of cigarettes smoked per day.

	# of cigarettes		# of packs
Three Months Before Pregnancy	_____	OR	_____
First Three Months of Pregnancy	_____	OR	_____
Second Three Months of Pregnancy	_____	OR	_____
Third Trimester of Pregnancy	_____	OR	_____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*
The item should be completed by keying the response recorded on the patient's work sheet. The following message and screen format is suggested:

Check whether the patient reported in cigarettes or packs. If both cigarettes and packs are given, enter in packs:

- ☐ Cigarettes
- ☐ Packs

Enter the average number of cigarettes or packs of cigarettes smoked per day for each time period. If none enter "0." If no part of the item is completed, check "unknown." If a range is given enter the highest number.

If the number of cigarettes is checked the following screen will appear:

Enter the number of cigarettes shown on the worksheet.

Number of cigarettes

Three months before pregnancy	_____
First three months of pregnancy	_____
Second three months of pregnancy	_____
Third Trimester of Pregnancy	_____

- ❑ Unknown

If the number of packs is checked the following screen will appear:

Number of packs

Enter the number of whole packs and/or check any fraction of a pack as shown on the worksheet.

Three months before pregnancy	_____	□ ¼	□½	□¾
First three months of pregnancy	_____	□¼	□½	□¾
Second three months of pregnancy	_____	□¼	□½	□¾
Third Trimester of Pregnancy	_____	□¼	□½	□¾

❑ Unknown

The entry of <u>only</u> a fraction of a pack is allowed.

Any complete numbers of packs of 0-4 should be multiplied by 20 and added to the number of cigarettes field for each trimester to sum the total "number of cigarettes variable" for each trimester.
The system should convert fractions of packs to number of cigarettes as follows: ¼=5; ½=10; ¾=15. The resulting number should then be added to the total number of cigarettes for each trimester. Once this is completed, the pack variables need not be carried forward; will not be transmitted to NCHS.

Values for packs equal to or greater than "5" should be converted to "98" cigarettes.

If the" unknown" box is checked, assign "99" to the four variables: CIGPN, CIGFN, CIGSN, CIGLN.

PROCESSING VARIABLES:

NAME	**DESCRIPTION**	**VALUE**
CIGPN	Number cigarettes smoked prior to pregnancy	0-98, 99
CIGPP	Number of packs smoked prior to pregnancy	0.00-5.00
CIGFN	Number of cigarettes smoked in 1st three months	0-98, 99
CIGFP	Number of packs smoked in 1st three months	0.00-5.00
CIGSN	Number of cigarettes smoked in 2nd three months	0-98, 99
CIGSP	Number of packs smoked in 2nd three months	0.00-5.00
CIGLN	Number of cigarettes smoked in last trimester	0-98, 99
CIGLP	Number of packs smoked in last trimester	0.00-5.00
	Unknown (all variables)	99

EDITS:

ELECTRONIC RECORD

The variables CIGPN, CIGFN, CIGSN, CIGLN can not be blank and must have valid entries of 00-98, 99.

PAPER RECORD

Records filed with this item blank shall be queried.

If the item is blank and not queried, the “unknown” code shall be assigned.

If the item indicates “unknown,” assign the “unknown ” code to each of the “number variables.”

If the item indicates “refused,” assign the “unknown” code to each of the “number variables.”

Use pack responses in preference to number of cigarette responses when there are entries in both for the same variable.

If a fraction is entered on the document like 2 ½ packs, use the conversion table below for entry. For the example, enter the decimal number “2.50.”

¼=0.25; ½=0.50; ¾=0.75

The number of packs is converted to the number of cigarettes by multiplying by 20 and assigning the resulting value to the corresponding number of cigarettes variable.

STATE FILE CONSIDERATIONS

States may elect to add a “never smoked” checkbox to this item. If so, this checkbox should be placed at the very end of the question. States should note that the inclusion of a “never smoked” checkbox may result in data which is not comparable to national data or to that of other States which do not include this checkbox.

State Edits of data file prior to NCHS transmission:

Must be valid codes.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE

CIGPN	2	Numeric	0-98, 99
CIGFN	2	Numeric	0-98, 99
CIGSN	2	Numeric	0-98, 99
CIGLN	2	Numeric	0-98, 99

EDI TRANSMISSION:

No standards set yet.

Item Title: **DATE LAST NORMAL MENSES BEGAN**

Item Number: **32 Report, 8 Facility worksheet**

Description: Date that the mother/patient's last normal menses began. This item is used to compute the gestational age of the fetus.

Source of Information:

Preferred Source: Mother/patient's prenatal care record
Other Source: Admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type all parts of the date that the patient's last normal menses began.

If no parts of the date are known, write in "unknown."

DATE LAST NORMAL MENSES BEGAN

_____/_____/_____
MM DD YYYY

FOR AN ELECTRONIC RECORD:

EFDR Developer: *(Instructions are in Italics)*

The date last normal menses began must be a three-field entry with month day and year being entered in separate fields.

The following message should appear first:

Check this button if the information is not yet available from one of the source documents. *(This should be indicated on the facility work sheet)*

- ❑ Information not currently available

If this button is checked, the item is skipped and placed in a pending status for completion at a later time. See final review screen.

EFDR developers may wish to use a hot key for responding to the above rather than a specific button. For example the message could read:

Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.

Each part of the three-part date field should be entered independently so any part of the date that is known is captured. The instructions below should appear when the date is to be completed:

Complete ALL PARTS of the date that are available.
Key all 9s for any parts of the date that are not known.

EFDR developers may wish to use a hot key in 9s for unknown values.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DLMP_YR	Year of last menstrual period	4 digit year 9999	Values of 99, and 9999
DLMP_MO	Month of last menstrual period	01-12, 99	are "unknown" codes.
DLMP_DY	Day of last menstrual period	01-31, 99	All other numeric values represent 4 digit years, or standard month and day numbers.

DERIVED VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
CM_DLNM	Century month last menstrual period	24024+, 88888	Values of 88, and 8888 are
C_GESTM	Months gestation	4-11, 88	"not computable" codes.
CM_DOD	Century month date of delivery	24024+, 88888	They are assigned to derived variables when information that is needed in computing the derived variable is not available or incorrect.

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If the "data are not available at this time" button is checked, all the date fields are set to the "unknown" code "99,9999 " and the item is put on the pending list for completion at a later time. No further edits are done.

If one or more of the date fields are completed they are checked against the values below.

Entry		**Values**
Month		01,02,03,04,05,06,07,08, 09,10,11,12, 99
Day	01	1-31, 99
	02	1-29, 99
	03	1-31, 99
	04	1-30, 99
	05	1-31, 99
	06	1-30, 99
	07	1-31, 99
	08	1-31, 99
	09	1-30, 99
	10	1-31, 99
	11	1-30, 99
	12	1-31, 99
Year		Must be equal to the fetus's year of delivery or 1-2 years less, or 9999.

Any blanks will be automatically converted to the appropriate "unknown" codes; "99" or "9999."

If any of the edits fail, error messages and instructions will appear that show all the date information entered and a comment on invalid entries. These errors must be corrected before the record can be filed or printed. If the edit on DLMP_YR still fails the edit after reentry then set all values of the date field to the unknown codes.

If February (02) day =29, year should be a leap year. The date of delivery field must be compared with the date last normal menses began to be sure the date last normal menses began is earlier than the fetus's date of delivery. If not, a message should appear and request that the inconsistency be resolved.

Derived Variable for Editing Purposes

The century month of the date last normal menses began should be computed and stored as a five digit numeric field (CM_DLNM) as follows:

If either the month or year of date last normal menses began is invalid or unknown, assign "88888" to the CM_DLNM variable.

*Otherwise, compute CM_DLNM as: ((12 * year last normal menses) + month of last normal menses).*

Compute the period of gestation in months as follows: C_GESTM= CM_DOD - CM_DLNM. If either or both CM_DOD or CM_DLNM is "88888" set the C_GESTM (computed gestation, months)= "88." If the computed interval is negative subtract 12 from CM_DLNM and re-compute. This could occur if the month of DLNM is greater than the month DOD and the years are the same. This error should have been caught in the previous edit. But if it occurs subtract 1 year from the DLNM and replace with the new value.

If C_GESTM is <0, (after the re-computation above) a message should appear that reads:

> **The date of the last normal menses does not agree with other items. Please check and re-enter.**

The edit is rerun and if the edit still indicates that the interval is less than 0, the following message should appear.

> **The fetus's gestation age still is less than 0, please check and re-enter the fetus's date of delivery.**

If the edit is rerun and fails again, assign "88" to C_GESTM.

If the computed gestation is < 4 or >11, one of the following messages appears:

Date of last normal menses as keyed does not agree with other items. Please check the dates listed below to be sure they were entered correctly. If there are errors, please re-enter the date(s).

The computation is re-run and if it still fails the edit, C_GESTM variable is assigned the value of "88."

If the final edit screen indicates that all of the date of last normal menses is unknown, assign "99" to the day and month fields, and "9999" to the year field. Assign "88" to the computed gestation field and "8888" to the Century month of last normal menses.

Values for DLMR_YR greater than 2 years different from fetus's date of delivery should be converted to unknown.

PAPER RECORD

If date of last normal menses field is blank, query. If there is no response to query or response is "unknown," assign the "not classifiable" code to each field.

Carry out the above edits for an electronic record after data entry

STATE FILE CONSIDERATIONS

State data files must contain space for the computed gestation in months although these data are not transmitted to NCHS. **This is not the computed gestation to be used for statistical purposes.**

If states elect to use a data base system that has an option of storing dates as "date type variables," the system must meet the criteria listed under transmission standards.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
DLMP_YR	4	Numeric	4 digit year, fetus's yr of delivery or 1 or 2 years less, 9999
DLMP_MO	2	Numeric	01-12, 99
DLMP_DY	2	Numeric	01-31, 99

EDI TRANSMISSION:

HL 7 Transmission standards will be followed . This is a time date stamped standard in the following format:

YYYY[MM[DD]]

Year must be fully represented with four digits.
Software that stores dates as "date type" must be year 2000 compliant and capable of producing the date in the YYYY….. format and capable of producing messages in the HL7 EDI format.

