

**Birth Edit Specifications for the 2003 Proposed Revision of the
U.S. Standard Certificate of Birth**

*Note: This document replaces Instruction Manual Part 3a,
“Classification and Coding Instructions for Live Birth Records”*

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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 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 track 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 birth except the mother’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 29(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 initial 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 mother received prenatal care.

- Yes, the mother received prenatal care
- No, the mother 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 if 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 30 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.

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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- **On-line help** - definitions and more detailed instructions included in the specifications for both the EBC and the EDC, and "The Guide to Completing the Facility Worksheet" for the EBC 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.)
- **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.

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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).
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 - 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).
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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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Sincerely yours,

Mary Anne Freedman
Director
Division of Vital Statistics

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

Item Number: **2 Certificate, 19 Facility worksheet**

Description: Hour and minute infant was born.

Source of Information:

Preferred Source: Labor and delivery, Newborn admission history and physical

Other Source: Attendant (non-facility births only)

INSTRUCTIONS

FOR A PAPER RECORD:

Print or type the hour and minute of birth using a 24-hour clock.
If the time of birth 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 BIRTH

_____ (24hr)

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

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

Hour and minute of birth _____

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
TB	Hour and minute of birth	0000-2359, 9999	Unknown

0001-2400,
9999

OR
(See Edits)
Unknown

EDITS:

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. However, 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 certificate 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
TB	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 Certificate, 32 Facility worksheet**

Description: The sex of the infant

Source of Information:

Preferred Source: Delivery record, Infant's medical record

INSTRUCTIONS

FOR A PAPER RECORD:

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

SEX

FOR AN ELECTRONIC RECORD:

EBR 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
- Not yet determined

A response of "Not yet determined" on the initial entry screen should be verified at the final review screen.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
ISEX	The sex of the infant	M	Male
		F	Female
		N	Not yet determined

EDITS:**ELECTRONIC RECORD**

Item must be completed. If the record is filed with an N code, send the record to NCHS but query the hospital until a determination of the infant's sex is made. Send the updated record to NCHS with the update file

PAPER RECORD

Records filed with this field blank or with "not yet determined" are queried. If there is no response to the query, retain the "Not yet determined" code. Send the record to NCHS on the data file but continue to query until a determination of the infant's sex is made. The revised record should then be sent to NCHS with the updated file.

STATE FILE CONSIDERATIONS

An N code for "not yet determined" should not be allowed for any record in the file at the time the file is closed. NCHS will query states to obtain the sex of the infant for all records still retaining the N code at the time the file is closed.

NCHS TRANSMISSION FILE**VARIABLES:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
ISEX	1	Alpha character string	M, F, N

EDI TRANSMISSION:

No standards set yet.

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

Item Number: **4 Certificate, 18 Facility worksheet**

Description: The infant's date of birth

Source of Information:

Preferred Source: Labor and delivery, newborn admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

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

DATE OF BIRTH (Mo/Day/Yr)

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

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

Month of infant's birth ____ ____

Day of infant's birth ____ ____

Year of infant's birth ____ ____ ____ ____

The following instruction should appear in the help function when the infant's date of birth is not known (foundlings).

If the date of birth of the infant is not known because the infant is a foundling, enter the date the infant was found as the date of birth.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
IDOB_YR	Year of Birth	4 digit year	Must be equal to current data year
IDOB_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
IDOB_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

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

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.

The infant's date of birth 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
IDOB_YR	4	Numeric or “date type”	Must be equal to current data year
IDOB_MO	2	Numeric or “date type”	01-12
IDOB_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 BIRTH
 COUNTY OF BIRTH
 FACILITY ID (NPI)
 PLACE WHERE BIRTH OCCURRED

Item Numbers: **5 Certificate, 1 Facility worksheet**
 6 Certificate, 3 Facility worksheet
 7 Certificate, 4 Facility worksheet
 17 Certificate, 2 Facility worksheet
 26 Certificate, 5 Facility worksheet

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

Source of Information:

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

INSTRUCTIONS

FOR A PAPER RECORD:

Item 5.

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

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

Item 6.

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

CITY, TOWN, OR LOCATION OF BIRTH

Item 7.

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

COUNTY OF BIRTH

Item 17.

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

FACILITY ID. (NPI)

Item 26.

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

PLACE WHERE BIRTH OCCURRED (Check one)

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

FOR AN ELECTRONIC RECORD:

EBR Developer: *(Instructions are in Italics)*

The initial question should ask if the birth occurred in this facility, if the answer is “yes,” or “born en route”, all the items (5,6,7,26) 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.

EBR 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 birth 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 Birth,” 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 birth 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 birth occurred in an airplane or boat enter boat (lake____) or boat (international waters) etc.

City, town, or location_____

County_____

Location_____

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
FNAME	Name of facility	Alpha/numeric	
FNPI	Facility NPI number	Alpha/numeric	
SFN	State facility number	Alpha/numeric	
FLOC	City town or location of birth	Alpha/numeric	
CNAME	County name where birth occurred	Alpha character string	
CNTYO	County code	Numeric (Appendix C)	
BPLACE	Birthplace	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 birth. 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 Birth 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 certificate 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 birth occurred at home.

Please query either the attendant or the mother to determine if the mother intended to have a home birth.

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 certificate item 5. 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 EBR 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 certificate item 26, 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:

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

EDI TRANSMISSION:

No standards set yet.

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

Item Number: **8b Certificate, 6 Mother's worksheet**

Description: The mother's date of birth

Source of Information:

Preferred Source: Mother

(NOTE: The mother is defined as the woman who gave birth to, or delivered the infant.)

INSTRUCTIONS

FOR A PAPER RECORD:

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

If the mother'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:

EBR 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 Mother'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 mother is not known at this time, leave blank.

Month of mother's birth ____ ____

Day of mother's birth ____ ____

Year of mother'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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
MDOB_YR	Year of Birth	4 digit year	Must be less than child's year of birth
		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
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
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 mother's date of birth (completed dates only) and the child's date of birth.

Calculated age must be >8 and < 65.

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

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

The entry screen for the mother'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 mother are queried. For those records with stated "age of mother" 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
MDOB_YR	4	Numeric or "date type"	4 digit year, <child's yr of birth, 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: **BIRTHPLACE (STATE, TERRITORY, OR FOREIGN COUNTRY)**

Item Number: **8d Certificate, 7 Mother's worksheet**

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

Source of Information:

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

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

FOR AN ELECTRONIC RECORD:

EBR 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 Mother
(Please enter for only one field)

Mother's U.S. State of Birth _____

OR

Mother's U.S. Territory of Birth _____

OR

Mother's Country of Birth _____ (if born outside of the U.S.)

- Mother's birthplace unknown

If unknown is recorded on the worksheet or if the informant does not know, check the "Mother'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 mother'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 Mother'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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>
BPLACE_ST	Mother's state of birth (literal)	Literal entry, blank
BPLACE_TER	Mother's territory of birth (literal)	Literal entry, blank
BPLACE_CNT	Mother's country of birth (literal)	Literal entry, blank
BPLACEC_ST_TER	Code for Mother's state or territory of birth	Appendix B
BPLACEC_CNT	Code for Mother'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:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
BPLACEC_ST_TER	2	Alphabetic	Appendix B
BPLACEC_CNT	2	Alphabetic	Appendix A

EDI TRANSMISSION:

No standards set yet.

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

Item Number: **9a – 9g Certificate; 3, 4 Mother’s worksheet**

Description: The geographic location of the mother’s residence

Source of Information:

 Preferred Source: Mother or other informant

INSTRUCTIONS:

FOR A PAPER RECORD:

Items 9a-9g.

These items refer to the mother’s residence address, not her postal address. Do not include post office boxes or rural route numbers.

Item 9a.

This item is where the U.S. States and territories, and the provinces of Canada are recorded.

If the mother is a U.S. resident, print the U.S. State or territory where the mother lives. If the mother is a U.S. resident do not record “U.S.”

If the mother is a Canadian resident, print the name of the province or territory followed by “ / Canada.”

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

RESIDENCE OF MOTHER-STATE

Item 9b & 9c.

Print the county, city or town or location where the mother lives.

If the mother is not a U.S. resident, leave these items blank.

COUNTY CITY, TOWN, OR LOCATION

Items 9d-9f.

Print the mother's street name and number, apartment or room number, and zip code.

If the mother 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 9g.

Check whether the mother'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 mother is not a U.S. resident, leave this item blank.

INSIDE CITY LIMITS?

Yes No

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*) *The collection of the mother'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 mother is the place the mother 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 mothers 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 mother’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. Mother’s country of residence_____

The inside city limits question will appear only if the “Mother’s country of residence” is USA, and “Name of city, town, or other place of residence is not “unknown.”

12. Is mother’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 mother’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 mother’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 mother 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 mother 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 mother 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 mother is not a resident of the U.S., its territories, or Canada, enter the name of the mother's country of residence.

If the mother'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 mother'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. Mother's country of residence _____

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

10. Is mother'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 mother'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 mother'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 mother 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 mother 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 mother 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 mother is not a resident of the U.S., its territories, or Canada, enter the name of the mother’s country of residence.

If the mother’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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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 N U	Yes No Unknown

TRANSLATIONS

Response Mapping (examples)

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

<u>DESCRIPTION</u>	<u>NAME</u>	<u>LENGTH</u>
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 6-4 codes (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:

<u>NAME</u>		<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
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: **DATE OF BIRTH (FATHER)**

Item Number: **10b Certificate, 19 Mother's worksheet**

Description: The father's date of birth

Source of Information:

Preferred Source: Mother 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:

EBR 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:

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

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 birth.

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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
FDOB_YR	4	Numeric or “date type”	4 digit year <Year of birth, 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.

Item Title: **MOTHER MARRIED?**
Item Number: **15 Certificate; 15, 17 Mother's worksheet**
Description: The marital status of the mother at birth, conception or any time in between.

Source of Information:

Preferred Source: Mother
Other Source: Informant

INSTRUCTIONS

FOR A PAPER RECORD:

If the mother is currently married or married at the time of conception or any time between conception and birth, check the "Yes" box.

If the mother is not currently married or was not married at the time of conception or any time between conception and birth, check the "No" box.

If the "No" box is checked, and an acknowledgement of paternity has been signed in the hospital, check the "Yes" box for the acknowledgement of paternity. Otherwise check the "No" box.

MOTHER MARRIED? (At birth, conception, or any time between)

Yes No

IF NO, HAS PATERNITY ACKNOWLEDGEMENT BEEN SIGNED IN THE HOSPITAL?

Yes No

FOR AN ELECTRONIC RECORD:

EBR developer: (*Instructions are in italics*)

There are a series of questions required by this item:

A. Has the mother ever been married?

Yes

- No
- Unknown at this time

If the “Yes” box is checked, the screen for the mother’s name prior to first marriage is shown. (See item 8c.) Once this is completed, question B appears.

If the “No” box is checked, B is skipped and question C appears.

If the “Unknown at this time” box is checked, all variables are assigned the “unknown” code, questions B and C are skipped and the following message will appear:

Please contact the mother, if she is still in the facility, to obtain this information. The item will appear on the final review screen.

B. Was the mother married at the time she conceived this child, at the time of birth, or at any time between conception and giving birth?

- Yes
- No

If the “Yes” box is checked, the EBR should then request the information about the father (items 10a, 10b, 10c, 19, 23, 24, 25).

If the no box is checked question C appears,

C. Have the mother and father signed a form (*Insert name of the State acknowledgement of paternity form*) in which the father accepted legal responsibility for the child?