Item Titles: **PLURALITY**
IF NOT SINGLE BIRTH – Born First, Second, Third, etc. (Specify)

Item Numbers: **33 Report; 28 facility worksheet**
34 Report; 29 facility worksheet
N/A Report; 30 facility worksheet

Description: Plurality – The number of infants delivered live or dead at any time in the pregnancy regardless of gestational age or if delivered at different dates in the pregnancy. ("Reabsorbed" fetuses, those which are not "delivered" (expulsed or extracted from the mother/patient) should not be counted.)

If not a singleton, specify delivered 1st, 2nd, etc. – For multiple deliveries, the order this infant was delivered in the set. Include all live births and fetal losses.

If not a singleton, specify the number of fetal deaths in this delivery -- For multiple deliveries, the number of fetal deaths delivered at any point in the pregnancy.

Source of Information:

Preferred Source: Admission history and physical, Delivery record

INSTRUCTIONS

FOR A PAPER RECORD:

Item 33, Plurality.
Print or type the plurality of this pregnancy e.g., single, twin, triplet, etc. Include all products of the pregnancy, that is, all live births and fetal deaths delivered at any point during the pregnancy.

PLURALITY - Single, Twin, Triplet, etc.
(Specify)_____

Item 34, Set Order.
If this is a singleton delivery, leave this item blank. For multiple deliveries, print the order that this fetal death was delivered in the set, e.g., first, second, third, etc. Count all live births and fetal deaths delivered at any point in the pregnancy.

IF NOT SINGLE BIRTH – Born First, Second, Third, etc. (Specify)_____

FOR AN ELECTRONIC RECORD:

EFDR Developer: *(Instructions are in italics)*

Plurality

Enter the number (live birth and fetal death) delivered (1,2,3,4,5,6,7,8,9, etc.) in the pregnancy.
(Twins=2, Triplets=3 etc.)
Include all live births and fetal deaths delivered at any point in the pregnancy regardless of gestational age.
Example: If one infant is born alive and two are delivered dead enter "3."

If plurality is unknown enter "99."

Plurality (number of live births and fetal deaths delivered)_____

If plurality = 99, assign "99" to "Set Order" (SORD) and to "Live born" (LIVEB).

If plurality = 1, assign the "not applicable" code "88" to variables "Set Order" and "Live Born."

If plurality >1 and not " 99" the following question is asked:

Enter the order this fetus was delivered in the pregnancy or set (1,2,3,4,5,6,7,8,9, etc.)
Include all live births and fetal deaths delivered at any point in the pregnancy regardless of gestational age.
If the order is unknown enter "99."

Set order of this fetal death_____

If plurality is >1 and not "99" the following question is asked:

Enter the total number of fetal deaths in the delivery_____

If "fetal deaths" > 1, an identification number unique to each multiple set delivered in the State for that year is generated. Each live birth and fetal death member of the set (if

the fetal death system is integrated with the birth) is assigned the same identification number. If the delivery includes a live birth the number may be generated from either the birth or fetal death systems. This number is entered for the variable "MATCH. The identification number may be the patient's medical record number, or any other identifying number which would be unique to the multiple set for that State.

Example:

Twin set A—1st born #345671 (live born)
2nd born #345671 (fetal death)

Twin set B – 1st born #567897 (fetal death)
2nd born #567897 (fetal death)

Triplet set A –1st born #789014 (fetal death)
2nd born #789014 (fetal death)
3rd born #789014 (live born)

When a number is assigned, a new record for each member of the set except the 1st born is created. Information common to all set members (e.g., patient's demographic and prenatal care information) is copied for each additional death. Only information potentially unique to the individual set member (e.g., method of delivery, weight at delivery) need be entered. (See "Attachment to the Facility Worksheet for the Live Birth Report for Multiple Births" which can be modified to use for fetal deaths.)

The purpose of generating identification numbers for multiple birth/delivery sets is to enhance quality control and to allow NCHS to more readily match members of multiple sets for data analysis.

The default MATCH number is 000000 (single delivery).

If the fetal death reporting system is integrated with the EBR system, sequence numbers can be assigned to fetal deaths delivered in multiple deliveries and fetal death reports initiated.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
PLUR	Plurality	01-12	Number of fetuses delivered
		99	Unknown
SORD	Set order	01-12	Order this infant was delivered in the set
		88	Not applicable

		99	Unknown
FDTH	Number of fetal deaths	01-12	Number of fetal deaths delivered
		88	Not applicable
		99	Unknown
MATCH	Matching number	000001to 999999	An ID number unique to multiple birth sets. Each set member has the same ID number.
PLUR_BYPASS	edit flag	0	OFF
		1	ON, queried and correct
		2	ON, Plurality/Set Order queried and inconsistent

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Plurality must be in the range 1-12, 99.

If plurality is >9 but not 99, the following message should appear:

The number of birth and fetal deaths in this delivery is recorded as_____.

Please indicate whether this number is "correct" or enter a new number.

□ correct

Number (born live or dead) in this delivery_____

If "Correct" is checked the PLUR_BYPASS variable is set to ON-1.

If a new number is entered the edit is rerun. If the edit fails, the PLUR_BYPASS variable is set to ON-1. If the edit passes, the PLUR_BYPASS variable is set to OFF-0.

If plurality >12 <u>after the edit is run</u>, change the value to 12.

If plurality = "99," "set order" must = "99."

If plurality = "1," "set order" must = "88."

If plurality >1 but not "99," "set order" must be ≤ plurality.
If this edit fails the following message occurs:

The record indicates that there were _____births and fetal deaths in this delivery but the set order of this fetal death was_____.

Please enter a new value for each of these items:

Total number (live or dead) in this delivery_____
Set order of this fetal death _____

The edit is re-run and if it fails the bypass flag is set to ON-2.

The number of fetal deaths in this delivery must be ≤the plurality. If it is not, a message should appear showing the discrepancy and asking that it be resolved by reentering "plurality" and "set order."

For quality control, the EFDR system should make sure that the correct number of records is completed for each fetal death in the multiple delivery by comparing the number for which the same identification number (MATCH) has been generated with the number reported as "fetal deaths" (FDTH).

PAPER RECORD

Records filed with the "Plurality" item blank are to be queried. If no response to query, assign "99" to the "plurality" and "set order" variables.

If "plurality" is > 1 and the "set order" is blank, query. If no response to query, assign "99" to the set order variable.

STATE DATA FILE CONSIDERATIONS

If states key literals for plurality (single, twin, etc.) and first, second etc for "Set order", on paper records, they will have to be translated to the corresponding numerical value for editing and transmission to NCHS.

NCHS TRANSMISSION FILE

Values of "88" for the SORD and FDTH variables are changed to "99" for transmission to NCHS.

Any values greater than "12" other than "99" for the PLUR and ORDER variables are assigned the value "12" for transmission to NCHS.

For paper records keyed by the state, the matching numbers for multiple deliveries will have to be assigned at the state office in order to transmit values for the variable “match”.

For multiple deliveries where there are one or more live births and one or more fetal deaths, obtain the match numbers from the live birth system. Otherwise, assign matching numbers and key enter the numbers for each fetal death in the multiple delivery.

VARIABLES:

NAME	LENGTH	TYPE	VALUES
PLUR	2	Numeric	01-12, 99
SORD	2	Numeric	01-12, 99
FDTH	2	Numeric	01-12 99
MATCH	6	Numeric	000001-999999
PLUR_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER/PATIENT TRANSFERRED FOR MATERNAL MEDICAL OR FETAL INDICATIONS FOR DELIVERY?**

Item Number: **35 Report, 20 Facility work sheet**

Description: Information of the transfer status of the mother/patient prior to delivery

Source of Information:

Preferred Source: Labor and delivery nursing admission triage form, Admission history and physical, Labor and delivery

INSTRUCTIONS

FOR A PAPER RECORD:

This item is to be completed by the facility. If the delivery did not occur in a facility, it is to be completed by the attendant or certifier and the response must be "no."

PATIENT TRANSFERRED FOR MATERNAL MEDICAL OR FETAL INDICATIONS FOR DELIVERY?

□ Yes □ No

IF YES, ENTER NAME OF FACILITY PATIENT TRANSFERRED FROM:

_____

If the name of the facility is not known, enter "unknown."

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

If the response to Report item 7 is any response but hospital, this item is automatically completed with the "no" response and will not appear on the EFDR screen.

Was the patient transferred to this facility for maternal medical or fetal indications prior to delivery? Transfers include hospital to hospital, birthing facility to hospital etc.

- ❑ Yes
- ❑ No
- ❑ Unknown

If the yes box is checked, the following appears:

Please enter the name of the facility the patient transferred from. If the name of the facility is not known, enter "unknown."

Facility name:_____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
TRAN	Patient transferred	Y	Yes
		N	No
		U	Unknown
NFACL	Name of facility	Alpha/Numeric	

EDITS:

ELECTRONIC RECORD

Before the record is transferred to the State

The transfer status cannot be blank.

If transfer status is left blank, the item will reappear at the final review screen. Record cannot be printed or transferred to the state until item is complete.

If transfer status is "no", the name of facility field must be blank.

If the transfer status is "yes", the name of facility field must have an entry. "Unknown" is an acceptable entry.

If the name of the facility field has any entry except "unknown" and the transfer status is "no", a query message should appear indicating the inconsistency and asking that it be corrected.

If transfer status is "yes", the response to item 7 must be "hospital." If any response but "hospital", a query message should appear. Either Report item 7 must be changed to "hospital" or Report item 35 changed to "no."

PAPER RECORD

Records filed with the transfer status blank shall be queried. If no response to query, enter response of "no."

If transfer status is "no", the name of facility field must be blank.

If the transfer status is "yes", the name of facility field must have an entry. "Unknown" is an acceptable entry.

If the name of the facility field has any entry except "unknown" and the transfer status is "no", query the inconsistency and resolve.