- Yes, a paternity acknowledgement has been completed
- No, a paternity acknowledgement has not been completed.

If the “Yes” box is checked, the EBR must request the information about the father (items 10a, 10b, 10c, 19, 23, 34, 25).

If the “No” box is checked, all items about the father (items 10a, 10b ,10c, 19, 23, 24, 25) are skipped.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
MARE	Mother ever married	Y N U	Yes No Unknown
MARN	Mother married at conception, at birth or	Y N	Yes No

	any time in between	U	Unknown
ACKN	Acknowledgement of paternity signed	Y N X U	Yes No Not applicable 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.

If the variable MARN has value "Y," the variable ACKN is assigned "X," unless state law allows an acknowledgement in such cases.

If the variable MARN has value "Y" or the variable ACKN has value "Y" items 10a, 10b, 10c, 19, 23 24 and 25 should have entries.

If the variable MARN has value "N" and the variable ACKN has value "N", items 10a, 10b, 10c, 19, 23 24, and 25 must be blank.

PAPER RECORD

Records filed with the "Mother married" item blank should be queried. If no response to query, assign the "unknown" code to all variables.

If the "Yes" box for married now, at conception, or any time in between is checked, the acknowledgement of paternity box must be blank or checked "No." (Specific state law may change this specification; for example, court orders prior to the birth of the child to a married woman.)

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

STATE FILE CONSIDERATIONS

States may need to adjust this item to meet State legal requirements. If states have an electronic paternity acknowledgement, the answers to these questions can be used to drive the creation of the acknowledgement and data from the birth record used to populate the acknowledgement. If an electronic acknowledgement is created and signed first, these data can be used to populate the birth record(s).

NCHS TRANSMISSION FILE**VARIABLES:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
MARE	1	Alpha character string	Y, N, U
MARN	1	Alpha character string	Y, N, U
ACKN	1	Alpha character string	Y, N, X, U

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER'S EDUCATION**

Item Number: **20 Certificate; 8 Mother's worksheet**

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

Source of Information:

Preferred Source: Mother or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

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

MOTHER'S EDUCATION

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

- 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)

FOR AN ELECTRONIC RECORD:**EBR Developer** (*Instructions are in Italics*)

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

Mother's Education

Based on the mother'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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
MEDUC		1	8 th grade or less
		2	9 th through 12 th 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 mother is still in the facility, please obtain her education level. If the mother has left the facility, please check the box below.

- Mother 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 EBR or electronic work sheet, Mother’s date of birth will have been entered and edited. Mother’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 certificate indicates an unlikely level of education for the mother at her age.

Mother'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:

Mother'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 mother's date of birth, the mother's date of birth screen appears. Please enter the correct date of birth

Month of mother's birth ____ ____

Day of mother's birth ____ ____

Year of mother'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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
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 OF HISPANIC ORIGIN?**

Item Number: **21 Certificate, 9 Mother's worksheet**

Description: The Hispanic origin of the mother.

Source of Information:

Preferred Source: Mother or other informant

INSTRUCTIONS

FOR A PAPER RECORD:

Based on the mother's response to the worksheet or the interview, select all the corresponding checkboxes on the certificate and fill in any literal (written) responses. If mother 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 mother indicates an ethnic origin not on the list, record it in the "Specify" space. Enter the mother's response in this space even if it is not a Hispanic origin. If the mother did not respond, type or print "Unknown."

MOTHER OF HISPANIC ORIGIN? (Check the box that best describes whether the mother is Spanish/Hispanic/Latina. Check the "No" box if mother 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:

EBR 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 mother'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 mother 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 mother indicates an ethnic origin not on the list, record it in the “Specify” space. Enter the mother’s response in this space even if it is not a Hispanic origin. If the mother did not respond, check “Unknown if Spanish/Hispanic/Latina.”

MOTHER 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, Colombian)
(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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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 mother 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
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'S RACE**

Item Number: 22 certificate, 10 mother's worksheet

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

Source of Information:

Preferred Source: The mother

INSTRUCTIONS

PAPER RECORD

Based on the mother's response to the worksheet or interview, select all the corresponding checkboxes on the certificate 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."

MOTHER'S RACE (Check one or more races to indicate what the mother 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:

EBR 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 mother’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

MOTHER’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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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
FRACE8	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 Mother 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. To save States from the effort of duplicating this complicated process, NCHS will transmit the edited race codes to the States. In addition, NCHS will transmit back to the States all the processing variables as initially recorded, including all the literal entries as well as the pre-edit codes NCHS assigns to these literal entries.

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:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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: **FATHER'S EDUCATION**

Item Number: **23 Certificate, 21 Mother's worksheet**

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

Source of Information:

Preferred Source: Mother or father

INSTRUCTIONS

FOR A PAPER RECORD:

Based on the mother's or father's response to the worksheet or interview, check the appropriate box in the listing on the certificate. If the item is blank and either parent is still in the facility, query. If the parents have left the facility write in "Unknown" in the space.

FATHER'S EDUCATION

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

- 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)

FOR AN ELECTRONIC RECORD:**EBR Developer** (*Instructions are in Italics*)

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

Father's Education

Based on the 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
FEDUC		1	8 th grade or less
		2	9 th through 12 th 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
FEDUC_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 parents are still in the facility, please obtain the father’s education level. If they have left the facility, please check the box below.

- Parents have 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 EBR or electronic work sheet, Father’s date of birth will have been entered and edited. Father’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 certificate indicates an unlikely level of education for the father for his age.

Father's education level is: _____

Please check one of the boxes below.

- Incorrect
- Correct
- Not able to verify

If the "Correct" button 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, the education selection list 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.

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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
FEDUC	1	Numeric	1, 2, 3, 4, 5, 6, 7, 8, 9
FEDUC_BYPASS	1	Numeric	0, 1, 2

EDI TRANSMISSION:

No standards set yet.

Item Title: **FATHER OF HISPANIC ORIGIN?**

Item Number: **24 Certificate, 22 Mother's worksheet**

Description: The Hispanic origin of the father.

Source of Information:

Preferred Source: Mother or father

INSTRUCTIONS

FOR A PAPER RECORD:

Based on the mother's or father's response to the worksheet or the interview, select all the corresponding checkboxes on the certificate and fill in any literal (written) responses. If more than one response has been chosen, check all selected; for example, if both Mexican and Cuban are checked, select both responses. If an ethnic origin not on the list is indicated, record it in the "Specify" space. Enter the response in this space even if it is not a Hispanic origin. If no response, type or print "Unknown."

FATHER OF HISPANIC ORIGIN? (Check the box that best describes whether the father is Spanish/Hispanic/Latino. Check the "No" box if father is not Spanish/Hispanic/Latino)

- No, not Spanish/Hispanic/Latino
- Yes, Mexican, Mexican American, Chicano
- Yes, Puerto Rican
- Yes, Cuban
- Yes, Other Spanish/Hispanic/Latino
(Specify)_____

FOR AN ELECTRONIC RECORD:

EBR 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 mother's or father'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 response is chosen, check all selected; for example, if both Mexican and Cuban are checked, select both responses. If an ethnic origin

not on the list is indicated, record it in the “Specify” space. Enter the response in this space even if it is not a Hispanic origin. If no response, check “Unknown if Spanish/Hispanic/Latino.”

FATHER OF HISPANIC ORIGIN?

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

If the “Yes, Other Spanish/Hispanic/Latino” 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/Latino” 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
FETHNIC1	Mexican, Mexican American or Chicano	N H U	No, not Mexican Yes, Mexican Unknown
FETHNIC2	Puerto Rican	N H U	No, not Puerto Rican Yes, Puerto Rican Unknown

FETHNIC3	Cuban	N	No, not Cuban
		H	Yes, Cuban
		U	Unknown
FETHNIC4	Other	N	No, not Other Hisp
		H	Yes, Other Hisp
		U	Unknown
FETHNIC5	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/Latino 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 father 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 should 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, FETHNIC4, 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 “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 FETHNIC_MVR.

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
FETHNIC1	1	Alpha character string	N, H, U
FETHNIC2	1	Alpha character string	N, H, U
FETHNIC3	1	Alpha character string	N, H, U
FETHNIC4	1	Alpha character string	N, H, U
FETHNIC5	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: **FATHER'S RACE**

Item Number: 25 certificate, 23 mother's worksheet

Description: The race(s) that best describes what the father considers himself to be.

Source of Information:

Preferred Source: The father

INSTRUCTIONS

PAPER RECORD

Based on the response to the worksheet or interview, select all the corresponding checkboxes on the certificate 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."

FATHER'S RACE (Check one or more races to indicate what the father considers himself 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:

EBR 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 response to the worksheet, 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.”

FATHER’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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
FRACE1	White checkbox	Y N	Box for race checked Box for race not checked
FRACE2	Black or African American checkbox	Y N	Box for race checked Box for race not checked
FRACE3	American Indian or Alaska Native checkbox	Y N	Box for race checked Box for race not checked
FRACE4	Asian Indian checkbox	Y N	Box for race checked Box for race not checked
FRACE5	Chinese checkbox	Y N	Box for race checked Box for race not checked
FRACE6	Filipino checkbox	Y N	Box for race checked Box for race not checked
FRACE7	Japanese checkbox	Y N	Box for race checked Box for race not checked
FRACE8	Korean checkbox	Y N	Box for race checked Box for race not checked
FRACE9	Vietnamese checkbox	Y N	Box for race checked Box for race not checked
FRACE10	Other Asian checkbox	Y N	Box for race checked Box for race not checked
FRACE 11	Native Hawaiian checkbox	Y N	Box for race checked Box for race not checked
FRACE 12	Guamanian or Chamorro checkbox	Y N	Box for race checked Box for race not checked
FRACE 13	Samoan checkbox	Y N	Box for race checked Box for race not checked
FRACE14	Other Pacific Islander checkbox	Y N	Box for race checked Box for race not checked

FRACE15	Other checkbox	Y N	Box for race checked Box for race not checked
FRACE16	First American Indian or Alaska Native literal		Literal responses, blank
FRACE17	Second American Indian or Alaska Native literal		Literal responses, blank
FRACE18	First Other Asian literal		Literal responses, blank
FRACE19	Second Other Asian literal		Literal responses, blank
FRACE20	First Other Pacific Islander literal		Literal responses, blank
FRACE21	Second Other Pacific Islander literal		Literal responses, blank
FRACE22	First Other literal		Literal responses, blank
FRACE23	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 Father 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. To save States from the effort of duplicating this complicated process, NCHS will transmit the edited race codes to the States. In addition, NCHS will transmit back to the States all the processing variables as initially recorded, including all the literal entries as well as the pre-edit codes NCHS assigns to these literal entries.