If transfer status is "yes", then the response to Report item 7 must be "hospital." If not, query. Either Report item 26 must be changed to "hospital" or Report item 35 changed to "no."

State Edits of data file prior to NCHS transmission

Must be a valid code (see below)

STATE FILE CONSIDERATIONS

States will need to have a field for the literal entry of facility names. They may also want to collect the facility NPI number or assign their own facility code.

NCHS TRANSMISSION FILE

VARIABLES:

NAME:	**LENGTH**	**TYPE**	**VALUES**
TRAN	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet.

Item Title: **RISK FACTORS IN THIS PREGNANCY**

Item Number: **36 Report, 14 Facility worksheet**

Description: Selected medical risk factors of the mother/patient during this pregnancy

Source of Information:

Preferred source: Mother/patient's prenatal care record
Other sources: Labor and delivery nursing admission triage form, Admission history and physical, Delivery record

INSTRUCTIONS*

* States that implemented the 2003 revision of the birth certificate and fetal death report prior to 2005 may have adopted editing specifications that were consistent with the version of the certificate and report in effect through October 2003, that is the version that was initially recommended by the Panel to Evaluate the U.S. Standard Certificates and Reports (http://www.cdc.gov/nchs/vital_certs_rev.htm). The standard certificates and report have now been officially cleared and promulgated by the U.S. Department of Health and Human Services, effective November 2003, and incorporate modest changes in some items, including this item. States which revise their certificates and report for 2005 and later years are expected to use these specifications (dated 2/2005) that reflect the content of the cleared certificates.

For item 36, the original version of the fetal death report had two response categories for the "hypertension" factor: "prepregnancy (chronic)" and "gestational (PIH, preeclampsia, eclampsia". During the clearance process the response categories for hypertension were revised. On the final version of the fetal death report, the response categories for hypertension are: "prepregnancy (chronic)," "gestational (PIH, preclampsia)," and "eclampsia."

For item 36, the original version of the fetal death report included a checkbox for "vaginal bleeding during this pregnancy prior to the onset of labor." During the clearance process that checkbox was deleted. The final report does not include this checkbox.

For item 36, the original version of the fetal death report included this checkbox: "pregnancy resulted from infertility treatment." During the clearance process two response categories were added to this risk factor. On the final version of the fetal death report, the checkbox was revised to read: "Pregnancy resulted from infertility treatment – If yes, check all that apply: __fertility-enhancing drugs, artificial insemination or intrauterine insemination; __assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT)"

FOR A PAPER RECORD:

The patient may have more than one risk factor, check all that apply.

If the patient had none of the risk factors, check the "None of the above" box.

If it is unknown if the patient had any of the risk factors, type or print unknown.

RISK FACTORS IN THIS PREGNANCY (Check all that apply):

Diabetes
- ❑ Prepregnancy (Diagnosis prior to this pregnancy)
- ❑ Gestational (Diagnosis in this pregnancy)

Hypertension
- ❑ Prepregnancy (Chronic)
- ❑ Gestational (PIH, preeclampsia)
- ❑ Eclampsia

- ❑ Previous preterm births
- ❑ Other previous poor pregnancy outcome (Includes: perinatal death, small for gestational age/interuterine growth restricted birth)
- ❑ Pregnancy resulted from infertility treatment –
  If Yes, check all that apply:
  - ❑ Fertility-enhancing drugs, artificial insemination or intrauterine insemination
  - ❑ Assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT))
- ❑ Patient had a previous cesarean delivery
  If yes, how many_____
- ❑ None of the above

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The following definitions should appear in the help function:

Diabetes (prepregnancy): Glucose intolerance requiring treatment diagnosed prior to this pregnancy.

Diabetes (gestational): Glucose intolerance requiring treatment diagnosed during this pregnancy.

Hypertension (prepregnancy): (Chronic) Elevation of blood pressure above normal for age, gender, and physiological condition diagnosed prior to the onset of this pregnancy.

Hypertension (gestational): (PIH, Preeclampsia) Elevation of blood pressure above normal for age, gender, and physiological condition diagnosed during this pregnancy. May include proteinuria (protein in the urine) without seizures or coma and pathologic edema (generalized swelling, including swelling of the hands, legs and face).

Hypertension (eclampsia): Pregnancy induced hypertension with proteinuria with generalized

seizures or coma. May include pathologic edema.

Previous preterm births: History of pregnancy(ies) terminating in a live birth of less than 37 completed weeks of gestation.

Other previous poor pregnancy outcome: (Includes perinatal death, small for gestational age/intrauterine growth restricted birth) History of pregnancies continuing into the 20th week of gestation (post menstrual age) and resulting in any of the listed outcomes. Perinatal death includes fetal and neonatal deaths.

Pregnancy resulted from infertility treatment - Any assisted reproduction technique used to initiate the pregnancy. Includes fertility-enhancing drugs (e.g., Clomid, Pergonal), artificial insemination, or intrauterine insemination and assisted reproduction technology (ART) procedures (e.g., IVF, GIFT and ZIFT**).**

- Fertility-enhancing drugs – Any fertility-enhancing drugs (e.g., Clomid, Pergonal), artificial insemination, or intrauterine insemination used to initiate the pregnancy.

- Assisted reproductive technology - Any assisted reproduction technology (ART)/ technical procedures (e.g., IVF, GIFT, ZIFT) used to initiate the pregnancy.

Previous cesearean delivery: Previous operative delivery in which the fetus is extracted through an incision in the maternal abdominal and uterine walls.

When this item is to be completed, it is critical that the recommended message screens appear when appropriate.

The following message should appear first:

> **Check this button if the information needed to complete item "Risk factors in this pregnancy" is currently not available, but an effort is being made to obtain it.**
>
> ☐ **Information not currently available**

EFDR developers may wish to use a hot key for responding to the above rather than a specific button. For example the instruction could read:

> **Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.**

When this button is checked, the item is skipped and placed in pending status for completion at a later time on the final review screen. The final review screen for this item will be a replica of the initial entry screen with the addition of a box to check

"unknown."

The following instruction should appear when the item is to be completed:

Please check all the boxes that apply. If the patient had none of the listed risk factors, please check the "None of the above" box. DO NOT LEAVE THE ITEM BLANK.

Risk Factors in this Pregnancy:

Diabetes
- ❑ Prepregnancy (Diagnosis prior to this pregnancy)
- ❑ Gestational (Diagnosis in this pregnancy)

Hypertension
- ❑ Prepregnancy (Chronic)
- ❑ Gestational (PIH, preeclampsia)
- ❑ Eclampsia

- ❑ Previous preterm births (<37 completed weeks gestation)
- ❑ Other previous poor pregnancy outcome (includes: perinatal death, small for gestational age/intrauterine growth restricted birth)
- ❑ Pregnancy resulted from infertility treatment
  If Yes, check all that apply:
  - ❑ Fertility-enhancing drugs, artificial insemination or intrauterine insemination
  - ❑ Assisted reproductive technology (e.g., in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT))
- ❑ Patient had a previous cesarean delivery
  If yes, how many_____
- ❑ None of the above

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
PDIAB	Prepregnancy diabetes	Y	Yes
		N	No
		U	Unknown
GDIAB	Gestational diabetes	Y, N, U	
PHYPE	Prepregnancy hypertension	Y, N, U	
GHYPE	Gestational hypertension	Y, N,U	
EHYPE	Eclampsia	Y, N, U	
PPB	Previous preterm births	Y, N, U	

PPO	Poor pregnancy outcomes	Y, N, U	
INFT	Infertility treatment	Y, N, U	
INFT_DRG	Infertility: Fertility Enhancing Drugs	Y	Yes
		N	No
		X	Not Applicable
		U	Unknown
INFT_ART	Infertility:Asst.Repr. Technology	Y, N, X, U	
PCES	Previous cesarean	Y, N, U	
NPCES	Number of previous cesareans	0-10, 99	
NPCES_BYPASS		0, 1	
NOA01	None of the above	Y, N, U	
DNA01	Pending flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If no boxes are checked, the following message will appear:

The item has not been completed. If there are risk factors, check the appropriate box(es). If there are no risk factors, check "None of the above."

If the "Data not available at this time" button is checked, the following message shall appear:

Please obtain the information necessary to complete this item. The item will be on the final review screen prior to submission to the state.

The pending flag shall be set to "ON" and all other variables assigned the "unknown" code.

The final review screen shall be a replica of the initial entry screen. If the "Unknown" box is checked on the final review screen, the pending flag is set to "OFF" and the record is accepted.

If the "None of the above" box is checked and at least one other box is checked, assign the "no" code to the "none of the above" variable" and continue edits.

If the "None of the above" box is checked and no other box checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to all blank boxes.

The prepregnancy diabetes and gestational diabetes choices cannot both be checked. If

both boxes are checked, a message should appear that reads:

> **Both the prepregnancy and gestational diabetes boxes are checked. Please review the records and choose the correct response.**

The eclampsia and either prepregnancy hypertension or gestational hypertention boxes may be checked. However, prepregnancy and gestational hypertension cannot both be checked. If both boxes are checked, a message should appear that reads:

> **Both the prepregnancy and gestational hypertension boxes are checked. Please review the records and choose the correct response.**

If the "Pregnancy resulted from infertility treatment" (INFT) box is not checked, assign "X"s to both "fertility-enhancing drugs" (INFT_DRG) and "assisted reproductive technology" (INFT_ART).

If the "Pregnancy resulted from infertility treatment" (INFT) box is checked, but neither types of treatment, "fertility-enhancing drugs" (INFT_DRG) or "assisted reproductive technology" (INFT_ART) is checked, assign "U"s to both INFT_DRG and INFT_ART. If only the INFT_DRG box is checked, assign "N" to INFT_ART. If only the INFT_ART box is checked, assign "N" to INFT_DRG.

Both the INFT_DRG and INFT_ART boxes may be checked. If one or both of INFT_DRG or INFT_ART are checked, but INFT is not checked, assign "Y" to INFT.

If the "Previous cesarean delivery" box is not checked, a value of 0 will be assigned to the variable for the number of previous cesarean deliveries.

If the "Previous cesarean delivery" box is checked, the following screen will immediately appear:

Enter the number of previous cesarean deliveries _____.
If unknown, enter "99."

If "0" or no entry is given from the number of previous cesareans, a message should appear asking that a number be entered, or 99 if the number is unknown

The number entered must be between >0 and <11. If the number is greater than 10, but not 99, the following message appears:

The record indicates that the number of previous cesarean deliveries is _____.
Please check "correct" or enter the correct number.

- ❑ **Correct**

Number of previous cesarean deliveries_____

If the value given is still greater than 10, the NPCES_BYPASS is set to "ON-1. If the

value is greater than 30, it should be changed to "unknown."

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign each choice the "unknown" code.

If "unknown" is printed in the box, assign each choice the "unknown" code.

If the "None of the above" box is checked and at least one other box is checked, assign the "None of the above" variable the "no" code and continue edits.

If the "None of the above" box is checked and no other box is checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to all blank boxes.

If both the "Prepregnancy diabetes" and "Gestational diabetes" boxes are checked, query.

If both the "Prepregnancy hypertension" and "Gestational hypertension" boxes are checked, query.
If the "Pregnancy resulted from infertility treatment" box is checked" but neither types of treatment, "fertility-enhancing drugs" or "assisted reproductive technology" is checked, query.

If the "Patient had a previous cesarean delivery" box is checked but the number of previous cesareans is not given, query.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

See electronic records section (above) for state processing of electronic records.

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
PDIAB	1	Alpha character string	Y, N, U
GDIAB	1	Alpha character string	Y, N, U
PHYPE	1	Alpha character string	Y, N, U

GHYPE	1	Alpha character string	Y, N, U
EHYPE	1	Alpha character string	Y, N, U
PPB	1	Alpha character string	Y, N, U
PPO	1	Alpha character string	Y, N, U
VB	1	Alpha character string	Y, N, U
INFT	1	Alpha character string	Y, N, U
INFT_DRG	1	Alpha character string	Y, N, X, U
INFT_ART	1	Alpha character string	Y, N, X, U
PCES	1	Alpha character string	Y, N, U
NPCES	2	Numeric	00-30,99
NPCES_BYPASS	1	Numeric	0,1

EDI TRANSMISSION:
No standards set yet.

Item Title: **INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY**

Item Number: **37 Report, 15 Facility worksheet**

Description: Selected infections that the mother/patient had or was treated for

during the course of this pregnancy

Source of Information:

Preferred Source: Mother/patient's prenatal care record
Other Sources: Labor and delivery nursing admission triage form, Admission history and physical, Delivery record

INSTRUCTIONS*

* States that implemented the 2003 revision of the birth certificate and fetal death report prior to 2005 may have adopted editing specifications that were consistent with the version of the certificate and report in effect through October 2003, that is the version that was initially recommended by the Panel to Evaluate the U.S. Standard Certificates and Reports (http://www.cdc.gov/nchs/vital_certs_rev.htm). The standard certificates and report have now been officially cleared and promulgated by the U.S. Department of Health and Human Services, effective November 2003, and incorporate modest changes in some items, including this item. States which revise their certificates and report for 2005 and later years are expected to use these specifications (dated 2/2005) that reflect the content of the cleared certificates.

For item 37, the original version of the fetal death report included a checkbox for "herpes simplex virus (HSV)." During the clearance process that checkbox was deleted. The final fetal death report does not include this checkbox.

FOR A PAPER RECORD:

If the prenatal care record is not available and the information is not available from other medical records, write "unknown" in the space. More than one infection may be checked.

INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY
(Check all that apply)

- ☐ Gonorrhea
- ☐ Syphilis
- ☐ Chlamydia
- ☐ Listeria
- ☐ Group B Streptococcus
- ☐ Cytomeglovirus
- ☐ Parvovirus

- □ Toxoplasmosis
- □ None of the above
- □ Other (Specify) _____

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The following instruction and definitions should appear in the help function:

> **Infections present and/or treated during the pregnancy:**
>
> Infections present at the time of pregnancy diagnosis or confirmed diagnosis during the pregnancy with or without documentation of treatment. Documentation of treatment is adequate if a definitive diagnosis is not present in the available record.

Gonorrhea – a positive test for *Neisseria gonorrhoeae*
Syphilis (also called lues) **–**. a positive test for *Treponema pallidum*.
Chlamydia - a positive test for *Chlamydia trachomatis*.
Listeria (LM) – a diagnosis of or positive test for Listeria monocytogenes
Group B Streptococcus (GBS) – a diagnosis of or positive test for Streptococcus agalactiae or group B streptococcus
Cytomeglovirus (CMV) – a diagnosis of or positive test for Cytomeglovirus
Parvovirus (B19) – a diagnosis of or positive test for Parvovirus B19
Toxoplasmosis (Toxo) – a diagnosis of or positive test for Toxoplasmosis gondii

When this item is to be completed, it is critical that the recommended message screens appear.

The following message should appear first:

> **Check this button if the information needed to complete item "Infections present and /or treated during this pregnancy" is currently not available, but an effort is being made to obtain it.**
>
> ❑ Information not currently available

EFDR developers may wish to use a hot key for responding to the above rather than a specific button. For example the instruction could read:

> **Press the _____key if the information needed to complete this item is currently not available, but an effort is being made to obtain it.**

When this button is checked, the item is skipped and placed in pending status for completion at a later time on the final review screen. The final review screen for this item will be a replica of the initial entry screen with the addition of a box to check "unknown."

The following instruction should appear when the item is to be completed:

Please check all the boxes that apply. If the patient had none of the listed infections please check "None of the above." DO NOT LEAVE THE ITEM BLANK.

INFECTIONS PRESENT AND/OR TREATED DURING THIS PREGNANCY
(Check all that apply)

- ❑ Gonorrhea
- ❑ Syphilis
- ❑ Chlamydia
- □ Listeria
- □ Group B Streptococcus
- □ Cytomeglovirus
- □ Parvovirus
- □ Toxoplasmosis
- □ None of the above
- □ Other (Specify) _____

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
GON	Gonorrhea	Y, N, U	Y—Yes, N—No, U--Unknown
SYPH	Syphilis	Y, N, U	
CHAM	Chlamydia	Y, N, U	
LM	Listeria	Y, N, U	
GBS	Group B Streptococcus	Y, N, U	
CMV	Cytomeglovirus	Y, N, U	
B19	Parvovirus	Y, N, U	
TOXO	Toxoplasmosis	Y, N, U	
NOA02	None of the above	Y, N, U	
OTHERI	Other (Specify)	Y, N, U	
		Alpha Character String	
DNA02	Pending flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If the "Data not available at this time" button is checked and no specific infections are identified, assign the "unknown" codes to each data element and set the pending flag to "ON." If the pending flag is "ON," the item will appear on the final review screen.

If the item is left blank and the keyer tabs to the next item, the following message will appear. **This item must be completed.** *The entry screen will appear.*

If the "None of the above" box is checked and at least one other box is checked, assign the "None of the above" variable the "no " code and continue edits.

If the "None of the above" box is checked and no other box checked, assign all other items the "no" code.

If one or more boxes are checked, all boxes not checked are assigned the "no" code.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, code each item to the "unknown" code.

If "unknown" is printed or typed in the box, assign each variable the "unknown" code.

If the "None of the above" box is checked and at least one other box is checked, assign the "None of the above" variable the "no" code and continue edits.

If the "None of the above" box is checked and no other box checked, assign all other items the "no" code.

If one or more boxes are checked, all infections not checked will be assigned the "no" code.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
GON	1	Alpha character string	Y,N,U
SYPH	1	Alpha character string	Y,N,U
CHAM	1	Alpha character string	Y,N,U
LM	1	Alpha character string	Y,N,U
GBS	1	Alpha character string	Y,N,U
CMV	1	Alpha character string	Y,N,U
B19	1	Alpha character string	Y,N,U
TOXO	1	Alpha character string	Y,N,U
OTHERI	1	Alpha character string	Y,N,U

EDI TRANSMISSION:

No standards set yet

Item Title: **METHOD OF DELIVERY**

Item Number: **38 Report, 23 facility worksheet**

Description: The physical process by which the complete delivery of the fetus was effected.

Source of Information:

Preferred source: Delivery record, Physician delivery summary, Recovery room record

INSTRUCTIONS

FOR A PAPER RECORD:

A response to each section is required.

If any of the information for an individual section is not known at this time, print or type unknown in the space for the particular section.

METHOD OF DELIVERY

A. Was delivery with forceps attempted but unsuccessful?

□ Yes □ No

B. Was delivery with vacuum extraction attempted but unsuccessful?

□ Yes □ No

C. Fetal presentation at delivery

- ❑ Cephalic
- ❑ Breech
- ❑ Other

D. Final route and method of delivery (Check one)

- ❑ Vaginal/Spontaneous
- ❑ Vaginal/Forceps
- ❑ Vaginal/Vacuum
- ❑ Cesarean

If cesarean, was a trial of labor attempted?

□ Yes
□ No

E. Hysterotomy/Hysterectomy

☐ Yes
☐ No

FOR AN ELECTRONIC RECORD:

EFDR developer *(Instructions are in Italics)*

The definitions below should be available through the help function for the item "method of delivery."

- **Attempted forceps or vacuum:** Obstetric forceps, ventouse or vacuum cup was applied to the fetal head in an unsuccessful attempt to effect delivery of the head through the vagina.

- **Cephalic presentation:** Presenting part of the fetus listed as vertex, occiput anterior (OA), occiput posterior (OP).

- **Breech presentation:** Presenting part of the fetus listed as breech, complete breech, frank breech, footling breech.

- **Other presentation:** Any other presentation or presenting part not listed above.

- **Spontaneous delivery:** Delivery of the entire fetus through the vagina by the natural forces of labor with or without manual assistance from the delivery attendant.

- **Forceps delivery:** Delivery of the fetal head through the vagina by application of obstetrical forceps to the fetal head.

- **Vacuum delivery:** Delivery of the fetal head through the vagina by application of a vacuum cup or ventouse to the fetal head.