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:**

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
FRACE1	1	Alpha character string	Y, N
FRACE2	1	Alpha character string	Y, N
FRACE3	1	Alpha character string	Y, N
FRACE4	1	Alpha character string	Y, N
FRACE5	1	Alpha character string	Y, N
FRACE6	1	Alpha character string	Y, N
FRACE7	1	Alpha character string	Y, N
FRACE8	1	Alpha character string	Y, N
FRACE9	1	Alpha character string	Y, N
FRACE10	1	Alpha character string	Y, N
FRACE11	1	Alpha character string	Y, N
FRACE12	1	Alpha character string	Y, N
FRACE13	1	Alpha character string	Y, N
FRACE14	1	Alpha character string	Y, N
FRACE15	1	Alpha character string	Y, N
FRACE16	30	Alpha character string	Literal, blank
FRACE17	30	Alpha character string	Literal, blank
FRACE18	30	Alpha character string	Literal, blank
FRACE19	30	Alpha character string	Literal, blank
FRACE20	30	Alpha character string	Literal, blank
FRACE21	30	Alpha character string	Literal, blank
FRACE22	30	Alpha character string	Literal, blank
FRACE23	30	Alpha character string	Literal, blank

TO BE PRODUCED BY THE NCHS EDITING ALGORITHM

FRACE1E	3	Alpha-numeric character string	Appendix E
FRACE2E	3	Alpha-numeric character string	Appendix E
FRACE3E	3	Alpha-numeric character string	Appendix E
FRACE4E	3	Alpha-numeric character string	Appendix E
FRACE5E	3	Alpha-numeric character string	Appendix E
FRACE6E	3	Alpha-numeric character string	Appendix E
FRACE7E	3	Alpha-numeric character string	Appendix E
FRACE8E	3	Alpha-numeric character string	Appendix E

TO BE PRODUCED BY THE NCHS CODING ALGORITHM

FRACE16C	3	Alpha-numeric character string	Appendix E
FRACE17C	3	Alpha-numeric character string	Appendix E
FRACE18C	3	Alpha-numeric character string	Appendix E

FRACE19C	3	Alpha-numeric character string	Appendix E
FRACE20C	3	Alpha-numeric character string	Appendix E
FRACE21C	3	Alpha-numeric character string	Appendix E
FRACE22C	3	Alpha-numeric character string	Appendix E
FRACE23C	3	Alpha-numeric character string	Appendix E

EDI TRANSMISSION: No standards set yet.

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

Item Number: **27 Certificate, 25 Facility worksheet**

Description: The name of the attendant (the person responsible for delivering the child), 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 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.

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 birth 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 birth 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:

EBR Developer (*Instructions are in italics*)

The following definition should be available in the help function:

The attendant at birth 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 birth 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

The 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
ATTENDN	Attendant's name	Alpha character string	

NPI	National provider ID number	Alpha/numeric	
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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
ATTEND	1	Numeric	1,2,3,4,5,9

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER TRANSFERRED FOR
MATERNAL MEDICAL OR FETAL
INDICATIONS FOR DELIVERY?**

Item Number: **28 Certificate, 24 Facility work sheet**

Description: Information of the transfer status of the mother 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 birth did not occur in a facility, it is to
be completed by the attendant or certifier and the response must be “no.”

**MOTHER TRANSFERRED FOR MATERNAL MEDICAL OR FETAL
INDICATIONS FOR DELIVERY?**

Yes No

**IF YES, ENTER NAME OF FACILITY MOTHER TRANSFERRED
FROM:**

If the name of the facility is not known, enter “unknown.”

FOR AN ELECTRONIC RECORD:**EBR Developer** (*Instructions are in Italics*)

If the response to certificate item 26 is any response but hospital, this item is automatically completed with the “no” response and will not appear on the EBR screen.

Was the mother 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 mother transferred from. If the name of the facility is not known, enter “unknown.”

Facility name: _____

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
TRAN	Mother transferred	Y N U	Yes No 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 26 must be “hospital.” If any response but “hospital”, a query message should appear. Either certificate item 26 must be changed to “hospital” or certificate item 28 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 certificate item 26 must be “hospital.” If not, query. Either certificate item 26 must be changed to “hospital” or certificate item 28 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: **DATES OF FIRST AND LAST PRENATAL CARE VISIT**

Item Number: **29a Certificate, 6a Facility worksheet
29b Certificate, 6b Facility worksheet**

Description: Date that the mother had her first prenatal care visit.
Date that the mother 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 mother'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 mother's prenatal care record. The paragraph should also appear on an electronic worksheet just before the section of information to be obtained from the mother's prenatal care record.

“Information for this and the following items should come from the mother's prenatal care record and from other medical reports in the mother's chart, as well as the infant's medical record. If the mother'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 mother 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 mother 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 mother had no prenatal care, check the “no prenatal care” box and leave the date blank.

No Prenatal Care

FOR AN ELECTRONIC RECORD:

EBR 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

EBR developers may wish to use “?” or a hot key for unknowns 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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 child’s birth or yr of child’s birth –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 child's birth, or yr of child's birth -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 child's date of birth) shall be changed to "unknown" before transmission to NCHS.

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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 child's birth 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 Child birth 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.**

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:

$$\text{CDPV} = (365 * \text{YYYY}) + \text{DY}$$

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

$$\text{CDPV} = (365 * 2003) + (90 + 10) = 731195$$

$$\text{CDLMP} = (365 * 2003) + (59 + 1) = 731155$$

1. Obtain the number of days between date of last LMP and date of first prenatal care visit.

$$\text{Days} = \text{CDPV} - \text{CDLMP}$$

$$\text{Days} = 731195 - 731155$$

$$\text{Days} = 40$$

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	1 st
31-61	2 nd
62-91	3 rd
92-122	4 th
123-152	5 th
153-182	6 th
183-213	7 th
214-243	8 th
244-274	9 th
275-304	10 th
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 birth as above and then

$$CD(OE)=CD(\text{date of birth})-(OE*7)$$

(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 mother 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: **30 Certificate, 7 Facility worksheet**

Description: Those visits which are listed in the mother's prenatal care and/or facility records

Source of Information:

Preferred Source: Prenatal care record

INSTRUCTIONS

FOR A PAPER RECORD:

If the mother had no prenatal care, type or print "0" in the space. Note: the "no prenatal care" box should also be checked in item 29.

If the mother 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:

EBR 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 mother'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

EBR 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 mother'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 29 is not marked. If the "no prenatal care" check box was marked in item 29, this screen is skipped and "0" automatically entered.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
NPREV	Number of prenatal care visits	0-98,99	Number within range
NPREV_BYPASS	Edit flag	0 1 2	OFF (edit passed) ON (edit failed, number verified) ON (edit failed, number not verified)
DNA30	Pending flag	0 1	OFF 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 29 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 29 indicates that the mother 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 mother 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 29. A review screen for item 29 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 29 indicates that there was prenatal care, query. If item 29 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
NPREV	2	Numeric	0-98,99

NPREV_BYPASS 1 Numeric 0,1,2

EDI TRANSMISSION:
No standards set yet

Item Title: **MOTHER'S HEIGHT**

Item Number: **31 Certificate, 12 Mother's worksheet**

Description: The mother's height

Source of Information:

Preferred Source: The mother
Other Source: The mother's medical record

INSTRUCTIONS

FOR A PAPER RECORD:

If the mother's height is unknown, print or type "unknown" in the space.

Enter the mother'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.

MOTHER'S HEIGHT _____(feet/inches)

FOR AN ELECTRONIC RECORD:

EBR 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.

Mother'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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUE</u>	<u>DEFINITION</u>
HFT	Mother's height feet	1-8 9	Feet Unknown
HIN	Mother's height inches	0-11 99	Inches Unknown
HGT_BYPASS	Edit flag for height	0 1 2	OFF ON (verified) 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 mother'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:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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'S PREPREGNANCY WEIGHT**

Item Number: **32 Certificate, 13 Mother's worksheet**

Description: The mother's prepregnancy weight

Source of Information:

Preferred Source: Mother

Other Source: Mother's Prenatal care record

INSTRUCTIONS

FOR A PAPER RECORD:

If the mother's prepregnancy weight is unknown, print or type "unknown" in the item's space.

Record weight in whole pounds only, do not include fractions.

MOTHER'S PREPREGNANCY WEIGHT _____(pounds).

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The mother'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:

Mother's prepregnancy weight _____pounds.

If weight is unknown, enter 999.

EBR developers may wish to use "?" or a hot key for unknowns.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
--------------------	---------------------------	----------------------	--------------------------

PWGT	Mother's prepregnancy weight	50-400 999	unknown
PWGT_BYPASS	Edit flag for prepregnancy weight	0 1 2	OFF ON (verified) ON (not verified)

EDITS:**ELECTRONIC RECORD****Before the record is transmitted to the State**

If mother'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:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
PWGT	3	Numeric	50-400, 999
PWGT_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **MOTHER'S WEIGHT AT DELIVERY**

Item Number: **33 Certificate, 26 Facility worksheet**

Description: The mother'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 mother's delivery weight is unknown, print or type "unknown" in the item's space.

Record weight in whole pounds only, do not include fractions.

MOTHER'S WEIGHT AT DELIVERY _____(pounds)

FOR AN ELECTRONIC RECORD:

EBR 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:

Mother's weight at delivery _____pounds.

If weight is unknown, enter 999.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
DWGT	Mother's weight at delivery	50-450 999	unknown
DWGT_BYPASS	Edit flag for delivery weight	0 1 2	OFF ON (verified) ON (not verified)

EDITS:**ELECTRONIC RECORD****Before the record is transmitted to the State**

If mother'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:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
DWGT	3	Numeric	50-450,999
DWGT_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **DID MOTHER GET WIC FOOD FOR HERSELF DURING THIS PREGNANCY?**

Item Number: **34 Certificate, 11 Mother's worksheet**

Description: Use of the Women, Infant's and Children (WIC) nutritional program by the mother during the pregnancy

Source of Information:

Preferred Source: Mother

INSTRUCTIONS

FOR A PAPER RECORD:

This item is to be completed based on information obtained from the mother. Either the "yes" or "no" box must be checked.

If the mother's work sheet indicates "unknown," print or type "unknown."

DID MOTHER GET WIC FOR HERSELF DURING THIS PREGNANCY?

Yes No

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The item should be completed by keying the response recorded on the mother's work sheet. The following list of choices should be provided.

- Yes
- No
- Unknown

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
WIC	Mother'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:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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: **35 a-c, 36 a-b Certificate;
9, 10, 11, 12, 13 Facility worksheet**

Description: The pregnancy history of the mother with respect to
previous children born alive.

The pregnancy history of the mother with respect to other
pregnancy outcomes (includes pregnancy losses of any
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 birth; include all previous live born infants. For multiple deliveries, include all live born infants preceding this infant in the delivery. If first born in a multiple delivery, do not include this infant. If second born, include the first born, etc.

Please type or print the number of previous live born infants still living in item 35a, the number born alive now dead in item 35b, and the number of other pregnancy outcomes in item 36a. 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 child)

35a. Now Living

35b. Now Dead

36a. 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 35c.

If the date of birth is not known, type or print "unknown" in the space.

35c. 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 36b.

If the date of delivery is not known, type or print "unknown" in the space.

36b. DATE OF LAST OTHER PREGNANCY OUTCOME

_____/_____
MM YYYY

FOR AN ELECTRONIC RECORD:

EBR 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

EBR 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 mother'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 birth 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.

The following message should appear.

When completing this item, do not include this birth. Do include any previous live born infants. If this was a multiple delivery, include all live born infants who preceded the live born infant in this delivery. If first born, do not include this infant. 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

In lieu of the checkbox for "unknown" the EBR developer may choose to use "hot keys" or other symbols for unknown values.

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 mother’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 mother’s year of birth plus 10 years. Values outside of this range should be converted to unknown (9999).

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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 (Mother’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 (Mother’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	Mother'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 mother as follows

$C_AGEM - LBO$ must be ≥ 8 .

If this value is < 8 , the following message appears

The mother 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 mother as follows:

C_AGEM-TBO must be ≥ 8 .