- **Cesarean delivery:** Extraction of the fetus, placenta and membranes through an incision in the maternal abdominal and uterine walls.

- **Hysterotomy/Hysterectomy:** Hysterotomy – the incision into the uterus extending into the uterine cavity. May be performed vaginally or transabdominally. Hysterectomy – the surgical removal of the uterus. May be performed abdominally or vaginally.

The following instruction should appear when the item is to be completed:

Please complete each section by checking the appropriate boxes. If the data are not available for completing an individual section, check the "Unknown at this time" box. DO NOT LEAVE ANY SECTION BLANK.

Each section should appear individually. As soon as one box is checked in section A, section B should then appear. As soon section B is completed, section C should appear, etc.. This is to prevent both "yes" and "no" being checked.

A. Was delivery with forceps attempted but unsuccessful?

□ Yes □ No

□ Unknown at this time

B. Was delivery with vacuum extraction attempted but unsuccessful?

□ Yes □ No

□ Unknown at this time

C. Fetal presentation at delivery (Check one)

- ❑ Cephalic
- ❑ Breech
- ❑ Other
- □ Unknown at this time

D. Final route and method of delivery (Check one)

Vaginal

- ❑ Vaginal/Spontaneous
- ❑ Vaginal/Forceps
- ❑ Vaginal/Vacuum
- ❑ Cesarean
- ❑ Unknown at this time

If the Cesarean box is checked the following question appears:

If cesarean, was a trial of labor attempted?

□ Yes
□ No
□ Unknown at this time

E. Hysterotomy/Hysterectomy

□ Yes
□ No
□ Unknown at this time

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
ATTF	Attempted forceps	Y, N, U	
ATTV	Attempted vacuum	Y, N, U	
DNAA	Follow up flag section A	0	Off
		1	On
DNAB	Follow up flag section B	0	Off
		1	On
PRES	Fetal presentation	1	Cephalic
		2	Breech
		3	Other
		9	Unknown
DNAC	Follow up flag section C	0	Off
		1	On
ROUT	Route and method of delivery	1	Spontaneous
		2	Forceps
		3	Vacuum
		4	Cesarean
		9	Unknown
DNAD	Follow up flag section D	0	Off
		1	On
TLAB	Trial of labor attempted	Y, N, X, U	
DNAL	Follow up flag trial of labor	0	Off
		1	On
			Y-----Yes N----No X----Not applicable U----Unknown
HYST	Hysterotomy/Hysterectomy	Y, N, U	

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If any of the "Unknown at this time" boxes are checked, the following message appears:

Please obtain the information necessary to complete this section. The section will appear on the final review screen

If any of the "Unknown at this time" boxes are checked the flag for that section is set to "ON" and the variables are assigned "unknown" codes

SECTION A: DELIVERY ATTEMPTED WITH FORCEPS

If the "Unknown at this time" box is not checked for the section, either the "yes" or "no" box for the item "Attempted forceps" must be checked. If neither box is checked, the following message shall appear.

Please choose either the "yes" or "no" box for the item "Attempted forceps," or check the "Unknown at this time box for the section." The entry screen should appear.

SECTION B: DELIVERY ATTEMPTED WITH VACUUM

If the "Unknown at this time" box is not checked, either the "yes" or "no" box for the item "Attempted vacuum" must be checked. If neither box is checked, the following message shall appear.

Please choose either the "yes" or "no" box for the item "Attempted vacuum" The entry screen should appear.

SECTION C: FETAL PRESENTATION AT DELIVERY

If none of the boxes are checked, the following message shall appear:

Please choose one of the choices from the menu. The menu of choices shall appear:

If more than one box is checked, the following message shall appear:

More than one choice from the menu was selected. Please review and pick only one menu item. The menu list shall appear:

SECTION D: FINAL ROUTE AND METHOD OF DELIVERY

If none of the boxes are checked, the following message shall appear:

Please choose one of the choices from the menu. The menu of choices shall appear:

If more than one box is checked, the following message shall appear:

More than one choice from the menu was selected. Please review and pick only one menu item. The menu list shall appear:

If "Cesarean" is checked, a response to the question on the attempted trial of labor is required. If neither the "yes" or "no" box is checked, the following message appears:

A response to the question concerning a trial of labor was not entered. Please choose the appropriate box.

If the "Cesarean" box is not checked, the "not applicable" code shall be assigned to the variable "Attempted trial of labor."

If the final route and method chosen is "forceps," the variable for "Attempted forceps" must be assigned the "no" code.

If the final route and method chosen is "vacuum," the variable "Attempted vacuum" must be assigned the "no" code.

SECTION E. Hysterotomy/Hysterectomy

Both hysterectomy and hysterectomy cannot be checked.

More than one choice from the menu was selected. Please review and pick only one menu item. The menu list shall appear:

PAPER RECORD

Records filed with any of the sections for this item are queried. If no response to query, code each item to the "unknown" code.

The edits listed under electronic records apply after data entry of this item.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUE
ATTF	1	Alpha character string	Y, N, U
ATTV	1	Alpha character string	Y, N, U
PRES	1	Numeric	1,2,3,9
ROUT	1	Numeric	1,2,3,4,9
TLAB	1	Alpha character string	Y, N, U, X
HYST	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **MATERNAL MORBIDITY**

Item Number: **39 Report, 24 Facility worksheet**

Description: Serious complications experienced by the mother/patient associated with labor and delivery

Source of Information:

Preferred Source: Delivery record, Recovery room record, Operative note, Physician progress note, Transfer note, Intake and output form

INSTRUCTIONS

FOR A PAPER RECORD:

Check all boxes that apply.
If unknown, print or type "unknown" in the space.

MATERNAL MORBIDITY (Check all that apply)
(Complications associated with labor and delivery)

- ☐ Maternal transfusion
- ☐ Third or fourth degree perineal laceration
- ☐ Ruptured uterus
- ☐ Unplanned hysterectomy
- ☐ Admission to intensive care unit
- ☐ Unplanned operating room procedure following delivery
- ☐ None of the above

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The following definitions are to be in the help menu for this item:

Maternal transfusion: Includes infusion of whole blood or packed red blood cells within the period specified.

Third or fourth degree perineal laceration: 3rd degree laceration extends completely through the perineal skin, vaginal mucosa, perineal body and anal sphincter. 4th degree laceration is all of the above with extension through the rectal mucosa.

Ruptured Uterus: Tearing of the uterine wall.

Unplanned hysterectomy: Surgical removal of the uterus that was not planned prior to admission for delivery. Includes an anticipated or possible but not definitively planned procedure.

Admission to intensive care unit: Any admission, planned or unplanned, of the patient to a facility/unit designated as providing intensive care.

Unplanned operating room procedure following delivery: Any transfer of the patient back to a surgical area for an operative procedure that was not planned prior to the admission for delivery. Excludes postpartum tubal ligations.

The following instruction should appear on the screen with the menu:

Please check all boxes that apply. If none are indicated, check "None of the above." If the data are not available at this time, check "Unknown at this time." DO NOT LEAVE THIS ITEM BLANK.

- ❑ Maternal transfusion
- ❑ Third or fourth degree perineal laceration
- ❑ Ruptured uterus
- ❑ Unplanned hysterectomy
- ❑ Admission to intensive care unit
- ❑ Unplanned operating room procedure following delivery
- ❑ None of the above
- ❑ Unknown at this time

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINTION
MTR	Maternal transfusion	Y, N, U	Y--Yes, N—No,
PLAC	Perineal laceration	Y, N, U	U--Unknown
RUT	Ruptured uterus	Y, N, U	
UHYS	Unplanned hysterectomy	Y, N, U	
AINT	Admission to intensive care	Y, N, U	
UOPR	Unplanned operation	Y, N, U	
NOA05	None of the above	Y, N, U	
DNA05	Pending flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If no boxes are checked, the following message will appear:

The item has not been completed. Please check "Unknown at this time" if the data are not available. If any of the choices listed in the menu are indicated, check the appropriate box(s). Please check the "None of the above" box if none of the listed maternal morbidity items are indicated.

If the "None of the above" box is checked and at least one other box checked, assign the "None of above box" variable the "no" code and continue edits.

If the "None of the above" box is checked and no other boxes checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to items not checked.

PAPER RECORD

Records filed with all the items in the menu left blank are queried. If no response to query, code each item to the "unknown" code.

If "unknown" is printed in the box, assign each choice the "unknown" code.

If the "None of the above" box is checked and at least one other box checked, change the "None of above box" response to the "no" code and continue edits.

If the "None of the above" box is checked and no other boxes checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to all blank boxes.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
MTR (Maternal transfusion)	1	Alpha character string	Y, N, U
PLAC (Perineal laceration)	1	Alpha character string	Y, N, U
RUT (Ruptured uterus)	1	Alpha character string	Y, N, U
UHYS (Unp. hysterectomy)	1	Alpha character string	Y, N, U
AINT (Admit to intensive care)	1	Alpha character string	Y, N, U
UOPR (Unp. Operation)	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **CONGENITAL ANOMALIES OF THE FETUS**

Item Number: 40 **Certificate, 31 Facility worksheet**

Description: Malformations of the fetus diagnosed prenatally or after delivery

Source of Information:

Preferred Source: Labor and delivery summary, Fetal history and physical, Physician progress notes, Fetal admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

CONGENITAL ANOMALIES OF THE FETUS

Check all boxes that apply to this fetus. For "Downs Syndrome" and Suspected Chromosomal disorder" if karyotype status is unknown leave both the "Karyotype confirmed" and "Karyotype pending" boxes blank.