If this value is less than 8, the following message appears

The mother 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 EBR. 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:

<u>NAME</u>		<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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 (Mother'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 (Mother's year of birth plus 10 yrs through child's year of birth), 8888,9999

EDI TRANSMISSION:

No standards set yet.

Item Title: **CIGARETTE SMOKING BEFORE AND DURING PREGNANCY**

Item Number: **37 Certificate, 14 Mother's worksheet**

Description: The number of cigarettes or packs of cigarettes the mother smoked 3 months before and at various intervals during the pregnancy

Source of Information:

Preferred Source: Mother

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 3/2005) that reflect the content of the cleared certificates.

For item 37, the original version of the birth certificate 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 37 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 mother. If the birth did not occur in a facility, it is to be completed by the attendant or certifier based on information obtained from the mother.

If the mother'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:

EBR Developer (*Instructions are in Italics*)

The item should be completed by keying the response recorded on the mother’s work sheet. The following message and screen format is suggested:

Check whether the mother 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	_____	<input type="checkbox"/> 1/4	<input type="checkbox"/> 1/2	<input type="checkbox"/> 3/4
First three months of pregnancy	_____	<input type="checkbox"/> 1/4	<input type="checkbox"/> 1/2	<input type="checkbox"/> 3/4
Second three months of pregnancy	_____	<input type="checkbox"/> 1/4	<input type="checkbox"/> 1/2	<input type="checkbox"/> 3/4
Third Trimester of Pregnancy	_____	<input type="checkbox"/> 1/4	<input type="checkbox"/> 1/2	<input type="checkbox"/> 3/4

Unknown

The entry of only 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: 1/4=5; 1/2=10; 3/4=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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUE</u>
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 1 st three months	0-98, 99
CIGFP	Number of packs smoked in 1 st three months	0.00-5.00
CIGSN	Number of cigarettes smoked in 2 nd three months	0-98, 99
CIGSP	Number of packs smoked in 2 nd three months	0.00-5.00
CIGLN	Number of cigarettes smoked in third trimester	0-98, 99
CIGLP	Number of packs smoked in third trimester	0.00-5.00
	Unknown (all variables)	99

EDITS:

ELECTRONIC RECORD

The variables CIGPN, CIGFN, CIGSN, CIGLN 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.”

$$1/4=0.25; 1/2=0.50; 3/4=0.75$$

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 Edits of data file prior to NCHS transmission:

Must be valid codes.

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.

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
-------------	---------------	-------------	--------------

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: **PRINCIPAL SOURCE OF PAYMENT FOR THIS DELIVERY**

Item Number: **38 Certificate, 22 Facility worksheet**

Description: The principal payer for this delivery

Source of Information:

Preferred Source: Hospital face sheet, Admitting office face sheet

INSTRUCTIONS

FOR A PAPER RECORD:

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

Please check the one box that best describes the principal source of payment for this delivery. If the "Other (Specify)" box is selected, please specify the payer. If the principal source of payment is not known, print or type "unknown" in the space.

PRINCIPAL SOURCE OF PAYMENT FOR THIS DELIVERY

- Private Insurance
- Medicaid
- Self-pay
- Other (Specify)_____

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in italics*)

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

The principal source of payment for this delivery is to be selected from the following:

- Medicaid
- Private Insurance (Blue Cross/ Blue Shield, Aetna, etc.)
- Self-pay
- Other (Specify)_____
- Unknown

State may also chose to expand this item to include common payment sources such as those listed below in addition to State-specific sources. If any of these additional sources listed below are captured, please assign values as shown under “processing variables.”

- Indian Health Service
- CHAMPUS/TRICARE
- Other government (federal, state, local)

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
PAY	Principal source of payment for delivery	1	Medicaid
		2	Private Insurance
		3	Self-pay
		4	Indian Health Service
		5	CHAMPUS/ TRICARE
		6	Other government (federal, state, local)
		8	Other
		9	Unknown

EDITS:

ELECTRONIC RECORD

Only one source of payment may be selected. This item may not be blank; the record cannot be filed or printed until the item is completed.

PAPER RECORD

Records filed with the source of payment blank should be queried. If no response to query, enter “unknown” in the “other specify” location.

If the “Other specify” indicates any of those listed, code as shown above. All other

entries code to “Other.”

States can develop a coding scheme for responses other than those listed, but all responses except “unknown” should be converted to the “Other” code for transmission to NCHS.

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

STATE FILE CONSIDERATIONS

State offices can design their software to maintain the other specified response codes and expand the list to meet their needs.

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
PAY	1	Numeric	1,2,3,8,9 (4,5,6 if States elect to collect the expanded list)

EDI TRANSMISSION:

No standards set yet.

Item Title: DATE LAST NORMAL MENSES BEGAN

Item Number: 39 Certificate, 8 Facility worksheet

Description: Date that the mother's last normal menses began. This item is used to compute the gestational age of the infant.

Source of Information:

Preferred Source: Mother'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 mother'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:

EBR 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.

EBR 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.**

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
DLMP_YR	Year of last menstrual period	4 digit year 9999	Values of 99, and 9999 are “unknown” codes.
DLMP_MO	Month of last menstrual period	01-12, 99	All other numeric values represent 4 digit years, or standard month and day numbers.
DLMP_DY	Day of last menstrual period	01-31, 99	

DERIVED VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
CM_DLNM	Century month last menstrual period	24024+, 88888	Values of 88, and 8888 are “not computable” codes. They are assigned to derived variables when information that is needed in computing the derived variable is not available or incorrect.
C_GESTM	Months gestation	4-11, 88	
CM_DOB	Century month date of birth	24024+, 88888	

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 child's year of birth 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 birth field must be compared with the date last normal menses began to be sure the date last normal menses began is earlier than the child's date of birth. 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_DOB - CM_DLNM. If either or both CM_DOB 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 DOB 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 infant's gestation age still is less than 0, please check and re-enter the child's date of birth.

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 DLNR_YR greater than 2 years different from child's date of birth 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
DLMP_YR	4	Numeric	4 digit year, child’s yr of birth 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 Title: **RISK FACTORS IN THIS PREGNANCY**

Item Number: **41 Certificate, 14 Facility worksheet**

Description: Selected medical risk factors of the mother during this pregnancy

Source of Information:

Preferred source: Mother'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 3/2005) that reflect the content of the cleared certificates.

For item 41, the original version of the birth certificate 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 birth certificate, the response categories for hypertension are: "prepregnancy (chronic)," "gestational (PIH, preeclampsia)," and "eclampsia."

For item 41, the original version of the birth certificate 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 birth certificate does not include this checkbox.

For item 41, the original version of the birth certificate 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 birth certificate, 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 mother may have more than one risk factor, check all that apply.

If the mother had none of the risk factors, check the "None of the above" box.

If it is unknown if the mother 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))
- Mother had a previous cesarean delivery
If yes, how many _____
- None of the above

FOR AN ELECTRONIC RECORD:

EBR 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 cesarean 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

EBR 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 mother 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))
- Mother had a previous cesarean delivery
 - If yes, how many _____
- None of the above

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
PDIAB	Prepregnancy diabetes	Y N U	Yes No 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. Rep. 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 boxe(s). 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 eclampsia and either prepregnancy 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 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 “Mother 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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
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: **42 Certificate, 15 Facility worksheet**

Description: Selected infections that the mother had or was treated for during the course of this pregnancy

Source of Information:

Preferred Source: Mother'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 3/2005) that reflect the content of the cleared certificates.

For item 42, the original version of the birth certificate included a checkbox for "herpes simplex virus (HSV)." During the clearance process that checkbox was deleted. The final birth certificate 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
- Hepatitis B
- Hepatitis C
- None of the above

FOR AN ELECTRONIC RECORD:

EBR 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) B. a positive test for *Treponema pallidum*.

Chlamydia - a positive test for *Chlamydia trachomatis*.

Hepatitis B (HBV, serum hepatitis) - a positive test for the hepatitis B virus.

Hepatitis C - (non A, non B hepatitis (HCV). A positive test for the hepatitis C virus.

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

EBR 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 mother 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
- Hepatitis B
- Hepatitis C
- None of the above

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
GON	Gonorrhea	Y, N, U	Y—Yes, N—No, U--Unknown
SYPH	Syphilis	Y, N, U	
CHAM	Chlamydia	Y, N, U	
HEPB	Hepatitis B	Y, N, U	
HEPC	Hepatitis C	Y, N, U	
NOA02	None of the above	Y, N, U	
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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
GON	1	Alpha character string	Y,N,U
SYPH	1	Alpha character string	Y,N,U
CHAM	1	Alpha character string	Y,N,U
HEPB	1	Alpha character string	Y,N,U
HEPC	1	Alpha character string	Y,N,U

EDI TRANSMISSION:

No standards set yet

Item Title: **OBSTETRIC PROCEDURES**

Item Number: **43 Certificate, 16 Facility worksheet**

Description: Selected medical treatments or invasive/manipulative procedures performed during this pregnancy specifically for management of labor and/or delivery.

Source of Information:

Preferred Source: Prenatal care record
Other Source: Labor and delivery nursing admission triage form, Admission history and physical, Delivery record

INSTRUCTIONS

FOR A PAPER RECORD:

If the medical records are not available at this time, print or type “unknown” in the space

OBSTETRIC PROCEDURES (check all that apply)

- Cervical cerclage
- Tocolysis

- External cephalic version
 - Successful
 - Failed

- None of the above

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The definitions below should be available through the help function for obstetric procedures:

- **Cervical cerclage:** Circumferential banding or suture of the cervix to prevent or treat passive dilation. Includes MacDonal’s suture, Shirodkar procedure, abdominal cerclage via laparotomy.
- **Tocolysis:** Administration of any agent with the intent to inhibit pre-term uterine contractions to extend the length of the pregnancy.
- **External cephalic version:** Attempted conversion of a fetus from a non-vertex presentation to a

vertex presentation by external manipulation.

Success: Fetus was converted to vertex presentation.

Failure: Fetus was not converted to vertex presentation.

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**

EBR 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 procedures that apply. If the mother had none of the listed procedures or treatments, please check the “None of the above” box. DO NOT LEAVE BLANK.

OBSTETRIC PROCEDURES (Check all that apply)

- Cervical cerclage
- Tocolysis

External cephalic version

- Successful
- Failed

- None of the above

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
CERV	Cervical cerclage	Y, N, U	Y--Yes
TOC	Tocolysis	Y, N, U	N--No
ECVS	Successful External cephalic version	Y, N, U	U--Unknown
ECVF	Failed External cephalic version	Y, N, U	
NOA03	None of the above	Y, N, U	
DNA03	Pending flag	0	OFF
		1	ON

EDITS:**ELECTRONIC RECORD****Before the record is transmitted to the State**

If no boxes are checked, the item entry screen will appear with the following message:

This item has not been completed. Check the appropriate procedures or check “None of the above.”

If the “Data not available at this time” box is selected, the following message will 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 will be set to “ON” and all other variables assigned the “unknown” code.

The final review screen for this item will 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 boxes are checked, assign all other items the “no” code.

If one or more boxes are checked, all procedures not checked will be assigned the “no” code.

“Successful external cephalic version” and the “Failed external cephalic version” procedures cannot both be selected. If both are checked, a message should appear that reads:

Both “Successful external cephalic version” and the “Failed external cephalic version” boxes are checked. Please review the records and choose the correct response.

PAPER RECORD

Records filed with this field blank are queried. If no response to query, assign the “unknown” code to each procedure variable.

If “unknown” is printed in the box, assign each procedure variable the “unknown” code

If the “None of the above” box is checked and at least one other box is checked, assign the “no” code to the “None or 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 one or more boxes are checked, all procedures not checked will be assigned the “no” code.

The “Successful external cephalic version” and the “Failed external cephalic version” boxes cannot both be checked. If both are checked, query.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
CERV	1	Alpha character string	Y, N, U
TOC	1	Alpha character string	Y, N, U
ECVS	1	Alpha character string	Y, N, U
ECVF	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **ONSET OF LABOR**

Item Number: **44 Certificate, 17 Facility worksheet**

Description: Serious complications experienced by the mother associated with labor and delivery

Source of Information:

Preferred Source: Labor and delivery record, Delivery comments

INSTRUCTIONS

FOR A PAPER RECORD:

Check all boxes that apply.

If unknown, print or type “unknown” in the space.

ONSET OF LABOR

(Check all that apply)

- Premature Rupture of the Membranes (prolonged, ≥ 12 hours)
- Precipitous labor (<3 hours)
- Prolonged labor (≥ 20 hours)
- None of the above

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The following definitions are to be in the help menu for this item:

Premature Rupture of the Membranes (prolonged ≥ 12 hours)

Spontaneous tearing of the amniotic sac, (natural breaking of the “bag of waters”), 12 hours or more before labor begins.

Precipitous labor (<3hours)

Labor that progresses rapidly and lasts for less than 3 hours.

Prolonged labor (≥ 20 hours)

Labor that progresses slowly and lasts for 20 hours or more.

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.

- Premature Rupture of the Membranes (prolonged, ≥ 12 hours)
- Precipitous labor (<3 hours)
- Prolonged labor (≥ 20 hours)
- None of the above

- Unknown at this time

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
PROM	Premature rupture	Y, N, U	Y--Yes, N—No,
PRIC	Precipitous labor	Y, N, U	U--Unknown
PROL	Prolonged labor	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.

Precipitous labor and prolonged labor cannot both be checked. If both are checked, as message should appear indicated that only one box can be checked and to choose the appropriate response.

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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
PROM (Premature rupture)	1	Alpha character string	Y, N, U
PRIC (Precipitous labor)	1	Alpha character string	Y, N, U
PROL (Prolonged labor)	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **CHARACTERISTICS OF LABOR AND DELIVERY**

Item Number: **45 Certificate; 27 Facility worksheet**

Description: Information about the course of labor and delivery.

Source of information:

Preferred Source: Delivery record, Physician progress note, Newborn admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

More than one characteristic may be checked.

If the characteristics of the labor and delivery are not known at this time, print or type “unknown” in the space.

CHARACTERISTICS OF LABOR AND DELIVERY

(Check all that apply)

- Induction of labor
- Augmentation of labor
- Non-vertex presentation
- Steroids (glucosteroids) for fetal lung maturation received by the mother prior to delivery
- Antibiotics received by the mother during labor
- Clinical chorioamnionitis diagnosed during labor or maternal temperature ≥ 38 C (100.4 F)
- Moderate/heavy meconium staining of the amniotic fluid
- Fetal intolerance of labor such that one or more of the following actions was taken: in-utero resuscitation measures, further fetal assessment, or operative delivery
- Epidural or spinal anesthesia during labor
- None of the above

FOR AN ELECTRONIC RECORD:

EBR developer (*Instructions are in Italics*)

The following definitions should appear in the help function:

Induction of labor : Initiation of uterine contractions by medical and/or surgical means for the purpose of delivery before the spontaneous onset of labor.

Augmentation of labor: Stimulation of uterine contractions by drug or manipulative technique with the intent to reduce the time to delivery.

Non-vertex presentation: Includes any non-vertex fetal presentation, e.g., breech, shoulder, brow, face presentations, and transverse lie in the active phase of labor or at delivery other than vertex.

Steroids (glucosteroids) for fetal lung maturation received by the mother prior to delivery: Includes betamethasone, dexamethasone, or hydrocortisone specifically given to accelerate fetal lung maturation in anticipation of preterm delivery. Excludes steroid medication given to the mother as an anti-inflammatory treatment.

Antibiotics received by the mother during labor: Includes antibacterial medications given systemically (intravenous or intramuscular) to the mother in the interval between the onset of labor and the actual delivery (Ampicillin, Penicillin, Clindamycin, Erythromycin, Gentamicin, Cefataxime, Ceftriaxone, etc.)

Clinical chorioamnionitis diagnosed during labor or maternal temperature ≥ 38 C (100.4 F): A clinical diagnosis of chorioamnionitis during labor made by the delivery attendant. Usually includes more than one of the following: fever, uterine tenderness and/or irritability, leukocytosis, and fetal tachycardia. Any recorded maternal temperature at or above the febrile threshold as stated.

Moderate/heavy meconium staining of the amniotic fluid: Staining of the amniotic fluid caused by passage of fetal bowel contents during labor and/or delivery which is more than enough to cause a greenish color change of an otherwise thin fluid.

Fetal intolerance of labor such that one or more of the following actions was taken: in-utero resuscitation measures, further fetal assessment, or operative delivery: *In utero resuscitative measure-s* such as any of the following: maternal position change, oxygen administration to the mother, intravenous fluid administered to the mother, amnioinfusion, support of maternal blood pressure, and administration of uterine relaxing agents. *Further fetal assessment* includes any of the following: scalp pH, scalp stimulation, acoustic stimulation. *Operative delivery*-operative intervention to shorten time to delivery of the fetus such as forceps, vacuum, or cesarean delivery.

Epidural or spinal anesthesia during labor: Administration to the mother of a regional anesthetic for control of the pain of labor, i.e., delivery of the agent into a limited space with the distribution of the analgesic effect limited to the lower body.

The following instruction should appear for this item:

Please check all characteristics that apply. If information on the labor and delivery are not available at this time check “unknown at this time.” If none of the characteristics of labor and delivery apply to this delivery, check “None of the above.” DO NOT LEAVE THIS ITEM BLANK.

- Induction of labor
- Augmentation of labor

- Non-vertex presentation
- Steroids (glucosteroids) for fetal lung maturation received by the mother prior to delivery
- Antibiotics received by the mother during labor
- Clinical chorioamnionitis diagnosed during labor or maternal temperature ≥ 38 degreesC(100.4F)
- Moderate/heavy meconium staining of the amniotic fluid
- Fetal intolerance of labor such that one or more of the following actions was taken: in-utero resuscitation measures, further fetal assessment, or operative delivery
- Epidural or spinal anesthesia during labor

- None of the above
- Unknown at this time

VARIABLES:

NAMES	DESCRIPTION	VALUES	DEFINITIONS
INDL	Induction of labor	Y, N, U	Y—Yes, N--N
AUGL	Augmentation of labor	Y, N, U	U--Unknown
NVPR	Non-vertex present	Y, N, U	
STER	Steroids	Y, N, U	
ANTB	Antibiotics	Y, N, U	
CHOR	Chorioamnionitis	Y, N, U	
MECS	Meconium staining	Y, N, U	
FINT	Fetal intolerance	Y, N, U	
ESAN	Anesthesia	Y, N, U	
NOA04	None of the above	Y, N, U	
DNA04	Pending flag	0 1	Off 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 at this time. If any of the characteristics listed in the menu are

indicated, check the appropriate box(s). Please check the “None of the above” box if none of the listed characteristics of labor and delivery are indicated.

If the “Unknown at this time” box is checked, all other variables are assigned the “unknown” code and the flag is set to “ON.” A message will appear that reads:

Please obtain the records necessary to complete this item. The item will be 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.

PAPER RECORD

Records filed with this item incomplete will be queried. If no response to query, assign each item 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, 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.

State Edits of data file prior to NCHS transmission.

Must be valid codes (see below).

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
INDL (Induction of labor)	1	alpha character string	Y, N, U
AUGL (Augmentation of labor)	1	alpha character string	Y, N, U
NVPR (Non-vertex present)	1	alpha character string	Y, N, U
STER (Steroids)	1	alpha character string	Y, N, U
ANTB (Antibiotics)	1	alpha character string	Y, N, U
CHOR (Chorioamnionitis)	1	alpha character string	Y, N, U
MECS (Meconium staining)	1	alpha character string	Y, N, U
FINT (Fetal intolerance)	1	alpha character string	Y, N, U
ESAN (Anesthesia)	1	alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **METHOD OF DELIVERY**

Item Number: **46 certificate, 28 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, newborn admission history and physical

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 birth

- 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

FOR AN ELECTRONIC RECORD:

EBR 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.

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 birth (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

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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

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 BIRTH

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.

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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
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

EDI TRANSMISSION:

No standards set yet

Item Title: **MATERNAL MORBIDITY**

Item Number: **47 Certificate, 29 Facility worksheet**

Description: Serious complications experienced by the mother 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:

EBR 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 mother to a facility/unit designated as providing intensive care.

Unplanned operating room procedure following delivery: Any transfer of the mother 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINTION</u>
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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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: **BIRTHWEIGHT**

Item Number: **49 Certificate, 30 Facility worksheet**

Description: The weight of the infant at birth.

Source of Information:

Preferred Source: Delivery record, Admission assessment

INSTRUCTIONS

FOR A PAPER RECORD:

Wherever possible, weigh and report the infant's birthweight 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 birthweight is not known, print or type "unknown" in the space.

BIRTHWEIGHT (grams preferred, specify unit)

grams lb/oz

FOR AN ELECTRONIC RECORD:

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

The birthweight of the child 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 birthweight item is to be completed.

Please check one box below.

Note: hospitals which only use one unit to measure birthweight 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.

- Birthweight is measured in grams
- Birthweight is measured in pounds and ounces

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

Birthweight of infant _____ grams.

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

Birthweight of infant _____ lbs. _____ ozs.

The following instruction should appear in the help menu:

Unknown Birthweight: If the birthweight of the infant 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
BWG	Infant’s birthweight	0000-9998 9999	Birthweight in grams Unknown
BWP	Infant’s birthweight	00-20	Birthweight pounds
BWO	Infant’s birthweight	00-15 99 99	Birthweight ounces Birthweight pounds Birthweight ounces
BW_BYPASS	Bypass flag	0 1 2	OFF Queried data correct, but out of range Queried, failed birthweight/gestation edit.

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

Birthweights in pounds and ounces are converted to grams and assigned to the BWG field for editing and tabulation purposes. (Do not convert unknown (99, 99) values for pounds and ounces.)

The conversion algorithm is:

$$BWG = ((BWP * 16) + BWO) * 28.35$$

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

The birthweight of the infant is _____grams (or lbs/ou).

Please check the box or enter a new weight.

- Weight is correct

Birthweight is _____ grams.

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

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

BIRTHWEIGHT/GESTATION CONSISTENCY CHECK

The following edit is done if: the BW_BYPASS flag is 0, the birthweight 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, BW <1,000 grams

If C_GESTM is 5 and plurality is any valid value, BW < 2,000 grams

If C_GESTM is 6 and plurality is any valid value, BW < 3,000 grams

If C_GESTM is 7 and plurality is any valid value, BW <4,000 grams

If C_GESTM is equal to or >8 and plurality is value 1, BW \geq 1,000 grams.

The following edit is done if: the BW_BYPASS flag is 0, the birthweight 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, BW <1,000 grams

If OWGEST is 20-23 and plurality is any valid value, BW < 2,000 grams

If OWGEST is 24-27 and plurality is any valid value, BW < 3,000 grams

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

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

The record indicates that the infant has a gestation of _____months/weeks and a birthweight of _____grams.