- ❑ Anencephaly
- ❑ Meningomyelocele / Spina Bifida
- ❑ Cyanotic congenital heart disease
- ❑ Congenital diaphramatic hernia
- ❑ Omphalocele
- ❑ Gastroschisis
- ❑ Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
- ❑ Cleft Lip with or without Cleft Palate
- ❑ Cleft Palate alone
- ❑ Down Syndrome
  - ❑ Karyotype confirmed
  - ❑ Karyotype pending
- ❑ Suspected chromosomal disorder
  - ❑ Karyotype confirmed
  - ❑ Karyotype pending
- ❑ Hypospadias
- ❑ None of the anomalies listed above

FOR AN ELECTRONIC RECORD:

EFDR Developer *(Instructions are in Italics)*

The following definitions are to be in the help menu for this item:

Anencephaly: Partial or complete absence of the brain and skull. Also called anencephalus, acrania, or absent brain. Babies with craniorachischisis (anencephaly with contiguous spine defect) should also be included in this category.

Meningomyelocele / Spina Bifida: Spina bifida refers to herniation of the meninges and/or spinal cord tissue through a bony defect of spine closure. Meningomyelocele refers to herniation of meninges and spinal cord tissue. Babies with meningocele (herniation of meninges without spinal cord tissue) should also be included in the category. Both open and closed (covered with skin) lesions should be included. Spina bifida occulta (a midline bony spinal defect without protrusion of the spinal cord or meninges) should not be included in this category.

Cyanotic congenital heart disease: Congenital heart defects which cause cyanosis. Includes but is not limited to transposition of the great arteries (vessels), teratology of Fallot, pulmonary or pulmonic valvular atresia, tricuspid atresia, truncus arteriosus, total/partial anomalous pulmonary venous return with or without obstruction.

Congenital diaphragmatic hernia: Defect in the formation of the diaphragm allowing herniation of abdominal organs into the thoracic cavity.

Omphalocele: A defect in the anterior abdominal wall, accompanied by herniation of some abdominal organs through a widened umbilical ring into the umbilical stalk. The defect is covered by a membrane, (different from gastroschisis, see below), although this sac may rupture. Also called exomphalos. Umbilical hernia (completely covered by skin) should not be included in this category.

Gastroschisis: An abnormality of the anterior abdominal wall, lateral to the umbilicus, resulting in herniation of the abdominal contents directly into the amniotic cavity. Differentiated from omphalocele by the location of the defect and absence of a protective membrane.

Limb reduction defect: (excluding congenital amputation and dwarfing syndromes) Complete or partial absence of a portion of an extremity secondary to failure to develop.

Cleft Lip with or without Cleft Palate: Cleft lip with or without cleft palate refers to incomplete closure of the lip. Cleft lip may be unilateral, bilateral or median; all should be included in this category.

Cleft Palate alone: Cleft palate refers to incomplete fusion of the palatal shelves. This may be limited to the soft palate or may also extend into the hard palate. Cleft palate in the presence of cleft lip should be included in the "Cleft Lip with or without cleft Palate" category, rather than here.

Down Syndrome: Trisomy 21

Suspected chromosomal disorder: Includes any constellation of congenital malformations resulting from or compatible with known syndromes caused by detectable defects in chromosome structure.

Hypospadias: Incomplete closure of the male urethra resulting in the urethral meatus opening on the ventral surface of the penis. Includes first degree – on the glans ventral to the tip, second degree – in the coronal sulcus, and third degree – on the penile shaft.

The following menu of congenital anomalies of the fetus should be used. The following instruction should appear on the screen with the menu.

Please check all boxes that apply. If the information needed to complete this item is not available at this time please check the "Unknown at this time" box. If none of the congenital anomalies of the fetus are indicated, check the "None of the above" box. DO NOT LEAVE THIS ITEM BLANK.

CONGENITAL ANOMALIES OF THE FETUS

Check all boxes that apply:

- ❑ Anencephaly
- ❑ Meningomyelocele / Spina Bifida
- ❑ Cyanotic congenital heart disease
- ❑ Congenital diaphramatic hernia
- □ Omphalocele
- □ Gastroschisis
- ❑ Limb reduction defect (excluding congenital amputation and dwarfing syndrones)
- ❑ Cleft Lip with or without Cleft Palate
- ❑ Cleft Palate alone
- ❑ Down Syndrome
  - ❑ Karyotype confirmed
  - ❑ Karyotype pending
- ❑ Suspected chromosomal disorder
  - ❑ Karyotype confirmed
  - ❑ Karyotype pending
- ❑ Hypospadias
- ❑ None of the anomalies listed above

- ❑ Unknown at this time

Systems should be designed so that "Karyotype pending" or "Karyotype confirmed" can only be selected if "Down Syndrome" and/or "Suspected chromosomal disorder anomalies" are checked.

The following instruction should appear with the "Karyotype confirmed" / "Karyotype pending" item:

If karyotype status is unknown, leave both "Karyotype confirmed" and "Karyotype

pending" boxes blank.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINTION
ANEN	Anencephaly	Y, N, U	Y--Yes, N—No,
MNSB	Meningomyelocele/ Spina Bifida	Y, N, U	U--Unknown
CCHD	Cyanotic congenital heart disease	Y, N, U	
CDH	Congenital diaphragmatic hernia	Y, N, U	
OMPH	Omphalocele	Y, N, U	
GAST	Gastroschisis	Y, N, U	
LIMB	Limb reduction defect	Y, N, U	
CL	Cleft Lip with or without Cleft Palate	Y, N, U	
CP	Cleft Palate alone	Y, N, U	
DOWN	Down Syndrome	Y, N, U	
DOWC	Down Karyotype confirmed	Y, N, U	
DOWP	Down Karyotype pending	Y, N, U	
CDIS	Suspected chromosomal disorder	Y, N, U	
CDIC	Suspected chromosomal disorder karyotype confirmed	Y, N, U	
CDIP	Suspected chromosomal disorder karyotype pending	Y, N, U	
HYPO	Hypospadias	Y, N, U	
NOA55	None of the above	Y, N, U	
DNA55	Follow up flag	0	OFF
		1	ON

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

If no boxes are checked, the following message will appear:

The item has not been completed. Please check the "Unknown at this time" box if the data are not available to complete this item at this time. Check the "None of the above" box if none of the listed anomalies are indicated. If any of the anomalies listed in the menu are indicated, check the appropriate box(s).

If the "Unknown at this time" box is checked, all variables are assigned the "unknown" code and the pending flag is set to "ON." A message will appear that reads:

Please obtain the records needed to complete this item. The item will appear on the final review screen.

If the "None of the above" box is checked and at least one other box checked, assign the "no" code to the "None of above" variable" and continue edits.

If the "None of the above" box is checked and no other boxes checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to all blank boxes.

If the "Down syndrome" and/or "Suspected chromosomal disorder" boxes are checked, but it is unknown whether the karyotype is "confirmed" or "pending," leave both the "confirmed" and "pending" boxes blank. Processing variables DOWC AND DOWP, CDIC and CDIP are assigned the value "U."

PAPER RECORD

Records filed with all the items in the menu left blank are queried. If no response to query, code each item to the "unknown" code.

If the "None of the above" box is checked and at least one other box checked, change the "None of above box" response to the "no" code and continue edits.

If the "None of the above" box is checked and no other boxes checked, assign all other items the "no" code.

If the "None of the above" box is blank and at least one other box is checked, assign the "no" code to all blank boxes.

If the "Down Syndrome" box is checked and no boxes for the "Karyotype confirmed or pending" are checked, assign the unknown or "U" response to "karyotype pending" and the "U" response to "karyotype confirmed." If both boxes are checked, assign the "Y" response to "karyotype confirmed" and the "N" response to "karyotype" pending.

If the "Suspected chromosomal disorder" box is checked and no boxes for the "Karyotype confirmed or pending" are checked, assign the unknown or "U" response to "karyotype pending" and the "U" response to "karyotype confirmed." If both boxes are checked, assign the "Y" response to "karyotype confirmed" and "N" response to the "karyotype pending."

If a "karyotype confirmed or pending" box is checked and the corresponding anomaly is not checked, query. If no response to query assign all variables the "U" code.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

The processing variables DOWN, DOWC, and DOWP are combined into one variable "DOWT" for transmission as follows:

If the processing variable DOWN is assigned the "Y" code and DOWC is assigned the "Y" code, assign DOWT the value "C."
If the processing variable DOWN is assigned the "Y" code and DWOP is assigned the "Y" code, assign DOWT the value "P."
If the processing variable DOWN is assigned the "Y" code and both processing variables DOWC and DOWP are assigned the "U" code, assign DOWT the value "P."

If the processing variable DOWN is assigned the "N" code, assign DOWT the value "N"
If the processing variable DOWN is assigned the "U" code, assign DOWT the value "U."

The processing variables CDIS, CDIC, and CDIP are combined into one variable called CDIT for transmission as follows:

If the processing variable CDIS is assigned the "Y" code and CDIC is assigned the "Y" code, assign CDIT the value "C."
If the processing variable CDIS is assigned the "Y" code and CDIP is assigned the "Y" code, assign CDIT the value "P."
If the processing variable CDIS is assigned the "Y" code and both processing variables CDIC and CDIP are assigned the "U" code, assign CDIT the value "P."

If the processing variable CDIS is assigned the "N" code, assign CDIT the value "N"
If the processing variable CDIS is assigned the "U" code, assign CDIT the value "U."

NCHS TRANSMISSION FILE

VARIABLES:

NAME	LENGTH	TYPE	VALUES
ANEN (Anencephaly)	1	Alpha character string	Y, N, U
MNSB (Meningomyelocele/Spina Bifida)	1	Alpha character string	Y, N, U
CCHD (Cyanotic congenital heart disease)	1	Alpha character string	Y, N, U
CDH (Congenital diaphragmatic hernia)	1	Alpha character string	Y, N, U
OMPH (Omphalocele)	1	Alpha character string	Y, N,U
GAST (Gastroschisis)	1	Alpha character string	Y, N,U
LIMB (Limb reduction defect)	1	Alpha character string	Y, N, U
CL (Cleft Lip with or without Cleft Palate)	1	Alpha character string	Y, N, U
CP (Cleft Palate alone)	1	Alpha character string	Y, N, U
DOWT (Down Syndrome)	1	Alpha character string	C, P, N, U
CDIT (Suspected chromosomal disorder)	1	Alpha character string	C, P, N, U
HYPO (Hypospadias)	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

File Processing Item: **State of delivery**

File Layout Location: **5-6**

Description: Information about the State of occurrence of the delivery.