Please check the correct box or enter a new birthweight.

Birthweight correct

Birthweight_____ grams

If the “Birthweight correct” box is checked, the BW_BYPASS flag is set to ON-2

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

PAPER RECORD

Records filed with the birthweight blank should be queried. If no response to query, assign 9999 to the birthweight 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
BWG	4	Numeric	0000-9999
BW_BYPASS	1	Numeric	0,1,2

EDI TRANSMISSION:

No standards set yet.

Item Title: **OBSTETRIC ESTIMATION OF GESTATION**

Item Number: **50 Certificate, 31 Facility worksheet**

Description: The obstetric estimate of the infant's gestation in completed weeks based on the birth 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 infant'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 infant's date of birth and the mother's date of LMP.

OBSTETRIC ESTIMATE OF GESTATION:
_____ (completed weeks)

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The obstetric estimate of the infant'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 infant's gestation is not known, enter 99. Do not complete this item based on the infant's date of birth and the mother's date of LMP.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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 infant'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" 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
OWGEST	2	Numeric	00-98,99
OWGEST_BYPASS	1	Numeric	0,1

EDI TRANSMISSION:

No standards set yet.

Item Title: **APGAR SCORE**

Item Number: **51 Certificate, 33 Facility worksheet**

Description: The Apgar Score for the child at 5 and 10 minutes

Source of Information:

Preferred Source: Delivery record (infant data)

INSTRUCTIONS

FOR A PAPER RECORD:

Enter the infant's Apgar score at 5 minutes, and if the score at 5 minutes is less than 6, enter the infant's Apgar score at 10 minutes.

APGAR SCORE

Score at 5 minutes: _____

If 5 minute score is less than 6,

Score at 10 minutes: _____

If the infant's Apgar score is not known or was not taken at 5 minutes or ten minutes, print or type "unknown" in the space.

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in italics*)

The following instruction should appear:

Enter the infant's Apgar score taken at 5 minutes

If the infant's Apgar score is not known or was not taken at 5 minutes, enter 99.

Apgar score at 5 minutes _____.

If the score entered is 6 or greater, the variable for the Apgar score at 10 minutes is assigned the value "88."

If the score entered is less than 6 or 99, a request for the Apgar score at 10 minutes appears with the following instruction:

Enter the infant's Apgar score taken at 10 minutes.

If the infant's Apgar score is not known or was not taken at 10 minutes, enter 99.

Apgar score at 10 minutes_____.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
APGAR5	Apgar score at 5 minutes	00-10 99	Apgar score Unknown
APGAR10	Apgar score at 10 minutes	00-10 88 99	Apgar score Not applicable Unknown

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

The variable APGAR5 must have a value in the range 00-10, 99.

The variable APGAR10 must have a value in the range 00-10, 88, 99

If either variable's value is greater than 10 but not 88 or 99, the following message should appear:

The infant's Apgar score is recorded as _____.

Please re-enter the infant's Apgar score_____.

If the new Apgar score is greater than 10, assign "99" to the appropriate variable.

PAPER RECORD

Records filed with the "Apgar score(s)" blank should be queried. If no response to query, enter "99" for each variable.

State Edits of data file prior to NCHS transmission

See above edits for electronic records.

NCHS TRANSMISSION FILE**VARIABLES:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
APGAR5	2	Numeric	00-10, 99
APGAR10	2	Numeric	00-10, 88, 99

EDI TRANSMISSION:

No standards set yet.

Item Titles: **PLURALITY
IF NOT SINGLE BIRTH – Born First, Second,
Third, etc. (Specify)**

Item Numbers: **52 certificate; 34 facility worksheet
53 certificate; 35 facility worksheet
N/A certificate; 36 facility worksheet**

Description: Plurality – The number of fetuses delivered live or dead at any time in the pregnancy regardless of gestational age or if the fetuses were delivered at different dates in the pregnancy. (“Reabsorbed” fetuses, those which are not “delivered” (expulsed or extracted from the mother) should not be counted.)

If not single birth, specify born 1st, 2nd, etc. – For multiple deliveries, the order this infant was delivered in the set. Include all live births and fetal losses.

If not single birth, specify the number of infants in this delivery born alive -- For multiple deliveries, the number of infants born alive at any point in the pregnancy.

Source of Information:

Preferred Source: Admission history and physical, Delivery record

INSTRUCTIONS

FOR A PAPER RECORD:

Item 52, 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 53, Set Order.

If this is a singleton delivery, leave this item blank. For multiple deliveries, print the order that this infant 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:

EBR Developer: (*Instructions are in italics*)

Plurality

Enter the number of fetuses 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 born dead enter “3.”

If plurality is unknown enter “99.”

Plurality (number of fetuses 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 infant 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 infant_____

If plurality is >1 and not “99” the following question is asked:

Enter the total number of infants born alive in the delivery_____

If “Live Born” > 1, an identification number unique to each multiple set born in the State for that year is generated. Each live born member of the set (and each fetal death, if the fetal death system is integrated with the birth) is assigned the same identification

number. This number is entered for the variable "MATCH. The identification number may be the mother's medical record number, or any other identifying number which would be unique to the multiple set for that State.

Example: (Assuming all born live)

*Twin set A—1st born #345671
2nd born #345671*

*Twin set B – 1st born #567897
2nd born #567897*

*Triplet set A –1st born #789014
2nd born #789014
3rd born #789014*

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., mother's demographic and prenatal care information) is copied for each additional infant. Only information potentially unique to the individual set member (e.g., method of delivery, abnormal conditions, birthweight) need be entered. (See "Attachment to the Facility Worksheet for the Live Birth Certificate for Multiple Births.")

The purpose of generating identification numbers for multiple birth sets is to enhance quality control and to allow NCHS to more readily match members of multiple birth 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
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
LIVEB	Number of Live born	01-12	Number of infants

		88	delivered alive
		99	Not applicable
			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 fetuses in this delivery is recorded as _____.

Please indicate whether this number is “correct” or enter a new number.

correct

Number of fetuses (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 after the edit is run, 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 _____ fetuses in this delivery but the set order of the infant was _____.

Please enter a new value for each of these items:

Total number of fetuses (born live and dead) in this delivery _____
Set order of this infant _____

The edit is re-run and if it fails the bypass flag is set to ON-2.

The number of infants born alive in this delivery must be \leq 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 EBR system should make sure that the correct number of records is completed for each live born infant in the multiple delivery by comparing the number for which the same identification number (MATCH) has been generated with the number reported as “Live born” (LIVEB).

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 LIVEB 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

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
PLUR	2	Numeric	01-12, 99
SORD	2	Numeric	01-12, 99
LIVEB	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: **ABNORMAL CONDITIONS OF THE NEWBORN**

Item Number: **54 Certificate; 37 Facility worksheet**

Description: Disorders or significant morbidity experienced by the newborn infant

Source of Information:

Preferred Source: Labor and delivery summary, Newborn history and physical, Newborn medical admission record

INSTRUCTIONS

FOR A PAPER RECORD:

Check all boxes that apply to this child.

ABNORMAL CONDITIONS OF THE NEWBORN

- Assisted ventilation required immediately after delivery
- Assisted ventilation required for more than 6 hours
- NICU admission
- Newborn given surfactant replacement therapy
- Antibiotics received by the newborn for suspected neonatal sepsis
- Seizure or serious neurologic dysfunction
- Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/ or soft tissue/solid organ hemorrhage which requires intervention)
- None of the above

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The following definitions are to be in the help menu for this item:

Assisted ventilation required immediately after delivery: Infant given manual breaths with bag and mask or bag and endotracheal tube within the first several minutes from birth for any duration. Excludes oxygen only and laryngoscopy for aspiration of meconium.

Assisted ventilation required for more than 6 hours: Infant given mechanical ventilation (breathing assistance) by any method for more than 6 hours. Includes conventional, high frequency and/or continuous positive pressure (CPAP).

NICU admission: Admission into a facility or unit staffed and equipped to provide continuous mechanical ventilatory support for the newborn.

Newborn given surfactant replacement therapy: Endotracheal instillation of a surface active suspension for the treatment of surfactant deficiency either due to preterm birth or pulmonary injury resulting in decreased lung compliance (respiratory distress). Includes both artificial and extracted natural surfactant.

Antibiotics received by the newborn for suspected neonatal sepsis: Any antibacterial drug given systemically (intravenous or intramuscular.) (e.g. penicillin, ampicillin, gentamicin, cefotaxime, etc.)

Seizure or serious neurologic dysfunction: Seizure defined as any involuntary repetitive, convulsive movement or behavior. Serious neurologic dysfunction defined as severe alteration of alertness such as obtundation, stupor, or coma, i.e. hypoxicischemic encephalopathy. Excludes lethargy or hypotonia in the absence of other neurologic findings. Exclude symptoms associated with CNS congenital anomalies.

Significant birth injury: (skeletal fracture(s), peripheral nerve injury and/or soft tissue/solid organ hemorrhage which requires intervention) Defined as present immediately following delivery or manifesting following delivery. Includes any bony fracture or weakness or loss of sensation, but excludes fractured clavicles and transient facial nerve palsy. Soft tissue hemorrhage requiring evaluation and/or treatment includes sub-galeal (progressive extravasation within the scalp) hemorrhage, giant cephalohematoma, extensive truncal, facial and /or extremity ecchymosis accompanied by evidence of anemia and/or hypovolemia and or hypotension. Solid organ hemorrhage includes subcapsular hematoma of the liver, fractures of the spleen, or adrenal hematoma. All require confirmation by diagnostic imaging or exploratory laparotomy. See below for listing of significant birth injuries:

Skeletal Fractures

Clavicle

Humerus

Skull (Also reported by skull bone, i.e. parietal, frontal, occipital)
Femur

Peripheral Nerve

Facial

Brachial Plexus Injury

(Also reported as Erb's Palsy, Klumpke's Palsy)

Phrenic

Recurrent Laryngeal

Soft Tissue or Solid Organ Hemorrhage

Cranial (exclude cephalohematoma, hemorrhagic caput succedaneum)

Subgaleal

Cortical

Intraventricular

Subcapsular hematoma of liver

Adrenal hemorrhage/hematoma

The following instruction should appear with the menu.

Please check all boxes that apply. If none of the abnormal conditions of the newborn are indicated, check “None of the above.” DO NOT LEAVE THIS ITEM BLANK.

- Assisted ventilation required immediately after delivery
- Assisted ventilation required for more than 6 hours
- NICU admission
- Newborn given surfactant replacement therapy
- Antibiotics received by the newborn for suspected neonatal sepsis
- Seizure or serious neurologic dysfunction
- Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage which requires intervention)
- None of the above

- Unknown at this time

PROCESSING VARIABLES:

NAMES	DESCRIPTION	VALUES	DEFINTION
AVEN1	Assisted ventilation	Y, N, U	Y--Yes, N—No,
AVEN6	Assisted ventilation for 6 or more hours	Y, N, U	U--Unknown
NICU	Admission to NICU	Y, N, U	
SURF	Surfactant replacement therapy	Y, N, U	
ANTI	Antibiotics	Y, N, U	
SEIZ	Seizure or serious neurologic dysfunction	Y, N, U	
BINJ	Significant birth injury	Y, N, U	
NOA54	None of the above	Y, N, U	
DNA54	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 the data are not available at this time please check “Unknown at this time.” If any of the abnormal conditions listed in the menu are indicated, check the appropriate box. Check “None of the above” if none of the listed abnormal conditions are indicated.