Source of Information:

Preferred Source: System generated or State vital statistics staff

INSTRUCTIONS

FOR A PAPER RECORD:

State vital statistics staff

Use the 2- character alpha State code from Appendix B to be superseded by NCHS Part 8 (from FIPS table 5-2).

FOR AN ELECTRONIC RECORD:

Use the 2- character alpha State code from Appendix B to be superseded by NCHS Part 8 (from FIPS table 5-2).

EFDR Developer

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
DSTATE	State of delivery	Alpha	Appendix B

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
DSTATE	2	Alpha character string	Appendix B

File Processing Item: **Report number (State file number)**

File Layout Location: **7-12**

Description: Information about the record used for quality control, management, and evaluation.

Source of Information:

Preferred Source: System generated or State vital statistics staff

INSTRUCTIONS

FOR A PAPER RECORD:

State vital statistics staff

To be used for administrative and management purposes. Left fill with zeros if the State file number has fewer than 6 digits.

FOR AN ELECTRONIC RECORD:

EFDR Developer

To be used for administrative and management purposes. Left fill with zeros if the State file number has fewer than 6 digits.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
FILENO	State file number	6-digit	Left fill zero if not 6 digits

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
FILENO	6	Numeric character string	000001-999999

File Processing Item: **Void flag**

File Layout Location: **13**

Description: Information about the record used for quality control, management, and evaluation.

Source of Information:

Preferred Source: System generated or State vital statistics staff

INSTRUCTIONS

FOR A PAPER RECORD:

State vital statistics staff

To help identify records that have been voided from the data file.

FOR AN ELECTRONIC RECORD:

EFDR Developer

To help identify records that have been voided from the data file.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
VOID (default)	**Flag indicating void**	**0**	**Valid record**
		1	**Void record**

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
VOID	1	Numeric character string	0,1

File Processing Item: **Auxiliary state file number**

File Layout Location: **14-25**

Description: Information about the record used for quality control, management, and evaluation.

Source of Information:

Preferred Source: System generated or State vital statistics staff

INSTRUCTIONS

FOR A PAPER RECORD:

State vital statistics staff

To be used for administrative and management purposes. Left fill with zeros if the auxiliary State file number has fewer than 12 digits.

FOR AN ELECTRONIC RECORD:

EFDR Developer

To be used for administrative and management purposes. Left fill with zeros if the auxiliary State file number has fewer than 12 digits.

PROCESSING VARIABLES:

NAME	DESCRIPTION	VALUES	DEFINITION
AUXNO	**Auxiliary State File number**	**12-digit**	**Left fill zero if not 12 digits, blank**

NCHS TRANSMISSION FILE

VARIABLES:

NAMES	LENGTH	TYPE	VALUES
AUXNO	12	Numeric character string	000000000001-999999999999, blank

Appendix A

TABLE OF COUNTRY CODES

APPENDIX A

COUNTRY CODES

Codes marked with an "*" indicate historic political entities that no longer exist. Some of the historic political entities appear multiple times in the list: alphabetically and indented following the related active political entities. When active and historic political entities have the same name, dates have been provided to help select the most appropriate code. A few codes appear more than once in the list alphabetized under commonly use variants of the official name. Italics are used to indicate all codes appearing more than once, whether because of a name variation or because a historic code has been grouped with the current active country.

NOTE: Codes are not available for countries that ceased to exist prior to June 15, 1970. To code an event for a country for which a code is not available, use the code for the closest contemporary country (i.e. a code that is not italicized).

AFGHANISTAN	AF	
ALBANIA	AL	
ALGERIA	AG	
AMERICAN SAMOA	AQ	
ANDORRA	AN	
ANGOLA	AO	
ANGUILLA	AV	
ANTARCTICA	AY	
ANTIGUA AND BARBUDA	AC	
ARGENTINA	AR	
ARMENIA [as of September 21, 1991]	AM	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
ARUBA [as of January 1, 1986]	AA	
NETHERLANDS ANTILLES [prior to January 1, 1986]	*NA*	*
ASHMORE AND CARTIER ISLANDS	AT	
AUSTRALIA	AS	
AUSTRIA	AU	
AZERBAIJAN [as of August 30, 1991]	AJ	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
BAHAMAS, THE	BF	
BAHRAIN	BA	
BANGLADESH	BG	
BARBADOS	BB	
BASSAS DA INDIA	BS	
BELARUS [as of August 25, 1991]	BO	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
BELGIUM	BE	
BELIZE	BH	
BENIN	BN	
DAHOMEY [BENIN]	*DM*	*
BERMUDA	BD	
BHUTAN	BT	
BOLIVIA	BL	
BOSNIA AND HERZEGOVINA [as of April 5, 1992]	BK	
YUGOSLAVIA [December 1, 1918 to April 11, 1992]	*YO*	*
BOTSWANA	BC	
BOUVET ISLAND	BV	
BRAZIL	BR	
BRITISH INDIAN OCEAN TERRITORY	IO	
BRITISH VIRGIN ISLANDS	VI	
BRUNEI	BX	

BULGARIA	BU	
BURKINA FASO	UV	
BURMA	BM	
BURUNDI	BY	
CAMBODIA	CB	
CAMEROON	CM	
CANADA	CA	
CANTON AND ENDERBERRY ISLANDS	EQ	*
CAPE VERDE	CV	
CAYMAN ISLANDS	CJ	
CENTRAL AFRICAN REPUBLIC	CT	
CENTRAL AND SOUTHERN LINE ISLANDS	CL	*
CHAD	CD	
CHILE	CI	
CHINA	CH	
CHRISTMAS ISLAND	KT	
CLIPPERTON ISLAND	IP	
COCOS (KEELING) ISLANDS	CK	
COLOMBIA	CO	
COMOROS	CN	
CONGO (DEMOCRATIC REPUBLIC OF THE CONGO)	CG	
CONGO (REPUBLIC OF THE CONGO)	CF	
COOK ISLANDS	CW	
CORAL SEA ISLANDS	CR	
COSTA RICA	CS	
COTE D' IVOIRE	IV	
CROATIA [as of June 11, 1992]	HR	
YUGOSLAVIA [December 1, 1918 to April 11, 1992]	*YO*	*
CUBA	CU	
CYPRUS	CY	
CZECH REPUBLIC [as of January 1, 1993]	EZ	
CZECHOSLOVAKIA [October 28, 1918 to January 1, 1993]	CZ	*
DAHOMEY [BENIN]	DM	*
DENMARK	DA	
DJIBOUTI	DJ	
DOMINICA	DO	
DOMINICAN REPUBLIC	DR	
EAST BERLIN [prior to October 3, 1990]	EB	*
EAST GERMANY (GERMAN DEMOCRATIC REPUBLIC) [October 11, 1949 to October 3, 1990]	GC	*
EAST TIMOR [as of October 1999]	TT	
TIMOR [prior to 1975]	*PT*	*
ECUADOR	EC	
EGYPT	EG	
EL SALVADOR	ES	
ENGLAND (UNITED KINGDOM)	*UK*	
EQUATORIAL GUINEA	EK	
ERITREA	ER	
ESTONIA [as of August 20, 1991]	EN	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
ETHIOPIA	ET	
EUROPA ISLAND	EU	
FALKLAND ISLANDS	FK	
FAROE ISLANDS	FO	
FIJI	FJ	
FINLAND	FI	
FRANCE	FR	
FRENCH GUIANA	FG	
FRENCH POLYNESIA	FP	
FRENCH SOUTHERN AND ANTARCTIC LANDS	FS	
FRENCH TERRITORY OF THE AFFARS AND ISSAS	FT	*
GABON	GB	
GAMBIA, THE	GA	
GAZA STRIP	GZ	
GEORGIA [as of April 9, 1991]	GG	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
GERMANY [as of October 3, 1990]	GM	
EAST BERLIN [October 11, 1949 to October 3, 1990]	*EB*	*
EAST GERMANY (GERMAN DEMOCRATIC REPUBLIC) [October 11, 1949 to October 3, 1990]	*GC*	*
WEST BERLIN [September 21, 1949 to October 3, 1990]	*WB*	*

WEST GERMANY (FEDERAL REPUBLIC OF GERMANY) [September 21, 1949 to October 3, 1990]	*GE*	*
GHANA	GH	
GIBRALTAR	GI	
GILBERT ISLANDS	GS	*
GILBERT AND ELLICE ISLANDS	GN	*
GLORIOSO ISLANDS	GO	
GREAT BRITIAN (UNITED KINGDOM)	*UK*	
GREECE	GR	
GREENLAND	GL	
GRENADA	GJ	
GUADELOUPE	GP	
GUAM	GQ	
GUATEMALA	GT	
GUERNSEY	GK	
GUINEA	GV	
GUINEA-BISSAU	PU	
GUYANA	GY	
HAITI	HA	
HEARD ISLAND AND MCDONALD ISLANDS	HM	
HOLY SEE (VATICAN CITY)	VT	
HONDURAS	HO	
HONG KONG	HK	
HOWLAND ISLAND	HQ	
HUNGARY	HU	
ICELAND	IC	
INDIA	IN	
SIKKIM [prior to 1975]	*SK*	*
INDONESIA	ID	
IRAN	IR	
IRAQ	IZ	
IRAQ-SAUDI ARABIA NEUTRAL ZONE	IY	*
IRELAND	EI	
ISLE OF MAN	IM	
ISRAEL	IS	
ISRAEL-JORDAN DEMILITARIZED ZONE	IW	*
ISRAEL-SYRIA DEMILITARIZED ZONE	IU	*
ITALY	IT	
IVORY COAST, THE (COTE D' IVOIRE)	*IV*	
JAMAICA	JM	
JAN MAYEN	JN	
SVALBARD AND JAN MAYEN	JS	*
JAPAN	JA	
JARVIS ISLAND	DQ	
JERSEY	JE	
JOHNSTON ISLAND	JQ	
JORDAN	JO	
JUAN DE NOVA ISLAND	JU	
KAZAKHSTAN [as of December 16, 1991]	KZ	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
KENYA	KE	
KIRIBATI	KR	
KUWAIT	KU	
KYRGYZSTAN [as of August 31, 1991]	KG	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
LAOS	LA	
LATVIA [August 21, 1991]	LG	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
LEBANON	LE	
LESOTHO	LT	
LIBERIA	LI	
LIBYA	LY	
LIECHTENSTEIN	LS	
LITHUANIA [as of March 11, 1990]	LH	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
LUXEMBOURG	LU	
MACAU	MC	
MACEDONIA, F.Y.R.O. [as of September 17, 1991]	MK	
YUGOSLAVIA [December 1, 1918 to April 11, 1992]	*YO*	*
MADAGASCAR	MA	
MALAWI	MI	