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 “None of above” 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, assign each item to the “Unknown” code.

If “unknown” is printed in the box, assign each choice in the menu the “unknown” code.

If the “None of the above” box is checked and at least one other box checked, change the “None of above” response to the “no” code and continue edits.

If the “None of the above” box is checked and no other boxes checked, assign all 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
AVEN1 (Assisted ventilation)	1	Alpha character string	Y, N, U
AVEN6 (Assisted ventilation 6)	1	Alpha character string	Y, N, U
NICU (Admission to NICU)	1	Alpha character string	Y, N, U
SURF (Surfactant)	1	Alpha character string	Y, N, U
ANTI (Antibiotics)	1	Alpha character string	Y, N, U
SEIZ (Seizures)	1	Alpha character string	Y, N, U
BINJ (Birth injury)	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **CONGENITAL ANOMALIES OF THE NEWBORN**

Item Number: **55 Certificate, 38 Facility worksheet**

Description: Malformations of the newborn diagnosed prenatally or after delivery

Source of Information:

Preferred Source: Labor and delivery summary, Infant history and physical, Physician progress notes, Newborn admission history and physical

INSTRUCTIONS

FOR A PAPER RECORD:

CONGENITAL ANOMALIES OF THE NEWBORN

Check all boxes that apply to this child. 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 diaphragmatic 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:

EBR 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 newborn 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 newborn are indicated, check the “None of the above” box. DO NOT LEAVE THIS ITEM BLANK.

CONGENITAL ANOMALIES OF THE NEWBORN

Check all boxes that apply:

- Anencephaly
- Meningomyelocele / Spina Bifida
- Cyanotic congenital heart disease
- Congenital diaphragmatic 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

- 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINTION</u>
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 1	OFF 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:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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

Item Title: **WAS INFANT TRANSFERRED WITHIN 24 HOURS OF DELIVERY?**

Item Number: **56 Certificate, 39 facility worksheet**

Description: Information on the transfer status of the infant within 24 hours after delivery

Source of Information:

Preferred source: Infant progress notes, Transfer form

INSTRUCTIONS

FOR A PAPER RECORD:

Check “yes” if the infant was transferred from this facility to another within 24 hours of delivery and enter the name of the facility the infant was transferred to.

If the name of the facility is not known, print or type “unknown.”

If the infant was transferred more than once, enter the name of the first facility to which the infant was transferred.

WAS INFANT TRANSFERRED WITHIN 24 HOURS OF DELIVERY? Yes No
IF YES, PRINT OR TYPE THE NAME OF THE FACILITY THE INFANT WAS TRANSFERRED TO: _____

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

Was the infant transferred to a different facility within 24hours of delivery?

- Yes
- No
- Unknown

If the yes box is checked, the following appears:

Please enter the name of the facility to which the infant was transferred.

If the name of the facility is not known, enter “unknown.”

If the infant was transferred more than once enter the name of the first facility to which the infant was transferred.

Facility name: _____

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
ITRAN	Infant transferred	Y N U	Yes No Unknown
FTRAN	Name of facility to which transferred	Alpha character string	

EDITS:

ELECTRONIC RECORD

The transfer status cannot be blank.

If transfer status is left blank, the item will reappear at the final review screen.

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 asking that the inconsistency be corrected.

PAPER RECORD

Records filed with the transfer status blank shall be queried. If no response to query, enter response of “unknown.”

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.

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 and/or NPI numbers or state facility codes.

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
ITRAN	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet

Item Title: **IS INFANT LIVING AT THE TIME OF REPORT?**

Item Number: **57 Certificate, 40 facility worksheet**

Description: Information on the infant's survival.

Source of Information:

Preferred Source: Infant progress notes

INSTRUCTIONS

FOR A PAPER RECORD:

Check "Yes" if the infant is living.

Check "Yes" if the infant has already been discharged to home care.

Check "No" if it is known that the infant has died.

If the infant was transferred but the status is known, indicate the known status.

IS INFANT LIVING AT TIME OF REPORT?

Yes No Infant transferred, status unknown

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

The following instructions should appear when this item is to be completed:

Check "Yes" if the infant is living.

Check "Yes" if the infant has already been discharged to home care.

Check "No" if it is known that the infant has died.

If the infant was transferred but the status is known, please indicate the known status.

Is the infant living at the time of this report?

- Yes
- No
- Infant transferred, status unknown

If the "No" box is checked states may want to consider a pop-up window that appears which reminds the facility that a death record must also be completed by the infant's physician.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
ILIV	Infant living	Y N U	Yes No Infant transferred, status unknown

EDITS:

ELECTRONIC RECORD

Before the record is transmitted to the State

The living status cannot be blank.

PAPER RECORD

Records filed with the item "Is infant living at the time of report" blank shall be queried. If no response to query, enter response of "yes."

State Edits of data file prior to NCHS transmission

Must be a valid code (see below)

NCHS TRANSMISSION FILE**VARIABLES:**

<u>NAME</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
ILIV	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet.

Item Title: **IS INFANT BEING BREASTFED AT DISCHARGE?**

Item Number: **58 Certificate; 41 facility work sheet**

Description: Information on whether the infant is being breastfed at discharge from the hospital.

Source of Information:

Preferred Source: Labor and delivery summary, Maternal progress note, Newborn flow record, Lactation consult

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 3/2005) that reflect the content of the cleared certificates.

For item 58, the original version of the birth certificate read "Is infant being breast fed?" During the clearance process the item was reworded as follows: "Is the infant being breastfed at discharge?"

FOR A PAPER RECORD:

Check "Yes" if the infant is being breastfed at discharge.

Check "No" if the infant is not being breastfed at discharge.

If it is not known if the infant is being breastfed at discharge, print or type "unknown" in the space.

IS INFANT BEING BREASTFED AT DISCHARGE? Yes No

FOR AN ELECTRONIC RECORD:

EBR Developer (*Instructions are in Italics*)

Is the infant being breastfed at discharge?

- Yes
- No
- Unknown at this time

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
BFED	Infant breastfed at discharge	Y N U	Yes No Unknown

EDITS:**ELECTRONIC RECORD****Before the record is transmitted to the State**

If the “Unknown at this time” box is checked assign the unknown code and the following message should appear.

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

The item cannot be blank.

PAPER RECORD

Records filed with the item “Is infant being breastfed at discharge?” blank shall be queried. If no response to query, enter response of “unknown.”

State Edits of data file prior to NCHS transmission

Must be a valid code (see below)

NCHS TRANSMISSION FILE**VARIABLES:**

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUE</u>
BFED	1	Alpha character string	Y, N, U

EDI TRANSMISSION:

No standards set yet.

File Processing Item: **State of birth**

File Layout Location: **5-6**

Description: Information about the State of occurrence of the birth.

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 8A (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 8A (from FIPS table 5-2).

EDR Developer

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
BSTATE	State of birth	Alpha	Appendix B

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
BSTATE	2	Alpha character string	Appendix B

File Processing Item: **Certificate 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:

EDR 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
FILENO	State file number	6-digit	Left fill zero if not 6 digits

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
FILENO	6	Numeric character string	000001-999999

File Processing Item: **Void flag**

File Layout Location: **13-13**

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:

EDR Developer

To help identify records that have been voided from the data file.

PROCESSING VARIABLES:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
VOID (default)	Flag indicating void	0	Valid record
		1	Void record

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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:

EDR 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:

<u>NAME</u>	<u>DESCRIPTION</u>	<u>VALUES</u>	<u>DEFINITION</u>
AUXNO	Auxiliary State file number 12-digit		Left fill zero if not 12 digits, blank

NCHS TRANSMISSION FILE

VARIABLES:

<u>NAMES</u>	<u>LENGTH</u>	<u>TYPE</u>	<u>VALUES</u>
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	BANGLADESH	BG
ALBANIA	AL	BARBADOS	BB
ALGERIA	AG	BASSAS DA INDIA	BS
AMERICAN SAMOA	AQ	BELARUS [as of August 25, 1991]	BO
ANDORRA	AN	<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>
ANGOLA	AO	<i>REPUBLICS [November 7, 1917 to</i>	
ANGUILLA	AV	<i>December 26, 1991]</i>	
ANTARCTICA	AY	BELGIUM	BE
ANTIGUA AND BARBUDA	AC	BELIZE	BH
ARGENTINA	AR	BENIN	BN
ARMENIA [as of September 21, 1991]	AM	<i>DAHOMEY [BENIN]</i>	<i>DM *</i>
<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>	BERMUDA	BD
<i>REPUBLICS [November 7, 1917 to</i>		BHUTAN	BT
<i>December 26, 1991]</i>		BOLIVIA	BL
ARUBA [as of January 1, 1986]	AA	BOSNIA AND HERZEGOVINA [as of April 5,	BK
<i>NETHERLANDS ANTILLES [prior to</i>	<i>NA *</i>	1992]	
<i>January 1, 1986]</i>		<i>YUGOSLAVIA [December 1, 1918 to</i>	<i>YO *</i>
ASHMORE AND CARTIER ISLANDS	AT	<i>April 11, 1992]</i>	
AUSTRALIA	AS	BOTSWANA	BC
AUSTRIA	AU	BOUVET ISLAND	BV
AZERBAIJAN [as of August 30, 1991]	AJ	BRAZIL	BR
<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>	BRITISH INDIAN OCEAN TERRITORY	IO
<i>REPUBLICS [November 7, 1917 to</i>		BRITISH VIRGIN ISLANDS	VI
<i>December 26, 1991]</i>		BRUNEI	BX
BAHAMAS, THE	BF	BULGARIA	BU
BAHRAIN	BA		

BURKINA FASO	UV	EAST GERMANY (GERMAN DEMOCRATIC	GC *
BURMA	BM	REPUBLIC) [October 11, 1949 to October 3,	
BURUNDI	BY	1990]	
CAMBODIA	CB	EAST TIMOR [as of October 1999]	TT
CAMEROON	CM	<i>TIMOR [prior to 1975]</i>	PT *
CANADA	CA	ECUADOR	EC
CANTON AND ENDERBERRY ISLANDS	EQ *	EGYPT	EG
CAPE VERDE	CV	EL SALVADOR	ES
CAYMAN ISLANDS	CJ	<i>ENGLAND (UNITED KINGDOM)</i>	UK
CENTRAL AFRICAN REPUBLIC	CT	EQUATORIAL GUINEA	EK
CENTRAL AND SOUTHERN LINE ISLANDS	CL *	ERITREA	ER
CHAD	CD	ESTONIA [as of August 20, 1991]	EN
CHILE	CI	<i>UNION OF SOVIET SOCIALIST</i>	UR *
CHINA	CH	<i>REPUBLICS [November 7, 1917 to</i>	
CHRISTMAS ISLAND	KT	<i>December 26, 1991]</i>	
CLIPPERTON ISLAND	IP	ETHIOPIA	ET
COCOS (KEELING) ISLANDS	CK	EUROPA ISLAND	EU
COLOMBIA	CO	FALKLAND ISLANDS	FK
COMOROS	CN	FAROE ISLANDS	FO
CONGO (DEMOCRATIC REPUBLIC OF THE CONGO)	CG	FIJI	FJ
CONGO (REPUBLIC OF THE CONGO)	CF	FINLAND	FI
COOK ISLANDS	CW	FRANCE	FR
CORAL SEA ISLANDS	CR	FRENCH GUIANA	FG
COSTA RICA	CS	FRENCH POLYNESIA	FP
COTE D'IVOIRE	IV	FRENCH SOUTHERN AND ANTARCTIC	FS
CROATIA [as of June 11, 1992]	HR	LANDS	
<i>YUGOSLAVIA [December 1, 1918 to</i>	YO *	FRENCH TERRITORY OF THE AFFARS AND	FT *
<i>April 11, 1992]</i>		ISSAS	
CUBA	CU	GABON	GB
CYPRUS	CY	GAMBIA, THE	GA
CZECH REPUBLIC [as of January 1, 1993]	EZ	GAZA STRIP	GZ
CZECHOSLOVAKIA [October 28, 1918 to	CZ *	GEORGIA [as of April 9, 1991]	GG
January 1, 1993]		<i>UNION OF SOVIET SOCIALIST</i>	UR *
DAHOMEY [BENIN]	DM *	<i>REPUBLICS [November 7, 1917 to</i>	
DENMARK	DA	<i>December 26, 1991]</i>	
DJIBOUTI	DJ	GERMANY [as of October 3, 1990]	GM
DOMINICA	DO	EAST BERLIN [October 11, 1949 to October 3,	EB *
DOMINICAN REPUBLIC	DR	1990]	
EAST BERLIN [prior to October 3, 1990]	EB *	<i>EAST GERMANY (GERMAN</i>	GC *
		<i>DEMOCRATIC REPUBLIC) [October</i>	
		<i>11, 1949 to October 3, 1990]</i>	
		<i>WEST BERLIN [September 21, 1949 to</i>	WB *
		<i>October 3, 1990]</i>	
		<i>WEST GERMANY (FEDERAL</i>	GE *
		<i>REPUBLIC OF GERMANY) [September</i>	
		<i>21, 1949 to October 3, 1990]</i>	

GHANA	GH	SVALBARD AND JAN MAYEN	JS *
GIBRALTAR	GI	JAPAN	JA
GILBERT ISLANDS	GS *	JARVIS ISLAND	DQ
GILBERT AND ELLICE ISLANDS	GN *	JERSEY	JE
GLORIOSO ISLANDS	GO	JOHNSTON ISLAND	JQ
<i>GREAT BRITIAN (UNITED KINGDOM)</i>	<i>UK</i>	JORDAN	JO
GREECE	GR	JUAN DE NOVA ISLAND	JU
GREENLAND	GL	KAZAKHSTAN [as of December 16, 1991]	KZ
GRENADA	GJ	<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>
GUADELOUPE	GP	<i>REPUBLICS [November 7, 1917 to</i>	
GUAM	GQ	<i>December 26, 1991]</i>	
GUATEMALA	GT	KENYA	KE
GUERNSEY	GK	KIRIBATI	KR
GUINEA	GV	KUWAIT	KU
GUINEA-BISSAU	PU	KYRGYZSTAN [as of August 31, 1991]	KG
GUYANA	GY	<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>
HAITI	HA	<i>REPUBLICS [November 7, 1917 to</i>	
HEARD ISLAND AND MCDONALD ISLANDS	HM	<i>December 26, 1991]</i>	
HOLY SEE (VATICAN CITY)	VT	LAOS	LA
HONDURAS	HO	LATVIA [August 21, 1991]	LG
HONG KONG	HK	<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>
HOWLAND ISLAND	HQ	<i>REPUBLICS [November 7, 1917 to</i>	
HUNGARY	HU	<i>December 26, 1991]</i>	
ICELAND	IC	LEBANON	LE
INDIA	IN	LESOTHO	LT
<i>SIKKIM [prior to 1975]</i>	<i>SK *</i>	LIBERIA	LI
INDONESIA	ID	LIBYA	LY
IRAN	IR	LIECHTENSTEIN	LS
IRAQ	IZ	LITHUANIA [as of March 11, 1990]	LH
IRAQ-SAUDI ARABIA NEUTRAL ZONE	IY *	<i>UNION OF SOVIET SOCIALIST</i>	<i>UR *</i>
IRELAND	EI	<i>REPUBLICS [November 7, 1917 to</i>	
ISLE OF MAN	IM	<i>December 26, 1991]</i>	
ISRAEL	IS	LUXEMBOURG	LU
ISRAEL-JORDAN DEMILITARIZED ZONE	IW *	MACAU	MC
ISRAEL-SYRIA DEMILITARIZED ZONE	IU *	MACEDONIA, F.Y.R.O. [as of September 17,	MK
ITALY	IT	1991]	
<i>IVORY COAST, THE (COTE D'IVOIRE)</i>	<i>IV</i>	<i>YUGOSLAVIA [December 1, 1918 to</i>	<i>YO *</i>
JAMAICA	JM	<i>April 11, 1992]</i>	
JAN MAYEN	JN	MADAGASCAR	MA
		MALAWI	MI
		MALAYSIA	MY
		MALDIVES	MV
		MALI	ML
		MALTA	MT

MARSHALL ISLANDS	RM	PALAU	PS
MARTINIQUE	MB	PALMYRA ATOLL	LQ
MAURITANIA	MR	PANAMA [as of October 1, 1979]	PM
MAURITIUS	MP	PANAMA [November 6, 1903 to October 1, 1979]	PN *
MAYOTTE	MF	PANAMA CANAL ZONE [November 6, 1903 to October 1, 1979]	PQ *
MEXICO	MX	PAPUA NEW GUINEA	PP
MICRONESIA, FEDERATED STATES OF	FM	PARACEL ISLANDS	PF
MIDWAY ISLAND	MQ	PARAGUAY	PA
MOLDOVA [as of August 27, 1991]	MD	PERU	PE
<i>UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]</i>	UR *	PHILIPPINES	RP
MONACO	MN	PITCAIRN ISLAND	PC
MONGOLIA	MG	POLAND	PL
MONTSERRAT	MH	PORTUGAL	PO
MOROCCO	MO	PUERTO RICO	RQ
<i>SPANISH NORTH AFRICA</i>	ME *	QATAR	QA
<i>SPANISH SAHARA</i>	SS *	REUNION	RE
MOZAMBIQUE	MZ	ROMANIA	RO
NAMIBIA	WA	RUSSIA [August 24, 1991]	RS
NAURU	NR	<i>UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]</i>	UR *
NEPAL	NP	RWANDA	RW
NETHERLANDS	NL	RYUKYU ISLANDS, SOUTHERN	YQ *
NETHERLANDS ANTILLES [as of January 1, 1986]	NT	SAINT HELENA	SH
NETHERLANDS ANTILLES [prior to January 1, 1986]	NA *	SAINT KITTS AND NEVIS	SC
NEW CALEDONIA	NC	SAINT LUCIA	ST
NEW ZEALAND	NZ	SAINT PIERRE AND MIQUELON	SB
NICARAGUA	NU	SAINT VINCENT AND THE GRENADINES	VC
NIGER	NG	SAMOA	WS
NIGERIA	NI	SAN MARINO	SM
NIUE	NE	SAO TOME AND PRINCIPE	TP
NORFOLK ISLAND	NF	SAUDI ARABIA	SA
NORTH KOREA	KN	SENEGAL	SG
NORTH VIETNAM [October 26, 1955 to July 2, 1976]	VN *	SEYCHELLES	SE
NORTHERN MARIANAS ISLANDS	CQ	SIERRA LEONE	SL
NORWAY	NO	SIKKIM [prior to 1975]	SK *
OMAN	MU	SINGAPORE	SN
PAKISTAN	PK	SLOVAKIA [as of January 1, 1993]	LO
		<i>CZECHOSLOVAKIA [October 28, 1918 to January 1, 1993]</i>	CZ *

SLOVENIA [as of June 25, 1991]	SI	TRUST TERRITORY OF THE PACIFIC ISLANDS	TQ *
<i>YUGOSLAVIA [December 1, 1918 to April 11, 1992]</i>	YO *	TUNISIA	TS
SOLOMON ISLANDS	BP	TURKEY	TU
SOMALIA	SO	TURKMENISTAN [as of October 27, 1991]	TX
SOUTH AFRICA	SF	<i>UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]</i>	UR *
SOUTH GEORGIA AND THE SOUTH SANDWICH ISLANDS	SX	TURKS AND CAICOS ISLANDS	TK
SOUTH KOREA	KS	TUVALU	TV
SOUTH VIETNAM [October 26, 1955 to July 2, 1976]	VS *	UGANDA	UG
SOUTHERN RHODESIA [prior to April 18, 1980]	RH *	UKRAINE [as of August 24, 1991]	UP
<i>SOVIET UNION (UNION OF SOVIET SOCIALIST REPUBLICS) [November 7, 1917 to December 26, 1991]</i>	UR *	UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]	UR *
SPAIN	SP	UNITED ARAB EMIRATES [as of December 1, 1998]	AE
SPANISH NORTH AFRICA	ME *	UNITED ARAB EMIRATES [prior to December 1, 1998]	TC *
SPANISH SAHARA	SS *	UNITED KINGDOM	UK
SPRATLY ISLANDS	PG	UNITED STATES	US
SRI LANKA	CE	UNITED STATES VIRGIN ISLANDS	VQ
SUDAN	SU	URUGUAY	UY
SURINAME	NS	US MISCELLANEOUS PACIFIC ISLANDS	IQ *
SVALBARD	SV	UZBEKISTAN [September 1, 1991]	UZ
SVALBARD AND JAN MAYEN	JS *	<i>UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]</i>	UR *
SWAN ISLANDS	SQ *	VANUATU	NH
SWAZILAND	WZ	VATICAN CITY (HOLY SEE)	VT
SWEDEN	SW	VENEZUELA	VE
SWITZERLAND	SZ	VIETNAM [as of July 2, 1976]	VM
SYRIA	SY	<i>NORTH VIETNAM [October 26, 1955 to July 2, 1976]</i>	VN *
TAIWAN	TW	<i>SOUTH VIETNAM [October 26, 1955 to July 2, 1976]</i>	VS *
TAJKISTAN [as of September 9, 1991]	TI	WAKE ISLAND	WQ
<i>UNION OF SOVIET SOCIALIST REPUBLICS [November 7, 1917 to December 26, 1991]</i>	UR *	WALLIS AND FUTUNA	WF
TANZANIA	TZ	WEST BANK	WE
THAILAND	TH	WEST BERLIN [September 21, 1949 to October 3, 1990]	WB *
TIMOR [prior to 1975]	PT *	WEST GERMANY (FEDERAL REPUBLIC OF GERMANY) [September 21, 1949 to October 3, 1990]	GE *
TOGO	TO	WESTERN SAHARA	WI
TOKELAU	TL	YEMEN [as of May 22, 1990]	YM
TONGA	TN	YEMEN (ADEN) [prior to May 22, 1990]	YS *
TRINIDAD AND TOBAGO	TD		
TROMELIN ISLAND	TE		

YEMEN (SANA'A) [prior to May 22, 1990]	YE *
YUGOSLAVIA [as of April 11, 1992]	YI
YUGOSLAVIA [<i>December 1, 1918 to April 11, 1992</i>]	YO *
ZAMBIA	ZA
ZIMBABWE	ZI
<i>SOUTHERN RHODESIA [prior to April 18, 1980]</i>	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.

<u>VALID</u>	<u>VALUES</u>
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
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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

<u>VALID</u>	<u>VALUE</u>
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See FIPS 55-3 name table

Not classifiable	99999
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Source: FIPS 55-3 [<http://www.itl.nist.gov/fipspubs/>]

COUNTY

<u>VALID</u>	<u>VALUE</u>
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See FIPS 6-4 name table

Not classifiable	999
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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)