MALAYSIA	MY	
MALDIVES	MV	
MALI	ML	
MALTA	MT	
MARSHALL ISLANDS	RM	
MARTINIQUE	MB	
MAURITANIA	MR	
MAURITIUS	MP	
MAYOTTE	MF	
MEXICO	MX	
MICRONESIA, FEDERATED STATES OF	FM	
MIDWAY ISLAND	MQ	
MOLDOVA [as of August 27, 1991]	MD	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
MONACO	MN	
MONGOLIA	MG	
MONTSERRAT	MH	
MOROCCO	MO	
SPANISH NORTH AFRICA	*ME*	*
SPANISH SAHARA	*SS*	*
MOZAMBIQUE	MZ	
NAMIBIA	WA	
NAURU	NR	
NEPAL	NP	
NETHERLANDS	NL	
NETHERLANDS ANTILLES [as of January 1, 1986]	NT	
NETHERLANDS ANTILLES [prior to January 1, 1986]	NA	*
NEW CALEDONIA	NC	
NEW ZEALAND	NZ	
NICARAGUA	NU	
NIGER	NG	
NIGERIA	NI	
NIUE	NE	
NORFOLK ISLAND	NF	
NORTH KOREA	KN	
NORTH VIETNAM [October 26, 1955 to July 2, 1976]	VN	*
NORTHERN MARIANAS ISLANDS	CQ	
NORWAY	NO	
OMAN	MU	
PAKISTAN	PK	
PALAU	PS	
PALMYRA ATOLL	LQ	
PANAMA [as of October 1, 1979]	PM	
PANAMA [November 6, 1903 to October 1, 1979]	PN	*
PANAMA CANAL ZONE [November 6, 1903 to October 1, 1979]	PQ	*
PAPUA NEW GUINEA	PP	
PARACEL ISLANDS	PF	
PARAGUAY	PA	
PERU	PE	
PHILIPPINES	RP	
PITCAIRN ISLAND	PC	
POLAND	PL	
PORTUGAL	PO	
PUERTO RICO	RQ	
QATAR	QA	
REUNION	RE	
ROMANIA	RO	
RUSSIA [August 24, 1991]	RS	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
RWANDA	RW	
RYUKYU ISLANDS, SOUTHERN	YQ	*
SAINT HELENA	SH	
SAINT KITTS AND NEVIS	SC	
SAINT LUCIA	ST	
SAINT PIERRE AND MIQUELON	SB	
SAINT VINCENT AND THE GRENADINES	VC	
SAMOA	WS	
SAN MARINO	SM	
SAO TOME AND PRINCIPE	TP	
SAUDI ARABIA	SA	
SENEGAL	SG	
SEYCHELLES	SE	
SIERRA LEONE	SL	

SIKKIM [prior to 1975]	SK	*
SINGAPORE	SN	
SLOVAKIA [as of January 1, 1993]	LO	
CZECHOSLOVAKIA [October 28, 1918 to January 1, 1993]	*CZ*	*
SLOVENIA [as of June 25, 1991]	SI	
YUGOSLAVIA [December 1, 1918 to April 11, 1992]	*YO*	*
SOLOMON ISLANDS	BP	
SOMALIA	SO	
SOUTH AFRICA	SF	
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	SX	
SOUTH KOREA	KS	
SOUTH VIETNAM [October 26, 1955 to July 2, 1976]	VS	*
SOUTHERN RHODESIA [prior to April 18, 1980]	RH	*
SOVIET UNION (UNION OF SOVIET SOCIALIST REPUBLICS) [November 7, 1917 to December 26, 1991]	*UR*	*
SPAIN	SP	
SPANISH NORTH AFRICA	ME	*
SPANISH SAHARA	SS	*
SPRATLY ISLANDS	PG	
SRI LANKA	CE	
SUDAN	SU	
SURINAME	NS	
SVALBARD	SV	
SVALBARD AND JAN MAYEN	JS	*
SWAN ISLANDS	SQ	*
SWAZILAND	WZ	
SWEDEN	SW	
SWITZERLAND	SZ	
SYRIA	SY	
TAIWAN	TW	
TAJIKISTAN [as of September 9, 1991]	TI	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
TANZANIA	TZ	
THAILAND	TH	
TIMOR [prior to 1975]	PT	*
TOGO	TO	
TOKELAU	TL	
TONGA	TN	
TRINIDAD AND TOBAGO	TD	
TROMELIN ISLAND	TE	
TRUST TERRITORY OF THE PACIFIC ISLANDS	TQ	*
TUNISIA	TS	
TURKEY	TU	
TURKMENISTAN [as of October 27, 1991]	TX	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
TURKS AND CAICOS ISLANDS	TK	
TUVALU	TV	
UGANDA	UG	
UKRAINE [as of August 24, 1991]	UP	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	UR	*
UNITED ARAB EMIRATES [as of December 1, 1998]	AE	
UNITED ARAB EMIRATES [prior to December 1, 1998]	TC	*
UNITED KINGDOM	UK	
UNITED STATES	US	
UNITED STATES VIRGIN ISLANDS	VQ	
URUGUAY	UY	
US MISCELLANEOUS PACIFIC ISLANDS	IQ	*
UZBEKISTAN [September 1, 1991]	UZ	
UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	*UR*	*
VANUATU	NH	
VATICAN CITY (HOLY SEE)	*VT*	
VENEZUELA	VE	
VIETNAM [as of July 2, 1976]	VM	
NORTH VIETNAM [October 26, 1955 to July 2, 1976]	*VN*	*
SOUTH VIETNAM [October 26, 1955 to July 2, 1976]	*VS*	*
WAKE ISLAND	WQ	
WALLIS AND FUTUNA	WF	
WEST BANK	WE	

WEST BERLIN [September 21, 1949 to October 3, 1990]	WB	*
WEST GERMANY (FEDERAL REPUBLIC OF GERMANY) [September 21, 1949 to October 3, 1990]	GE	*
WESTERN SAHARA	WI	
YEMEN [as of May 22, 1990]	YM	
YEMEN (ADEN) [prior to May 22, 1990]	YS	*
YEMEN (SANA'A) [prior to May 22, 1990]	YE	*
YUGOSLAVIA [as of April 11, 1992]	YI	
YUGOSLAVIA [*December 1, 1918 to April 11, 1992*]	YO	*
ZAMBIA	ZA	
ZIMBABWE	ZI	
SOUTHERN RHODESIA [prior to April 18, 1980]	*RH*	*
NOT CLASSIFIABLE	ZZ	

Appendix B

TABLE OF STATE, TERRITORY, AND CANADIAN PROVINCE CODES

APPENDIX B

STATE, TERRITORY, AND CANADIAN PROVINCE CODES

U.S. State and Territory coding information included in this appendix will be incorporated into the revised NCHS geographic coding manual (*Instruction Manual Part 8*). Release of the revised manual, in electronic format, is expected in August 2002.

VALID VALUES	
U.S. States	
Alabama	AL
Alaska	AK
Arizona	AZ
Arkansas	AR
California	CA
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Massachusetts	MA
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
New York City	YC (note: not a standard FIPS code)
North Carolina	NC
North Dakota	ND
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA

Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
Utah	UT
Vermont	VT
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

U.S. Territories

American Samoa	AS
Federated States of Micronesia	FM
Marshall Islands	MH
Northern Marianas	MP
Palau	PW
Puerto Rico	PR
Virgin Islands	VI
Guam	GU

Source: FIPS 5-2 [http://www.itl.nist.gov/fipspubs/]

Canadian Provinces (for use with residence item only)

Alberta	AB
British Columbia	BC
Manitoba	MB
New Brunswick	NB
Newfoundland	NF
Northwest Territories	NT
Nova Scotia	NS
Nunavut	NU
Ontario	ON
Prince Edward Island	PE
Quebec	QC
Saskatchewan	SK
Yukon Territory	YT

Source: Canadian Postal Codes

Unknown or blank	ZZ

Appendix C

TABLE OF CITY AND COUNTY CODES

APPENDIX C

CITY & COUNTY CODES

*City and County coding information included in this appendix has been incorporated into the revised NCHS geographic coding manual (*Instruction Manual Part 8*). The URLs for the manuals are:*

Part 8-Geographic Classification, 2003 is available at
http://www.cdc.gov/nchs/data/dvs/IMP8_PrintVersion.pdf

Part 8a-Geographic Classification (FIPS), 2004 is available at
http://www.cdc.gov/nchs/data/dvs/IMP8A_PrintVersion.pdf

CITY CODES

VALID	VALUE
See FIPS 55-3 name table	
Not classifiable	99999

Source: FIPS 55-3 [http://www.itl.nist.gov/fipspubs/]

COUNTY

VALID	VALUE
See FIPS 6-4 name table	
Not classifiable	999

Source: FIPS 6-4 [http://www.itl.nist.gov/fipspubs/]

Appendix D

HISPANIC ORIGIN CODE LOOK-UP TABLE

Available on the Revision Website
http://www.cdc.gov/nchs/vital_certs_rev.htm

Code List – Hispanic Code Titles
(Acrobat file and Excel table)

Appendix E

TABLE OF RACE CODES

Available on the Revision Website
http://www.cdc.gov/nchs/vital_certs_rev.htm

Code List – Race Code Titles
(Acrobat file and Excel table)